



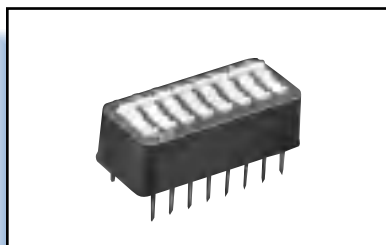
*GD Series - Page A3*



*GDH Series - Page A5*



*AD Series - Page A7*



*7000 Series - Page A11*



*7100 Series - Page A17*



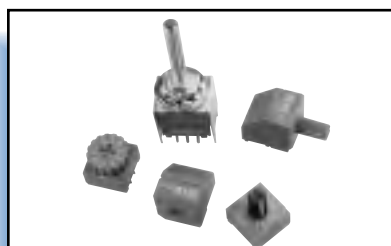
*S Series - Page A18*



*MRD Series - Page A21*



*DRD Series - Page A23*



*DR Series - Page A25*

# DIP Switches

**A**  
DIP Switches

**A**

**DIP Switches**

**DIP Switch Part Number Index**

ADE02	.....A7	ADF07	.....A8	ADPA05S	.....A9	GDR02	.....A5
ADE02S	.....A7	ADF07S	.....A8	ADPA05SA	.....A9	GDR02S	.....A5
ADE02SA	.....A7	ADF07SA	.....A8	ADPA06	.....A9	GDR04	.....A5
ADE03	.....A7	ADF07SAT	.....A8	ADPA06S	.....A9	GDR04S	.....A5
ADE03S	.....A7	ADF07ST	.....A8	ADPA06SA	.....A9	GDR06	.....A5
ADE03SA	.....A7	ADF07STTR	.....A8	ADPA07	.....A9	GDR06S	.....A5
ADE04	.....A7	ADF07T	.....A8	ADPA07S	.....A9	GDR08	.....A5
ADE04S	.....A7	ADF08	.....A8	ADPA07SA	.....A9	GDR08S	.....A5
ADE04SA	.....A7	ADF08S	.....A8	ADPA08	.....A9	GDR10	.....A5
ADE05	.....A7	ADF08SA	.....A8	ADPA08S	.....A9	GDR10S	.....A5
ADE05S	.....A7	ADF08SAT	.....A8	ADPA08SA	.....A9	GDS02	.....A3
ADE05SA	.....A7	ADF08ST	.....A8	ADPA09	.....A9	GDS02NTS	.....A3
ADE06	.....A7	ADF08STTR	.....A8	ADPA09S	.....A9	GDS02S	.....A3
ADE06S	.....A7	ADF08T	.....A8	ADPA09SA	.....A9	GDS02STR	.....A3
ADE06SA	.....A7	ADF09	.....A8	ADPA10	.....A9	GDS04	.....A3
ADE07	.....A7	ADF09S	.....A8	ADPA10S	.....A9	GDS04NTS	.....A3
ADE07S	.....A7	ADF09SA	.....A8	ADPA10SA	.....A9	GDS04S	.....A3
ADE07SA	.....A7	ADF09SAT	.....A8	APD10SA	.....A9	GDS04STR	.....A3
ADE08	.....A7	ADF09ST	.....A8	DRD*RAE	.....A25	GDS06	.....A3
ADE08S	.....A7	ADF09STTR	.....A8	DRD10CE	.....A23	GDS06NTS	.....A3
ADE08SA	.....A7	ADF09T	.....A8	DRD10CES	.....A23	GDS06S	.....A3
ADE09	.....A7	ADF10	.....A8	DRD10E	.....A23	GDS06STR	.....A3
ADE09S	.....A7	ADF10S	.....A8	DRD10ES	.....A23	GDS08	.....A3
ADE09SA	.....A7	ADF10SA	.....A8	DRD16CE	.....A23	GDS08NTS	.....A3
ADE10	.....A7	ADF10SAT	.....A8	DRD16CES	.....A23	GDS08S	.....A3
ADE10S	.....A7	ADF10ST	.....A8	DRD16E	.....A23	GDS08STR	.....A3
ADE10SA	.....A7	ADF10STTR	.....A8	DRD16ES	.....A23	GDS10	.....A3
ADE12	.....A7	ADF10T	.....A8	DRM	.....A25	GDS10S	.....A3
ADE12S	.....A7	ADF12	.....A8	DRS	.....A25	GDS10STR	.....A3
ADE12SA	.....A7	ADF12S	.....A8	DRW	.....A25	MGDH04	.....A6
ADF02	.....A8	ADF12SA	.....A8	GDB02	.....A4	MRD10	.....A21
ADF02S	.....A8	ADF12SAT	.....A8	GDB02S	.....A4	MRD10S	.....A21
ADF02SA	.....A8	ADF12ST	.....A8	GDB04	.....A4	MRD16C	.....A21
ADF02SAT	.....A8	ADF12STTR	.....A8	GDB04S	.....A4	MRD16S	.....A21
ADF02ST	.....A8	ADF12T	.....A8	GDB06	.....A4	SLV04	.....A18
ADF02STTR	.....A8	ADP02	.....A9	GDB06S	.....A4	SLV06	.....A18
ADF02T	.....A8	ADP02S	.....A9	GDB08	.....A4	SSH02	.....A18
ADF03	.....A8	ADP02SA	.....A9	GDB08S	.....A4	SSH04	.....A18
ADF03S	.....A8	ADP04	.....A9	GDB10	.....A4	SSH06	.....A18
ADF03SA	.....A8	ADP04S	.....A9	GDB10S	.....A4	SSH08	.....A18
ADF03SAT	.....A8	ADP04SA	.....A9	GDH02S	.....A5	SSH10	.....A18
ADF03ST	.....A8	ADP05	.....A9	GDH02STR	.....A5	SSV02	.....A18
ADF03STTR	.....A8	ADP05S	.....A9	GDH04S	.....A5	SSV04	.....A18
ADF03T	.....A8	ADP05SA	.....A9	GDH04STR	.....A5	SSV06	.....A18
ADF04	.....A8	ADP06	.....A9	GDH06S	.....A5	SSV08	.....A18
ADF04S	.....A8	ADP06S	.....A9	GDH06STR	.....A5	SSV10	.....A18
ADF04SA	.....A8	ADP06SA	.....A9	GDH08S	.....A5	435166	.....A15
ADF04SAT	.....A8	ADP07	.....A9	GDH08STR	.....A5	435469	.....A14
ADF04ST	.....A8	ADP07S	.....A9	GDH10S	.....A5	435470	.....A13
ADF04STTR	.....A8	ADP07SA	.....A9	GDH10STR	.....A5	435626	.....A15
ADF04T	.....A8	ADP08	.....A9	GDP02	.....A4	435640	.....A17
ADF05	.....A8	ADP08S	.....A9	GDP02NTS	.....A4	435668	.....A17
ADF05S	.....A8	ADP08SA	.....A9	GDP02S	.....A4	435704	.....A20
ADF05SA	.....A8	ADP09	.....A9	GDP02STR	.....A4	435802	.....A12
ADF05SAT	.....A8	ADP09S	.....A9	GDP04	.....A4	436860	.....A20
ADF05ST	.....A8	ADP09SA	.....A9	GDP04NTS	.....A4		
ADF05STTR	.....A8	ADP10	.....A9	GDP04S	.....A4		
ADF05T	.....A8	ADP10S	.....A9	GDP06	.....A4		
ADF06	.....A8	ADPA02	.....A9	GDP06S	.....A4		
ADF06S	.....A8	ADPA02S	.....A9	GDP08	.....A4		
ADF06SA	.....A8	ADPA02SA	.....A9	GDP08S	.....A4		
ADF06SAT	.....A8	ADPA04	.....A9	GDP08STR	.....A4		
ADF06ST	.....A8	ADPA04S	.....A9	GDP10	.....A4		
ADF06STTR	.....A8	ADPA04SA	.....A9	GDP10S	.....A4		
ADF06T	.....A8	ADPA05	.....A9	GDP10STR	.....A4		

**DIP Switches, Low Profile, Slide Actuator, Through Hole and Surface Mount**

**FEATURES:**

- Conventional gold wiping contact system
- Available in PC and surface mount configurations
- Traditional tape seal standard
- 95% Minimum solder coverage (90/10 tin lead)
- Withstands wave soldering temperature of 245°C for 3-5 seconds
- Heat deflection temperature of 260°C for surface mount compatibility
- End stackable (GDS version)
- Auto-insertable (GDS and GDB version)
- Vacuum pick and place compatible (GDS, GDB and GDH)
- Half pitch .050" terminal spacing (GDH version)
- Available in optional tape & reel packaging
- Shipped in the off position

**MATERIAL SPECIFICATIONS:**

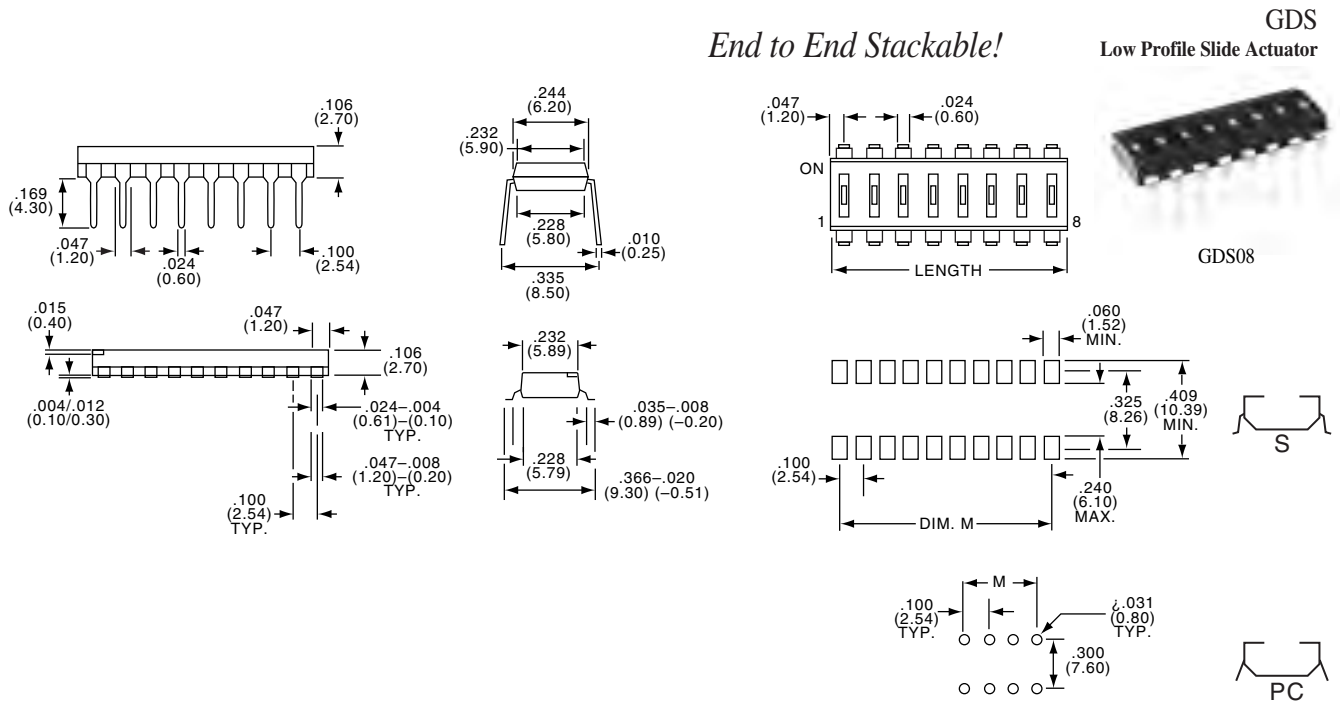
Moving Contact .....Gold over nickel over copper alloy  
 Fixed Contact .....Gold over nickel over copper alloy  
 Base Material .....PPS UL94V-0  
 Cover Material .....PPS UL94V-0  
 Actuator Material .....High temperature polyester/polyamide  
 Terminal .....Tin lead plated over nickel over copper alloy

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 24 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 250 VDC  
 Dielectric Strength .....300 VAC  
 Life Expectancy .....1,000 Cycles  
 Operating Force .....60-600 Grams

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-30°C to +85°C  
 Storage Temperature .....-45°C to +100°C  
 Solder Heat Resistance .....See page M3-4



Part Number								Poles	Length	Dim. M
PC Model		S Model		Tape & Reel		S Model No Tape				
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
5-1437590-5	GDS02	5-1437590-7	GDS02S	5-1437590-8	GDS02STR	5-1437590-6	GDS02NTS	2	.194(4.94)	.100(2.54)
5-1437590-9	GDS04	6-1437590-1	GDS04S	6-1437590-2	GDS04STR	6-1437590-0	GDS04NTS	4	.394(10.02)	.300(7.62)
6-1437590-3	GDS06	6-1437590-5	GDS06S	6-1437590-6	GDS06STR	6-1437590-4	GDS06NTS	6	.594(15.10)	.500(12.7)
6-1437590-7	GDS08	6-1437590-9	GDS08S	7-1437590-0	GDS08STR	6-1437590-8	GDS08NTS	8	.794(20.18)	.700(17.78)
7-1437590-1	GDS10	7-1437590-2	GDS10S	7-1437590-3	GDS10STR	—	—	10	.994(25.26)	.900(22.86)

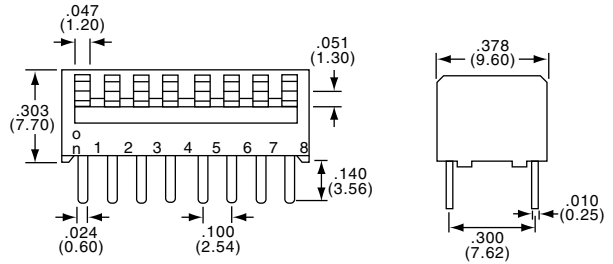
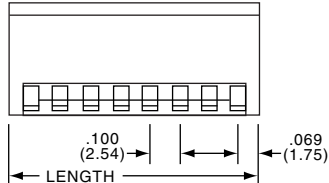
**A**

**DIP Switches, Piano Actuator, Through Hole and Surface Mount**

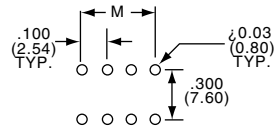
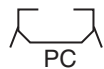
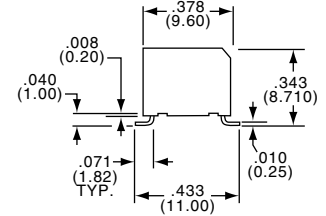
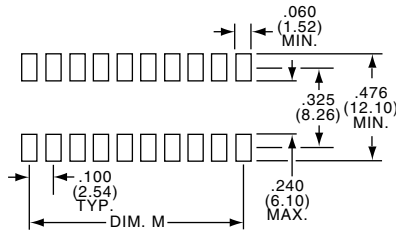
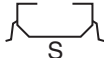
SEE PAGE A3 FOR PRODUCT SPECIFICATIONS

GDP

Classic Profile Piano Actuator



GDP08

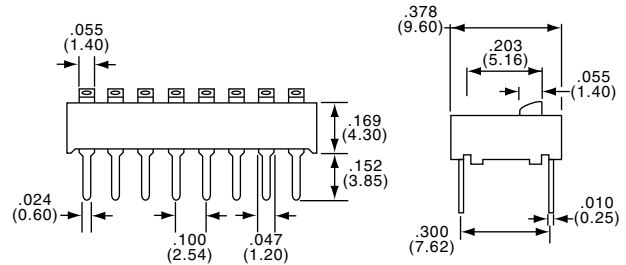
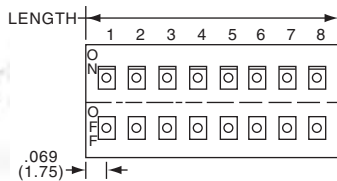


Part Number								Poles	Length	Dim. M
PC Model		S Model		Tape and Reel		S Model No Tape				
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
3-1437590-2	GDP02	3-1437590-4	GDP02S	1571668-1	GDP02STR	3-1437590-3	GDP02NTS	2	.238(6.04)	.100(2.54)
3-1437590-5	GDP04	3-1437590-7	GDP04S	—	—	3-1437590-6	GDP04NTS	4	.438(11.12)	.300(7.62)
3-1437590-8	GDP06	3-1437590-9	GDP06S	—	—	—	—	6	.638(16.20)	.500(12.7)
4-1437590-0	GDP08	4-1437590-1	GDP08S	4-1437590-2	GDP08STR	—	—	8	.838(21.28)	.700(17.78)
4-1437590-3	GDP10	4-1437590-4	GDP10S	4-1437590-5	GDP10STR	—	—	10	1.038(26.36)	.900(22.86)

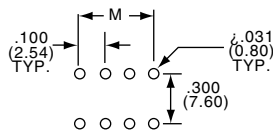
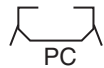
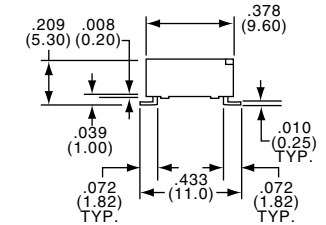
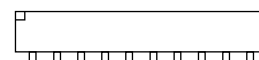
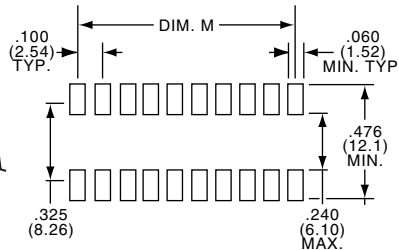
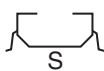
**DIP Switches, Flush Rocker Actuator, Through Hole and Surface Mount**

GDB

Flush Rocker Actuator



GDB08



Part Number								Poles	Length	Dim. M
PC Model		S Model		Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch							
1437590-1	GDB02	—	GDB02S	2	.238(6.04)	.100(2.54)				
1437590-2	GDB04	1437590-3	GDB04S	4	.438(11.12)	.300(7.62)				
1437590-4	GDB06	1437590-5	GDB06S	6	.638(16.20)	.500(12.7)				
1437590-6	GDB08	1437590-7	GDB08S	8	.838(21.28)	.700(17.78)				
1437590-8	GDB10	1437590-9	GDB10S	10	1.038(26.36)	.900(22.86)				

**DIP Switches, Recessed Rocker, Through Hole and Surface Mount**

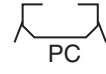
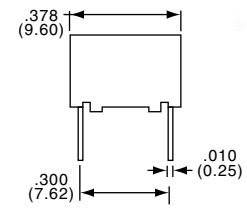
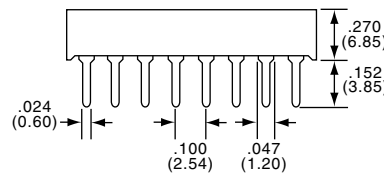
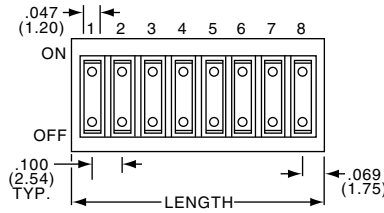
SEE PAGE A3 FOR PRODUCT SPECIFICATIONS

Part Number				Poles	Length	Dim. M
PC Model		S Model				
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
4-1437590-6	GDR02	4-1437590-7	GDR02S	2	.238(6.04)	.100(2.54)
4-1437590-8	GDR04	4-1437590-9	GDR04S	4	.438(11.12)	.300(7.62)
5-1437590-0	GDR06	5-1437590-1	GDR06S	6	.638(16.20)	.500(12.7)
5-1437590-2	GDR08	5-1437590-3	GDR08S	8	.838(21.28)	.700(17.78)
5-1437590-4	GDR10	—	GDR10S	10	1.038(26.36)	.900(22.86)

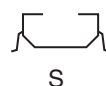
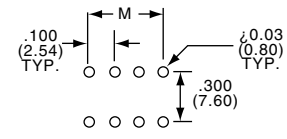
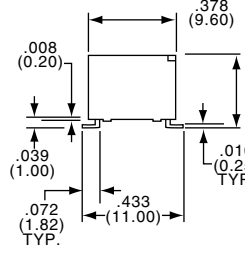
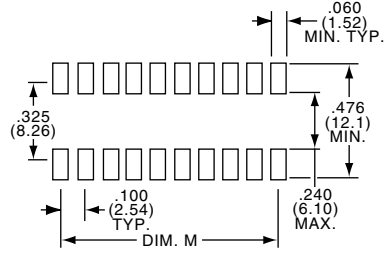
GDR  
Classic Profile  
Recessed Rocker Actuator



GDR08



PC



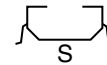
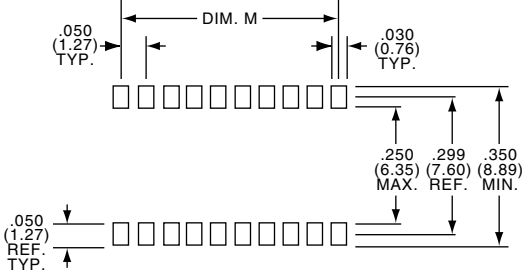
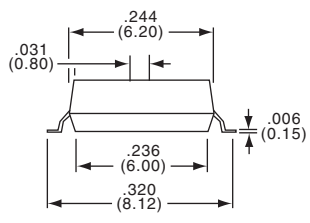
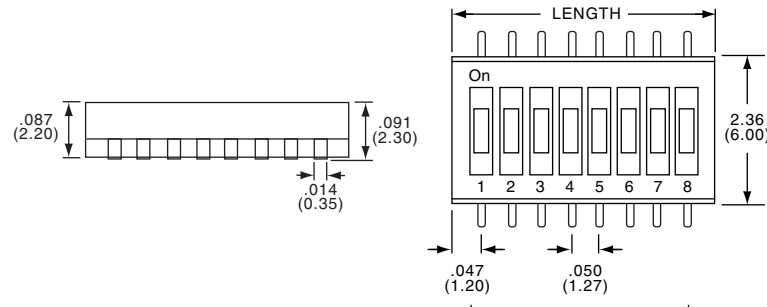
S

**DIP Switches, Half Pitch, Low Profile**

GDH  
Half Pitch .050" Terminal Spacing



GDH08S



Part Number				Poles	Length	Dim. M
PC Model		S Model				
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
1-1437590-0	GDH02S	1-1437590-3	GDH02STR	2	.144(3.66)	.050(1.27)
1-1437590-4	GDH04S	1-1437590-6	GDH04STR	4	.244(6.20)	.150(3.81)
1-1437590-9	GDH06S	2-1437590-1	GDH06STR	6	.344(8.75)	.250(6.35)
2-1437590-2	GDH08S	2-1437590-4	GDH08STR	8	.444(11.29)	.350(8.89)
2-1437590-6	GDH10S	2-1437590-8	GDH10STR	10	.544(13.82)	.450(11.43)

**DIP Switches, Half Pitch, Ultra Low Profile, .067" High**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper alloy, gold plate over nickel  
 Case Material .....High temperature polyamide, UL 94V-0  
 Actuator Material .....High temperature polyester, 94V-0  
 Moving Contact .....Copper alloy, gold plate over nickel  
 Fixed Contact .....Copper alloy, gold plate over nickel  
 Terminals .....Copper alloy, gold flash over nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Non-switching: 100 Milliamps @ 50 VDC  
 Switching: 25 Milliamps @ 24 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....300 VAC, 1 minute  
 Actuation Force .....60 - 600 Grams max.  
 Life Expectancy .....1,000 Cycles min.

**ENVIRONMENTAL SPECIFICATIONS:**

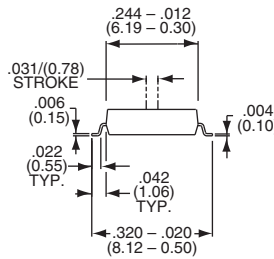
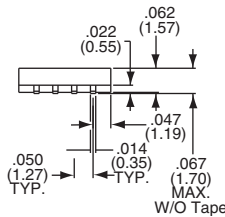
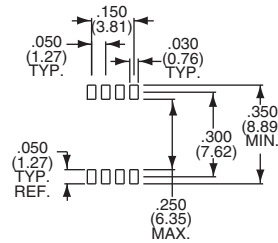
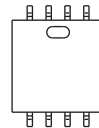
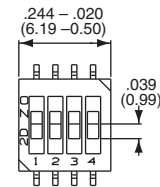
Operating Temperature.....-30°C to +85°C (-22°F to +185°F)  
 Storage Temperature.....-45°C to +100°C (-49°F to +212°F)

**MGDH**

Half Pitch .050" Terminal Spacing, .067" High



MGDH04



Part Number	
Tyco Electronics	Alcoswitch
7-1437590-5	MGDH04

**DIP Switches, Extended Actuator, Auto Insertable, Through Hole and Surface Mount**

**FEATURES:**

- Available in PC or surface mount termination.
- High pressure wiping contact allows aqueous or solvent cleaning without tape seal.
- Auto-insertable
- Tape Seal version available for vacuum pick-n-place
- Unique design can withstand vapor phase reflow or wave soldering conditions.
- Gas tight contacts
- Shipped in the off position

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-30°C to + 85°C  
 Storage Temperature .....-45°C to + 100°C  
 Solder Heat Resistance.....245°C ± 5°C with switch in "off" position 30 seconds when mounted on a .060" thick PCB per MIL-STD202, Method 210  
 Cleaning.....Aqueous solution or solvent

**MATERIAL SPECIFICATIONS:**

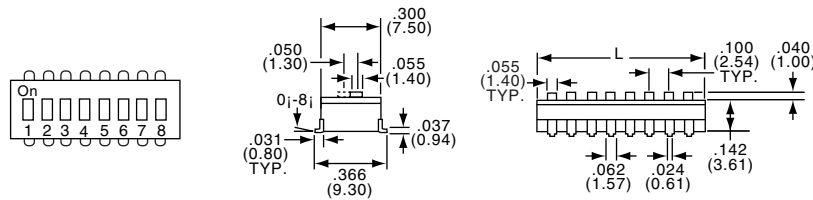
Base and Cover .....PPS-UL94V-0, (Black)  
 Actuator.....PA6T-UL94V-0, (White)  
 Fixed Contact/Terminal .....Copper alloy plate-solder/copper  
 Moving Contact .....Copper alloy plate-gold/nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC max.  
 Max Rating Switching-100 Milliamp @ 24VDC  
 Min Rating Switching-1 Microamp @ 1 Millivolt  
 Max Rating Non Switching-1 Amp @ 5VDC  
 Initial Contact Resistance .....50 Milliohms max.  
 Insulation Resistance .....1,000 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC  
 Operating Force .....Less than 800 grams  
 Actuator Travel .....AD/R Series 1.30mm/.050" piano style 25°  
 Life Expectancy .....1,000 Cycles

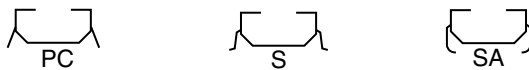


ADE



ADE08  
Extended Actuator

S Termination Shown



PC Term.		"S" Term.		"SA" Term.		No. of Positions	Actuator Style	Dim. L
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
1437586-2	ADE02	1437586-4	ADE02S	1437586-5	ADE02SA	2	Slide	.278(7.06)
1437586-7	ADE03	1437586-8	ADE03S	—	ADE03SA	3	Slide	.378(9.60)
1-1437586-0	ADE04	1-1437586-2	ADE04S	1-1437586-3	ADE04SA	4	Slide	.478(12.14)
1-1437586-5	ADE05	1-1437586-7	ADE05S	—	ADE05SA	5	Slide	.578(14.68)
1-1437586-8	ADE06	2-1437586-0	ADE06S	2-1437586-1	ADE06SA	6	Slide	.678(17.22)
2-1437586-3	ADE07	2-1437586-5	ADE07S	—	ADE07SA	7	Slide	.778(19.76)
2-1437586-6	ADE08	2-1437586-8	ADE08S	2-1437586-9	ADE08SA	8	Slide	.878(22.30)
3-1437586-0	ADE09	—	ADE09S	—	ADE09SA	9	Slide	.978(24.84)
3-1437586-2	ADE10	3-1437586-7	ADE10S	—	ADE10SA	10	Slide	1.078(27.38)
3-1437586-8	ADE12	1571337-1	ADE12S	—	ADE12SA	12	Slide	1.278(32.51)

See Page A9 for PC Pad Layout.



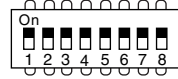
**DIP Switches, Flush Acuator, Auto Insertable, Through Hole, and Surface Mount**

SEE PAGE A7 FOR PRODUCT SPECIFICATIONS

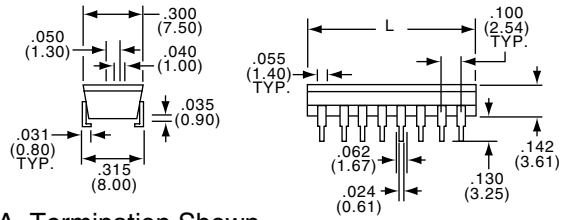
ADF



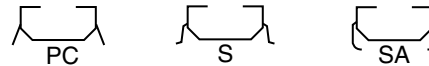
ADF08S  
Flush Actuator



See Page A9 for PC Pad Layout.



SA Termination Shown



PC Term.		PC Term. w/Tape		No. of Positions	Actuator Style	Dim. L
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
4-1437586-2	ADF02	5-1437586-0	ADF02T	2	Slide	.278(7.06)
5-1437586-1	ADF03	5-1437586-6	ADF03T	3	Slide	.378(9.60)
5-1437586-7	ADF04	6-1437586-4	ADF04T	4	Slide	.478(12.14)
6-1437586-5	ADF05	7-1437586-0	ADF05T	5	Slide	.578(14.68)
7-1437586-1	ADF06	8-1437586-0	ADF06T	6	Slide	.678(17.22)
8-1437586-1	ADF07	8-1437586-5	ADF07T	7	Slide	.778(19.76)
8-1437586-6	ADF08	9-1437586-5	ADF08T	8	Slide	.878(22.30)
9-1437586-6	ADF09	—	ADF09T	9	Slide	.978(24.84)
1437587-1	ADF10	1437587-7	ADF10T	10	Slide	1.078(27.38)
—	ADF12	1571336-1	ADF12T	12	Slide	1.278(32.51)

"S" Term.		"S" Term. w/Tape Seal		Tape & Reel		No. of Positions	Actuator Style	Dim. L
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
4-1437586-4	ADF02S	4-1437586-8	ADF02ST	4-1437586-9	ADF02STTR	2	Slide	.278(7.06)
5-1437586-2	ADF03S	5-1437586-4	ADF03ST	5-1437586-5	ADF03STTR	3	Slide	.378(9.60)
5-1437586-9	ADF04S	6-1437586-3	ADF04ST	1437583-6	ADF04STTR	4	Slide	.478(12.14)
6-1437586-6	ADF05S	6-1437586-8	ADF05ST	6-1437586-9	ADF05STTR	5	Slide	.578(14.68)
7-1437586-5	ADF06S	7-1437586-8	ADF06ST	7-1437586-9	ADF06STTR	6	Slide	.678(17.22)
8-1437586-2	ADF07S	8-1437586-3	ADF07ST	8-1437586-4	ADF07STTR	7	Slide	.778(19.76)
8-1437586-8	ADF08S	9-1437586-1	ADF08ST	9-1437586-2	ADF08STTR	8	Slide	.878(22.30)
9-1437586-7	ADF09S	9-1437586-8	ADF09ST	9-1437586-9	ADF09STTR	9	Slide	.978(24.84)
1437587-3	ADF10S	1437587-5	ADF10ST	1437587-6	ADF10STTR	10	Slide	1.078(27.38)
1437587-8	ADF12S	—	ADF12ST	1437587-9	ADF12STTR	12	Slide	1.278(32.51)

"SA" Term.		"SA" Term. w/Tape Seal		No. of Positions	Actuator Style	Dim. L
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
4-1437586-5	ADF02SA	4-1437586-6	ADF02SAT	2	Slide	.278(7.06)
5-1437586-3	ADF03SA	—	ADF03SAT	3	Slide	.378(9.60)
6-1437586-0	ADF04SA	6-1437586-1	ADF04SAT	4	Slide	.478(12.14)
—	ADF05SA	—	ADF05SAT	5	Slide	.578(14.68)
7-1437586-6	ADF06SA	7-1437586-7	ADF06SAT	6	Slide	.678(17.22)
—	ADF07SA	—	ADF07SAT	7	Slide	.778(19.76)
8-1437586-9	ADF08SA	9-1437586-0	ADF08SAT	8	Slide	.878(22.30)
—	ADF09SA	—	ADF09SAT	9	Slide	.978(24.84)
—	ADF10SA	1437587-4	ADF10SAT	10	Slide	1.078(27.38)
—	ADF12SA	—	ADF12SAT	12	Slide	1.278(32.51)



**DIP Switches, Piano Acuator, Auto Insertable, Through Hole, and Surface Mount**

ADP

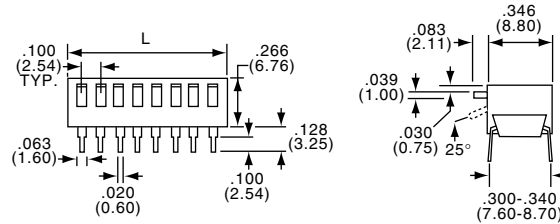


ADP04S

Piano Actuator

“PC” Termination Shown

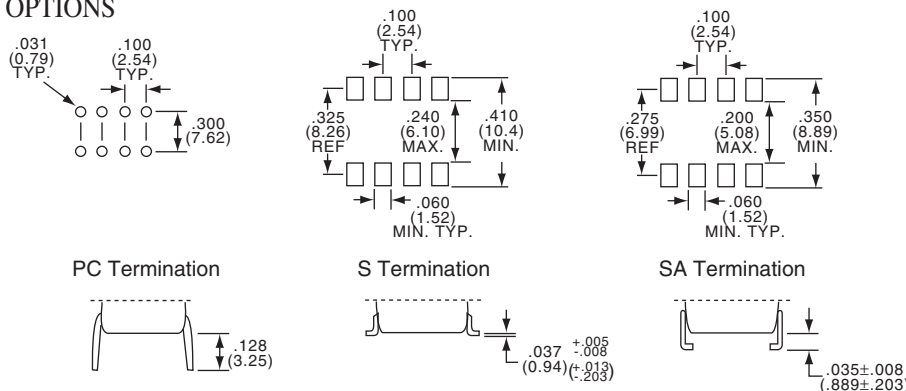
SEE PAGE A7 FOR PRODUCT SPECIFICATIONS



Lever Down "On"		"S" Term Lever Down "On"		"SA" Term. Lever Down "On"		No. of Positions	Actuator Style	Dim. L
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
1-1437587-1	ADP02	1-1437587-2	ADP02S	1-1437587-3	ADP02SA	2	Piano	.278(7.06)
1-1437587-5	ADP04	1-1437587-7	ADP04S	1-1437587-8	ADP04SA	4	Piano	.478(12.14)
2-1437587-0	ADP05	2-1437587-1	ADP05S	—	ADP05SA	5	Piano	.578(14.68)
2-1437587-2	ADP06	2-1437587-3	ADP06S	2-1437587-4	ADP06SA	6	Piano	.678(17.22)
2-1437587-5	ADP07	—	ADP07S	—	ADP07SA	7	Piano	.778(19.76)
2-1437587-6	ADP08	2-1437587-8	ADP08S	2-1437587-9	ADP08SA	8	Piano	.878(22.30)
3-1437587-0	ADP09	—	ADP09S	3-1437587-1	ADP09SA	9	Piano	.978(24.84)
3-1437587-3	ADP10	3-1437587-6	ADP10S	—	ADP10SA	10	Piano	1.078(27.38)

Lever Up "On"		"S" Term Lever Up "On"		"SA" Term. Lever Up "On"		No. of Positions	Actuator Style	Dim. L
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			
4-1437587-7	ADPA02	—	ADPA02S	—	ADPA02SA	2	Piano	.278(7.06)
4-1437587-8	ADPA04	5-1437587-0	ADPA04S	5-1437587-1	ADPA04SA	4	Piano	.478(12.14)
5-1437587-2	ADPA05	5-1437587-3	ADPA05S	—	ADPA05SA	5	Piano	.578(14.68)
5-1437587-4	ADPA06	5-1437587-5	ADPA06S	5-1437587-6	ADPA06SA	6	Piano	.678(17.22)
5-1437587-7	ADPA07	—	ADPA07S	—	ADPA07SA	7	Piano	.778(19.76)
5-1437587-8	ADPA08	6-1437587-0	ADPA08S	—	ADPA08SA	8	Piano	.878(22.30)
—	ADPA09	—	ADPA09S	—	ADPA09SA	9	Piano	.978(24.84)
6-1437587-1	ADPA10	—	ADPA10S	—	ADPA10SA	10	Piano	1.078(27.38)

TERMINATION OPTIONS



**Hybrid DIP Switches, Through Hole and Surface Mount**

**A**  
AR Series

**AUTO-INSERTABLE\* DIP SWITCH WITH INTEGRAL RESISTORS**

SEE PAGE A7 FOR PRODUCT SPECIFICATIONS

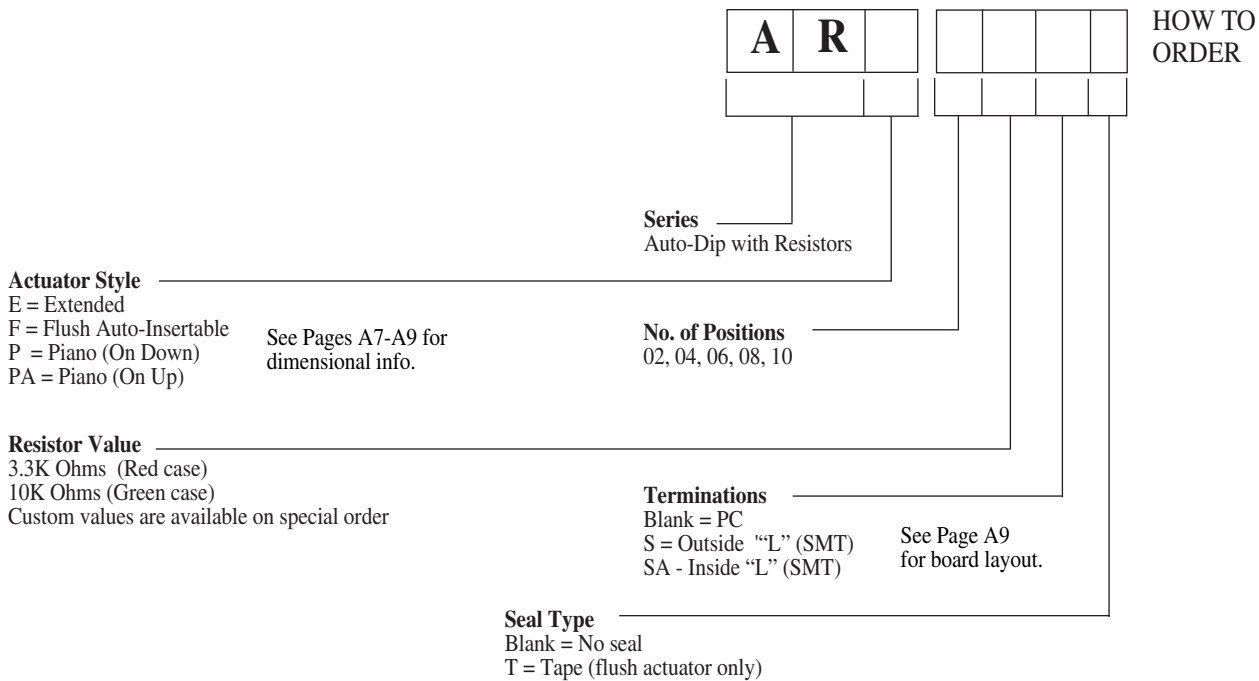
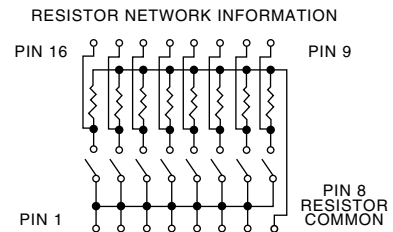
\* Flush actuator versions are auto-insertable

**FEATURES:**

All the features of the AD SERIES - PLUS

- Thick film pull-up resistors molded into the base of the switch.
- Replaces discrete resistor network plus DIP Switch with one component.
- Available with 3.3K ohms or 10K ohms resistors.
- Ceramic substrate allows wave soldering temperatures of 245°C for up to 30 seconds per MIL-STD 202, Method 210.
- Custom resistor values available.
- Shipped in off position.

Rated Pwr.	Resistance	Tolerance	Max. Voltage
125 mW	3.3K Ohms (red)	±5% at 85°C	24V
125 mW	10K Ohms (green)	±5% at 85°C	24V



**Example: ARF 06 10KST = Auto-Dip**  
 Flush actuator  
 06 positions  
 10K ohms resistors  
 Outside "L" terminations & tape seal



Alcoswitch 7000 Series DIP switches are available in standard single pole, single throw; side actuated, single pole, single throw and multiple series versions. Contacts are made of high strength copper alloy with .000030 [0.00076] gold over .000050 [0.00127] nickel plating in contact area and legs plated to meet Tyco Electronics Solderability Specification 109-11-3.

The multiple series switches offer the unique feature of single pole switches coupled mechanically to provide switching of various poles simultaneously. This allows flexibility in programming.

Multipole switches are available with or without lever-actuated rockers and in a variety of configurations in addition to those listed. The maximum number of poles that can be ganged is six.

## DIP Switches

### Performance Characteristics

**Current and Voltage Rating:**

Nonswitching — 1.5 amperes max. at 50 VDC  
 Switching — 100 milliamperes max at 5 VDC (resistive load);  
 25 milliamperes max. at 24 VDC (resistive load)

**Contact Resistance, Dry Circuit:**

100 milliohms max. (end of life) and 50 milliohms (initial) at 50 mV open circuit, 50 milliamperes

**Insulation Resistance:**

1 x 10<sup>9</sup> ohms min. at 100 VDC (initial)

**Dielectric Withstanding Voltage:**

500 VDC min. at standard atmospheric conditions

**Capacitance:**

5 picofarads max.

**Temperature Rating:**

Nonoperating — -73.3°C to +105°C  
 Operating — -55°C to +105°C

**Vibration:**

Discontinuities shall not exceed 10 microseconds when subjected to 10-2000-10 Hz transversing for 20 minutes at .060 [1.52] inches total excursion

**Shock:**

No physical damage or discontinuities greater than 10 microseconds when tested with .10 ampere current applied per Tyco Electronics Specification 109-26, Condition A

**Humidity:**

Withstands an environment of +40°C and 95% RH for 96 hours

**Durability:**

No physical damage or contact resistance greater than 100 milliohms up to 7000 cycles of actuation with a resistive load of 24 VDC and 25 milliamperes max. current applied

**Terminal Strength (Bend Test):**

Two (2) 45° bend cycles per MIL-STD-202, Method 211, Condition B

### Materials

**Housing:**

Glass-filled polyester, 94V-0 rated, black

**Rocker:**

Thermoplastic, 94V-0 rated, white

**Spring Contacts and Leads:**

Copper alloy with .000030 [0.00076] gold over .000050 [0.00127] nickel in contact area and .000150 [0.00381] tin-lead over .000050 [0.00127] nickel on solder legs, plated to meet Tyco Electronics Solderability Specification 109-11-3.

### Technical Documents

**Product Specification:**

108-7519

**Instruction Sheet:**

408-07779

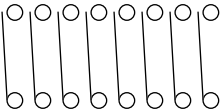
**Application Specification:**

114-1056

**Single Pole  
Single Throw  
Side Actuated  
Low Profile**

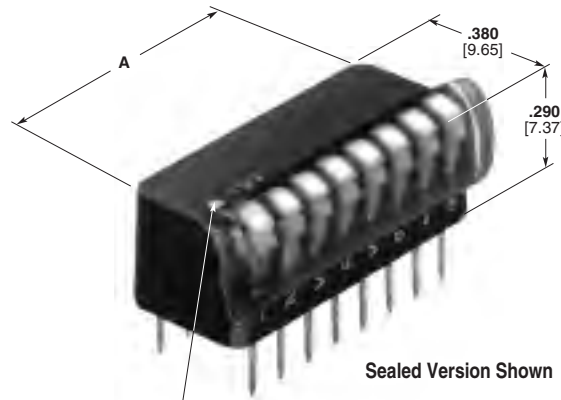
**Contact Lead Spacing —**  
.100 x .300 [2.54 x 7.62]  
**Lead Length —** .140 [3.56]  
below mounting surface

**Contact Arrangement**



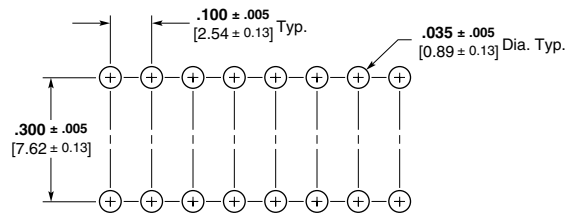
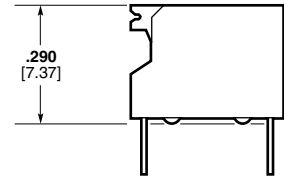
Pin 1

**Note:** Switches shown in open position



Sealed Version Shown

White Dot Identifies Pin 1



Recommended PC Board Hole Pattern

No. of Switches	Dim. A		SPST Side Actuated Part No.		
	inch	mm	Unsealed <sup>1</sup>	Sealed	Tape Sealed
2	.280	7.11	1-435802-0	—	—
3	.380	9.65	435802-2	—	—
4	.480	12.19	435802-3	1-435802-5	—
5	.580	14.73	435802-4	1-435802-6	—
6	.680	17.27	435802-5	1-435802-7	—
7	.780	19.81	435802-6	1-435802-8	—
8	.880	22.35	435802-1	435802-9	3-435802-8
9	.980	24.89	435802-7	1-435802-9	—
10	1.080	27.43	435802-8	2-435802-0	—
11	1.180	29.97	—	2-435802-1	—
12	1.280	32.51	—	2-435802-2	—

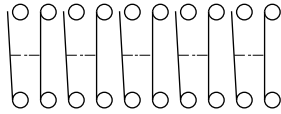
<sup>1</sup> All switches are bottom sealed.

**DIP Switches, Extended Actuator, Single or Double Pole, Double Throw**

**Multiple Single Pole Double Throw**

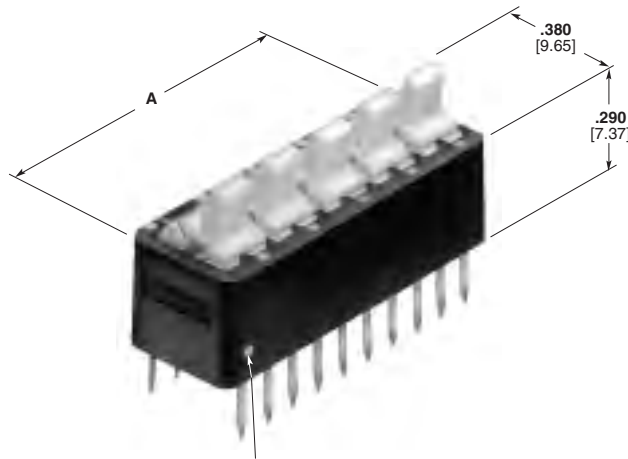
**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface

**Contact Arrangement**

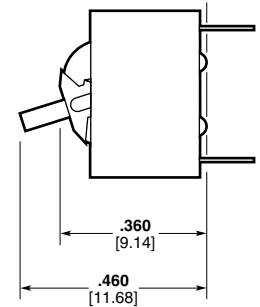


Pin 1

**Note:** Switch positions are closed when rockers are down toward white dots. Switches have make-before-break circuit design.



White Dot Identifies Pin 1



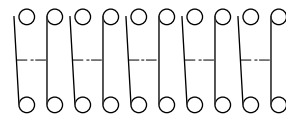
Extended Lever Actuator Shown

No. of Switches	Dim. A		SPDT Part No.	
	inch	mm	Low Profile Actuator	Extended Lever Actuator
1	.280	7.11	435470-7	2-435470-1
2	.480	12.19	435470-1	2-435470-2
3	.680	17.27	435470-2	—
4	.880	22.35	435470-3	2-435470-4
5	1.080	27.43	—	2-435470-5
6	1.280	32.51	—	2-435470-6

**Double Pole Double Throw**

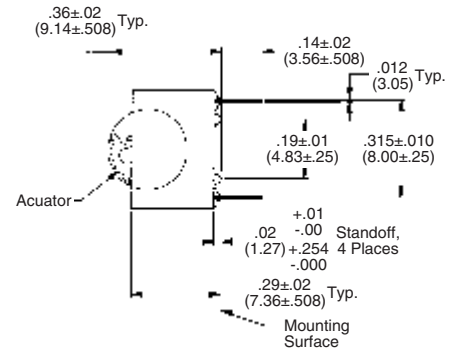
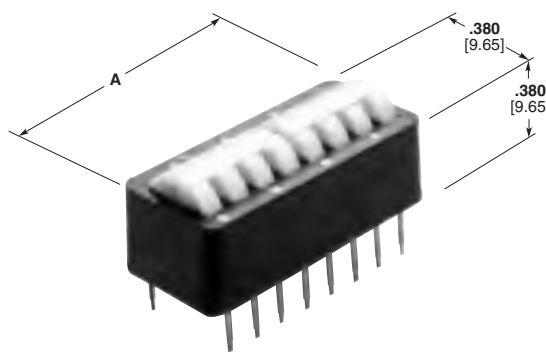
**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface

**Contact Arrangement**



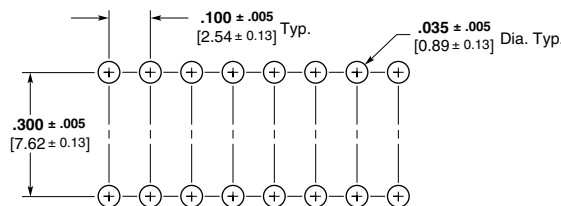
Pin 1

**Note:** Switch positions are closed when rockers are down toward white dots. Switches have make-before-break circuit design.



Low Profile Lever Actuator Shown

No. of Switches	Dim. A		DPDT Part No.	
	inch	mm	Low Profile Actuator	Extended Lever Actuator
1	.480	12.19	435470-5	3-435470-1
2	.880	22.35	435470-9	—



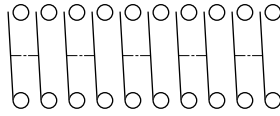
Recommended PC Board Hole Pattern

**DIP Switches, Extended Actuator, Multiple Pole, Single Throw**

**Multiple Double Pole Single Throw**

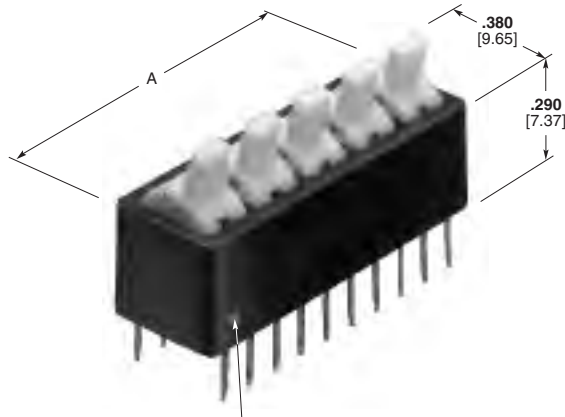
**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface

**Contact Arrangement**

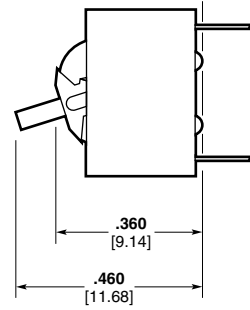


Pin 1

**Note:** Switches shown in open position.



White Dot Identifies Pin 1



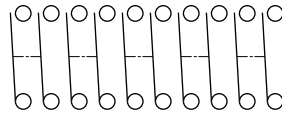
Extended Lever Actuator Shown

No. of Switches	Dim. A		DPST Part No.	
	inch	mm	Low Profile Actuator	Extended Lever Actuator
1	.280	7.11	435469-9	2-435469-1
2	.480	12.19	—	2-435469-2
4	.880	22.35	435469-3	2-435469-4
5	1.080	27.43	—	2-435469-5
6	1.280	32.51	—	2-435469-6

**4-Pole Single Throw**

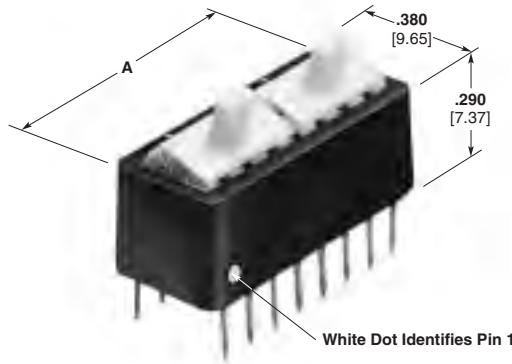
**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface

**Contact Arrangement**

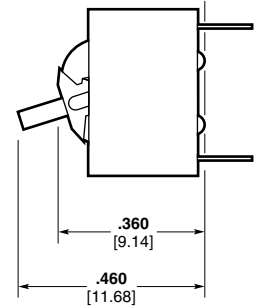


Pin 1

**Note:** Switches shown in open position.

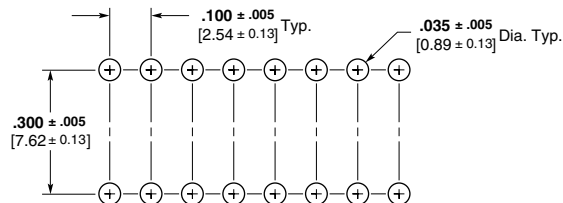


White Dot Identifies Pin 1



Extended Lever Actuator Shown

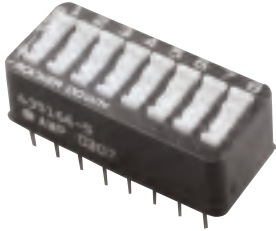
No. of Switches	Dim. A		4PST Part No.	
	inch	mm	Low Profile Actuator	Extended Lever Actuator
1	.480	12.19	435469-7	3-435469-1



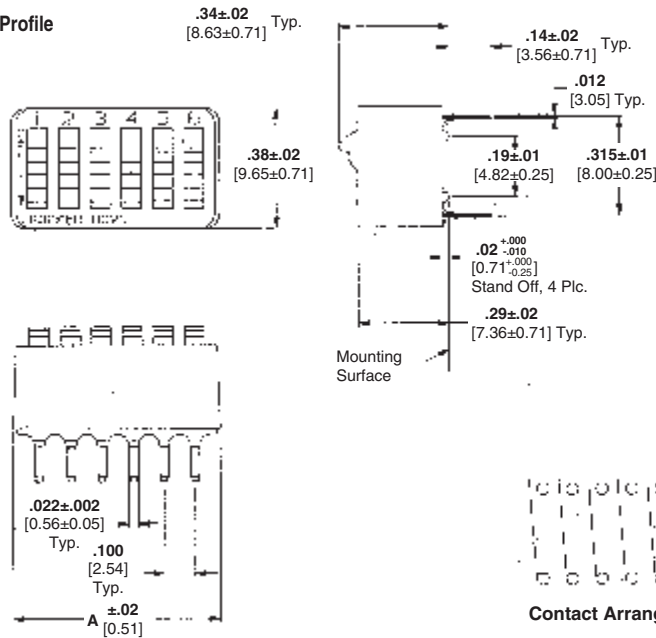
Recommended PC Board Hole Pattern

**DIP Switches, Rocker Style Actuator**

**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface



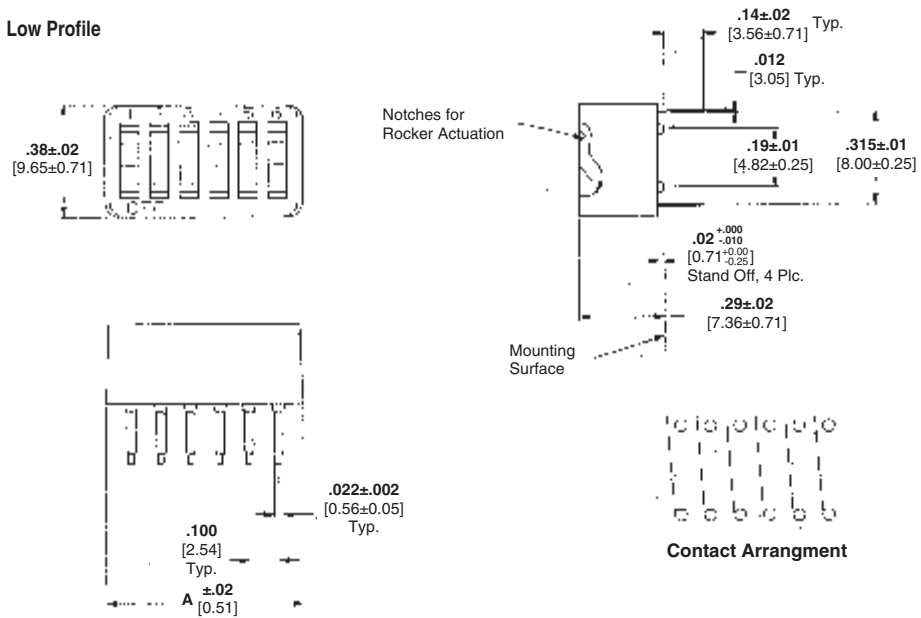
**Standard Profile**



**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface

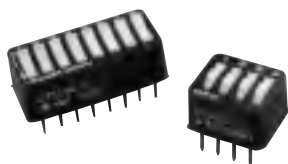


**Low Profile**



Number of Switches	SPST Standard Profile		SPST Low Profile	
	Unsealed	Sealed	Unsealed	Tape Sealed
2	2-435166-9	—	—	3-435626-6
3	—	—	—	3-435626-7
4	435166-2	4-435166-9	435626-1	3-435626-8
5	—	5-435166-0	435626-2	—
6	435166-4	5-435166-1	—	4-435626-0
7	435166-1	5-435166-2	—	4-435626-1
8	435166-5	5-435166-3	435626-5	4-435626-2
9	435166-6	—	—	—
10	435166-7	5-435166-5	—	4-435626-4





Alcoswitch 7100 Series DIP Switches are recommended for programming applications where the number of cycles per pole is limited. These single pole, single throw switches have been designed for a life of up to 2000 cycles per pole and feature contacts of copper alloy with .000030 [0.00076] gold over nickel plating in the contact area and legs plated to meet Tyco Electronics Solderability Specification 109-11-3. In addition, the SPST standard and low profile switches are also available with a top seal to provide protection during soldering and cleaning processes.

## DIP Switches

### Performance Characteristics

**Current and Voltage Rating:**

Nonswitching — 1.0 amperes max. at 40 VDC  
 Switching — 60 milliamperes max at 5 VDC (resistive load);  
 15 milliamperes max. at 24 VDC (resistive load)

**Contact Resistance, Dry Circuit:**

100 milliohms max. (end of life) and 50 milliohms (initial) at 50 mV open circuit, 50 milliamperes

**Insulation Resistance:**

1 x 10<sup>9</sup> ohms min. at 100 VDC (initial)

**Dielectric Withstanding Voltage:**

500 VDC min. at standard atmospheric conditions

**Capacitance:**

5 picofarads max.

**Temperature Rating:**

Nonoperating — -73°C to +105°C  
 Operating — -55°C to +105°C

**Vibration:**

Discontinuities shall not exceed 10 microseconds when subjected to 10-2000-10 Hz transversing for 20 minutes at .060 [1.52] inches total excursion

**Shock:**

No physical damage or discontinuities greater than 10 microseconds when tested with .10 ampere current applied per Tyco Electronics Specification 109-26, Condition A

**Humidity:**

Withstands an environment of +40°C and 95% RH for 96 hours

**Durability:**

No physical damage or contact resistance greater than 100 milliohms after 2000 cycles of actuation with a resistive load of 24 VDC and 25 milliamperes max. current applied

**Terminal Strength (Bend Test):**

Two (2) 45° bend cycles per MIL-STD-202, Method 211, Condition B

### Materials

**Housing:**

Glass-filled polyester, 94V-0 rated, blue

**Rocker:**

Thermoplastic, 94V-0 rated, white

**Spring Contacts and Leads:**

Copper alloy with .000030 [0.00076] gold over .000050 [0.00127] nickel in contact area and .000150 [0.00381] tin-lead over .000050 [0.00127] nickel on solder legs, plated to meet Tyco Electronics Solderability Specification 109-11-3.

### Technical Documents

**Product Specification:**

108-7532

**Instruction Sheet:**

408-07779

**Application Specification:**

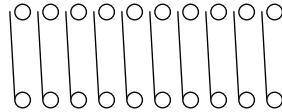
114-1056

**DIP Switches, Rocker Style Actuator**

**Single Pole  
Single Throw**

**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface

**Contact Arrangement**



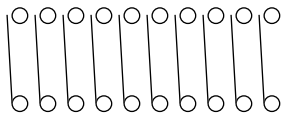
Pin 1

Note: Switches shown in open position.

**Single Pole  
Single Throw  
Low Profile**

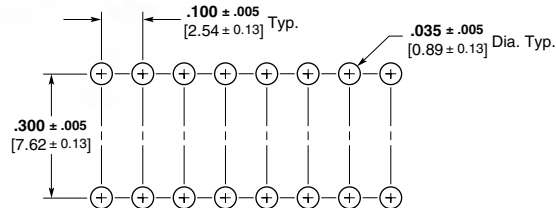
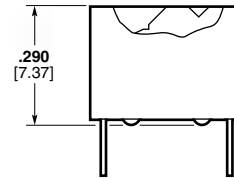
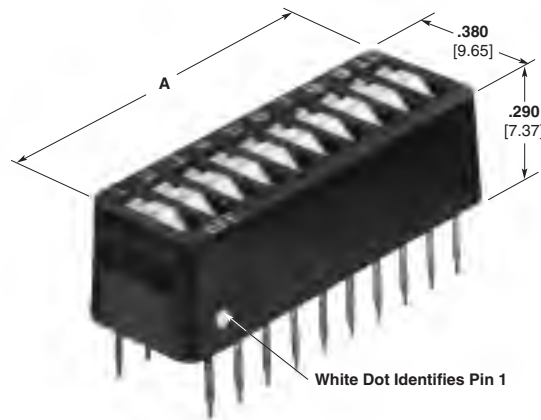
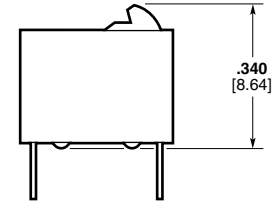
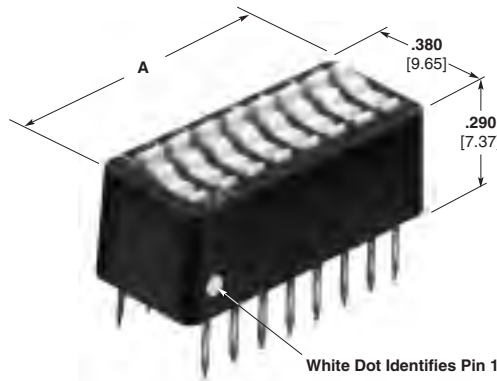
**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface

**Contact Arrangement**



Pin 1

Note: Switches shown in open position.



Recommended PC Board Hole Pattern

No. of Switches	Dim. A		SPST Standard Profile		SPST Low Profile	
	inch	mm	Unsealed <sup>1</sup> Part No.	Sealed Part No.	Unsealed <sup>1</sup> Part No.	Tape Sealed Part No.
2	.280	7.11	2-435640-9	—	435668-1	2-435668-6
3	.380	9.65	3-435640-0	—	—	3-435668-3
4	.480	12.19	435640-2	3-435640-5	435668-3	3-435668-4
5	.580	14.73	435640-3	3-435640-6	435668-4	3-435668-5
6	.680	17.27	435640-4	3-435640-7	435668-5	2-435668-5
7	.780	19.81	435640-1	3-435640-8	—	2-435668-7
8	.880	22.35	435640-5	3-435640-9	435668-7	2-435668-8
9	.980	24.89	435640-6	4-435640-0	—	2-435668-9
10	1.080	27.43	435640-7	4-435640-1	435668-9	3-435668-0
11	1.180	29.97	—	—	—	3-435668-1
12	1.280	32.51	3-435640-2	4-435640-3	—	3-435668-2

<sup>1</sup> All switches are bottom sealed.

**Sip Switches, Low Profile, Vertical and Right Angle**

**FEATURES:**

- End-to-end stackable in .100" center (SSV/SLV) versions
- High pressure wiping contacts allows aqueous or solvent cleaning
- Gas tight contacts (280,000 PSI)
- Ceramic substrate allows wave soldering temperature of 245° for up to 10 seconds (SLV Version)
- 2 SIP switches take up less board space than 1 DIP switch

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-30°C to +85°C  
 Storage Temperature .....-45°C to +100°C  
 Solder Heat Resistance .....Wave soldering temperatures of 245°C ± 5°C with switch in off position 30 seconds when mounting on a .060" thick PCB per MIL-STD 202, Method 210

**MATERIAL SPECIFICATIONS:**

Base .....PPS 94V-0/Encapsulated Ceramic (SLV/SLH)  
 Cover .....PBT 94V-0  
 Contacts .....Gold flashed Beryllium copper  
 Actuator Material .....Polyamide  
 Terminals/Fixed Contacts .....Solder coated copper alloy  
 Terminal Seal .....Insert molded  
 Process Seal .....Gas tight contacts

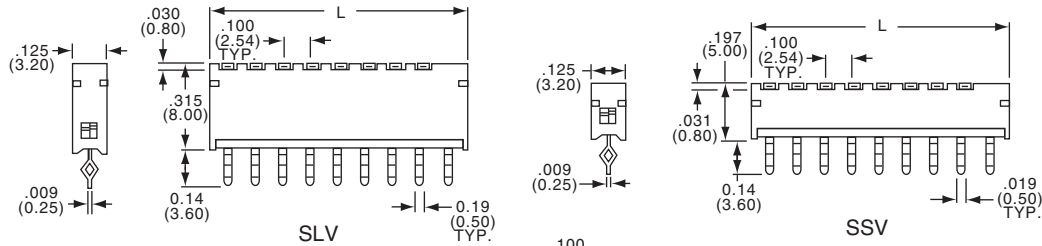
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC max.  
 Initial Contact Resistance .....50 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC  
 Actuation Force .....800 Grams max.  
 Actuator Travel .....50°  
 Life Expectancy .....1,000 Cycles

**SSV**



SSV08

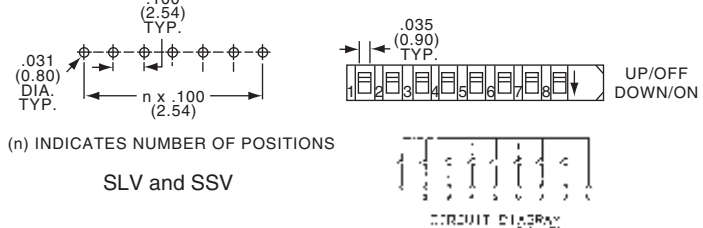


**SLV**



SLV08

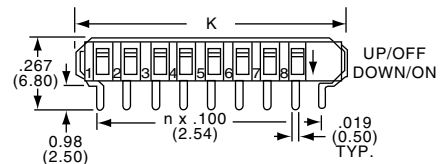
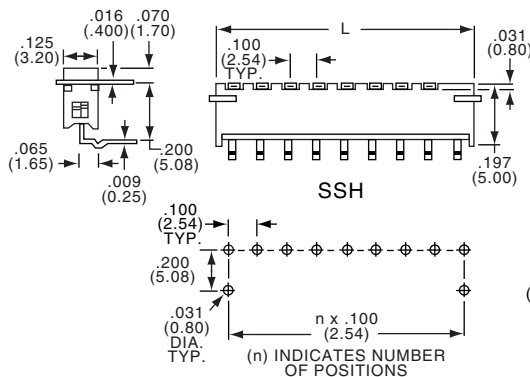
Model		No. of Positions	Dim. L
Tyco Electronics	Alcoswitch		
2-1437589-2	SSV02	2	0.298
2-1437589-3	SSV04	4	0.498
2-1437589-4	SSV06	6	0.698
2-1437589-6	SSV08	8	0.898
2-1437589-7	SSV10	10	1.098
1-1437589-5	SLV04	4	0.498
1-1437589-6	SLV08	8	0.898



**SSH**

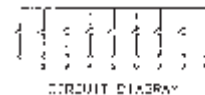


SSH06



**SSH**

Model		No. of Positions	Dim. L	Dim. K
Tyco Electronics	Alcoswitch			
1-1437589-7	SSH02	2	0.298	0.338
1-1437589-8	SSH04	4	0.498	0.538
1-1437589-9	SSH06	6	0.699	0.738
2-1437589-0	SSH08	8	0.898	0.938
2-1437589-1	SSH10	10	1.098	1.138



Alcoswitch DIP Shunts are a highly reliable, low cost means of manually programming various types of electrical/electronic equipment. The shunt consists of a series of conductive straps packaged in a DIP configuration. The straps can be retained intact for a closed circuit or broken with a hand tool to produce an open circuit.

DIP shunts are available in 4- through 12-position configurations. All shunts can be supplied either unprogrammed or preprogrammed.

## DIP Shunts



### Performance Characteristics

**Current Rating:**

Standard Pressure — 2 amperes for +20°C rise above ambient (one conductor per shunt)  
Machine Insertable — 1 ampere for +20°C rise above ambient (one conductor per shunt)

**Insulation Resistance:**

1 x 10<sup>10</sup> ohms min. at 100 VDC

**Dielectric Withstanding Voltage:**

500 VDC min.

**Capacitance:**

2 picofarads max. between adjacent straps  
5 picofarads max. across cut straps

**Temperature Rating:**

-55°C to +105°C

**Humidity:**

Withstands an environment of +40°C and 95% RH for 96 hours

**Terminal Strength (Bend Test):**

Two 45° bend cycles per MIL-STD-202, Method 211, Condition B  
Resistance to Soldering Heat: EIA-364-56A Condition C

**Reconnection Option**

Cut straps can be reconnected by soldering bridging. Solder bridging recommendations are:

- Use low temperature solder
- Use solder tip approximately 1/32 [0.79] in diameter
- Do not let solder tip come in contact with plastic material

### Materials

**Housing:**

Glass-filled thermoplastic, 94V-0 rated

**Metal Parts:**

Copper alloy with electroplated tin finish (gold plated I/O legs are optional)

### Technical Documents

**Product Specifications:**

108-7533 Through Hole

**Instruction Sheets:**

408-07768 Through Hole

**Application Specifications:**

114-1054 Through Hole

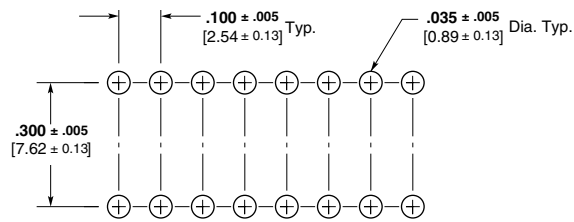
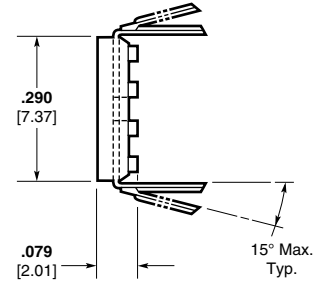
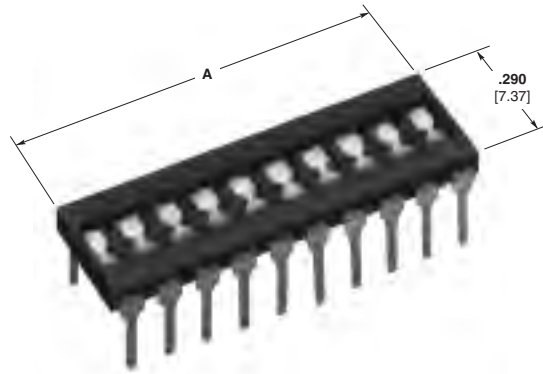
**Standard Shunt  
Standard Pressure**

**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface  
**Housing Color** — Black  
**Programming Tool** — See below

**Programming  
Hand Tool  
Part No. 435862-1**



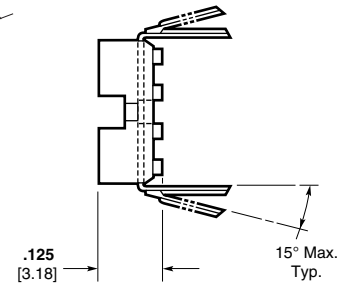
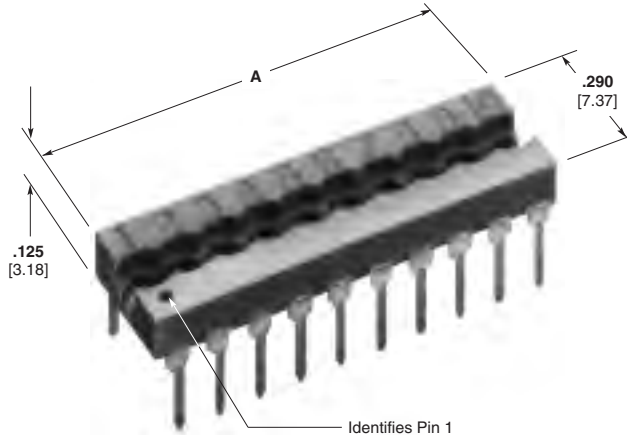
This tool provides a reliable means of programming DIP shunts. It is rugged, lightweight and dependable. No special skills are required to use this tool.



Recommended PC Board Hole Pattern

**Machine Insertable Shunt**  
(Compatible with commercially available IC insertion equipment)

**Contact Lead Spacing** —  
.100 x .300 [2.54 x 7.62]  
**Lead Length** — .140 [3.56]  
below mounting surface  
**Housing Color** — Gray  
**Programming Tool** — None required  
(5 to 10 lbs. [22.2 to 44.4 N] required to manually program each shunt position)



No. of Positions	Dim. A		Standard Shunt Standard Pressure	Machine Insertable Shunt
	inch	mm		
4	.400	10.16	435704-4	—
6	.600	15.24	435704-6	—
7	.700	17.78	435704-7	—
8	.800	20.32	435704-8	436860-7
9	.900	22.86	435704-9	—
10	1.000	25.40	1-435704-0	—
12	1.200	30.48	1-435704-2	—

**Rotary DIP Switches, Low Profile, Process Sealed, 7MM, Through Hole and Surface Mount**

**FEATURES:**

- 40% PCB area space savings over standard rotary dials
- 50% Lower in profile than standard rotary dials
- Hexadecimal or binary code, complement available
- Deflection temperature of 250°C for SMT reflow soldering
- Gold contacts, tin/lead terminals
- Sealed "O" ring design

**MATERIAL SPECIFICATIONS:**

Fixed Contacts/Terminals.....Brass, gold plated / tin/lead  
 Moving Contacts.....BeCu, gold plated  
 Case Material .....PPS UL94V-0  
 Rotor .....Nylon UL94V-0  
 Cover Material .....PPS UL94V-0  
 O-Ring .....Fluoro Rubber

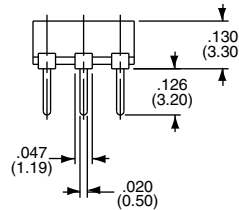
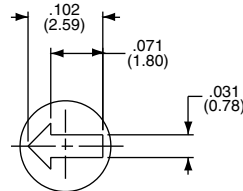
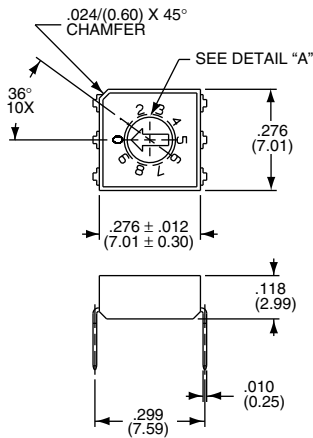
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-10°C to +85°C  
 Storage Temperature.....-45°C to +100°C  
 Solder Heat Resistance .....MIL-STD 202F, Method 210  
 IR Process Capability .....EIA-364-56 Level II (250°C peak)

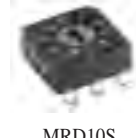
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA Max. @ 20 VDC  
 Initial Contact Resistance .....50m Max. @ 2 VDC 10mA  
 Insulation Resistance .....1,000 Megohms max.  
 Dielectric Strength .....300 VAC for 1 minute  
 Actuator Travel.....36° 10 Position, 22.5° 16 position  
 Operating Force .....200 Grams avg.  
 Life Expectancy .....20,000 Steps, mechanical

**P.C. MOUNT**



MRD10



MRD10S

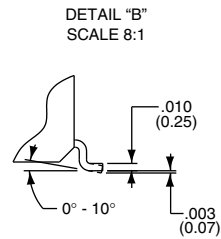
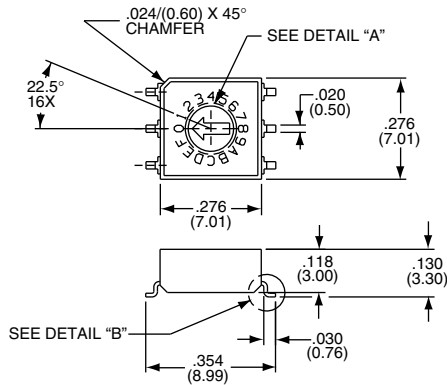


MRD16C



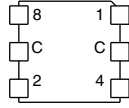
MRD16S

**SURFACE MOUNT**

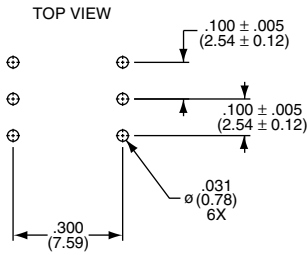


**Rotary DIP Switches, Low Profile, Process Sealed, 7MM, Through Hole and Surface Mount**

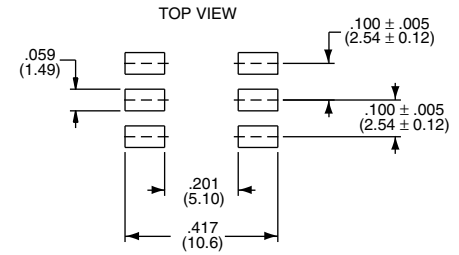
TERMINAL IDENTIFICATION  
VIEWED FROM BOTTOM SWITCH



P.C. LAYOUT (THRU HOLE)



P.C. LAYOUT (SURFACE MOUNT)



TRUTH TABLES

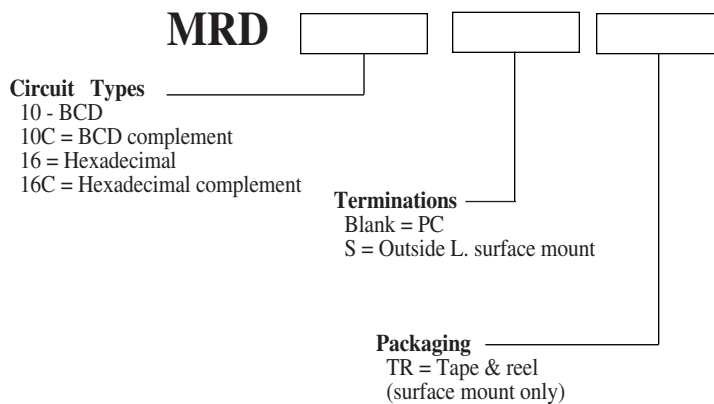
Pos.	0	1	2	3	4	5	6	7	8	9
C	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X
2			X	X			X	X		
4					X	X	X	X		
8									X	X

Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X		X		X		X
2			X	X			X	X			X	X			X	X
4					X	X	X	X					X	X	X	X
8									X	X	X	X	X	X	X	X

Pos.	0	1	2	3	4	5	6	7	8	9
C	X	X	X	X	X	X	X	X	X	X
1	X		X		X		X		X	
2	X	X			X	X			X	X
4	X	X	X	X					X	X
8	X	X	X	X	X	X	X	X		

Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1	X		X		X		X		X		X		X		X	
2	X	X			X	X			X	X			X	X		
4	X	X	X	X					X	X	X	X				
8	X	X	X	X	X	X	X	X								

HOW TO ORDER



Circuit Type	Actuator Color
10	Red
10C	Orange
16	Green
16C	White



**Rotary Dip Switches, Process Sealed, Through Hole and Surface Mount**

**MATERIAL SPECIFICATIONS:**

- Contacts .....Gold flashed copper alloy
- Terminals .....Tin lead plated brass
- Base, Rotor, Case .....PC, Glass filled PBT resin (blue case)  
SMT, Polyimide (white case)
- Movable Contact.....Gold flashed copper alloy
- Ball Support Plate.....Copper alloy
- Detent Spring .....Stainless steel (spring)

**ENVIRONMENTAL SPECIFICATIONS:**

- Operating Temperature.....-22°F to +185°F (-30°C to +85°C)
- Storage Temperature.....-49°F to 212°F (-45°C to +100°C)
- Vibration Resistance.....Subjected to vibration of 10-55hz per second with a total amplitude of .06 in. in 3 mutually perpendicular directions for 2 hours each
- Shock Resistance .....Will withstand 50G acceleration in 3 different planes for a period of 11 milliseconds
- Salt Spray Test .....Withstands an atmosphere of 5% salt water at temperature of 50°C
- Hydrogen Sulfide Test .....Withstands an atmosphere of 15-20 PPM hydrogen sulfide gas at temperature of 40°C for 240 hours
- Atmospheric Test .....Withstands an atmosphere of 30-50 PPM sulfite gas at a temperature of 40°C for 240 hours
- Solder Heat Resistance .....Withstands 5 sec. flow solder bath of 260°C when mounted on a .06" thick PC board per MIL-STD 202, Method 210
- Bubble Test.....Withstands submersion in 60°C Flouriert for 1 min. without leakage

**TYPICAL PERFORMANCE CHARACTERISTICS:**

- Contact Rating .....0.4 VA @ 20 VDC max.
- Initial Contact Resistance .....50 Milliohms max. @ 2 VDC
- Insulation Resistance .....1,000 Megohms min. @ 100 VDC
- Dielectric Strength .....300 VAC RMS @ sea level
- Operating Force .....6 Oz.-in. nom.
- SMT Operating Force.....3 Oz.-in. nom.
- Life Expectancy .....20,000 Steps



DRD10E



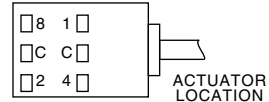
DRD16CE

**TRUTH TABLES**

**Terminal Identification**  
(view from bottom of the switch)



VIEW FROM BOTTOM  
OF THE SWITCH



NOTE: COMMON TERMINALS ARE CONNECTED INTERNALLY.

10-Position, BCD (red actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
C	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X
2			X	X			X	X		
4					X	X	X	X		
8									X	X

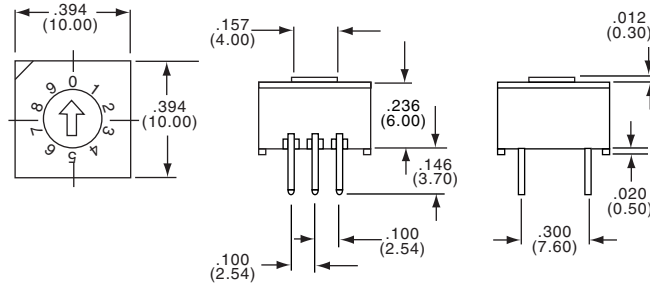
16-Position, Hexadecimal (black actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X		X		X		X
2			X	X			X	X			X	X			X	X
4					X	X	X	X					X	X	X	X
8									X	X	X	X	X	X	X	X

10-Position, BCD Complement (orange actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
C	X	X	X	X	X	X	X	X	X	X
1	X		X		X		X		X	
2	X	X			X	X			X	X
4	X	X	X	X					X	X
8	X	X	X	X	X	X	X	X		

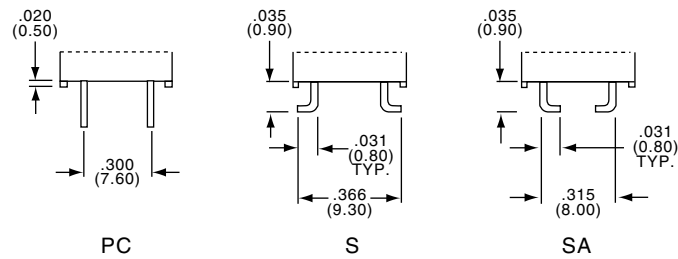
16-Position Hexadecimal Complement (white actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1	X		X		X		X		X		X		X		X	
2	X	X			X	X			X	X			X	X		
4	X	X	X	X					X	X	X	X				
8	X	X	X	X	X	X	X	X								

**Rotary DIP Switches, Process Sealed, Through Hole and Surface Mount**

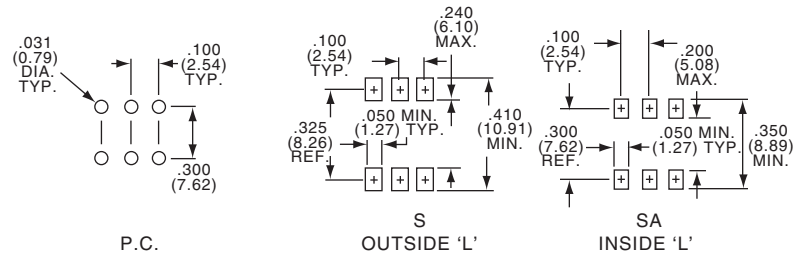
"D" FLUSH ACTUATOR



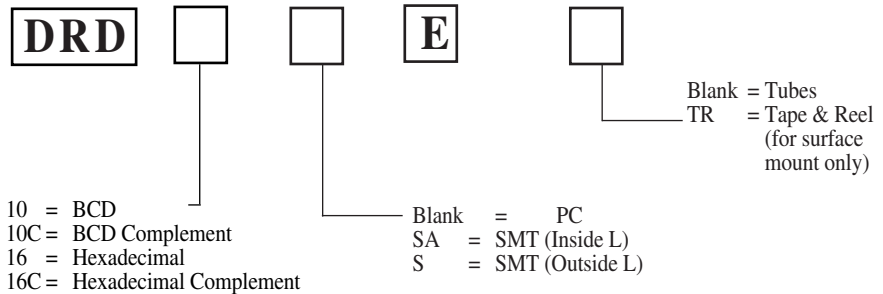
TERMINATIONS



LAYOUTS



HOW TO ORDER



**Rotary DIP Switches, Unsealed, Through Hole, Straight and Right-Angle**

**FEATURES:**

- High pressure contacts (140K PSI) provide 20,000 Steps.
- Unique design utilizes high pressure pin-point sliding contacts to penetrate contaminants on contact surface.
- Terminals insert molded into base.

- Screwdriver, knob and shaft (plastic and steel) type actuators available in both upright and right angle versions.

- 10 And 16 position versions with both real and complement codes.

Note: Common terminals connected internally.

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold flashed copper alloy

Terminals .....Tin Lead Plated

Base, Rotor, Case .....Polyester

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC

Initial Contact Resistance .....50 Milliohms max. @ 2 VDC

Insulation Resistance .....1,000 Megohms min. @ 100 VDC

Dielectric Strength .....300 VAC RMS @ sea level

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-22°F to +185°F (-30°C to +85°C)

Storage Temperature.....-49°F to +212°F (-45°C to +100°C)

Vibration Resistance.....Subjected to vibration of 10-55hz per second with a total amplitude of .06 in. in 3 mutually perpendicular directions for 2 hours each

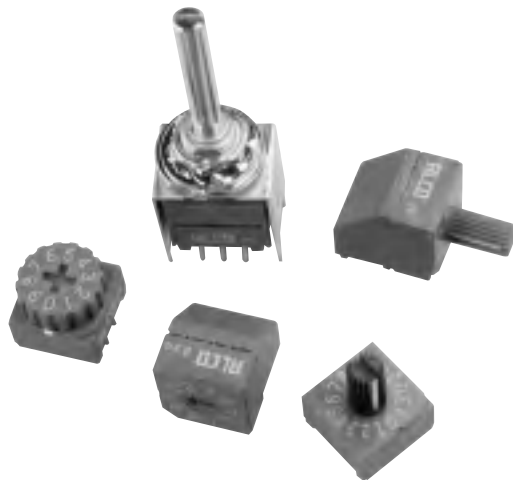
Shock Resistance .....Will withstand 50G acceleration in 3 different planes for a period of 11 milliseconds

Salt Spray Test .....Withstands an atmosphere of 5% salt water at temperature of 50°C

Hydrogen Sulfide Test .....Withstands an atmosphere of 15-20 PPM hydrogen sulfide gas at temperature of 40°C for 240 hours

Atmosphere Test.....Withstands an atmosphere of 30-50 PPM sulfide gas at a temperature of 40°C for 240 hours

Solder Heat Resistance .....Withstands 5 sec. flow solder bath of 260°C when mounted on a .06" thick PC board per MIL-STD 202, Method 210



**Example: DRW 10RA =** Rotary Dip with  
Wheel actuator  
BDC -10 position  
Right angle PC terminations

**Series**  
Rotary Dips (blue case)

**Actuator Style**

- \*D = Flush
- M = Mini plastic shaft
- W = Wheel
- S = Metal shaft

**Circuit Type**

- 10 = BCD
- 10C = BCD complement
- 16 = Hexadecimal
- 16C = Hexadecimal complement

**HOW TO ORDER**

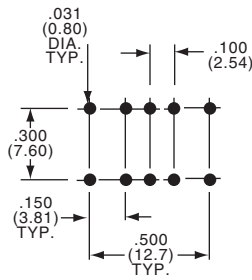
**Terminations**

- Blank = PC
- RA = Right angle for DRM, DRW, DRS only
- RAE = Right angle, Auto Assembly Compatible for DRD type only

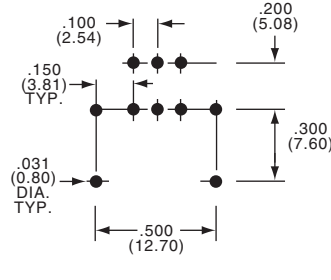
\*DRD Available in RAE version only. For PC or SMT versions, see Pg. A24 DRD "E" Process Sealed Product.

**Rotary DIP Switches, Unsealed, Through Hole, Straight and Right-Angle**

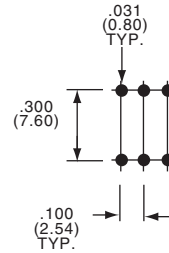
FOOTPRINTS



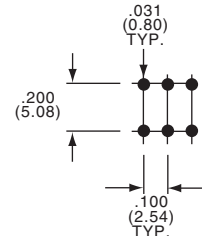
S STYLE VERTICAL  
(METAL SHAFT)



S STYLE RA  
(METAL SHAFT)



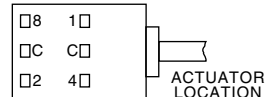
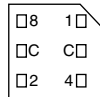
PC



PC  
RIGHT ANGLE

TRUTH TABLES

Terminal Identification  
(view from bottom of the switch)



10-Position, BCD (red actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
C	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X
2			X	X			X	X		
4					X	X	X	X		
8									X	X

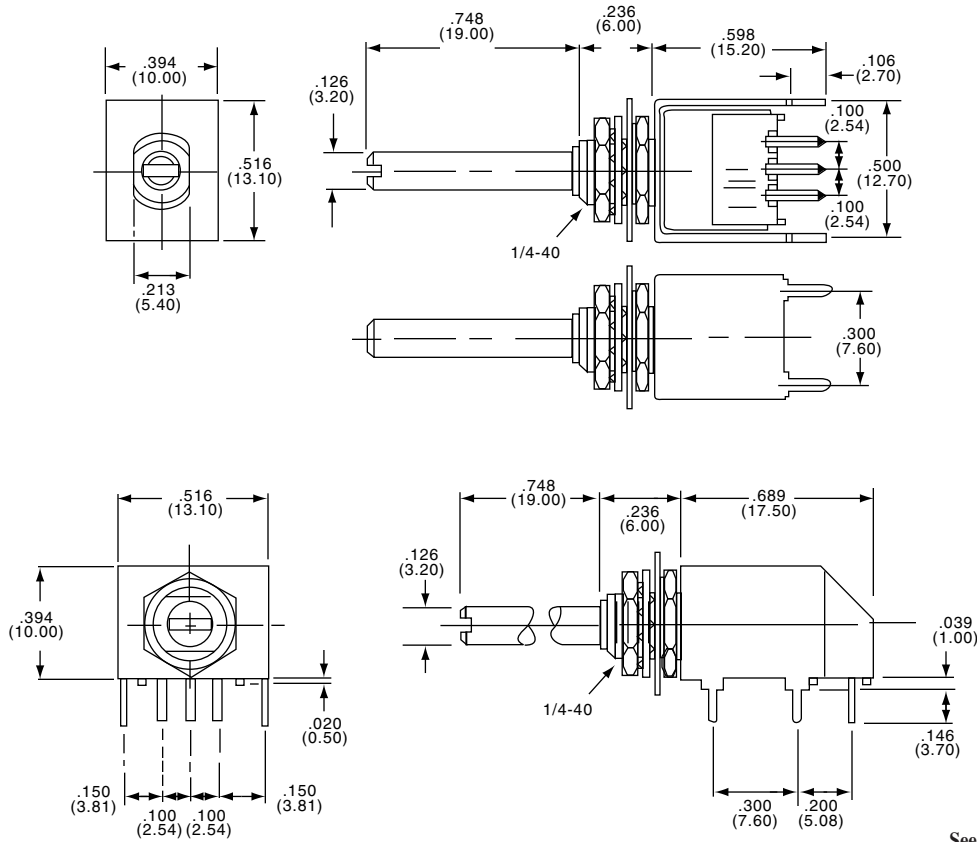
16-Position, Hexadecimal (black actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X		X		X		X
2			X	X			X	X			X	X			X	X
4					X	X	X	X					X	X	X	X
8									X	X	X	X	X	X	X	X

10-Position, BCD Complement (orange actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
$\bar{C}$	X	X	X	X	X	X	X	X	X	X
$\bar{1}$	X		X		X		X		X	
$\bar{2}$	X	X			X	X			X	X
$\bar{4}$	X	X	X	X					X	X
$\bar{8}$	X	X	X	X	X	X	X	X		

16-Position Hexadecimal Complement (white actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
$\bar{C}$	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
$\bar{1}$	X		X		X		X		X		X		X		X	
$\bar{2}$	X	X			X	X			X	X			X	X		
$\bar{4}$	X	X	X	X					X	X	X	X				
$\bar{8}$	X	X	X	X	X	X	X	X								

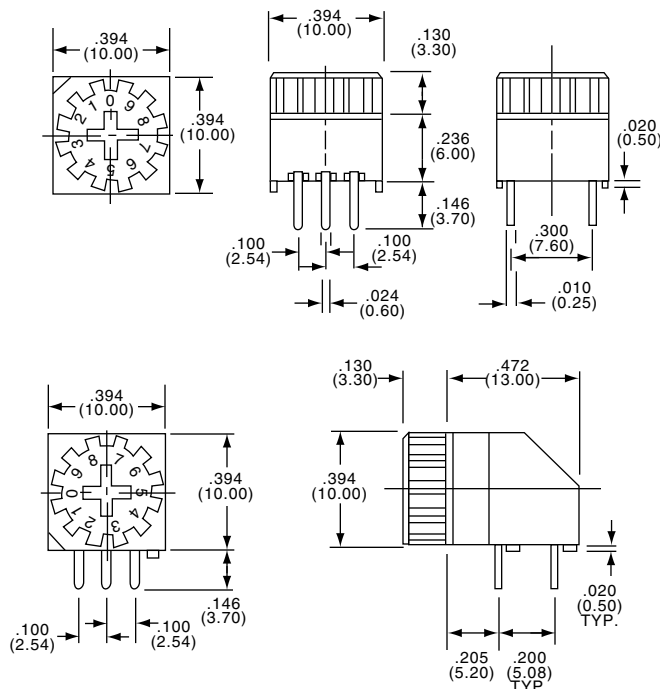
**Rotary DIP Switches, Unsealed, Through Hole, Metal Shaft or Wheel Actuator**

“S” METAL SHAFT ACTUATOR



See Section K for knob selection

“W” WHEEL ACTUATOR

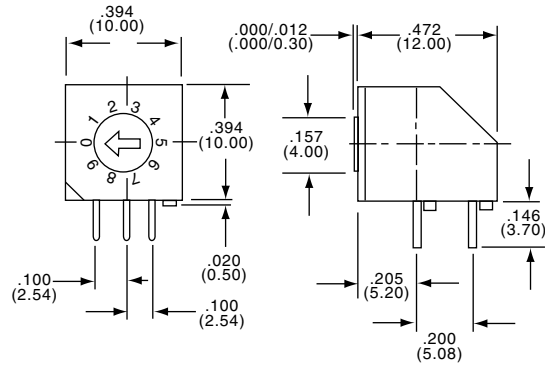


A

DR Series

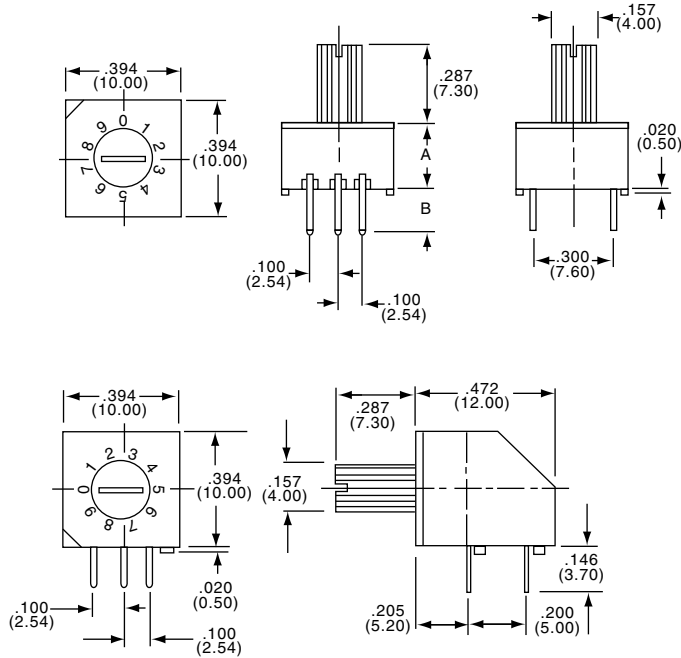
**Rotary DIP Switches, Unsealed, Through-Hole, Flush and Mini Shaft Actuator**

“D” FLUSH ACTUATOR



DIM.	DR	RC, *RA, RR
A	.236 (6.00)	.256 (6.50)
B	.146 (3.70)	.126 (3.20)

“M” MINI-SHAFT ACTUATOR



DIM.	DR	RR
A	.236 (6.00)	.256 (6.50)
B	.146 (3.70)	.126 (3.20)



*ASE/F Series - Page B5*



*SE Series - Page B9*



*STS Series - Page B11*



*TSS Series - Page B16*



*MSS Series - Page B18*



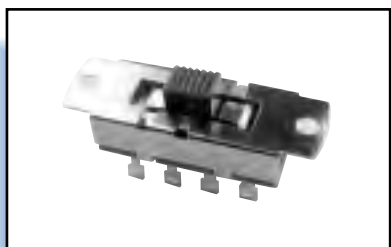
*MSSA Series - Page B24*



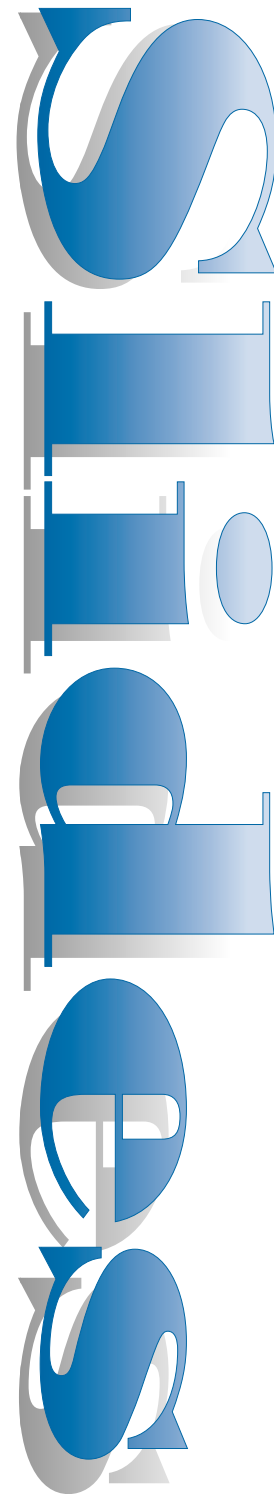
*MHS Series - Page B31*



*SSJ Series - Page B33*



*AC Power Slide Switches - Page B48*





**Slide Switches Part Number Index**

**B**

**Slide Switches**

ASE22	B6	ASF62RS	B9	MSSA101DG	B31	SLS1211	B43
ASE22G	B6	ASF62S	B9	MSSA101DGRA	B32	SLS121PC	B43
ASE22GL	B6	CST022NK	B45	MSSA101EG	B31	SLS121RA	B43
ASE22GS	B7	CST023NK	B45	MSSA101EGRA	B32	SLS131PC	B44
ASE22L	B6	CST042NK	B46	MSSA104D	B31	SLS131RA	B44
ASE22R	B5,B6	CST043NK	B46	MSSA104D1	B31	SLS141PC	B44
ASE22RG	B6	CST062NK	B46	MSSA104DRA	B32	SLS141RA	B44
ASE22RGL	B7	KSS10A	B40	MSSA104E	B31	SLS151PC	B44
ASE22RGS	B7	KSS10B	B40	MSSA104ERA	B32	SLS151RA	B44
ASE22RL	B7	KSS20A	B40	MSSA111DG	B30	SLS220	B41
ASE22RS	B7	KSS20B	B40	MSSA111EG	B30	SLS2201	B42
ASE22S	B7	MHS122	B33	MSSA114D	B30	SLS220PC	B40
ASE42	B6	MHS122G	B33	MSSA114E	B30	SLS230PC	B40
ASE42G	B6	MHS122GRA	B34	MSSA1350	B26	SLS240PCA	B40
ASE42GL	B6	MHS122K	B33	MSSA1350G	B26	SLS250PC	B40
ASE42GS	B7	MHS122KG	B33	MSSA1350R	B26	SLS260PC	B40
ASE42L	B6	MHS122RA	B34	MSSA1350RG	B26	SLSA120	B41
ASE42R	B6	MHS123	B33	MSSA1450	B26	SLSA1201	B42
ASE42RG	B6	MHS123G	B33	MSSA1450G	B26	SLSA220	B41
ASE42RGL	B7	MHS123GRA	B34	MSSA1450R	B26	SLSA2201	B42
ASE42RGS	B7	MHS123K	B33	MSSA1450RG	B26	SSA12	B39
ASE42RL	B7	MHS123KG	B33	MSSA201NGRA	B32	SSA12G	B39
ASE42RS	B7	MHS123RA	B34	MSSA201PGRA	B32	SSA22	B39
ASE42S	B7	MHS133	B33	MSSA204N	B31	SSA22G	B39
ASE43	B6	MHS133G	B33	MSSA204N1	B31	SSB12	B38
ASE43G	B6	MHS133GRA	B34	MSSA204NRA	B32	SSB12G	B38
ASE43GL	B6	MHS133K	B33	MSSA204P1	B31	SSB12R	B38
ASE43GS	B7	MHS133KG	B33	MSSA204PRA	B32	SSB12RG	B38
ASE43L	B6	MHS133RA	B34	MSSA211NG	B30	SSB22	B38
ASE43R	B6	MHS222	B33	MSSA214N	B30	SSB22G	B38
ASE43RG	B6	MHS222G	B33	MSSA2350	B27	SSB22R	B38
ASE43RGL	B7	MHS222GRA	B34	MSSA2350G	B27	SSB22RG	B38
ASE43RGS	B7	MHS222K	B33	MSSA2350R	B27	SSB42	B38
ASE43RL	B7	MHS222KG	B33	MSSA2350RG	B27	SSB42G	B38
ASE43RS	B7	MHS222RA	B34	MSSA2450	B27	SSJ12	B35
ASE43S	B7	MHS223	B33	MSSA2450G	B27	SSJ12R	B35
ASE62	B6	MHS223G	B33	MSSA2450R	B27	SSJ13	B35
ASE62G	B5,B6	MHS223GRA	B34	MSSA2450RG	B27	STS121PC	B13
ASE62GL	B6	MHS223K	B33	MSSA3350	B28	STS121RA	B13
ASE62GS	B7	MHS223KG	B33	MSSA3350G	B28	STS1300PC	B14
ASE62L	B6	MHS223RA	B34	MSSA3350R	B28	STS1300RA	B14
ASE62R	B6	MHS233	B33	MSSA3350RG	B28	STS131PC	B13
ASE62RG	B6	MHS233G	B33	MSSA3450	B28	STS131RA	B13
ASE62RGL	B7	MHS233GRA	B34	MSSA3450G	B28	STS1400PC	B14
ASE62RGS	B7	MHS233K	B33	MSSA3450R	B28	STS1400RA	B14
ASE62RL	B7	MHS233KG	B33	MSSA3450RG	B28	STS141PC	B14
ASE62RS	B7	MHS233RA	B34	MSSA4350	B29	STS141RA	B14
ASE62S	B7	MLL1200S	B47	MSSA4350G	B29	STS151PC	B15
ASF22	B5,B8	MLL1200STR	B47	MSSA4350R	B29	STS151RA	B15
ASF22G	B8	MLL1300S	B47	MSSA4450	B29	STS161PC	B15
ASF22GL	B8	MMS12	B36	MSSA4450G	B29	STS161RA	B15
ASF22GS	B9	MMS22	B36	MSSA4450R	B29	STS220PC	B16
ASF22L	B8	MMS22R	B36	MSSA4450RG	B29	STS2300PC	B15
ASF22R	B5,B8	MMS23	B36	S1DGPC	B12	STS230PC	B16
ASF22RG	B8	MMS23R	B36	S1DGRA	B12	STS2400PC	B15
ASF22RGL	B9	MMS42	B37	S1EGPC	B12	STS240PC	B16
ASF22RGS	B9	MMS42R	B37	S1EGRA	B12	STS250PC	B16
ASF22RL	B9	MMS43	B37	S2DGPC	B12	STS260PC	B16
ASF22RS	B9	MMS43R	B37	S2DGRA	B12	STSA220RA	B16
ASF22S	B9	MSS1200	B20	S2EGPC	B12	STSA220RA1	B16
ASF42	B8	MSS1200G	B20	S2EGRA	B12	STSA230RA	B16
ASF42G	B8	MSS1200R	B20	SDS1240RA0	B17	STSA230RA1	B16
ASF42GL	B8	MSS1200RG	B20	SDS1240RA8	B17	TSD21AAGPC	B18
ASF42GS	B9	MSS1300	B20	SDS1340RA0	B17	TSD21DDGIPC	B18
ASF42L	B8	MSS1300G	B20	SDS1340RA8	B17	TSD21DDGIRA	B19
ASF42R	B8	MSS1300R	B20	SDS2240RA0	B17	TSD21DDGPC	B18
ASF42RG	B8	MSS1400	B21	SDS2240RA8	B17	TSD21DDGIRA	B19
ASF42RGL	B9	MSS1400G	B21	SDS2340RA0	B17	TSD21IEEGIRA	B19
ASF42RGS	B9	MSS2225	B21	SDS2340RA8	B17	TSD21IEEGRA	B19
ASF42RL	B9	MSS2225G	B21	SE1DGPC	B12	TSD21RGIPC	B18
ASF42RS	B9	MSS2250	B21	SE1DGRA	B12	TSS11AGIPC	B18
ASF42S	B9	MSS2250G	B21	SE1DGRA	B12	TSS11AGPC	B18
ASF43	B8	MSS2250R	B22	SE1DGSMT	B11	TSS11DGIPC	B18
ASF43G	B8	MSS2250RG	B22	SE1DGSMTTR	B11	TSS11DGIRA	B19
ASF43GL	B8	MSS4200	B22	SE1EGPC	B12	TSS11IDGPC	B18
ASF43GS	B9	MSS4200G	B22	SE1EGRA	B12	TSS11IDGIRA	B19
ASF43L	B8	MSS4200R	B23	SE1EGSMT	B11	TSS11IEGIPC	B18
ASF43R	B8	MSS4200RG	B23	SE1EGSMTTR	B11	TSS11IEGIRA	B19
ASF43RG	B8	MSS4250	B22	SE1GSM	B11	TSS11IEGPC	B18
ASF43RGL	B9	MSS4300	B23	SE1GSMTR	B11	TSS11IEGRA	B19
ASF43RGS	B9	MSS4300G	B23	SE2DGPC	B12	TSS21KGIPC	B18
ASF43RL	B9	MSS4300R	B24	SE2DGRA	B12	TSS21KGGPC	B18
ASF43RS	B9	MSS4300RG	B24	SE2EGPC	B12	TSS21NGIPC	B18
ASF43S	B9	MSS4335	B23	SE2EGRA	B12	TSS21NGIRA	B19
ASF62	B8	MSS4350R	B24	SL1000	B40	TSS21NGPC	B18
ASF62G	B8	MSS4350RG	B24	SL220	B40	TSS21NGRA	B19
ASF62GL	B8	MSS6200	B24	SL330	B40	TSS21PAGRA	B19
ASF62GS	B9	MSS6200G	B24	SL550	B40	TSS21PGIRA	B19
ASF62L	B8	MSS6250	B25	SL660	B40	TSS21PGPC	B18
ASF62R	B8	MSS6350	B25	SL770	B40	TSS21PGRA	B19
ASF62RG	B8	MSS6350G	B25	SL880	B40	TSS41NGPC	B18
ASF62RGL	B9	MSS6350R	B25	SLS120	B41	TSS41NGRA	B19
ASF62RGS	B9	MSS6350RG	B25	SLS1201	B42	1571490	B48
ASF62RL	B9			SLS121	B43	1571491	B48

B2

**Slide Switch Selection Guide**

**PRODUCT LINE FEATURES**

- One of the broadest lines in the industry.
- One to six pole configurations.
- Current ratings from 0.4V @ 20VDC to 3A @ 115VAC.
- Miniature and sub-miniature case sizes.
- Gold or silver plating available in most series.
- Wave solderable, washable, and surface mount versions.
- Rocker (butt), shoe and bifurcated contact mechanisms.
- Vertical and RA actuator styles.

CIRCUITRY	SERIES	TERMINATION	CONTACT RATING/PLATING	ACTION	LIFE EXPECTANCY
SPST	TSS	P.C.	.4VA/GOLD	STANDARD/FLUSH	80K CYCLES
SPDT	MHS	P.C./RIGHT ANGLE	.4VA/GOLD:300mA/SILVER	STANDARD/BATON	15K CYCLES
	MLL	SURFACE MOUNT	0.3A @ 4 VDC/SILVER	RIGHT ANGLE	10K CYCLES
	MMS	P.C.	100MA/SILVER	STANDARD	10K CYCLES
	MSS	P.C./RIGHT ANGLE	.4VA/GOLD:300MA/SILVER	STANDARD	15K CYCLES
	MSSA <sup>H</sup> H1	P.C./RIGHT ANGLE	.4VA/GOLD	STANDARD	30K CYCLES
	MSSA <sup>H</sup> H4	P.C./RIGHT ANGLE	3A/SILVER	STANDARD	30K CYCLES
	SDS	P.C./RIGHT ANGLE	300mA @ 125VAC/SILVER	STANDARD	10K CYCLES
	SE, S	P.C./RIGHT ANGLE/SMT	.4VA/GOLD	STANDARD	6K CYCLES
	SL	P.C.	250mA/SILVER	STANDARD	6K CYCLES
	SLS	P.C./RIGHT ANGLE	250mA/SILVER	STANDARD	6K CYCLES
	SLS/A	P.C.	500mA/SILVER	STANDARD	10K CYCLES
	SSA	P.C.	100mA/SILVER:.4VA/GOLD	STANDARD	10K CYCLES
	SSB	P.C./RIGHT ANGLE	100MA/SILVER:.4VA/GOLD	STANDARD	10K CYCLES
	SSJ	P.C./RIGHT ANGLE	100mA/SILVER	STANDARD	10K CYCLES
	STS	P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES
	TSS	P.C./RIGHT ANGLE	.4VA/GOLD	STANDARD/FLUSH	60-80K CYCLES
SP3T	MHS	P.C./RIGHT ANGLE	300MA/SILVER:.4VA/GOLD	STANDARD/BATON	15K CYCLES
	MLL	SURFACE MOUNT	0.3A @ 4 VDC/SILVER	RIGHT ANGLE	10K CYCLES
	MSS	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES
	MSSA	P.C./RIGHT ANGLE	300MA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES
	SDS	P.C./RIGHT ANGLE	300mA @ 125VAC/SILVER	STANDARD	10K CYCLES
	SL	P.C.	250mA/SILVER	STANDARD	6K CYCLES
	SLS	P.C./RIGHT ANGLE	250MA/SILVER	STANDARD	6K CYCLES
	SSJ	P.C.	100mA/SILVER	STANDARD	10K CYCLES
	STS	P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES
SP4T	MSS	P.C.	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES
	MSSA	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES
	SLS	P.C./RIGHT ANGLE	250mA/SILVER	STANDARD	6K CYCLES
	STS	P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES
SP5T	SL	P.C.	250mA/SILVER	STANDARD	6K CYCLES
	SLS	P.C./RIGHT ANGLE	250mA/SILVER	STANDARD	6K CYCLES
	STS	P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES
SP6T	SL	P.C.	250mA/SILVER	STANDARD	6K CYCLES
	STS	P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES
SP7T	SL	P.C.	250mA/SILVER	STANDARD	6K CYCLES
SP8T	SL	P.C.	250mA/SILVER	STANDARD	6K CYCLES
SP10T	SL	P.C.	250mA/SILVER	STANDARD	6K CYCLES
DPST	TSS	P.C.	.4VA/GOLD	STANDARD/FLUSH	80K CYCLES
DPDT	ASE/F	P.C./RIGHT ANGLE/SMT	.4VA/GOLD:300mA SILVER	STANDARD/FLUSH	10K CYCLES
	CSS	P.C.	300mA/SILVER	BATON	15K CYCLES
	CST	P.C.	300mA/SILVER	BATON	15K CYCLES
	MHS	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD/BATON	15K CYCLES
	MMS	P.C./RIGHT ANGLE	100mA/SILVER	STANDARD	10K CYCLES
	MSS	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES
	MSSA21	P.C./RIGHT ANGLE	.4VA/GOLD	STANDARD	30K CYCLES

**B**

Slide Switches

**Slide Switch Selection Guide**

**B**  
Slide Switches

CIRCUITRY	SERIES	TERMINATION	CONTACT RATING/PLATING	ACTUATION	LIFE EXPECTANCY	
DPDT	1571491	PANEL	6A/SILVER	STANDARD	5K CYCLES	
	MSSA2H4	P.C./RIGHT ANGLE	3A/SILVER	STANDARD/FLUSH	30K CYCLES	
	SDS	P.C./RIGHT ANGLE	300mA @ 125 VAC/SILVER	STANDARD	10K CYCLES	
	SE, S	P.C./RIGHT ANGLE	.4VA/GOLD	STANDARD	10K CYCLES	
	SLS	P.C.	250mA/SILVER	STANDARD	6K CYCLES	
	SLS/A	P.C.	500mA/SILVER	STANDARD	10K CYCLES	
	SSA	P.C.	100mA/SILVER:.4VA/GOLD	STANDARD	10K CYCLES	
	SSB	P.C./RIGHT ANGLE	100mA/SILVER:.4VA/GOLD	STANDARD	10K CYCLES	
	STS	P.C./RIGHT ANGLE	300 mA/SILVER	STANDARD	10K CYCLE	
	TSS	P.C./RIGHT ANGLE	.4VA/GOLD	STANDARD/FLUSH	60-80K CYCLES	
	DP3T	1571490	PANEL	13A/SILVER	STANDARD	5K CYCLES
		CST	P.C.	300mA/SILVER	BATON	10K CYCLES
		MHS	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD/BATON	15KCYCLES
MMS		P.C./RIGHT ANGLE	100mA/SILVER	STANDARD	10K CYCLES	
MSSA		P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES	
SDS		P.C./RIGHT ANGLE	300mA @ 125 VAC	STANDARD	10K CYCLES	
SLS		P.C.	250mA/SILVER	STANDARD	6K CYCLES	
STS		P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES	
DP4T		MSS	P.C.	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES
		MSSA	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES
		SLS	P.C.	250mA/SILVER	STANDARD	6K CYCLES
DP5T		STS	P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES
		SLS	P.C.	250mA/SILVER	STANDARD	6K CYCLES
DP6T	STS	P.C./RIGHT ANGLE	300mA/SILVER	STANDARD	10K CYCLES	
	SLS	P.C.	250mA/SILVER	STANDARD	6K CYCLES	
3P3T	MSSA	P.C./RIGHT ANGLE	300mA/SILVER: .4VA/GOLD	STANDARD	15K CYCLES	
	SSB	P.C.	100mA/SILVER:.4VA/GOLD	STANDARD	10K CYCLES	
	MSSA	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES	
4PDT	ASE/F	P.C./RIGHT ANGLE/SMT	300mA/SILVER:.4VA/GOLD	STANDARD/FLUSH	10K CYCLES	
	CST	P.C.	300mA/SILVER	BATON	10K CYCLES	
	MMS	P.C./RIGHT ANGLE	100mA/SILVER	STANDARD	10K CYCLES	
	MSS	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES	
	SSB	P.C.	100mA/SILVER:.4VA/GOLD	STANDARD	10K CYCLES	
	TSS	P.C./RIGHT ANGLE	.4VA/GOLD	STANDARD	80K CYCLES	
	ASE/F	P.C./RIGHT ANGLE/SMT	300mA/SILVER	STANDARD/FLUSH	10K CYCLES	
4P3T	CST	P.C.	300mA/SILVER	BATON	10K CYCLES	
	MHS	P.C.	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES	
	MMS	P.C./RIGHT ANGLE	100mA/SILVER	STANDARD	10K CYCLES	
	MSS/MSSA	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15L CYCLES	
4P4T	MSSA	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES	
6PDT	ASE/F	P.C./RIGHT ANGLE/SMT	300mA/SILVER:.4VA/GOLD	STANDARD/FLUSH	10K CYCLES	
	CST	P.C.	300mA/SILVER:.4VA/GOLD	BATON	10K CYCLES	
	MSS	P.C.	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES	
6P3T	MSS	P.C./RIGHT ANGLE	300mA/SILVER:.4VA/GOLD	STANDARD	15K CYCLES	

**Slide Switches, Auto-insertable, Through Hole and Surface Mount**

**FEATURES:**

- Unique design allows ASE/F to withstand aqueous or solvent cleaning processes.
- High temperature anti-static plastic construction will withstand most surface mount, vapor phase reflow or wave soldering conditions.
- Three standard types:  
ASF – DIP package with flush actuator allows auto insertion on standard IC equipment. Standard tape seal and closed case construction provide process seal.

- ASFO–Open ended flush actuator without tape seal.
- ASE–extended actuator open-ended case allows washout after process cleaning.
- 2, 4 and 6 pole versions available with top or side actuator.
- Bifurcated double wipe contacts provide dependable, telecom grade switching.
- Industry standard .100 x .300 pin spacing

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold over nickel or  
Silver over nickel flash  
Case Material .....PET  
Actuator Material .....Nylon  
Terminal.....Copper alloy, terminals tin lead plate  
(90/10) over nickel

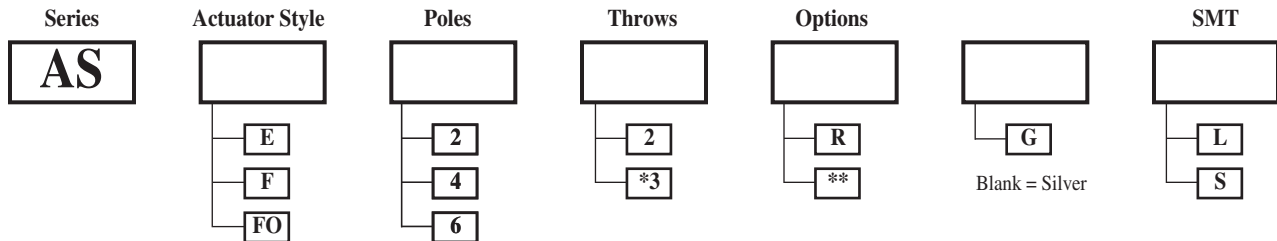
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA @ 20 VDC or peak AC shorting type  
Silver: 300mA @ 115 VAC 28 VDC  
Initial Contact Resistance .....40 Milliohms max.  
Insulation Resistance .....1,000 Megohms @ 500 VDC min.  
Dielectric Strength .....1,000 Volts RMS @ sea level  
Contact Timing .....Shorting  
Life Expectancy .....10,000 Cycles  
Actuation Force ......850g±150grams  
Travel ..... .100 ±.010 [2.54±.25]

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-40°F to +176°F (-40°C to +80°C)  
Storage Temperature.....-40°F to +176°F (-40°C to +80°C)  
Solder Heat Resistance .....See page M3-M4  
Movable Contact .....Copper alloy  
Terminal Seal.....Insert molded

**PART NUMBERING**



ASF: Tape seal, closed (sealed) case, flush top actuator.  
ASE: Open ended case, extended top or side actuator.  
ASFO: Open ended case, flush top or side actuator.

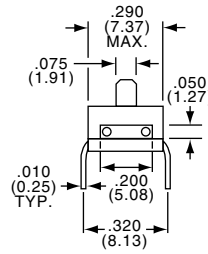
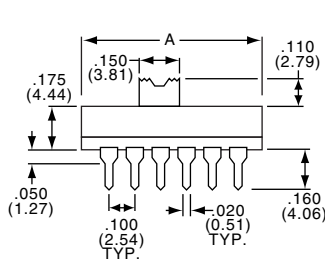
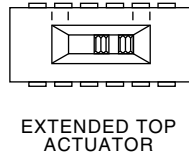
Standard actuator color is white.  
E= Extended actuator  
F= Flush actuator  
FO= Open ended without tape seal  
G= Gold contacts  
R= Side actuator  
\*3= Throw available in 4 pole only  
L= SMT terminal configuration  
S= SMT terminal reverse L configuration (Refer to page B10 for pad layout)



\*\*Flush side actuator "R" versions are supplied with open ended case and without tape seal.

**Note: For SPDT requirements, order DPDT version and use either set of contacts for SPDT switching.**

**Slide Switches, Extended Actuator, Through Hole and Surface Mount**

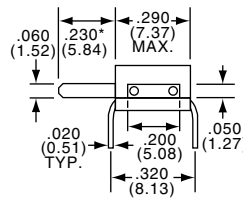
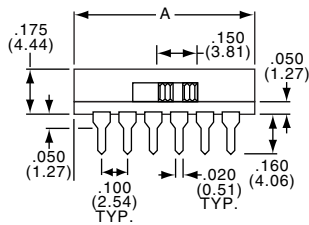
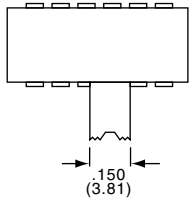


NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Upright, Through Hole, Extended Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
1437581-2	ASE22	DPDT	Silver	.400/10.2
1437581-4	ASE22G	DPDT	Gold	.400/10.2
1-1437581-4	ASE42	4PDT	Silver	.700/17.8
1-1437581-6	ASE42G	4PDT	Gold	.700/17.8
2-1437581-5	ASE43	4P3T	Silver	1.10/27.9
2-1437581-6	ASE43G	4P3T	Gold	1.10/27.9
3-1437581-1	ASE62	6PDT	Silver	1.00/25.4
3-1437581-3	ASE62G	6PDT	Gold	1.00/25.4

**EXTENDED SIDE ACTUATOR**

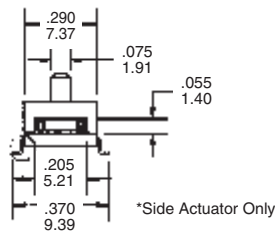
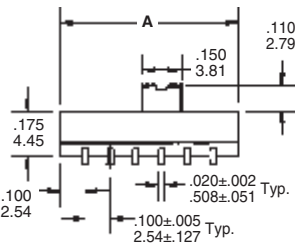
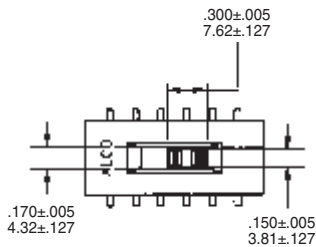


\*.105 (2.67) ASE22R, ASE22RG

NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Right Angle, Through Hole, Extended Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
1437581-8	ASE22R	DPDT	Silver	.400/10.2
1437581-9	ASE22RG	DPDT	Gold	.400/10.2
1-1437581-9	ASE42R	4PDT	Silver	.700/17.8
2-1437581-0	ASE42RG	4PDT	Gold	.700/17.8
2-1437581-9	ASE43R	4P3T	Silver	1.10/27.9
3-1437581-0	ASE43RG	4P3T	Gold	1.10/27.9
3-1437581-6	ASE62R	6PDT	Silver	1.00/25.4
3-1437581-7	ASE62RG	6PDT	Gold	1.00/25.4



\*Side Actuator Only

**L Type Surface Mount**

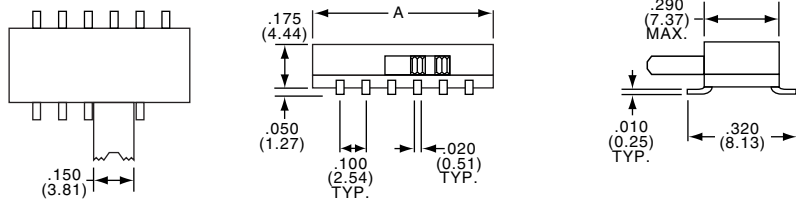
NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Upright, Surface Mount "L" Type, Extended Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
1437581-5	ASE22GL	DPDT	Gold	.400/10.2
1437581-7	ASE22L	DPDT	Silver	.400/10.2
1-1437581-7	ASE42GL	4PDT	Gold	.700/17.8
1-1437581-8	ASE42L	4PDT	Silver	.700/17.8
2-1437581-7	ASE43GL	4P3T	Gold	1.10/27.9
2-1437581-8	ASE43L	4P3T	Silver	1.10/27.9
3-1437581-4	ASE62GL	6PDT	Gold	1.00/25.4
3-1437581-5	ASE62L	6PDT	Silver	1.00/25.4

**Slide Switches, Extended Actuator, Through Hole and Surface Mount**

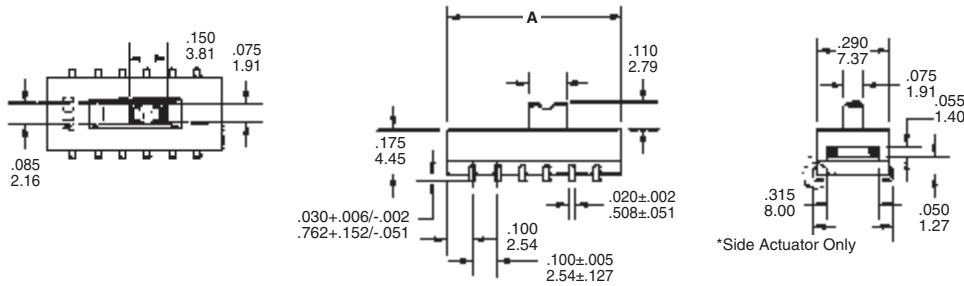
**B**  
ASE/F Series



NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Right Angle, Surface Mount "L" Type, Extended Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
—	ASE22RGL	DPDT	Gold	.400/10.2
1-1437581-1	ASE22RL	DPDT	Silver	.400/10.2
2-1437581-1	ASE42RGL	4PDT	Gold	.700/17.8
2-1437581-2	ASE42RL	4PDT	Silver	.700/17.8
—	ASE43RGL	4P3T	Gold	1.10/27.9
—	ASE43RL	4P3T	Silver	1.10/27.9
3-1437581-8	ASE62RGL	6PDT	Gold	1.00/25.4
3-1437581-9	ASE62RL	6PDT	Silver	1.00/25.4

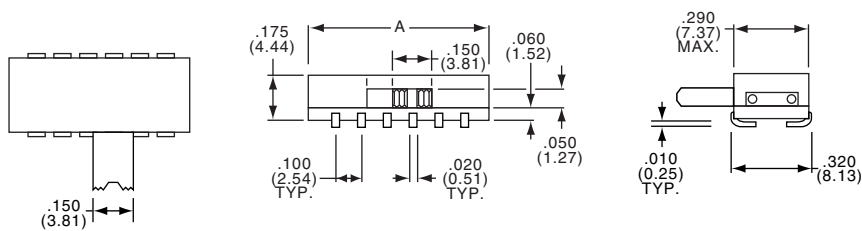


**S Type Surface Mount**

NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Upright, Surface Mount "S" Type, Extended Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
1437581-6	ASE22GS	DPDT	Gold	.400/10.2
1-1437581-3	ASE22S	DPDT	Silver	.400/10.2
—	ASE42GS	4PDT	Gold	.700/17.8
2-1437581-4	ASE42S	4PDT	Silver	.700/17.8
—	ASE43GS	4P3T	Gold	1.10/27.9
—	ASE43S	4P3T	Silver	1.10/27.9
—	ASE62GS	6PDT	Gold	1.00/25.4
—	ASE62S	6PDT	Silver	1.00/25.4



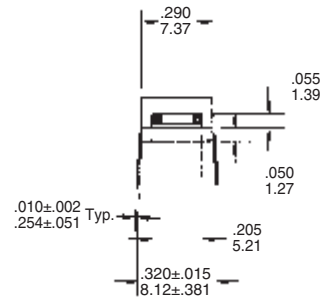
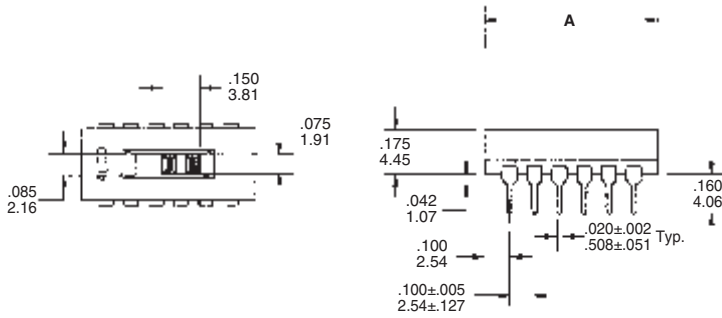
NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Right Angle, Surface Mount "S" Type, Extended Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
1-1437581-0	ASE22RGS	DPDT	Gold	.400/10.2
1-1437581-2	ASE22RS	DPDT	Silver	.400/10.2
—	ASE42RGS	4PDT	Gold	.700/17.8
2-1437581-3	ASE42RS	4PDT	Silver	.700/17.8
—	ASE43RGS	4P3T	Gold	1.10/27.9
—	ASE43RS	4P3T	Silver	1.10/27.9
—	ASE62RGS	6PDT	Gold	1.00/25.4
—	ASE62RS	6PDT	Silver	1.00/25.4



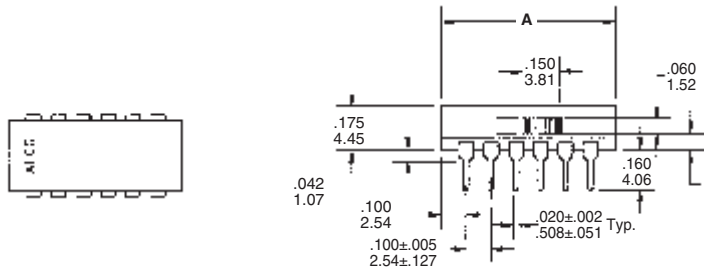
**Slide Switches, Flush Actuator, Through Hole and Surface Mount**



**Upright, Through Hole, Flush Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
5-1437581-6	ASF22	DPDT	Silver	.400/10.2
5-1437581-8	ASF22G	DPDT	Gold	.400/10.2
6-1437581-8	ASF42	4PDT	Silver	.700/17.8
7-1437581-0	ASF42G	4PDT	Gold	.700/17.8
7-1437581-8	ASF43	4P3T	Silver	1.10/27.9
7-1437581-9	ASF43G	4P3T	Gold	1.10/27.9
8-1437581-4	ASF62	6PDT	Silver	1.00/25.4
8-1437581-6	ASF62G	6PDT	Gold	1.00/25.4

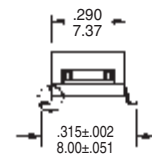
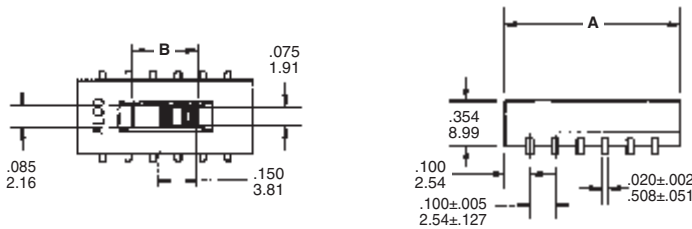
NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.



**Right Angle, Through Hole, Flush Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
6-1437581-2	ASF22R	DPDT	Silver	.400/10.2
6-1437581-3	ASF22RG	DPDT	Gold	.400/10.2
7-1437581-3	ASF42R	4PDT	Silver	.700/17.8
7-1437581-4	ASF42RG	4PDT	Gold	.700/17.8
	ASF43R	4P3T	Silver	1.10/27.9
8-1437581-2	ASF43RG	4P3T	Gold	1.10/27.9
8-1437581-9	ASF62R	6PDT	Silver	1.00/25.4
9-1437581-1	ASF62RG	6PDT	Gold	1.00/25.4

NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.



**L Type Surface Mount**

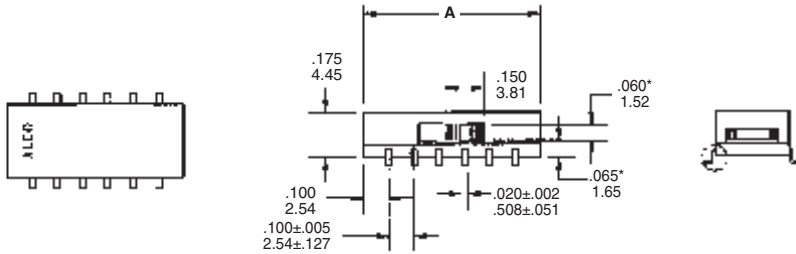
**Upright, Surface Mount "L" Type, Flush Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
5-1437581-9	ASF22GL	DPDT	Gold	.400/10.2
6-1437581-1	ASF22L	DPDT	Silver	.400/10.2
7-1437581-1	ASF42GL	4PDT	Gold	.700/17.8
7-1437581-2	ASF42L	4PDT	Silver	.700/17.8
8-1437581-0	ASF43GL	4P3T	Gold	1.10/27.9
8-1437581-1	ASF43L	4P3T	Silver	1.10/27.9
8-1437581-7	ASF62GL	6PDT	Gold	1.00/25.4
8-1437581-8	ASF62L	6PDT	Silver	1.00/25.4

NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.



**Slide Switches, Flush Actuator, Through Hole and Surface Mount**

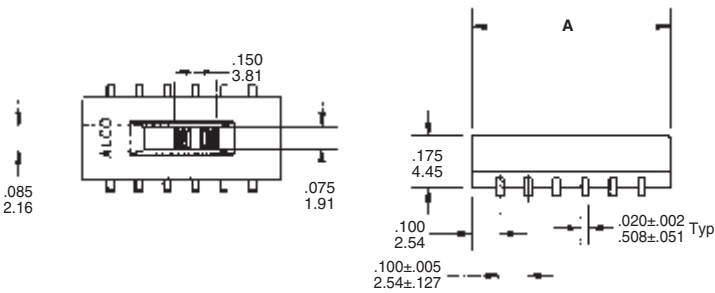


**L Type Surface Mount**

NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Right Angle, Surface Mount "L" Type, Flush Actuator**

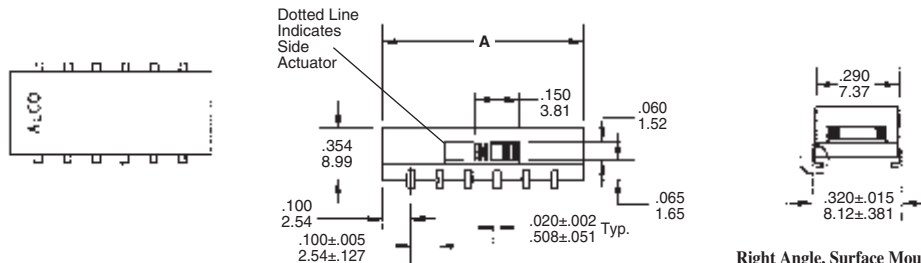
Tyco Electronics	Alcoswitch	Type	Contact	Dim A
6-1437581-4	ASF22RGL	DPDT	Gold	.400/10.2
—	ASF22RL	DPDT	Silver	.400/10.2
7-1437581-5	ASF42RGL	4PDT	Gold	.700/17.8
7-1437581-6	ASF42RL	4PDT	Silver	.700/17.8
—	ASF43RGL	4P3T	Gold	1.10/27.9
—	ASF43RL	4P3T	Silver	1.10/27.9
9-1437581-2	ASF62RGL	6PDT	Gold	1.00/25.4
—	ASF62RL	6PDT	Silver	1.00/25.4



NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Upright, Surface Mount "S" Type, Flush Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
6-1437581-0	ASF22GS	DPDT	Gold	.400/10.2
6-1437581-7	ASF22S	DPDT	Silver	.400/10.2
—	ASF42GS	4PDT	Gold	.700/17.8
7-1437581-7	ASF42S	4PDT	Silver	.700/17.8
—	ASF43GS	4P3T	Gold	1.10/27.9
8-1437581-3	ASF43S	4P3T	Silver	1.10/27.9
—	ASF62GS	6PDT	Gold	1.00/25.4
9-1437581-4	ASF62S	6PDT	Silver	1.00/25.4



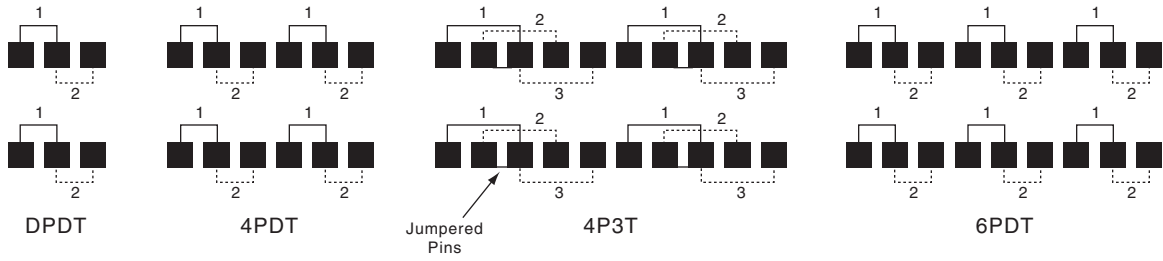
NOTE: See Page B10 for Circuit Diagram and Recommended PC Board Layout.

**Right Angle, Surface Mount "S" Type, Flush Actuator**

Tyco Electronics	Alcoswitch	Type	Contact	Dim A
6-1437581-5	ASF22RGS	DPDT	Gold	.400/10.2
6-1437581-6	ASF22RS	DPDT	Silver	.400/10.2
—	ASF42RGS	4PDT	Gold	.700/17.8
—	ASF42RS	4PDT	Silver	.700/17.8
—	ASF43RGS	4P3T	Gold	1.10/27.9
—	ASF43RS	4P3T	Silver	1.10/27.9
9-1437581-3	ASF62RGS	6PDT	Gold	1.00/25.4
—	ASF62RS	6PDT	Silver	1.00/25.4

**Slide Switches, Auto-insertable, Through Hole and Surface Mount**

CIRCUIT DIAGRAMS

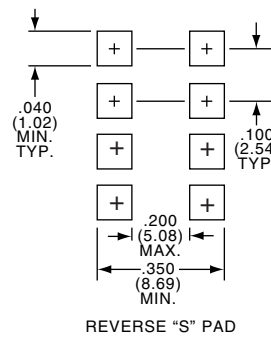
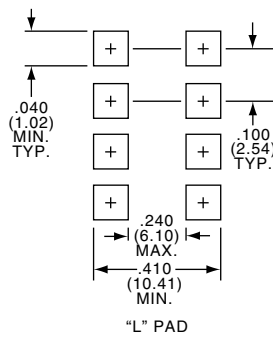


NOTE: For SPDT requirements order DPDT version and use either set of contacts for SPDT switching.

PC LAYOUT



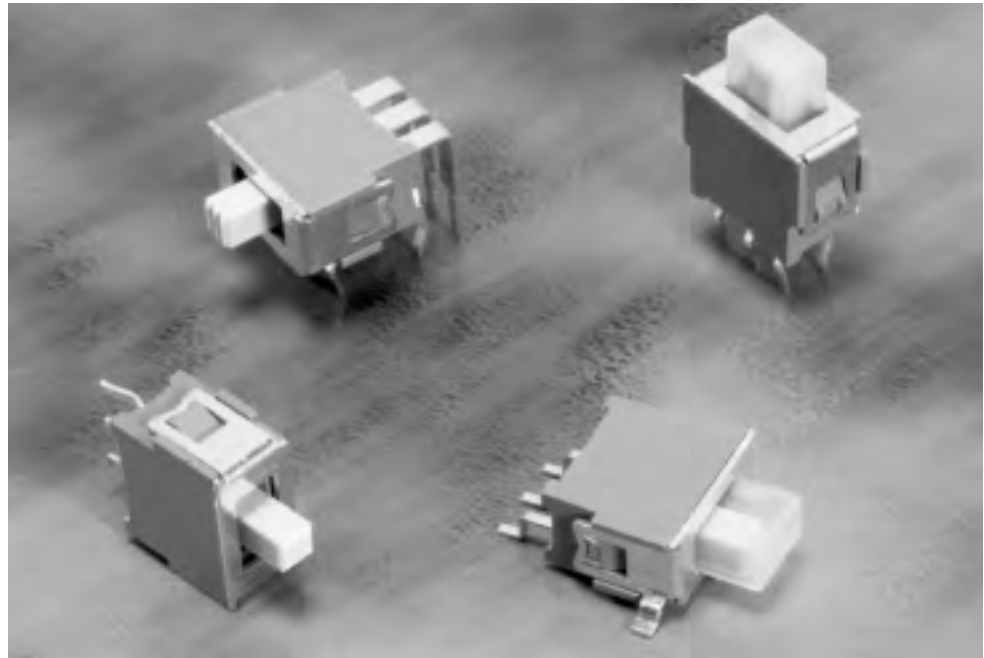
PAD LAYOUT



**S Series Unsealed, SE Series Sealed, Through-Hole and Surface Mount**

**Product Facts**

- ▢ Sealed or Unsealed
- ▢ Straight or Right-Angle
- ▢ Through-hole or Surface-mount
- ▢ Bulk or Tape-and-Reel packaged
- ▢ Compact size
- ▢ Double-pole function in a single-pole body
- ▢ PC retention feature
- ▢ High reliability contact system
- ▢ Epoxy sealed base
- ▢ Robust actuator for easy actuation
- ▢ Non-shorting (break-before-make)



**Switch, Slide, Surface Mount - SE1 SMT (Shown w/Boot)**

**Electrical Characteristics**

**Contact rating:** .4 VA @ 20 VDC Max.  
50mA 48V AC/DC  
Min. 1 micro A 20 mV AC/DC

**Initial Contact Resistance:** less than 50 milliohms

**Final Contact Resistance:** 100 milliohms max.

**Insulation Resistance:** 500 Megaohms @ 250 VDC

**Dielectric Strength:** 500 VAC between terminals and ground

**Mechanical**

**Mechanical Life:** Up to 10,000 cycles @ max. load

**Actuation Force:** 70 to 500 grams

**Materials and Finish**

**Terminals:** Tin-lead over nickel-plated phosphor bronze

**Contacts:** Gold over nickel plated phosphor bronze

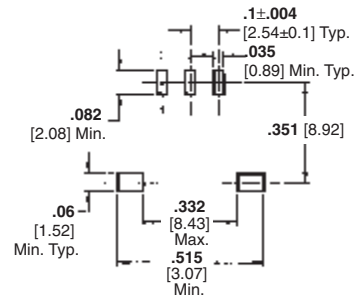
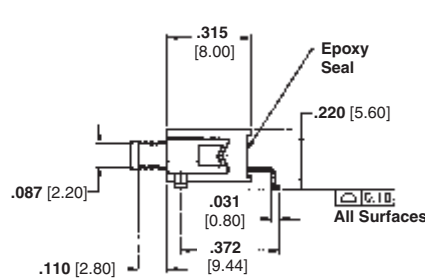
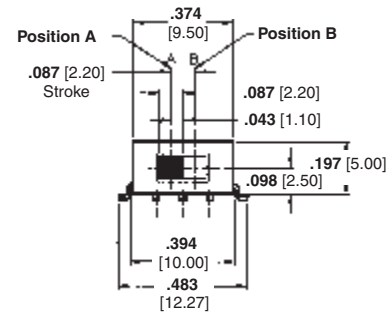
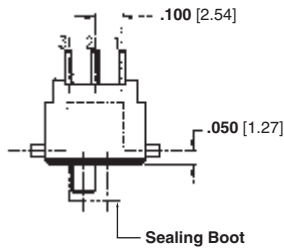
**Frame:** Tin over nickel plated brass

**Case, Actuator, Plunger, Terminal Board:** UL 94V-0 glass-filled Polyamide

**Actuator Boot:** Silicon Rubber

**Standards & Specs**

Sealed switch per IP 67



**Recommended P.C.B. Pad Layout**

**SMT-Sealed Part Numbers**

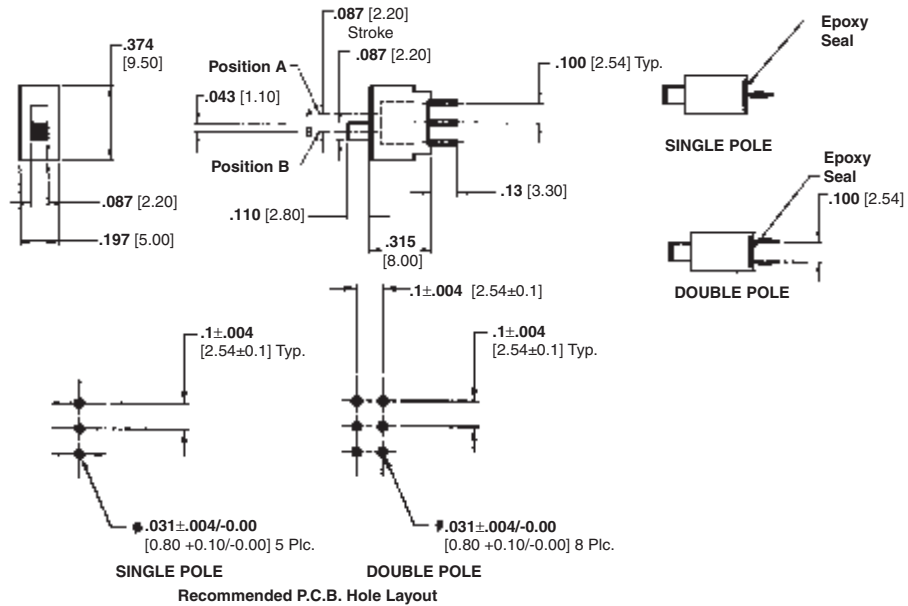
Tyco Electronics	Alcoswitch	Function
1571004-1	SE1GSMT	On-Off
1571004-2	SE1EGSMT	On-Off-On
1571004-3	SE1DGSMT	On-None-On

**Tape & Reel Package**

Tyco Electronics	Alcoswitch	Function
1571004-4	SE1GSMTTR	On-Off
1571004-5	SE1EGSMTTR	On-Off-On
1571004-6	SE1DGSMTTR	On-None-On

**B**  
S/SE Series

**Switch, Slide, PC Tail, S/SE GPC (Shown w/o Boot)**



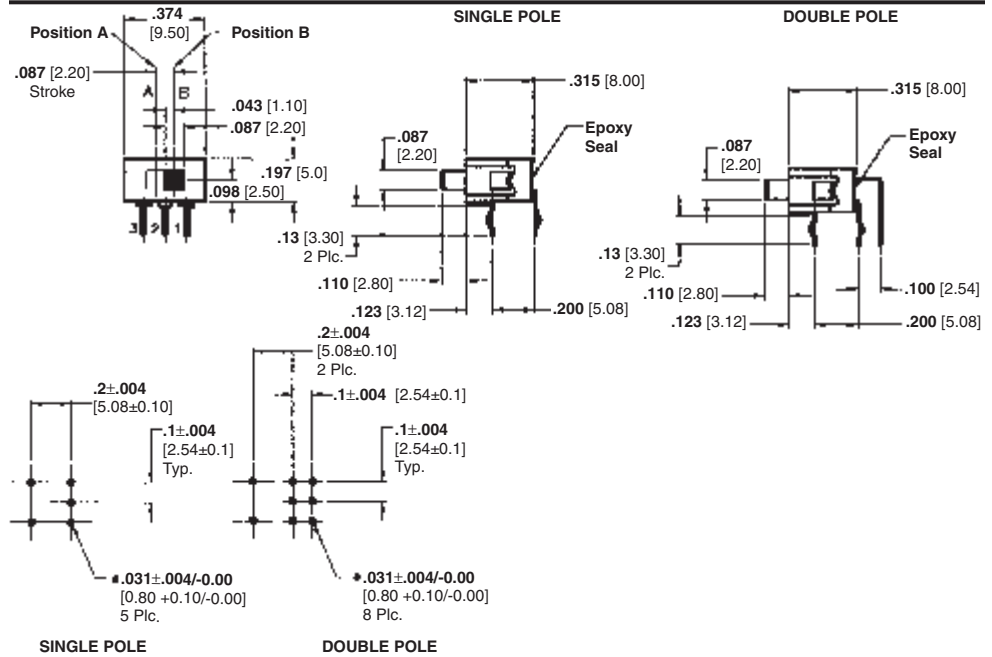
**Sealed Part Numbers w/Boot**

Tyco Electronics	Alcoswitch	Function
1437574-9	SE1DGPC	On-None-On
1-1437574-4	SE1EGPC	On-Off-On
1-1437574-6	SE2DGPC	On-None-On
2-1437574-0	SE2EGPC	On-Off-On

**Unsealed Part Numbers w/o Boot**

Tyco Electronics	Alcoswitch	Function
1571005-1	S1DGPC	On-None-On
1571005-2	S1EGPC	On-Off-On
1571005-3	S2DGPC	On-None-On
1571005-4	S2EGPC	On-Off-On

**Switch, Slide, Right Angle, S/SE GRA (Shown w/o Boot)**



**Sealed Part Numbers w/Boot**

Tyco Electronics	Alcoswitch	Function
1-1437574-1	SE1DGRA	On-None-On
1-1437574-5	SE1EGRA	On-Off-On
1-1437574-8	SE2DGRA	On-None-On
2-1437574-1	SE2EGRA	On-Off-On

**Unsealed Part Numbers w/o Boot**

Tyco Electronics	Alcoswitch	Function
1571006-1	S1DGRA	On-None-On
1571006-2	S1EGRA	On-Off-On
1571006-3	S2DGRA	On-None-On
1571006-4	S2EGRA	On-Off-On

**Slide Switches, Miniature, Low Profile, Economy Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver clad copper alloy  
 Case Material .....Steel zinc plated  
 Actuator Material .....Polyester (UL 94HB)  
 Terminal Seal .....Epoxy  
 Terminals/Fixed Contacts .....Silver plate copper alloy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-5°F to 140°F (-15°C to +60°C)  
 Storage Temperature.....-4°F to +158°F (-20°C to +70°C)  
 Solder Heat Resistance .....MIL-STD-202, Method 210

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....300 mA @ 125 VAC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Make-before-break  
 Insulation Resistance .....100 Megohms min. @ 500 VDC  
 Dielectric Strength .....500 VAC  
 Actuation Force .....250 Grams, +150 Grams, -100 Grams  
 Actuator Travel.....0.098" (2.49)  
 Life Expectancy .....Up to 10,000 Cycles

**NOTICE: Bifurcated contact produces double wiping, self-cleaning contacts.**

**SPDT**

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
5-1437577-8	STS121PC	Silver	Upright

STS121PC

**SPDT**

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
5-1437577-9	STS121RA	Silver	Right Angle

STS121RA

**SP3T**

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437577-2	STS131PC	Silver	Upright

STS131PC

**SP3T**

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437577-3	STS131RA	Silver	Right Angle

STS131RA

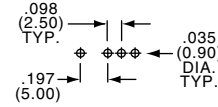
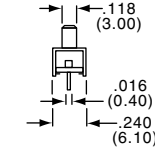
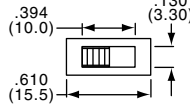
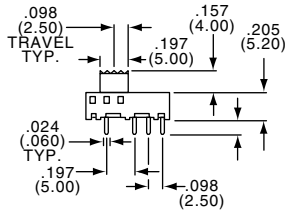
**Slide Switches, Miniature, Low Profile, Economy Grade**

SEE PAGE B13 FOR PRODUCT SPECIFICATIONS

SP3T



STS1300PC

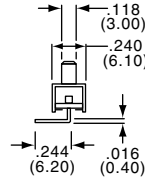
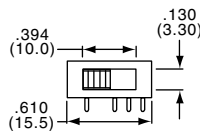


P. C. HOLE LAYOUT

SP3T



STS1300RA

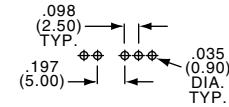
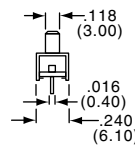
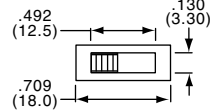
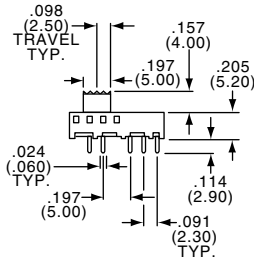


Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437577-0	STS1300PC	Silver	Upright
6-1437577-1	STS1300RA	Silver	Right Angle

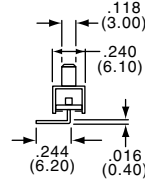
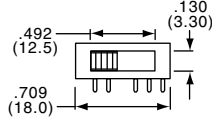
SP4T



STS1400PC



P. C. HOLE LAYOUT

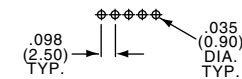
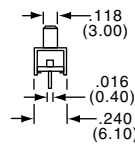
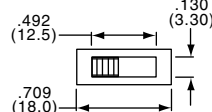
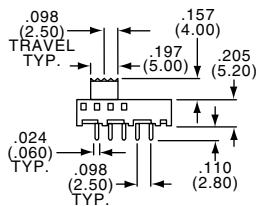


Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437577-5	STS1400PC	Silver	Upright
6-1437577-6	STS1400RA	Silver	Right Angle

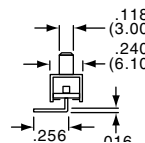
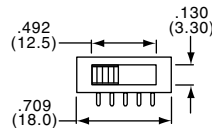
SP4T



STS141RA



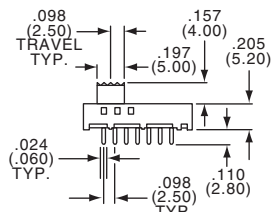
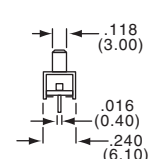
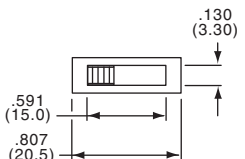
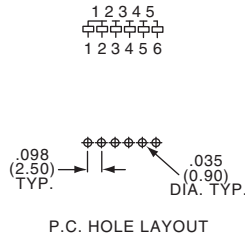
P. C. HOLE LAYOUT



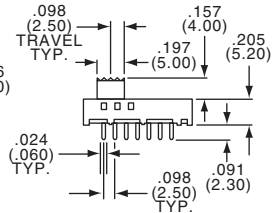
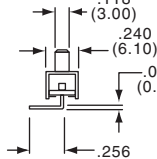
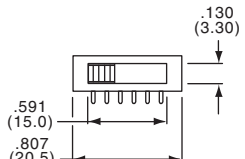
Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437577-7	STS141PC	Silver	Upright
6-1437577-8	STS141RA	Silver	Right Angle

**Slide Switches, Miniature, Low Profile, Economy Grade**

SEE PAGE B13 FOR PRODUCT SPECIFICATIONS

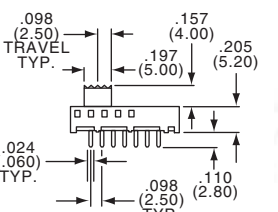
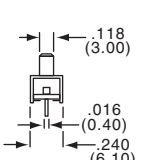
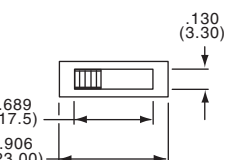
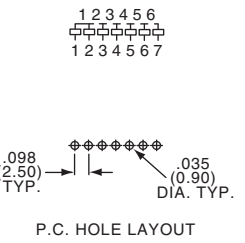


STS151PC

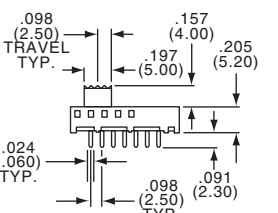
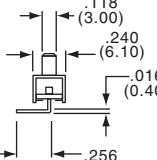
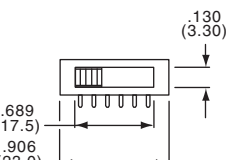


STS151RA

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437577-9	STS151PC	Silver	Upright
7-1437577-0	STS151RA	Silver	Right Angle

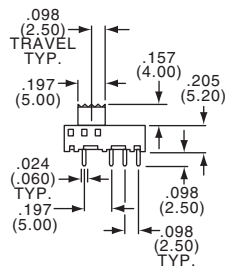
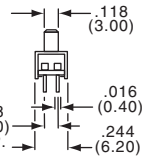
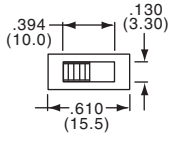
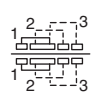
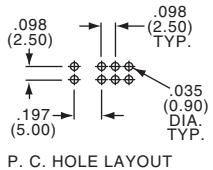


STS161PC

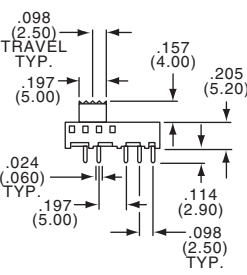
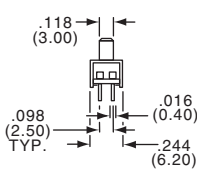
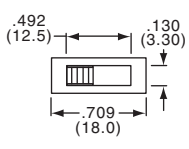
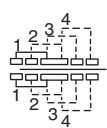
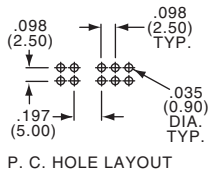


STS161RA

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
7-1437577-1	STS161PC	Silver	Upright
7-1437577-2	STS161RA	Silver	Right Angle



STS2300PC



STS2400PC

Part Number				
Tyco Electronics	Alcoswitch	Plating	Mounting Style	
7-1437577-4	STS2300PC	DP3T	Silver	Upright
7-1437577-6	STS2400PC	DP4T	Silver	Upright



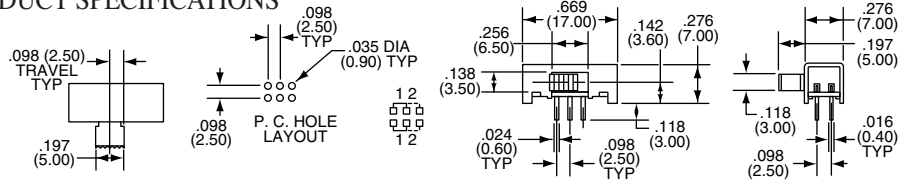
**Slide Switches, Miniature, Low Profile, Economy Grade**

SEE PAGE B13 FOR PRODUCT SPECIFICATIONS

DPDT



STSA220RA

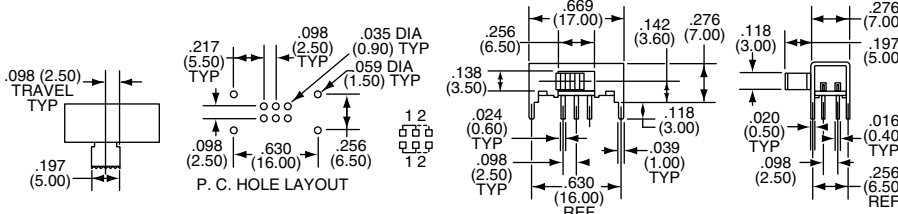


Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
8-1437577-0	STSA220RA	Silver	Right Angle

DPDT



STSA220RA1

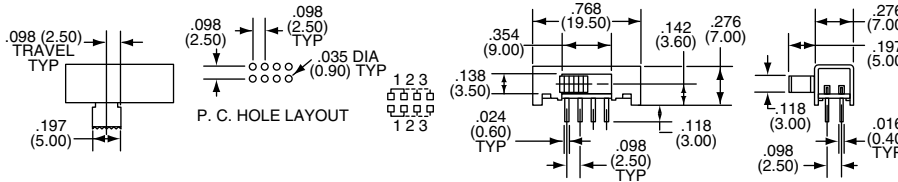


Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
8-1437577-1	STSA220RA1	Silver	Right Angle

DP3T



STSA230RA

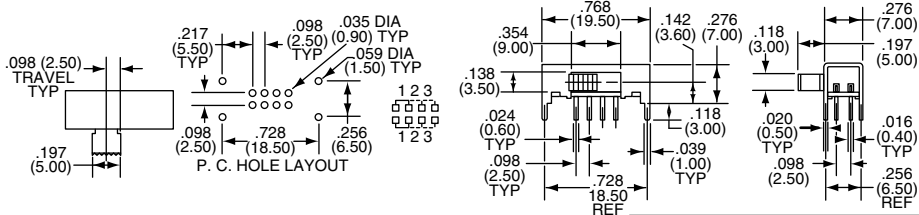


Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
8-1437577-2	STSA230RA	Silver	Right Angle

DP3T



STSA230RA1

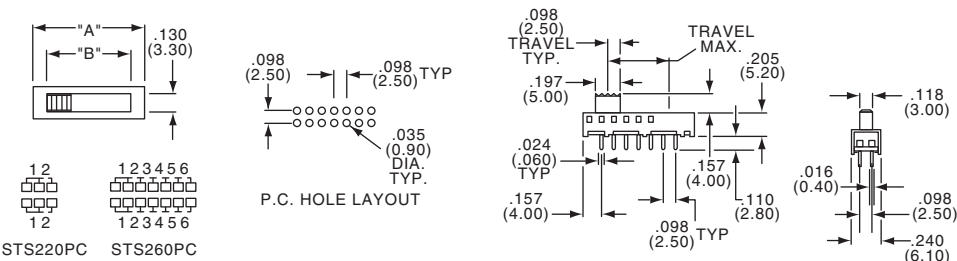


Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
8-1437577-3	STSA230RA1	Silver	Right Angle

DP6T/DP5T/DP4T/  
DP3T/DP2T



STS220PC



Part Number						Part Number						
Tyco Electronics	Alcoswitch	Type	Dim.A	Dim.B	Travel Max.	Tyco Electronics	Alcoswitch	Type	Dim.A	Dim.B	Travel Max.	Pin Holes
7-1437577-3	STS220PC	DP2T	.512(13.0)	.295(7.50)	.098(2.50)	7-1437577-8	STS250PC	DP5T	.807(20.5)	.591(15.0)	.394(10.0)	12
7-1437577-5	STS230PC	DP3T	.610(15.5)	.394(10.0)	.197(5.00)	7-1437577-9	STS260PC	DP6T	.906(23.0)	.689(17.5)	.492(12.5)	14
7-1437577-7	STS240PC	DP4T	.709(18.0)	.492(12.5)	.295(7.50)							

B STS/STSA Series

**Slide Switches, Instrument Grade, Decorative**

**MATERIAL SPECIFICATIONS:**

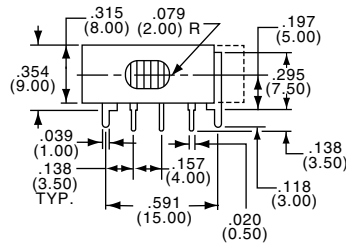
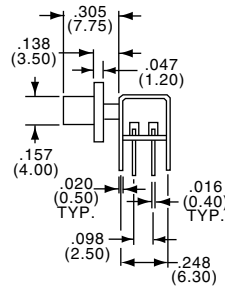
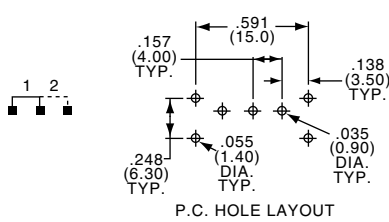
Contacts .....Silver clad copper alloy  
 Case Material .....Steel, tin plated  
 Actuator Material .....Polycarbonate  
 Terminals/Fixed Contacts .....Silver over nickel  
 Terminal Seal .....Epoxy

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....300 mA @ 125 VAC  
 Initial Contact Resistance .....20 Milliohms max.  
 Insulation Resistance .....1,000 Megohms min. @ 500 VDC  
 Dielectric Strength .....500 VAC  
 Actuation Force .....0.250 Grams, +200/-150  
 Plunger/Actuator Travel .....0.079" (2.01)  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

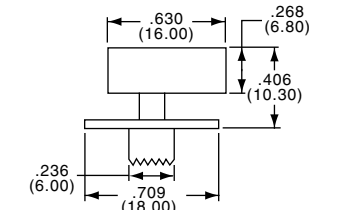
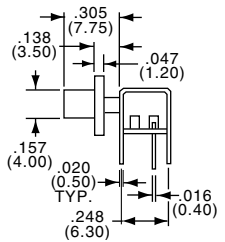
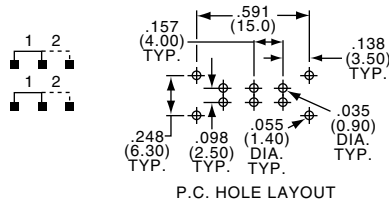
Operating Temperature.....-14°F to +140°F (-10°C to +60°C)  
 Storage Temperature.....-14°F to +140°F (-10°C to +60°C)  
 Solder Heat Resistance.....MIL-STD-202, Method 210



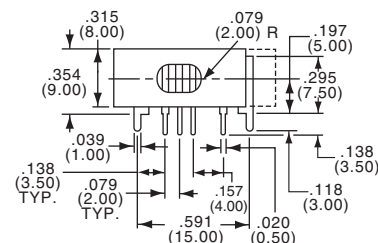
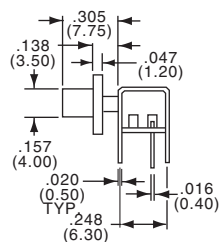
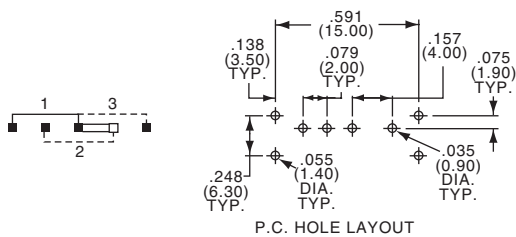
SPDT/DPDT



SDS2240RA0



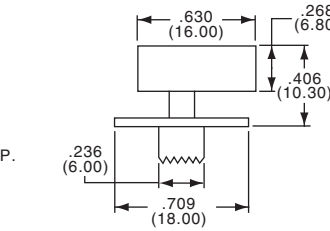
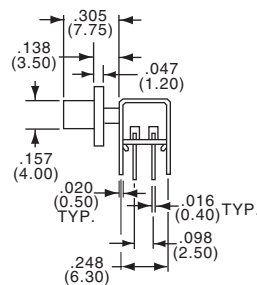
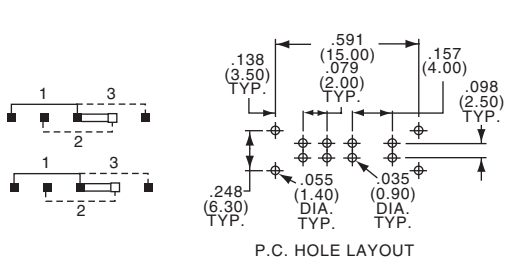
Part Number				Part Number					
Tyco Electronics	Alcoswitch	Type	■ ■ ■	Actuator Color	Tyco Electronics	Alcoswitch	Type	■ ■ ■	Actuator Color
1437577-2	SDS1240RA0	SPDT	■ ■ ■	Black	1437577-6	SDS2240RA0	DPDT	■ ■ ■	Black
1437577-3	SDS1240RA8	SPDT	■ ■ ■	Gray	—	SDS2240RA8	DPDT	■ ■ ■	Gray



SP3T/DP3T



SDS1340RA8



Part Number				Part Number					
Tyco Electronics	Alcoswitch	Type	■ ■ ■	Actuator Color	Tyco Electronics	Alcoswitch	Type	■ ■ ■	Actuator Color
1437577-4	SDS1340RA0	SP3T	■ ■ ■	Black	1437577-7	SDS2340RA0	DP3T	■ ■ ■	Black
1437577-5	SDS1340RA8	SP3T	■ ■ ■	Gray	—	SDS2340RA8	DP3T	■ ■ ■	Gray

**B**  
TSS Series

**Slide Switches, Vertical, Single or Dual Actuator**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper w/gold plate over nickel  
 Case Material .....High temperature polyester (94-VO)  
 Actuator Material .....Polyester (94-VO)  
 Terminals .....Copper alloy tin/lead/nickel or gold/nickel  
 Terminal Seal .....Epoxy standard: single pole, optional: double pole

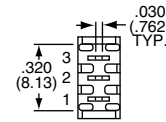
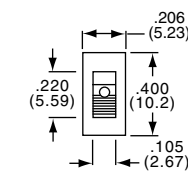
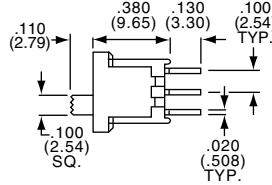
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA max. @ 20 VDC or peak AC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Non-shorting  
 Insulation Resistance .....1,000 Megohms min. @ 500 VDC  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Plunger/Actuator Travel .....0.120" (3.05)  
 Life Expectancy .....Up to 60,000-80,000 Cycles

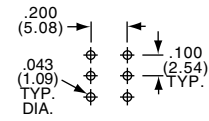
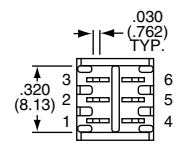
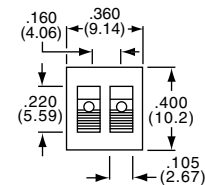
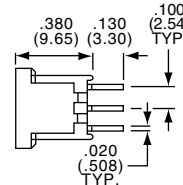
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4°F to + 176°F (-20°C to + 80°C)  
 Storage Temperature .....-4°F to + 176°F (-20°C to + 80°C)

**SPST/SPDT**



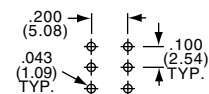
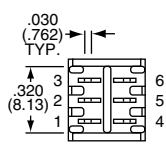
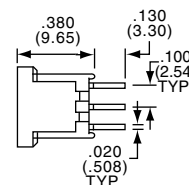
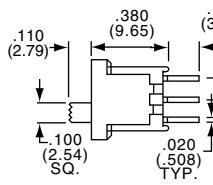
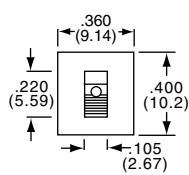
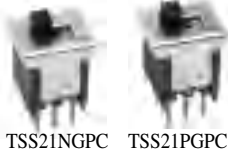
**SPST/SPDT (DUAL)**



Extended Actuator Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	On	None	Off	Extended Dual Actuator Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	On	None	Off
1437578-3	TSS11AGPC	SPST	A	On	None	Off	—	TSD21AAGPC	2 x SPST	A	On	None	Off
1-1437589-0	TSS11DGPC	SPDT	D	On	None	On	1437579-5	TSD21DDGPC	2 x SPDT	D	On	None	On
1-1437579-4	TSS11EGPC	SPDT	E	On	Off	On	<b>Flush Dual Actuator</b>						
—	TSS11AG1PC	SPST	A	On	None	Off	—	TSD21DDG1PC	2 x SPDT	D	On	None	On
1437579-8	TSS11DG1PC	SPDT	D	On	None	On							
1-1437579-2	TSS11EG1PC	SPDT	E	On	Off	On							

Note: No center terminals on "A" action switches.

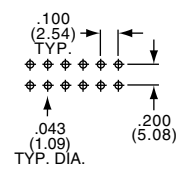
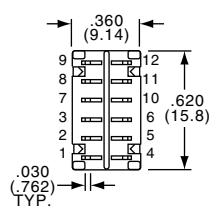
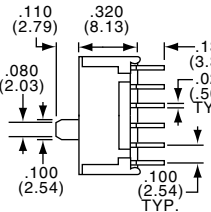
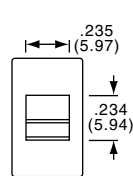
**DPST/DPDT**



Extended Actuator Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	On	None	Off	Flush Actuator Tyco Electronics	Alcoswitch	Act. Code Type	P. M6	On	None	Off
1-1437579-6	TSS21KGPC	DPST	K	On	None	Off	—	TSS21KG1PC	DPST	K	On	None	Off
1-1437579-9	TSS21NGPC	DPDT	N	On	None	On	1-1437579-7	TSS21NG1PC	DPDT	N	On	None	On
2-1437579-3	TSS21PGPC	DPDT	P	On	Off	On	2-1437579-1	TSD21RG1PC	DPDT	P	On	Off	On

Note: No center terminals on "K" action switches.

**4PDT**

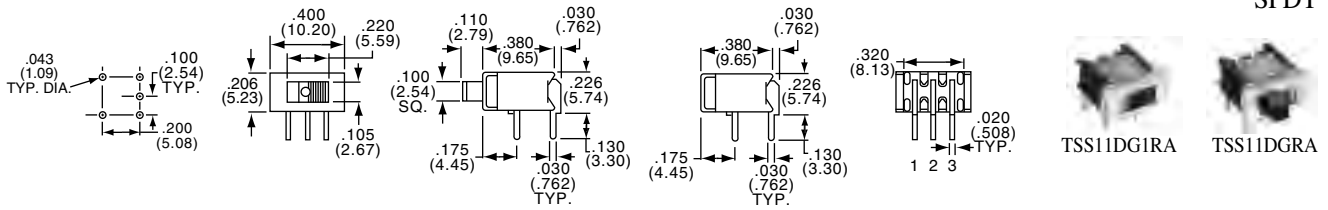


Extended Actuator Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	On	None	Off
2-1437579-5	TSS41NGPC	4PDT	N	On	None	On

**Slide Switches, Right Angle, Single or Dual Actuator**

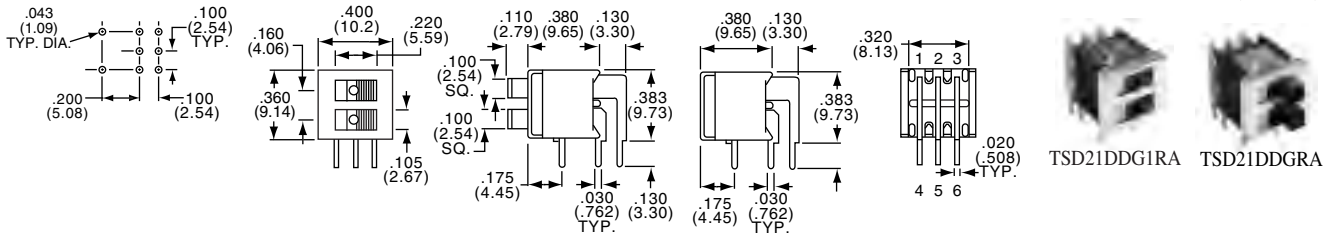
SEE PAGE B18 FOR PRODUCT SPECIFICATIONS

SPDT



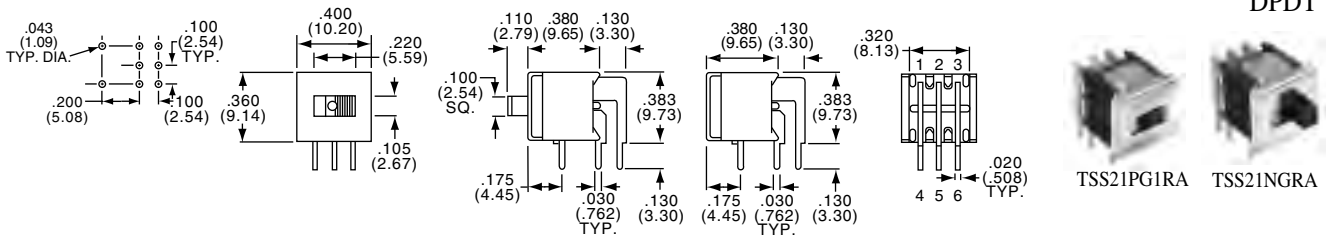
Extended Actuator			Act. Code			Flush Actuator			Act. Code			
Tyco Electronics	Alcoswitch	Type	P. M6	On	None	Tyco Electronics	Alcoswitch	Type	P. M6	On	None	On
1-1437579-1	TSS11DGRA	SPDT	D	On	None	1437579-9	TSS11DG1RA	SPDT	D	On	None	On
1-1437579-5	TSS11EGRA	SPDT	E	On	Off	1-1437579-3	TSS11EG1RA	SPDT	E	On	Off	On

SPDT (DUAL)



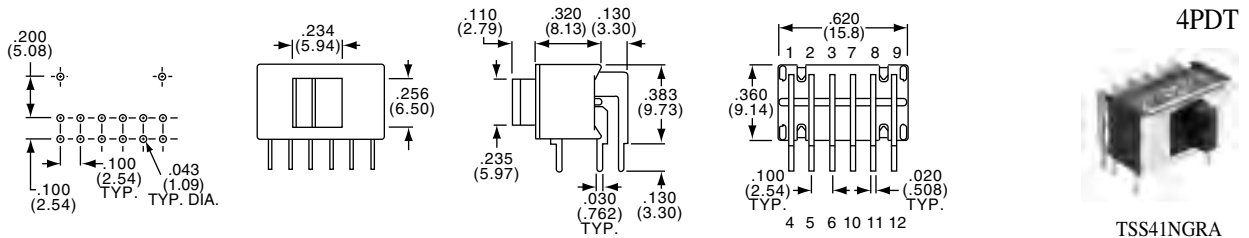
Extended Actuator			Act. Code			Flush Actuator			Act. Code			
Tyco Electronics	Alcoswitch	Type	P. M6	On	None	Tyco Electronics	Alcoswitch	Type	P. M6	On	None	On
1437579-6	TSD21DDGRA	2 x SPDT	D	On	None	1437579-4	TSD21DDG1RA	2 x SPDT	D	On	None	On
1437579-7	TSD21EEGRA	2 x SPDT	E	On	Off	—	TSD21EEG1RA	2 x SPDT	E	On	Off	On

DPDT



Extended Actuator			Act. Code			Flush Actuator			Act. Code			
Tyco Electronics	Alcoswitch	Type	P. M6	On	None	Tyco Electronics	Alcoswitch	Type	P. M6	On	None	On
—	TSS21PAGRA	SP3T	PA	On	On	—	TSS21NG1RA	DPDT	N	On	None	On
2-1437579-0	TSS21NGRA	DPDT	N	On	None	—	TSS21PG1RA	DPDT	P	On	Off	On
2-1437579-4	TSS21PGRA	DPDT	P	On	Off	—	—	—	—	—	—	—

4PDT



Extended Actuator			Act. Code			
Tyco Electronics	Alcoswitch	Type	P. M6	On	None	On
2-1437579-7	TSS41NGRA	4PDT	N	On	None	On

**Slide Switches, Instrumentation Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold or silver over nickel/copper alloy  
 Frame Material .....Tin plated steel  
 Terminals/Fixed Contacts.....Gold or silver over nickel/over copper alloy  
 Terminal Seal .....Epoxy  
 Actuator Material .....POM-UL94HB

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-40°F to +212°F (-40°C to +100°C)  
 Solder Heat Resistance .....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS:**

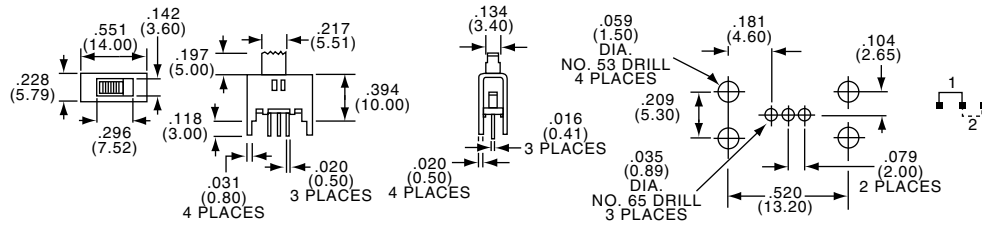
Contact Rating .....Gold: 0.4 VA 20 VDC or peak AC  
 Silver: 300 mA @ 125 VAC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Make before break  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....100 to 600 Grams  
 Life Expectancy .....Up to 15,000 Cycles  
 Travel .....0.079" (2.01) (unless otherwise specified)

**B**  
MSS Series

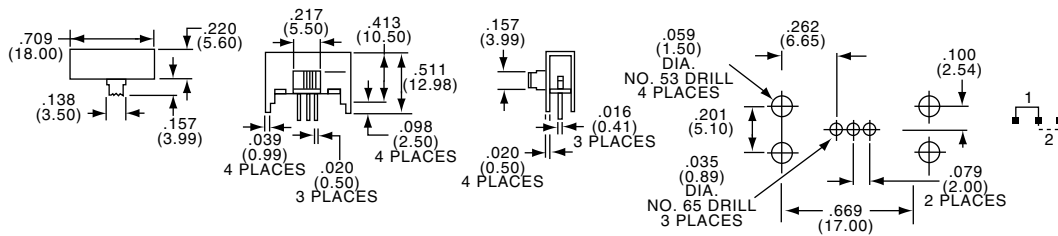
**SPDT**



MSS1200



MSS1200R

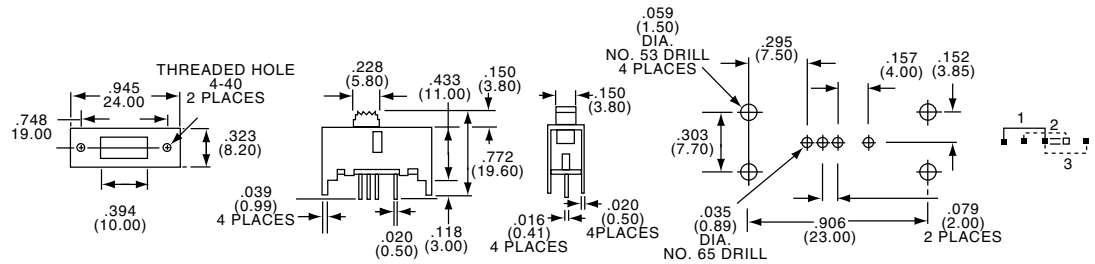


Tyco Electronics	Alcoswitch	Plating	Tyco Electronics	Alcoswitch	Plating
5-1437576-0	MSS1200	Silver	5-1437576-2	MSS1200R	Silver
5-1437576-1	MSS1200G	Gold	5-1437576-3	MSS1200RG	Gold

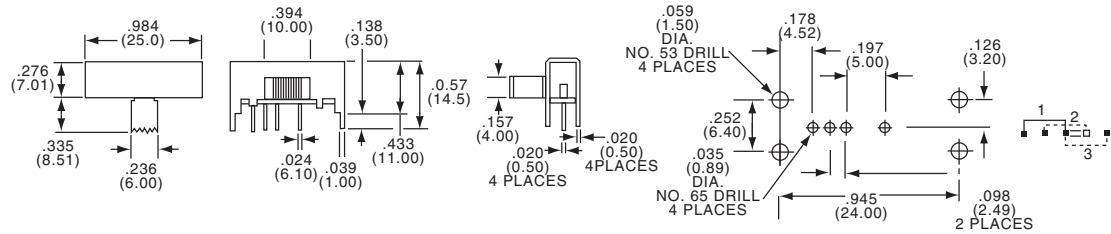
**SP3T**



MSS1300



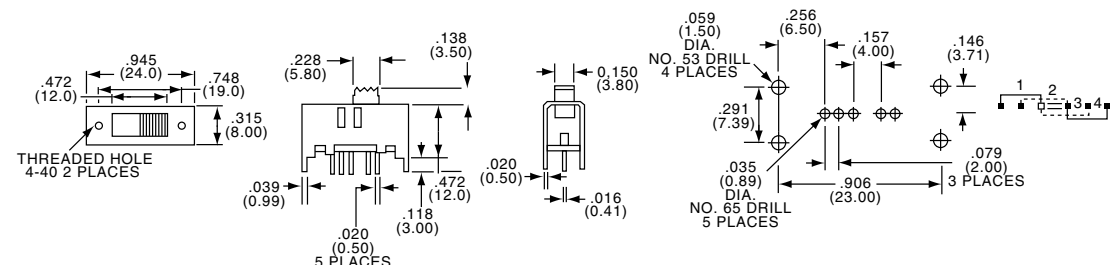
MSS1300R



Tyco Electronics	Alcoswitch	Plating	Tyco Electronics	Alcoswitch	Plating	Total Actuator Travel
5-1437576-4	MSS1300	Silver	5-1437576-6	MSS1300R	Silver	.098(2.50)
5-1437576-5	MSS1300G	Gold	5-1437576-7	MSS1300RG	Gold	.098(2.50)

**Slide Switches, Instrumentation Grade**

SEE PAGE B20 FOR PRODUCT SPECIFICATIONS

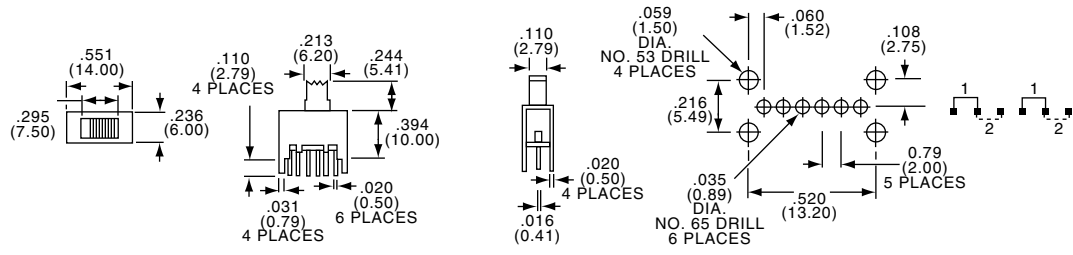


SP4T



MSS1400

Tyco Electronics	Alcoswitch	Plating
5-1437576-8	MSS1400	Silver
1571423-1	MSS1400G	Gold

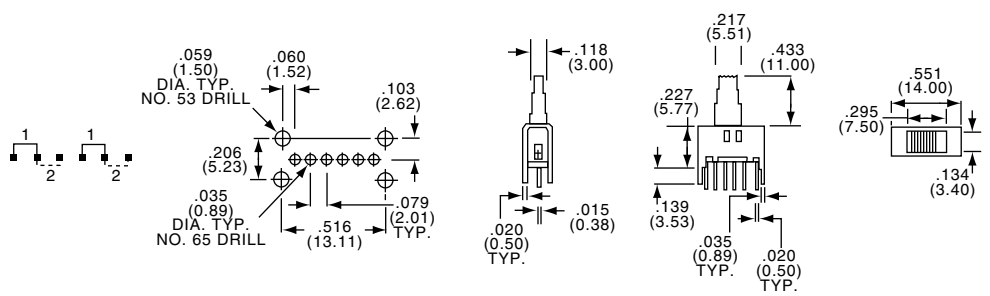


DPDT



MSS2225

Tyco Electronics	Alcoswitch	Plating
6-1437576-3	MSS2225	Silver
6-1437576-4	MSS2225G	Gold



DPDT



MSS2250

Tyco Electronics	Alcoswitch	Plating
6-1437576-5	MSS2250	Silver
6-1437576-6	MSS2250G	Gold



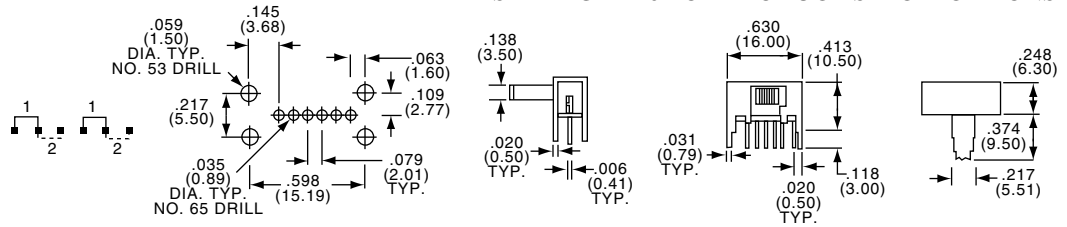
**Slide Switches, Instrumentation Grade**

SEE PAGE B20 FOR PRODUCT SPECIFICATIONS

DPDT



MSS2250R

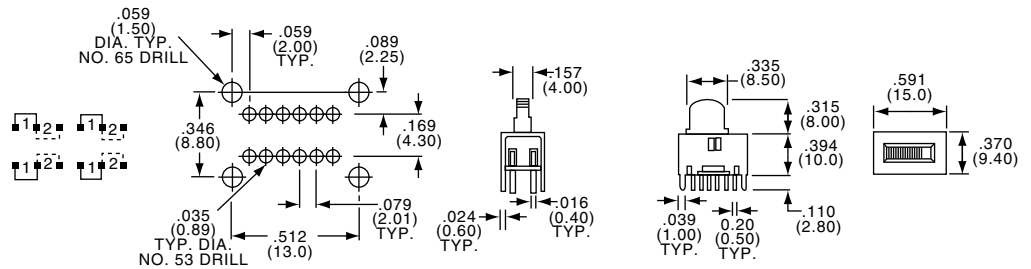


Tyco Electronics	Alcoswitch	Plating
6-1437576-7	MSS2250R	Silver
6-1437576-8	MSS2250RG	Gold

4PDT



MSS4200

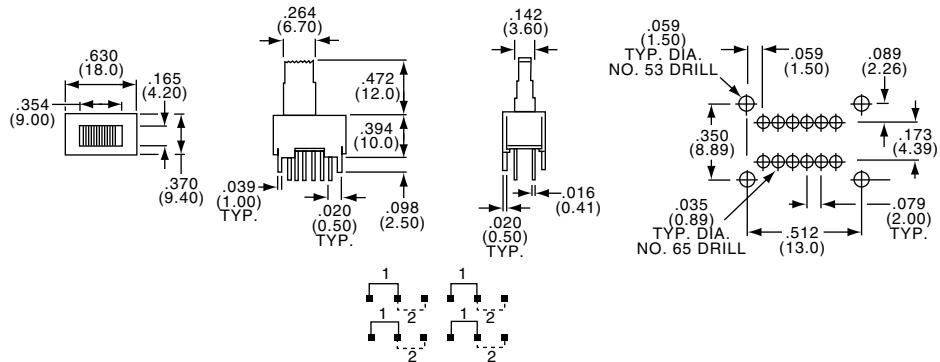


Tyco Electronics	Alcoswitch	Plating
6-1437576-9	MSS4200	Silver
7-1437576-0	MSS4200G	Gold

4PDT



MSS4250

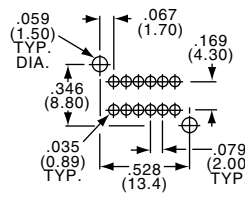
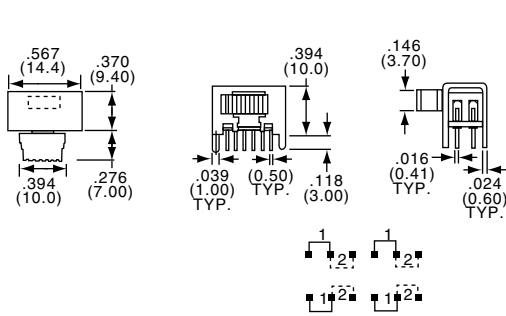


Tyco Electronics	Alcoswitch	Plating
7-1437576-4	MSS4250	Silver

**B**  
MSS Series

**Slide Switches, Instrumentation Grade**

SEE PAGE B20 FOR PRODUCT SPECIFICATIONS

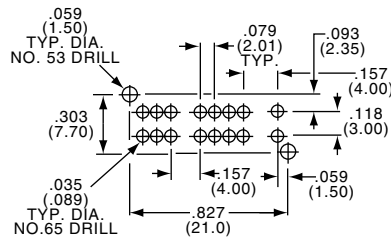
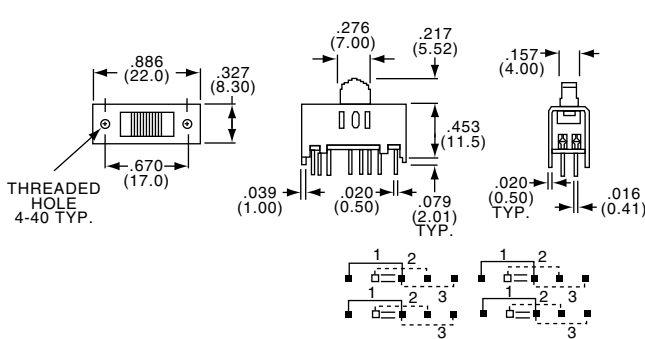


4PDT



MSS4200R

Tyco Electronics	Alcoswitch	Plating
7-1437576-2	MSS4200R	Silver
7-1437576-3	MSS4200RG	Gold

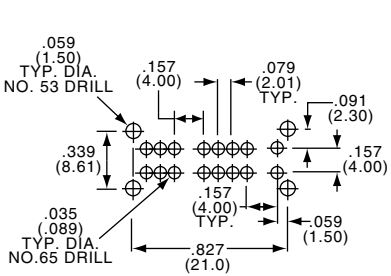
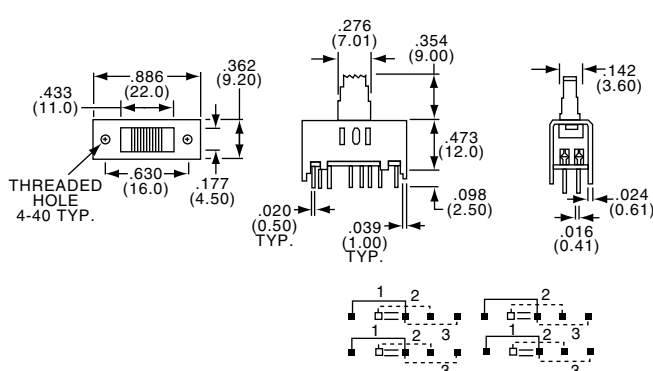


4P3T



MSS4300

Tyco Electronics	Alcoswitch	Plating
7-1437576-5	MSS4300	Silver
7-1437576-6	MSS4300G	Gold



4P3T



MSS4335

Tyco Electronics	Alcoswitch	Plating
7-1437576-9	MSS4335	Silver



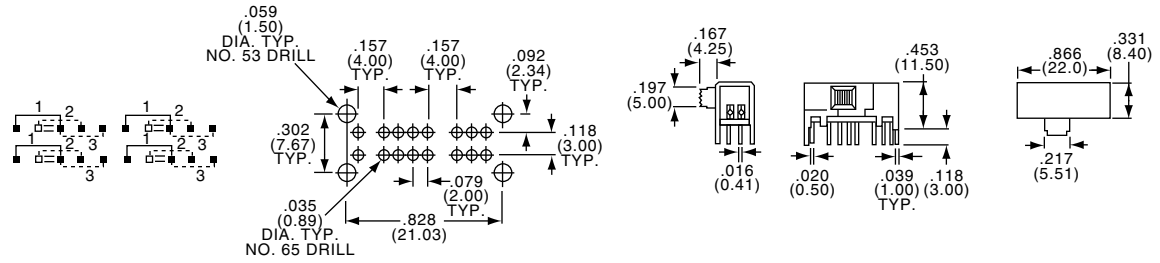
**Slide Switches, Instrumentation Grade**

SEE PAGE B20 FOR PRODUCT SPECIFICATIONS

4P3T



MSS4300R

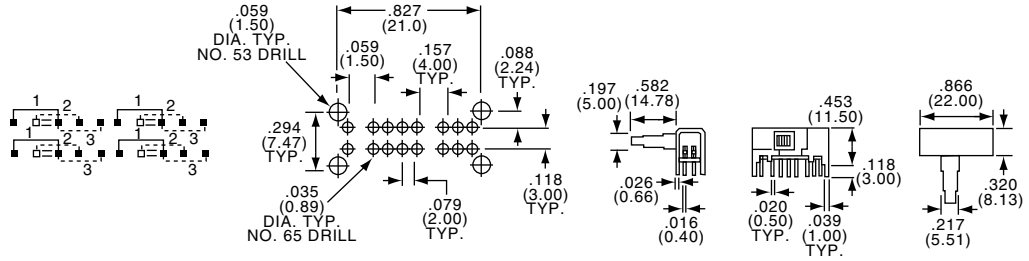


Tyco Electronics	Alcoswitch	Plating
7-1437576-7	MSS4300R	Silver
7-1437576-8	MSS4300RG	Gold

4P3T



MSS4350R

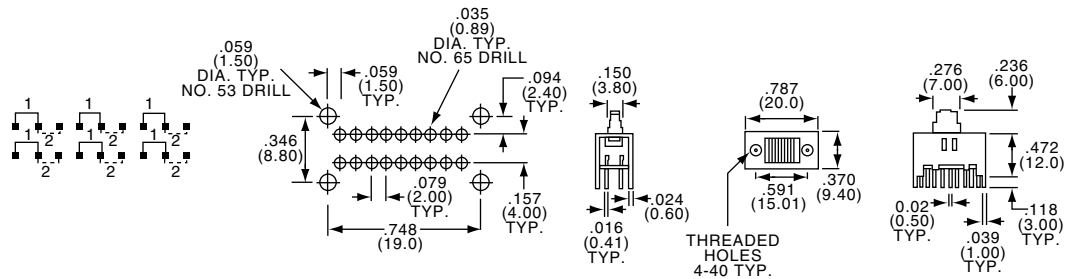


Tyco Electronics	Alcoswitch	Plating
8-1437576-0	MSS4350R	Silver
8-1437576-1	MSS4350RG	Gold

6PDT



MSS6200

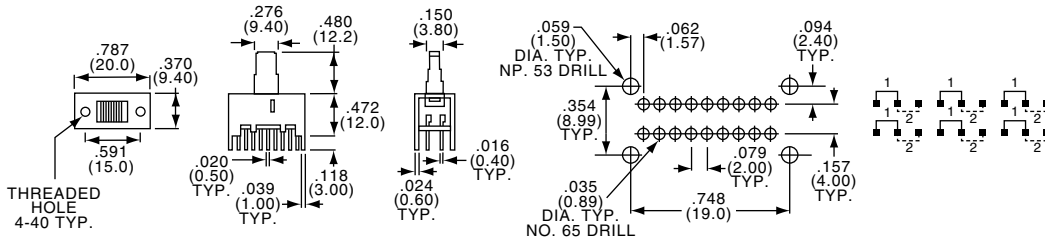


Tyco Electronics	Alcoswitch	Plating
8-1437576-8	MSS6200	Silver
8-1437576-9	MSS6200G	Gold

**B**  
MSS Series

Slide Switches, Instrumentation Grade

SEE PAGE B20 FOR PRODUCT SPECIFICATIONS

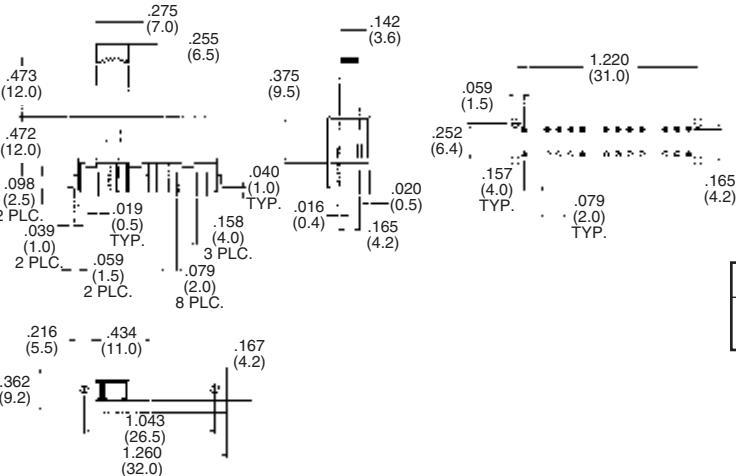


6PDT

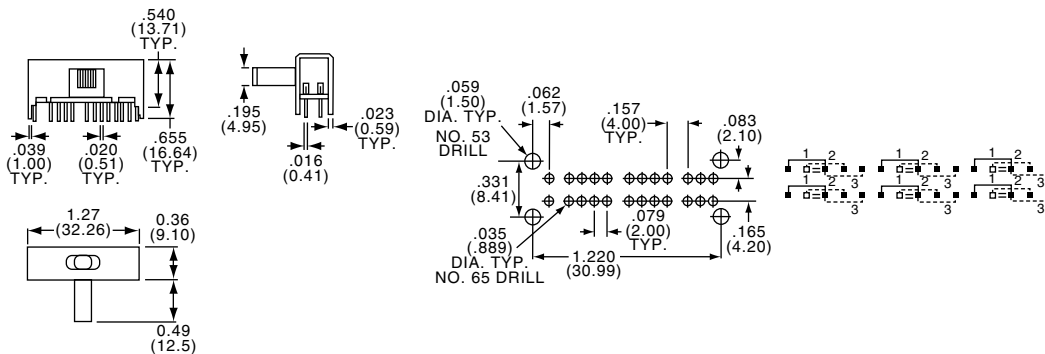


MSS6250

Tyco Electronics	Alcoswitch	Plating
9-1437576-0	MSS6250	Silver



Tyco Electronics	Alcoswitch	Plating
9-1437576-3	MSS6350	Silver
—	MSS6350G	Gold



6P3T



MSS6350R

Tyco Electronics	Alcoswitch	Plating
9-1437576-4	MSS6350R	Silver
—	MSS6350RG	Gold

**Slide Switches, Instrumentation Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver or gold over copper alloy  
 Case Material .....Cold rolled steel  
 Actuator Material .....Polyester UL94V-0  
 Terminals/Fixed Contacts.....Gold or silver plate over copper alloy  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-40°F to +212°F (-40°C to +100°C)  
 Solder Heat Resistance.....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS:**

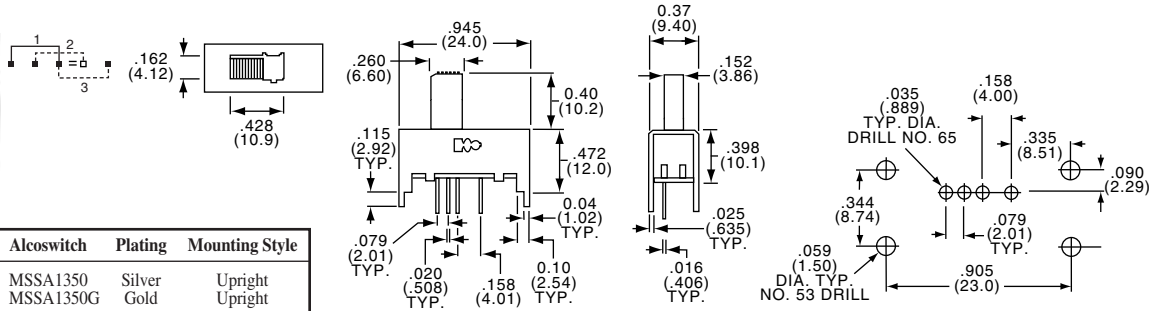
Contact Rating .....Gold: 0.4 VA 20 VDC or peak AC  
 Silver: 300 mA @ 125 VAC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing.....Make before break  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuation Force .....600±300/470 Grams average  
 Actuator Travel.....0.079" (2.01) approximate  
 Life Expectancy .....Up to 15,000 Cycles

**B**  
MSSA Series

**SP3T**



MSSA1350

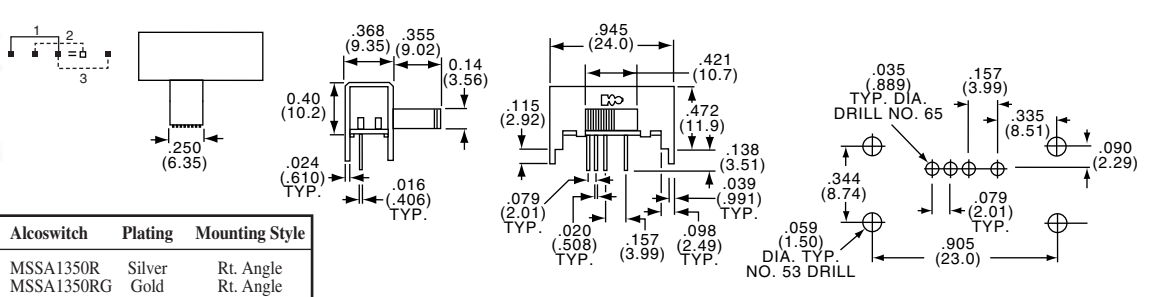


Tyco Electronics	Alcoswitch	Plating	Mounting Style
3-1437580-3	MSSA1350	Silver	Upright
3-1437580-4	MSSA1350G	Gold	Upright

**SP3T**



MSSA1350R

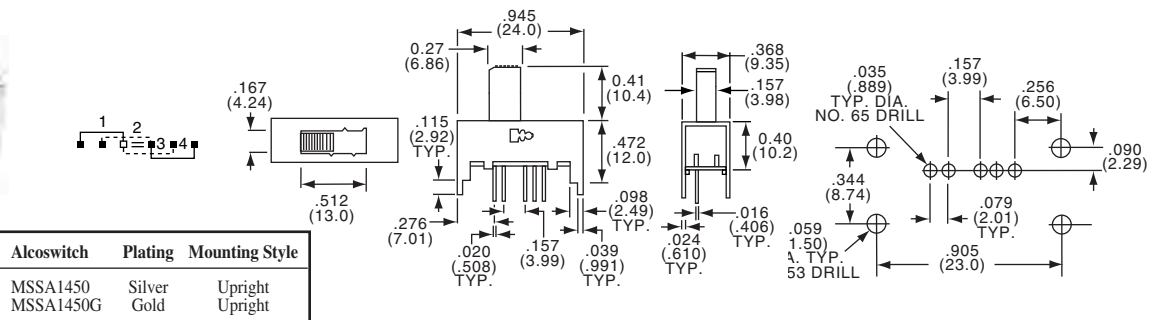


Tyco Electronics	Alcoswitch	Plating	Mounting Style
3-1437580-5	MSSA1350R	Silver	Rt. Angle
3-1437580-6	MSSA1350RG	Gold	Rt. Angle

**SP4T**



MSSA1450

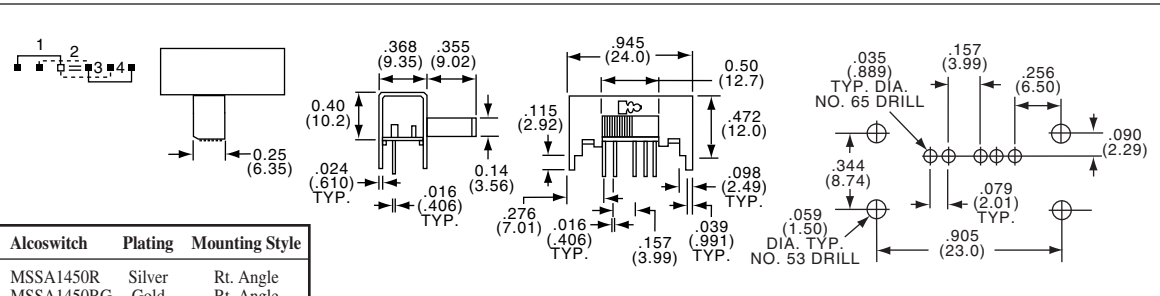


Tyco Electronics	Alcoswitch	Plating	Mounting Style
3-1437580-7	MSSA1450	Silver	Upright
3-1437580-8	MSSA1450G	Gold	Upright

**SP4T**



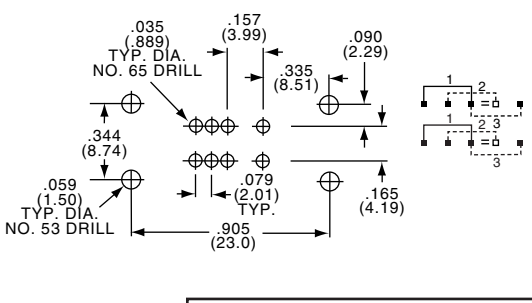
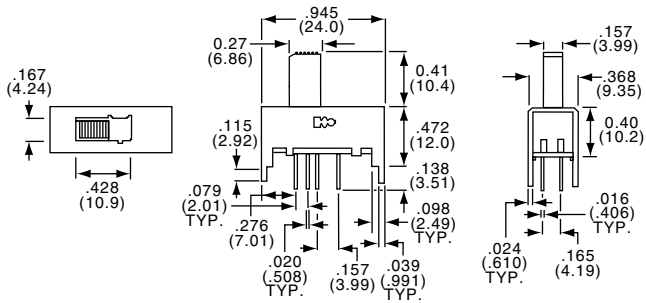
MSSA1450R



Tyco Electronics	Alcoswitch	Plating	Mounting Style
3-1437580-9	MSSA1450R	Silver	Rt. Angle
4-1437580-0	MSSA1450RG	Gold	Rt. Angle

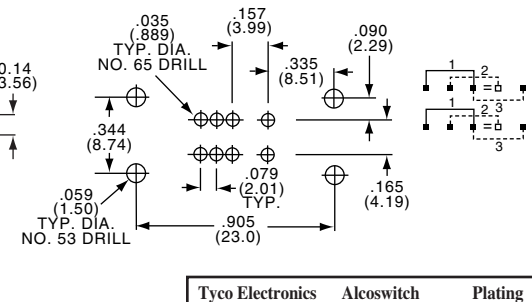
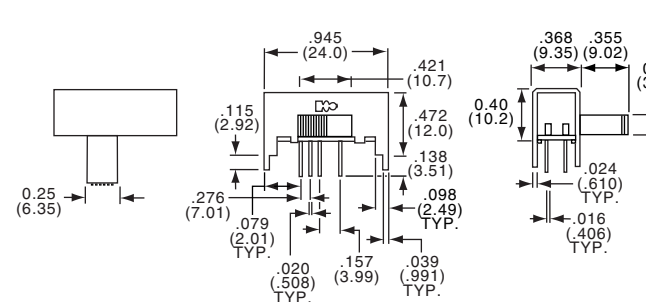
**Slide Switches, Instrumentation Grade**

SEE PAGE B26 FOR PRODUCT SPECIFICATIONS



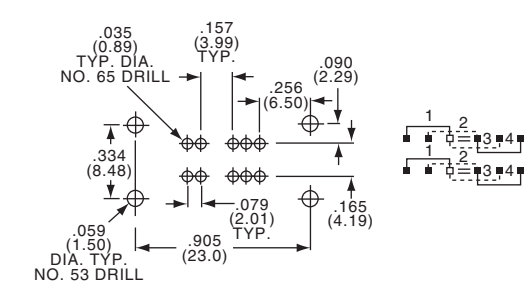
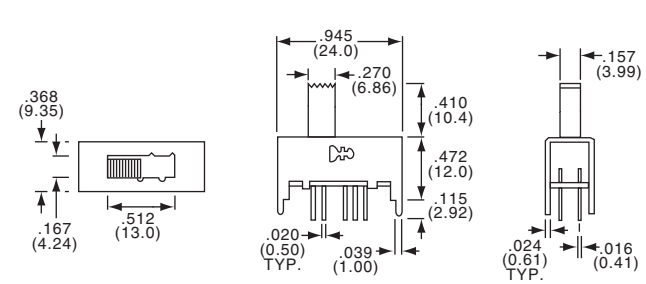
MSSA2350

Tyco Electronics	Alcoswitch	Plating	Mounting Style
5-1437580-3	MSSA2350	Silver	Upright
5-1437580-4	MSSA2350G	Gold	Upright



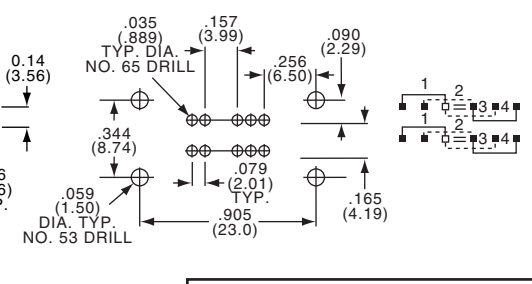
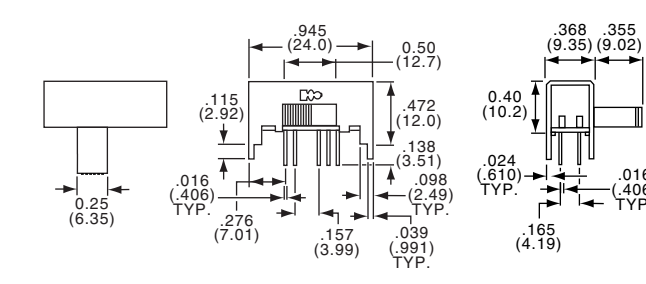
MSSA2350R

Tyco Electronics	Alcoswitch	Plating	Mounting Style
5-1437580-5	MSSA2350R	Silver	Rt. Angle
5-1437580-6	MSSA2350RG	Gold	Rt. Angle



MSSA2450

Tyco Electronics	Alcoswitch	Plating	Mounting Style
5-1437580-7	MSSA2450	Silver	Upright
5-1437580-8	MSSA2450G	Gold	Upright



MSSA2450R

Tyco Electronics	Alcoswitch	Plating	Mounting Style
5-1437580-9	MSSA2450R	Silver	Rt. Angle
6-1437580-0	MSSA2450RG	Gold	Rt. Angle

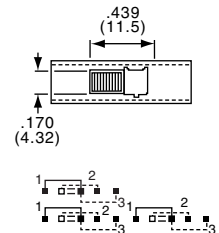
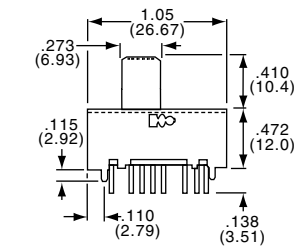
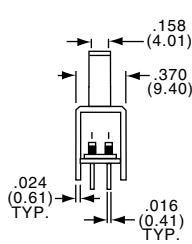
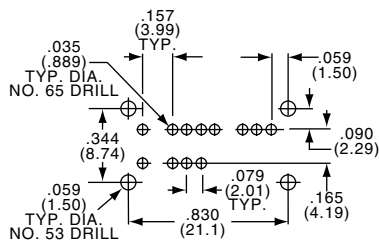
**Slide Switches, Instrumentation Grade**

SEE PAGE B26 FOR PRODUCT SPECIFICATIONS

**3P3T**



MSSA3350

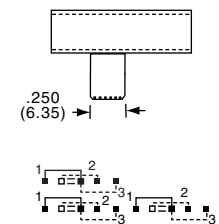
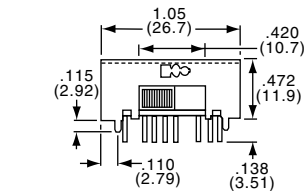
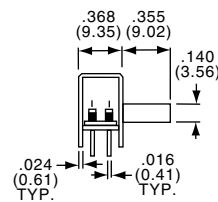
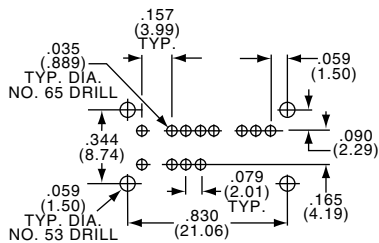


Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437580-1	MSSA3350	Silver	Upright
6-1437580-2	MSSA3350G	Gold	Upright

**3P3T**



MSSA3350R

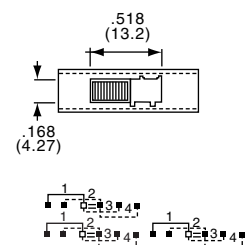
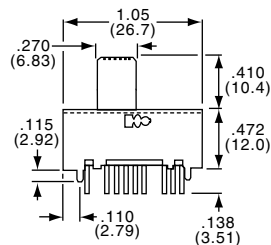
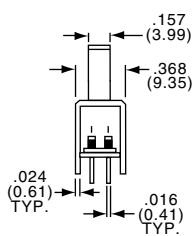
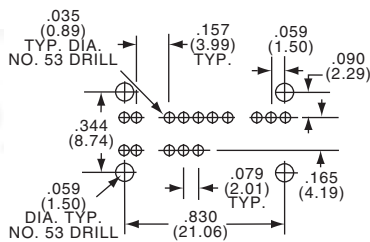


Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437580-3	MSSA3350R	Silver	Rt. Angle
6-1437580-4	MSSA3350RG	Gold	Rt. Angle

**3P4T**



MSSA3450

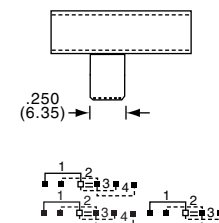
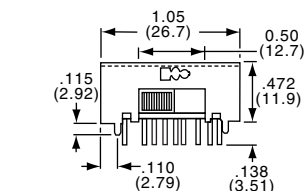
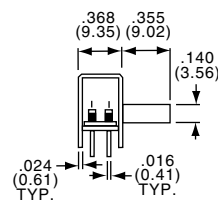
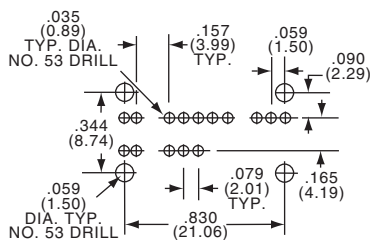


Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437580-5	MSSA3450	Silver	Upright
6-1437580-6	MSSA3450G	Gold	Upright

**3P4T**



MSSA3450R

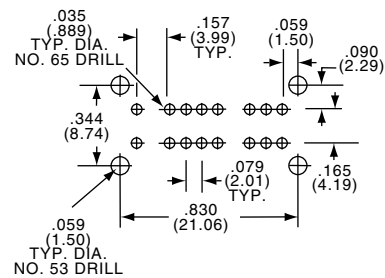
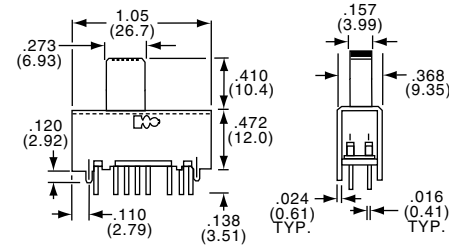
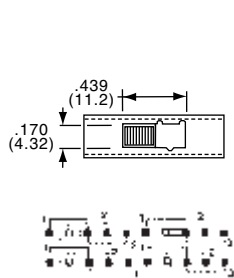


Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437580-7	MSSA3450R	Silver	Rt. Angle
6-1437580-8	MSSA3450RG	Gold	Rt. Angle

**Slide Switches, Instrumentation Grade**

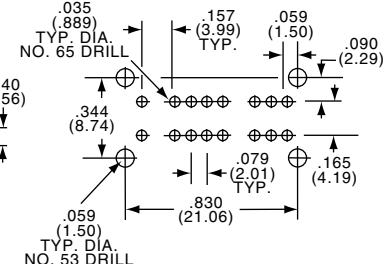
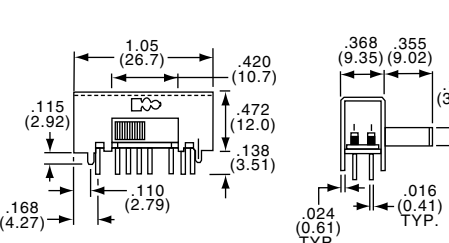
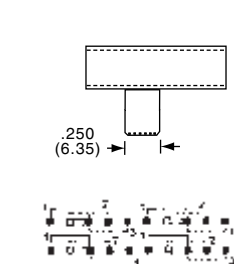
SEE PAGE B26 FOR PRODUCT SPECIFICATIONS

4P3T



MSSA4350

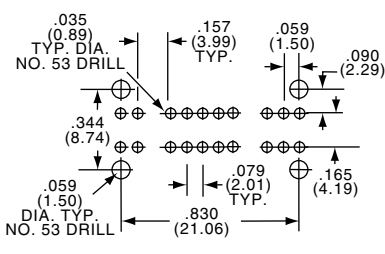
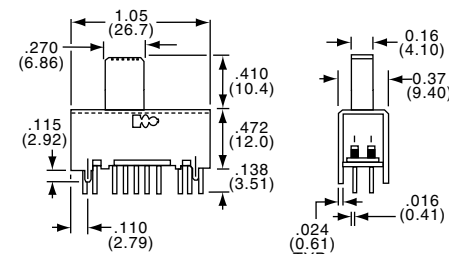
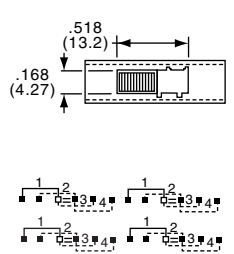
Tyco Electronics	Alcoswitch	Plating	Mounting Style
6-1437580-9	MSSA4350	Silver	Upright
7-1437580-0	MSSA4350G	Gold	Upright



MSSA4350R

Tyco Electronics	Alcoswitch	Plating	Mounting Style
7-1437580-1	MSSA4350R	Silver	Rt. Angle
7-1437580-2	MSSA4350RG	Gold	Rt. Angle

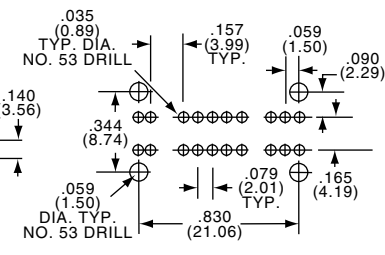
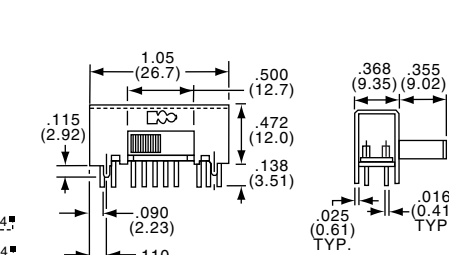
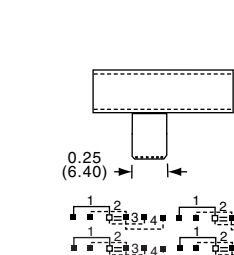
4P3T



MSSA4450

Tyco Electronics	Alcoswitch	Plating	Mounting Style
7-1437580-3	MSSA4450	Silver	Upright
7-1437580-4	MSSA4450G	Gold	Upright

4P4T



MSSA4450R

Tyco Electronics	Alcoswitch	Plating	Mounting Style
7-1437580-5	MSSA4450R	Silver	Rt. Angle
7-1437580-6	MSSA4450RG	Gold	Rt. Angle

4P4T

**Slide Switches, Instrumentation Grade, .200 Terminal Spacing**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver clad or gold plate  
 Case Material .....Polyester  
 Actuator Material .....Polyamide  
 Terminals .....Gold or silver plate  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +149°F (-20°C to +65°C)  
 Storage Temperature.....-40°F to +212°F (-40°C to +100°C)  
 Solder Heat Resistance.....See page M3-4

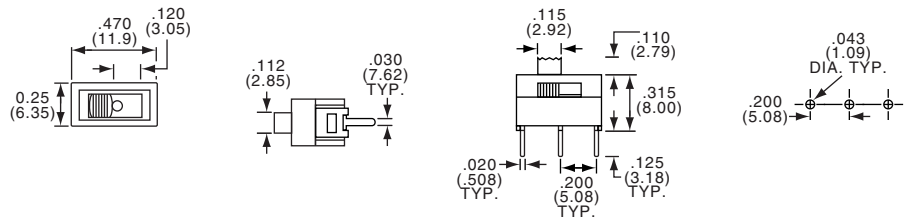
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA max. 20 VDC or peak AC  
 Silver: 3 A @ 115 VAC, 1.5A @ 230 VAC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Non-shorting  
 Insulation Resistance .....1,000 Megohms @ 500 VDC min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuation Force .....600 ±300 Grams  
 Actuator Travel ......120" (3.05) Approximate  
 Life Expectancy .....Up to 30,000 Cycles

**SPDT**



MSSA114D

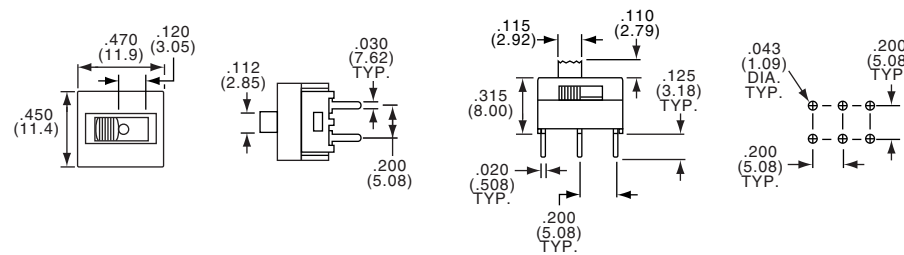


Tyco Electronics	Alcoswitch	Act. Code	Pg. M5	On	Off	On	Contacts
2-1437580-9	MSSA111DG	D		On	None	On	Gold
3-1437580-0	MSSA111EG	E		On	Off	On	Gold
3-1437580-1	MSSA114D	D		On	None	On	Silver
3-1437580-2	MSSA114E	E		On	Off	On	Silver

**DPDT**



MSSA214N



Tyco Electronics	Alcoswitch	Act. Code	Pg. M5	On	None	On	Contacts
4-1437580-9	MSSA211NG	N		On	None	On	Gold
5-1437580-2	MSSA214N	N		On	None	On	Silver

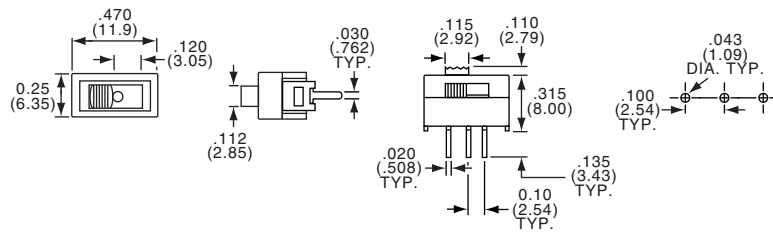
**B**

MSSA-01/04 Series



**Slide Switches, Instrumentation Grade, .100 Terminal Spacing**

SEE PAGE B30 FOR PRODUCT SPECIFICATIONS

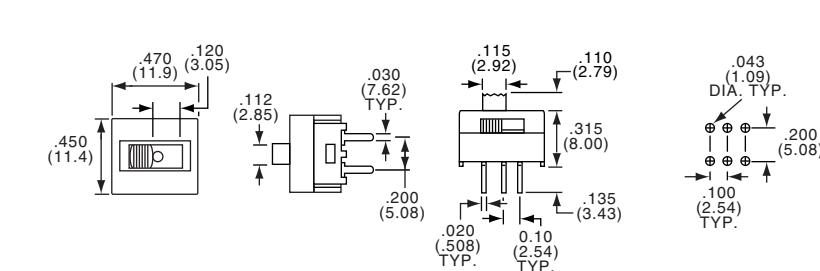


SPDT



MSSA104D

Tyco Electronics	Alcoswitch	Act. Code	Pg. M5				Contacts
1-1437580-7	MSSA101DG	D		On	None	On	Gold
—	MSSA101EG	E		On	Off	On	Gold
2-1437580-3	MSSA104D	D		On	None	On	Silver
2-1437580-6	MSSA104E	E		On	Off	On	Silver

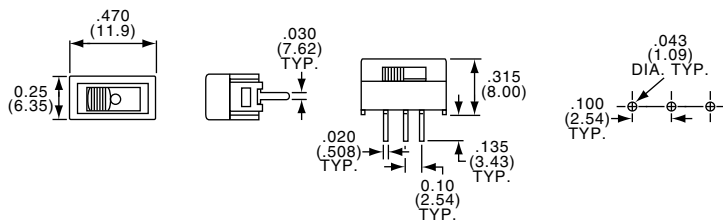


DPDT



MSSA204N

Tyco Electronics	Alcoswitch	Act. Code	Pg. M5				Contacts
4-1437580-4	MSSA204N	N		On	None	On	Silver

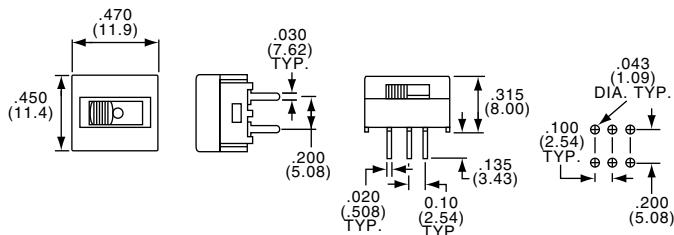


SPDT FLUSH ACTUATOR



MSSA104D1

Tyco Electronics	Alcoswitch	Act. Code	Pg. M5				Contacts
2-1437580-4	MSSA104D1	D		On	None	On	Silver



DPDT FLUSH ACTUATOR



MSSA204N1

Tyco Electronics	Alcoswitch	Act. Code	Pg. M5				Contacts
4-1437580-5	MSSA204N1	N		On	None	On	Silver
4-1437580-8	MSSA204P1	P		On	Off	On	Silver



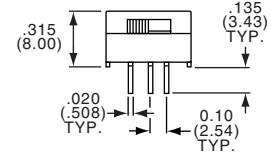
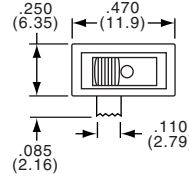
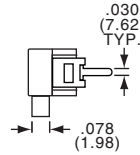
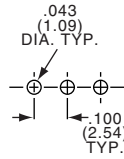
**Slide Switches, Instrumentation Grade, .100 Terminal Spacing**

SEE PAGE B30 FOR PRODUCT SPECIFICATIONS

SPDT



MSSA101DGRA

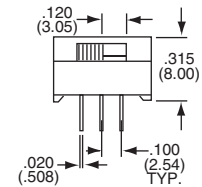
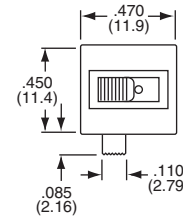
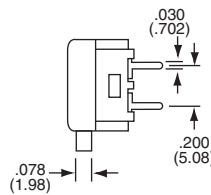
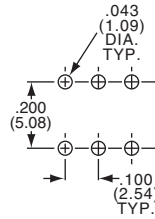


Tyco Electronics	Alcoswitch	Act. Code	Pg. M5	■ ■ ■			Contacts
1-1437580-9	MSSA101DGRA	D		On	None	On	Gold
2-1437580-1	MSSA101EGRA	E		On	Off	On	Gold
2-1437580-5	MSSA104DRA	D		On	None	On	Silver
2-1437580-8	MSSA104ERA	E		On	Off	On	Silver

DPDT



MSSA204NRA



Tyco Electronics	Alcoswitch	Act. Code	Pg. M5	■ ■ ■			Contacts
4-1437580-2	MSSA201NGRA	N		On	None	On	Gold
8-1437580-2	MSSA201PGRA	P		On	Off	On	Gold
4-1437580-6	MSSA204NRA	N		On	None	On	Silver
—	MSSA204PRA	P		On	Off	On	Silver

**Slide Switches, Low Profile, Instrumentation Grade**

**MATERIAL SPECIFICATIONS:**

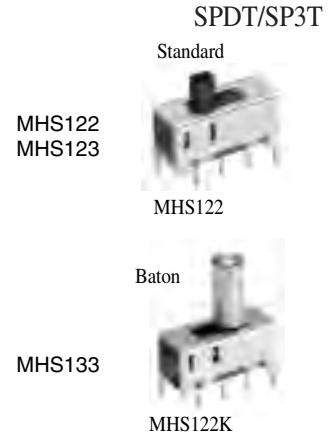
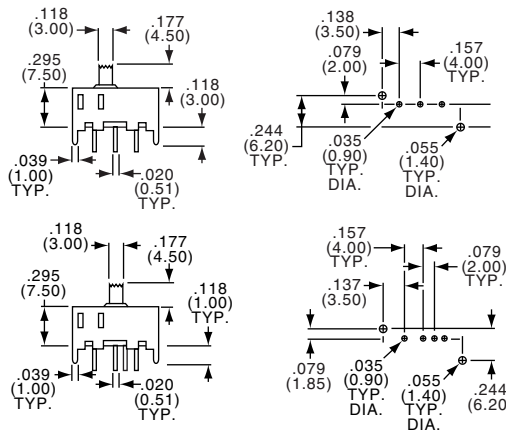
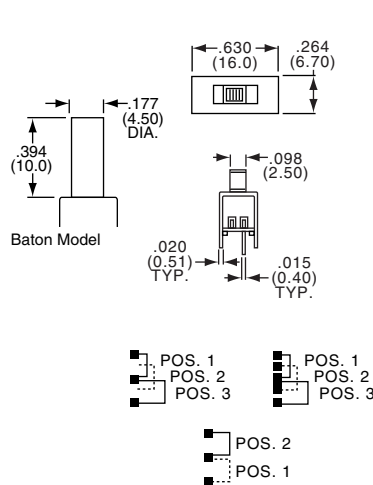
Contacts .....Gold or silver over nickel over Cu alloy  
 Frame Material .....Nickel plated, Steel  
 Actuator Material .....POM 94 HB  
 Terminals/Fixed Contacts.....Gold or silver over nickel over Cu alloy  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

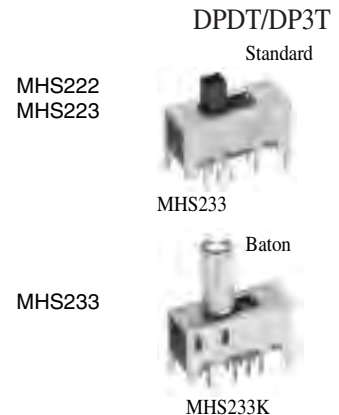
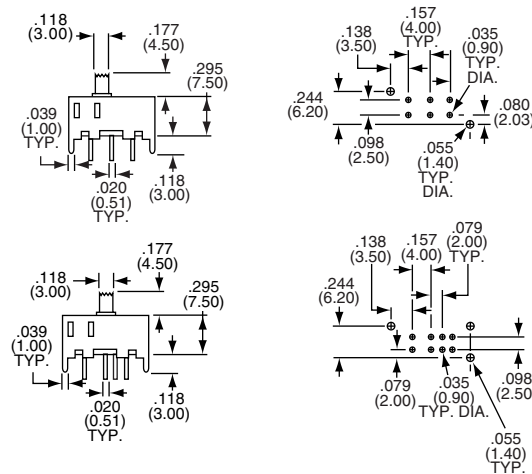
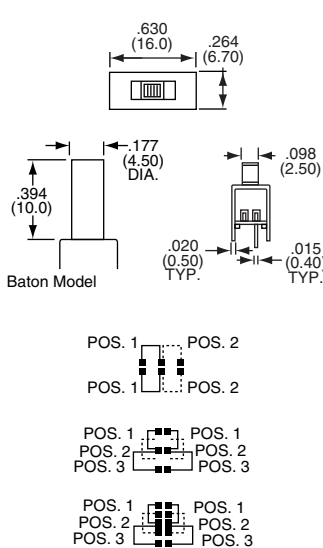
Operating Temperature.....-4°F to +212°F (-20°C to +100°C)  
 Storage Temperature.....-40°F to +212°F (-40°C to + 100°C)  
 Solder Heat Resistance .....See page M3-4  
 Recommended Cleaning.....No chlorine base or Freon can be used.  
 Aqueous or 100% ethanol.

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA 20 VDC or peak AC  
 Silver: 300 mA @ 125 VAC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing.....Make-before-break  
 Insulation Resistance .....1000 Megohms min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuation Force .....50 to 450 Grams  
 Actuator Travel.....0.079"-.158" (2.01-4.01)  
 Life Expectancy .....Up to 15,000 Cycles



Standard Model Tyco Electronics	Alcoswitch	Baton Model Tyco Electronics	Alcoswitch	Type	On	None	Off	Contacts
1437576-9	MHS122	1-1437576-2	MHS122K	SPDT	On	None	On	Silver
1-1437576-5	MHS123	1-1437576-7	MHS123K	SPDT	On	Off	On	Silver
1-1437576-9	MHS133	2-1437576-2	MHS133K	SP3T	On	On	On	Silver
1-1437576-0	MHS122G	1-1437576-3	MHS122KG	SPDT	On	None	On	Gold
	MHS123G		MHS123KG	SPDT	On	Off	On	Gold
2-1437576-0	MHS133G	2-1437576-3	MHS133KG	SP3T	On	On	On	Gold



Standard Model Tyco Electronics	Alcoswitch	Baton Model Tyco Electronics	Alcoswitch	Type	On	None	Off	Contacts
2-1437576-5	MHS222	2-1437576-8	MHS222K	DPDT	On	None	On	Silver
3-1437576-1	MHS223	3-1437576-4	MHS223K	DPDT	On	Off	On	Silver
3-1437576-6	MHS233	3-1437576-9	MHS233K	DP3T	On	On	On	Silver
2-1437576-6	MHS222G	2-1437576-9	MHS222KG	DPDT	On	None	On	Gold
3-1437576-2	MHS223G	—	MHS223KG	DPDT	On	Off	On	Gold
3-1437576-7	MHS233G	4-1437576-0	MHS233KG	DP3T	On	On	On	Gold

**Slide Switches, Low Profile, Right Angle, Instrumentation Grade**

SEE PAGE B33 FOR PRODUCT SPECIFICATIONS

**B**  
MHS Series

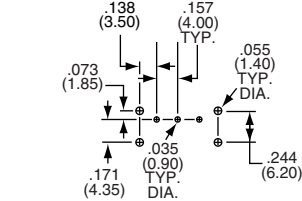
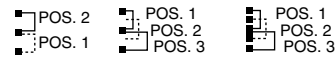
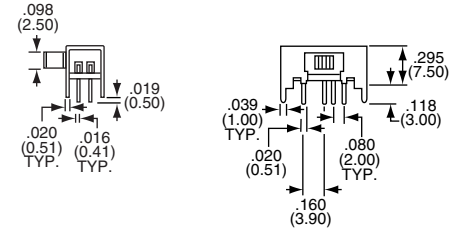
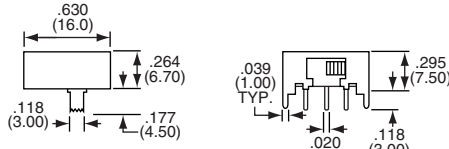
**SPDT/SP3T**



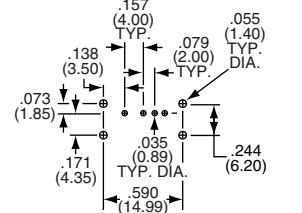
MHS122RA



MHS133GRA



MHS122/123



MHS133

Tyco Electronics	Alcoswitch	Type				Contacts
1-1437576-4	MHS122RA	SPDT	On	None	On	Silver
1-1437576-8	MHS123RA	SPDT	On	Off	On	Silver
2-1437576-4	MHS133RA	SP3T	On	On	On	Silver
1-1437576-1	MHS122GRA	SPDT	On	None	On	Gold
1-1437576-6	MHS123GRA	SPDT	On	Off	On	Gold
2-1437576-1	MHS133GRA	SP3T	On	On	On	Gold

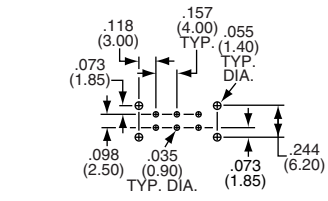
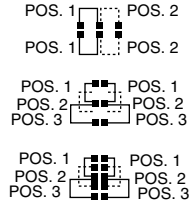
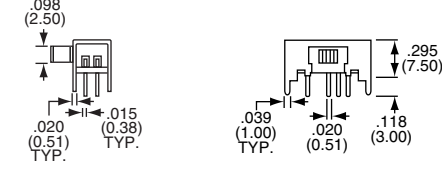
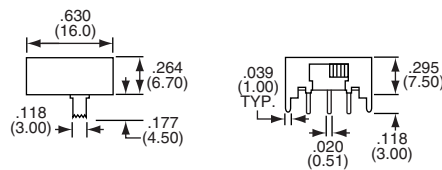
**DPDT/DP3T**



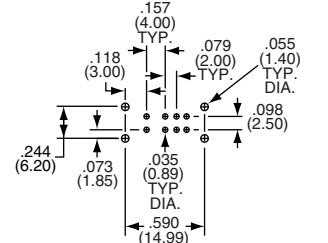
MHS222RA



MHS233GRA



MHS222/223



MHS233

Tyco Electronics	Alcoswitch	Type				Contacts
3-1437576-0	MHS222RA	DPDT	On	None	On	Silver
3-1437576-5	MHS223RA	DPDT	On	Off	On	Silver
4-1437576-1	MHS233RA	DP3T	On	On	On	Silver
2-1437576-7	MHS222GRA	DPDT	On	None	On	Gold
3-1437576-3	MHS223GRA	DPDT	On	Off	On	Gold
3-1437576-8	MHS233GRA	DP3T	On	On	On	Gold

**Slide Switches, Micro Size, Instrumentation Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver clad plate over copper alloy  
 Cover Base Material .....Polyester  
 Actuator Material .....Polyacetal  
 Terminals .....Silver over nickel plate over copper alloy  
 Terminal Seal .....Molded in

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....100 Milliamps @ 12 VDC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Make before break  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuation Force .....250 Grams, (+200g, -150g)  
 Actuator Travel .....0.079" (2.01)  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....+14°F to +140°F (-10°C to +60°C)  
 Storage Temperature .....-4°F to +140°F (-20°C to +60°C)  
 Solder Heat Resistance .....270°C+10°C, 5 seconds per MIL-STD-202,  
 Method 210

**PCB Hole Layout**

**Circuit Diagram**

**SPDT**

**SSJ12**

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
3-1437575-1	SSJ12	Silver	Upright

**PCB Hole Layout**

**Circuit Diagram**

**SPDT**

**SSJ12R**

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
3-1437575-2	SSJ12R	Silver	Right Angle

**PCB Hole Layout**

**Circuit Diagram**

**SP3T**

**SSJ13**

Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
3-1437575-3	SSJ13	Silver	Upright

**Slide Switches, Micro Size, Instrumentation Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver over nickel over copper alloy  
 Case Material .....Polyacetal UL94HB  
 Actuator Material .....Polyester UL94HB  
 Terminals .....Silver over nickel over copper alloy  
 Terminal Seal .....Epoxy  
 Terminal Board.....UL 94 V-O

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....+14°F to +140°F (-10°C to +60°C)  
 Storage Temperature.....+14°F to +140°F (-10°C to +60°C)  
 Solder Heat Resistance.....230 ± 150 grams ± 5°C for 3 seconds per MIL-STD-202, Method 210

**TYPICAL PERFORMANCE CHARACTERISTICS:**

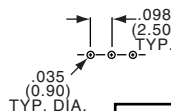
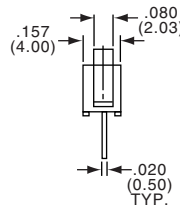
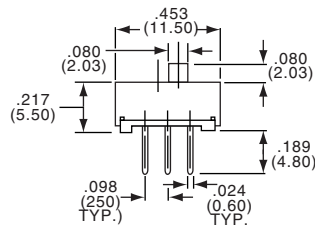
Contact Rating .....100 mA @ 30 VDC or peak AC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Make before break  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....200 ± 150 Grams  
 Life Expectancy .....Up to 10,000 Cycles

**B**  
MMS Series

**SPDT**



MMS12



Circuit Diagram

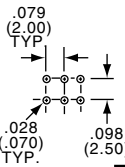
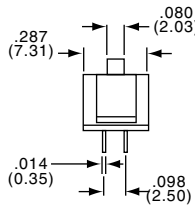
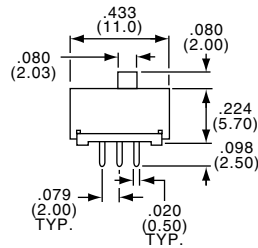


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
1437575-4	MMS12	SPDT	Silver	Upright

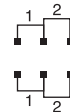
**DPDT**



MMS22



Circuit Diagram

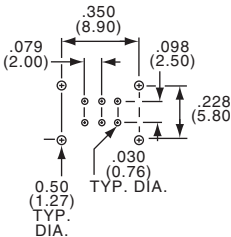
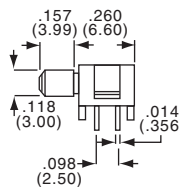
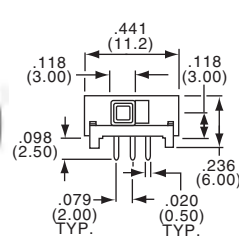


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
1437575-5	MMS22	DPDT	Silver	Upright

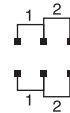
**DPDT**



MMS22R



Circuit Diagram

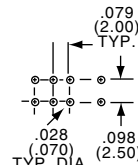
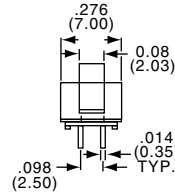
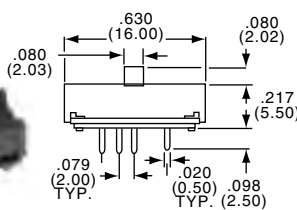


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
1437575-6	MMS22R	DPDT	Silver	Right Angle

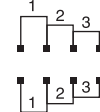
**DP3T**



MMS23



Circuit Diagram

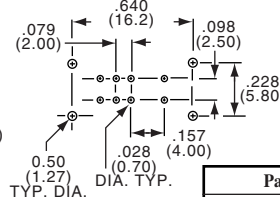
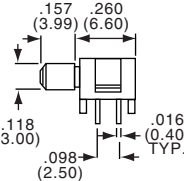
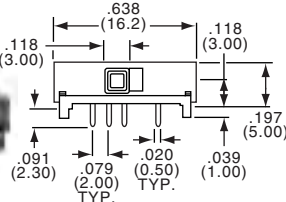


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
1437575-8	MMS23	DP3T	Silver	Upright

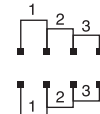
**DP3T**



MMS23R



Circuit Diagram

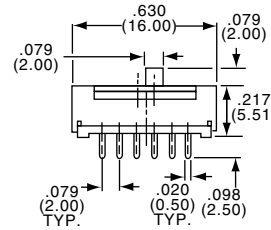
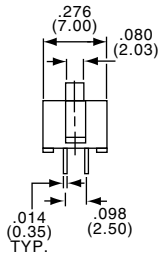
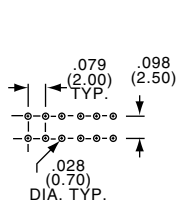
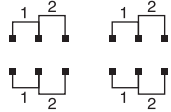


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
1437575-9	MMS23R	DP3T	Silver	Right Angle

**Slide Switches, Micro Size, Instrumentation Grade**

SEE PAGE B36 FOR PRODUCT SPECIFICATIONS

Circuit Diagram

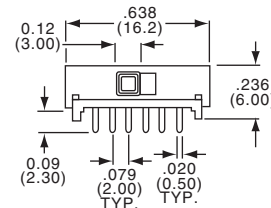
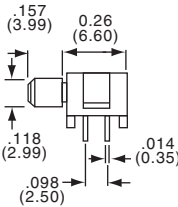
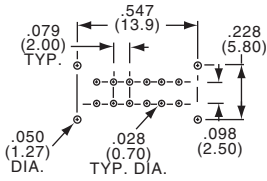
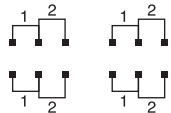


4PDT

MMS42

Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
I-1437575-0	MMS42	4PDT	Silver	Upright

Circuit Diagram

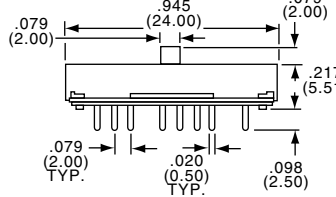
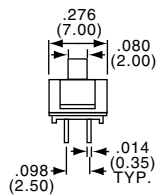
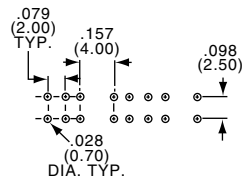
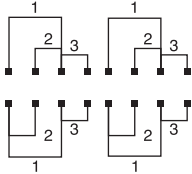


4PDT

MMS42R

Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
I-1437575-1	MMS42R	4PDT	Silver	Right Angle

Circuit Diagram

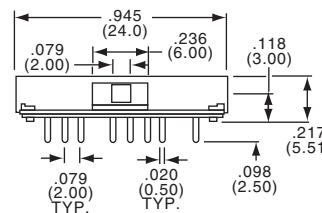
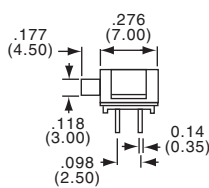
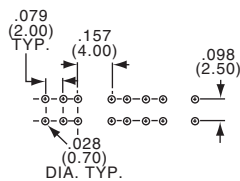
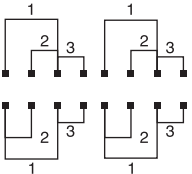


4P3T

MMS43

Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
I-1437575-2	MMS43	4P3T	Silver	Upright

Circuit Diagram



4P3T

MMS43R

Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
I-1437575-3	MMS43R	4P3T	Silver	Right Angle

**Slide Switches, Micro Size, Instrumentation Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold or silver plate over nickel plate  
 Case Material .....Steel, tin plate  
 Actuator Material .....Polyacetal UL94HB  
 Terminals .....Gold or silver plate over nickel plate  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-40°F to +212°F (-40°C to +100°C)  
 Solder Heat Resistance.....+260°C (+500°F) for 5 seconds  
 per MIL-STD-202, Method 210

**TYPICAL PERFORMANCE CHARACTERISTICS:**

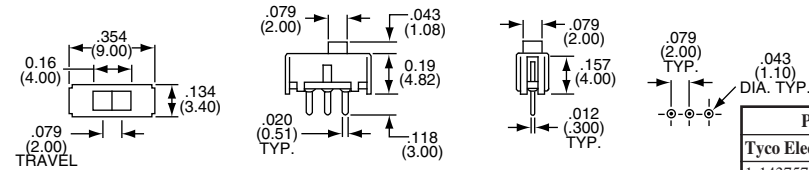
Contact Rating .....Gold: 0.4 VA @ 20 VDC or peak AC  
 Silver: 100 mA @ 30 VDC  
 Initial Contact Resistance.....30 Milliohms max.  
 Contact Timing.....Make before break  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....250 ± 150 Grams  
 Life Expectancy .....Up to 10,000 Cycles  
 Travel .....0.079" (2.01)

**B**  
SSB Series

**SPDT**



SSB12



Circuit Diagram

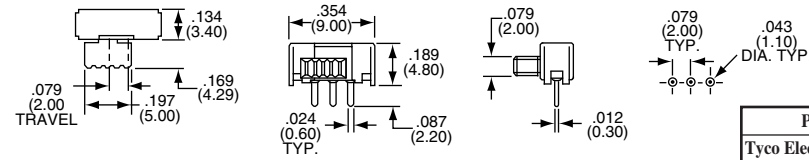


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
1-1437575-8	SSB12	SPDT	Silver	Upright
1-1437575-9	SSB12G	SPDT	Gold	Upright

**SPDT**



SSB12R



Circuit Diagram

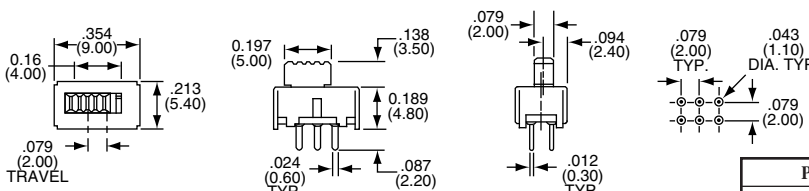


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
2-1437575-0	SSB12R	SPDT	Silver	Right Angle
2-1437575-1	SSB12RG	SPDT	Gold	Right Angle

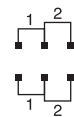
**DPDT**



SSB22



Circuit Diagram

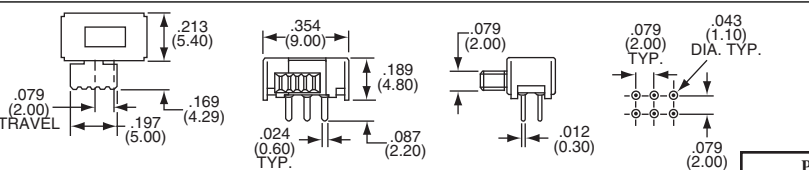


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
2-1437575-2	SSB22	DPDT	Silver	Upright
2-1437575-3	SSB22G	DPDT	Gold	Upright

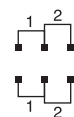
**DPDT**



SSB22R



Circuit Diagram

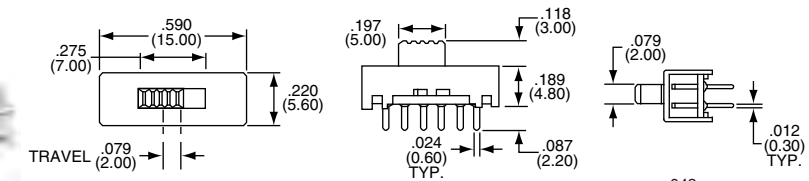


Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
2-1437575-4	SSB22R	DPDT	Silver	Right Angle
2-1437575-5	SSB22RG	DPDT	Gold	Right Angle

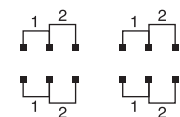
**4PDT**



SSB42



Circuit Diagram



Part Number				
Tyco Electronics	Alcoswitch	Type	Plating	Mounting Style
2-1437575-8	SSB42	4PDT	Silver	Upright
2-1437575-9	SSB42G	4PDT	Gold	Upright



**Slide Switches, Micro Size, Instrumentation Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver or gold plate  
 Case Material .....Polyester PPS UL94VO  
 Actuator Material .....Polyamide UL94HB  
 Cover Material .....Polyamide UL94HB  
 Terminals .....Silver or gold plate  
 Terminal Seal .....Epoxy

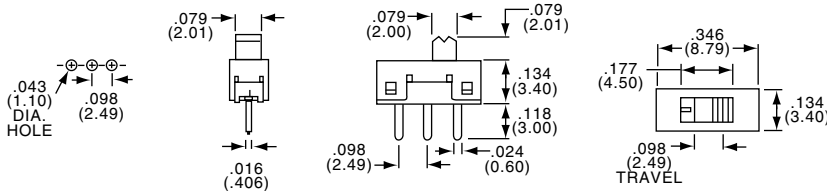
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA max. @ 20 VDC or peak AC  
 Silver: 100 Milliamps @ 30 VDC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Break-Before-Make  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....250 ± 100 Grams  
 Actuator Travel .....0.098" (2.49)  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4°F to +158°F (-20°C to +70°C)  
 Storage Temperature .....-40°F to +194°F (-40°C to +90°C)  
 Solder Heat Resistance .....260°C (+500°F) for 5 seconds  
 per MIL-STD-202, Method 210

**SPDT**



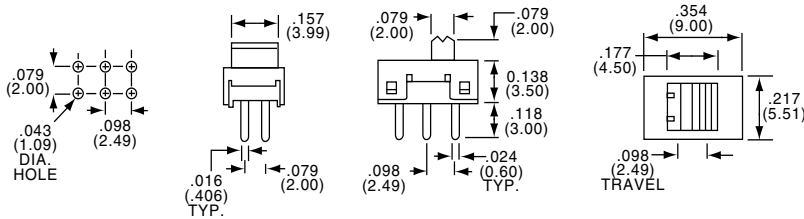
SSA12

Circuit Diagram



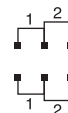
Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
1-1437575-4	SSA12	Silver	Upright
1-1437575-5	SSA12G	Gold	Upright

**DPDT**



SSA22

Circuit Diagram



Part Number			
Tyco Electronics	Alcoswitch	Plating	Mounting Style
1-1437575-6	SSA22	Silver	Upright
1-1437575-7	SSA22G	Gold	Upright



**Slide Switches, PC Tails, Wiping Contact, Consumer Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver plate over copper alloy  
 Case Material .....Steel  
 Actuator Material .....Polycarbonate  
 Terminals/Fixed Contacts.....Silver plate over copper alloy  
 Terminal Seal .....Epoxy

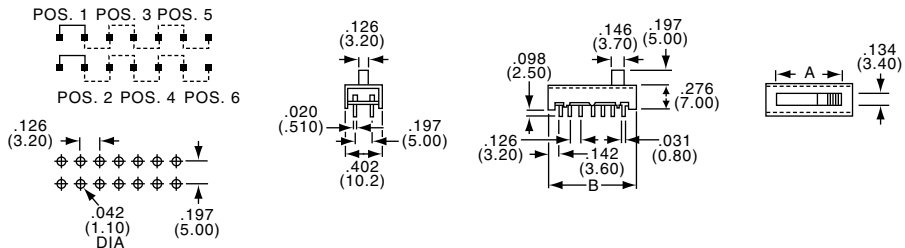
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....250 mA @ 125 VAC, 150 mA @ 12 VDC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Break before make  
 Insulation Resistance .....500 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....100-300 Grams  
 Actuator Travel.....0.126" (3.20)  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....14°F to +140°F (-10°C to +60°C)  
 Storage Temperature.....14°F to +140°F (-10°C to +60°C)

**2 TO 6 POSITIONS**

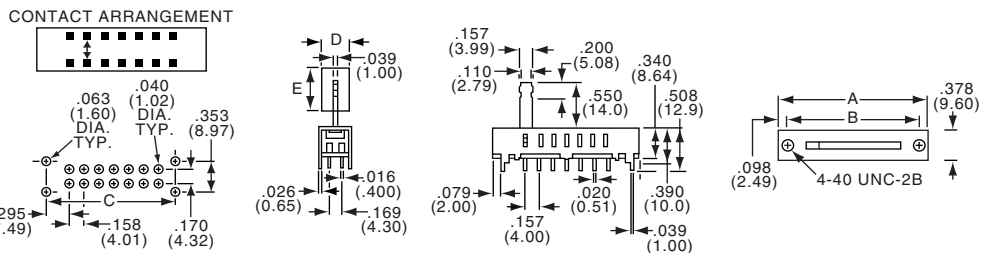


Part Number		Type	Dim.A	Dim.B
Tyco Electronics	Alcoswitch			
3-1437577-9	SLS220PC	2 Positions	.272(6.91)	.535(13.59)
4-1437577-1	SLS230PC	3 Positions	.398(10.11)	.661(16.79)
4-1437577-3	SLS240PCA	4 Positions	.524(13.31)	.787(19.99)
4-1437577-5	SLS250PC	5 Positions	.650(16.51)	.913(23.19)
4-1437577-7	SLS260PC	6 Positions	.776(19.71)	1.039(26.39)

**SL Series**

**Slide Switches, PC Tails, Lever or Knob Actuator**

**2 TO 10 POSITIONS**



Part Number		Type	Dim. A	Dim. B	Dim. C	Knob Only	Description	Dim. D	Dim. E
Tyco Electronics	Alcoswitch								
1437577-9	SL220	2 Positions	.95(24.13)	.750(19.05)	.750(19.05)	KSS10A	Aluminum-Clear Anodize	.270(6.86)	.500(12.70)
1-1437577-0	SL330	3 Positions	1.11(28.19)	.910(23.1)	.910(23.1)	KSS10B	Aluminum-Black Anodize	.270(6.86)	.500(12.70)
1-1437577-1	SL550	5 Positions	1.42(36.07)	1.22(30.99)	1.22(31.1)	KSS20A	Aluminum-Clear Anodize	.305(7.75)	.512(13.00)
1-1437577-2	SL660	6 Positions	1.58(40.13)	1.38(35.05)	1.38(35.1)	KSS20B	Aluminum-Black Anodize	.305(7.75)	.512(13.00)
1-1437577-3	SL770	7 Positions	1.74(44.20)	1.54(39.12)	1.54(39.1)				
1-1437577-4	SL880	8 Positions	1.89(48.01)	1.70(43.18)	1.70(43.1)				
1437577-8	SL1000	10 Positions	2.21(56.13)	2.01(51.05)	2.01(51.5)				

**Slide Switches, Panel Mount, Wiping Contact, Consumer Grade**

**MATERIAL SPECIFICATIONS:**

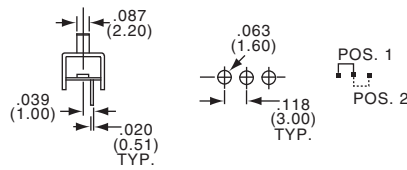
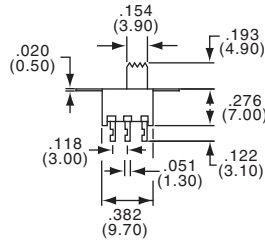
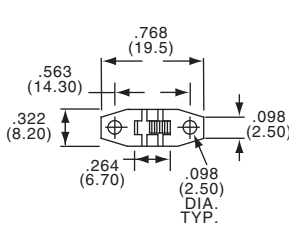
Contacts .....Silver over nickel plate copper alloy  
 Case Material .....Steel-zinc plated  
 Actuator Material .....PBT 30% glass  
 Terminals/Fixed Contacts.....Silver over nickel plate copper alloy  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-40°F to +212°F (-40°C to +100°C)  
 Solder Heat Resistance .....+300°C (+572°F) for 5 seconds

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....500 mA @ 125 VAC, 200 mA @ 12 VDC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Break-Before-Make  
 Insulation Resistance .....500 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....SLS: 100-300 Grams; SLSA: 220, 300 -500 Grams  
 Plunger/Actuator Travel: .....0.106" (2.69)  
 Life Expectancy .....Up to 10,000 Cycles

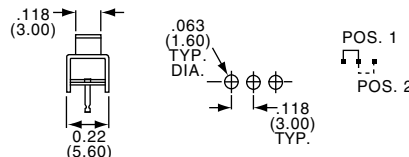
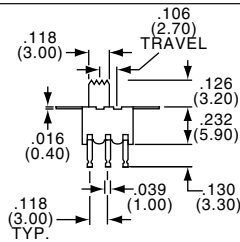
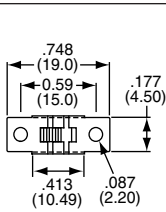


SPDT



SLS120

Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
1-1437577-5	SLS120	SPDT	Panel	Lug

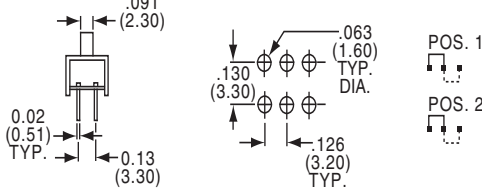
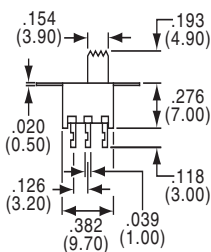
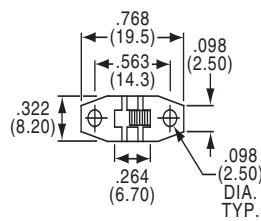


SPDT



SLSA120

Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
5-1437577-3	SLSA120	SPDT	Panel	Turret

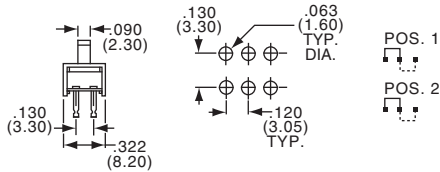
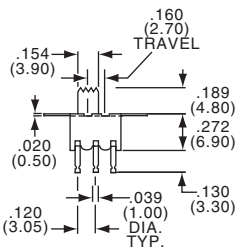
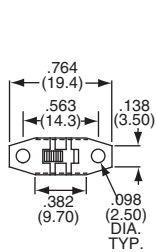


DPDT



SLS220

Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
3-1437577-7	SLS220	DPDT	Panel	Lug



DPDT



SLSA220

Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
5-1437577-5	SLSA220	DPDT	Panel	Turret

**Slide Switches, Wiping Contacts, Consumer Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper alloy-silver/nickel  
 Case Material .....Steel-zinc plate  
 Actuator Material .....PBT 30% Glass  
 Terminals/Fixed Contacts.....Copper, alloy, silver/nickel plate  
 Terminal Seal .....Epoxy

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....500 mA @ 125 VAC, 200 mA @ 12 VDC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Break before make  
 Insulation Resistance .....500 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....350±150 Grams  
 Plunger/Actuator Travel: .....0.106 (2.69)  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

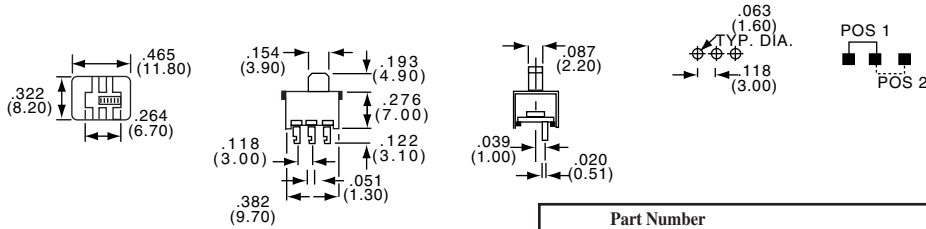
Operating Temperature.....-4°F to + 185°F (-20°C to + 85°C)  
 Storage Temperature.....-40°F to + 212°F (-40°C to + 100°C)  
 Solder Heat Resistance .....+300°C (+572°F) for 5 seconds

**SPDT**



Lug

SLS1201



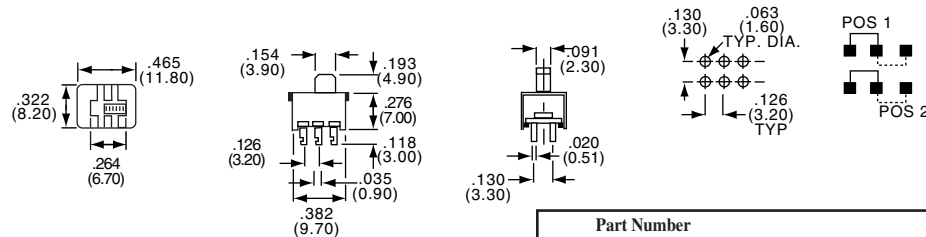
Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
1-1437577-6	SLS1201	SPDT	PC	Lug

**DPDT**



Lug

SLS2201



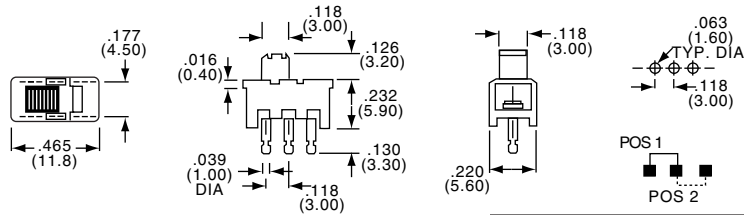
Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
3-1437577-8	SLS2201	DPDT	PC	Lug

**SPDT**



Turret

SLSA1201



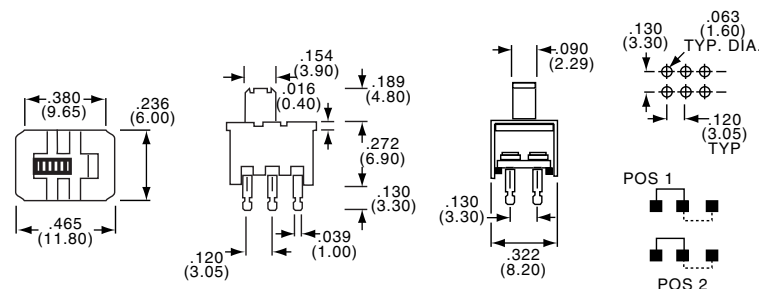
Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
5-1437577-4	SLSA1201	SPDT	PC	Turret

**DPDT**



Turret

SLSA2201



Part Number				
Tyco Electronics	Alcoswitch	Type	Mounting	Terminals Contacts
5-1437577-6	SLSA2201	DPDT	PC	Turret

**Slide Switches, Miniature, Rolling Contact, Economy Grade**

**MATERIAL SPECIFICATIONS:**

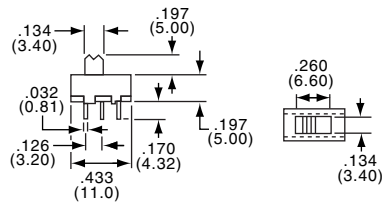
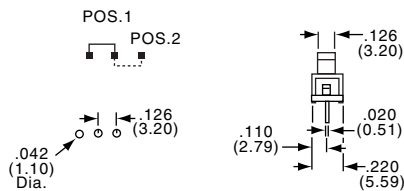
Contacts .....Silver over nickel plate over copper alloy  
 Case Material .....Tin plate over steel  
 Actuator Material .....Polycarbonate  
 Terminals/Fixed Contacts.....Silver over nickel plate over copper alloy

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....250 mA @ 125 VAC, 150 mA @ 12 VDC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Break before make  
 Insulation Resistance .....500 Megohms min.  
 Dielectric Strength .....500 VAC  
 Actuation Force .....340 ± 57 Grams  
 Actuator Travel.....0.126" (3.20)  
 Life Expectancy .....Up to 6,000 to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

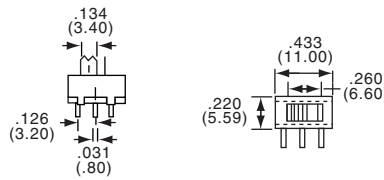
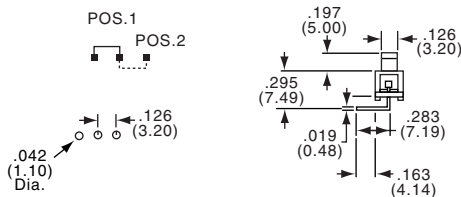
Operating Temperature.....14°F to +185°F (-10°C to +85°C)  
 Storage Temperature.....14°F to +185°F (-10°C to +85°C)



SLS121PC

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
1-1437577-9	SLS121PC	Printed Circuit

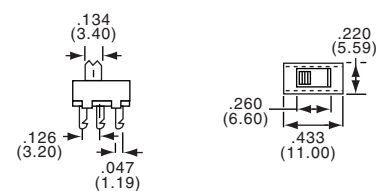
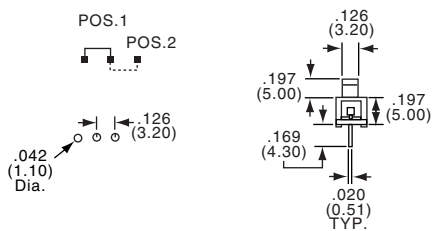
SPDT



SLS121RA

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
2-1437577-2	SLS121RA	Right Angle PC

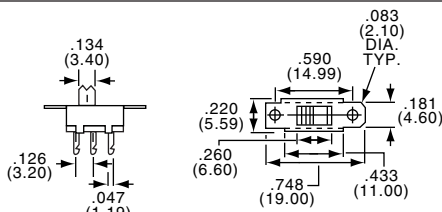
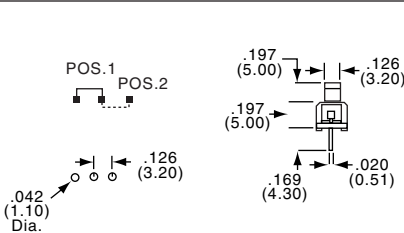
SPDT



SLS1211

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
1-1437577-8	SLS1211	Printed Circuit

SPDT



SLS121

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
1-1437577-7	SLS121	Panel Mounted

SPDT

**Slide Switches, Miniature, Rolling Contact, Economy Grade**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver over nickel flash over copper alloy  
 Case Material .....Steel  
 Actuator Material .....Polycarbonate  
 Terminals/Fixed Contacts.....Silver over nickel over copper alloy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....+14°F to +185°F (-10°C to +85°C)  
 Storage Temperature.....+14°F to +185°F (-10°C to +85°C)  
 Solder Heat Resistance.....+260°C for 5 seconds

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....250mA @ 125 VAC  
 150mA @ 12VDC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Break-Before-Make  
 Insulation Resistance .....>50 Megohms.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuation Force .....340 ± 57 Grams  
 Plunger/Actuator Travel: .....0.260" to 0.512" (6.60-13.00)  
 Life Expectancy .....Up to 10,000 Cycles at no load

**B**  
SLS Series

**SP3T**

**SLS131PC**

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
2-1437577-4	SLS131PC	Printed Circuit

**SP3T**

**SLS131RA**

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
2-1437577-6	SLS131RA	Right Angle PC

**SP4T**

**SLS141PC**

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
2-1437577-8	SLS141PC	Printed Circuit

**SP4T**

**SLS141RA**

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
3-1437577-0	SLS141RA	Right Angle PC

**SP5T**

**SLS151PC**

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
3-1437577-2	SLS151PC	Printed Circuit

**SP5T**

**SLS151RA**

Part Number		
Tyco Electronics	Alcoswitch	Mounting Style
3-1437577-4	SLS151RA	Right Angle PC

**Slide Switches, Baton-Toggle, Multi Pole**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver clad over nickel plated copper alloy  
 Case Material .....Steel, tin plate  
 Actuator Material .....ABS plastic/Aluminum cap  
 Terminals/Fixed Contacts.....Silver over nickel plated copper alloy  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

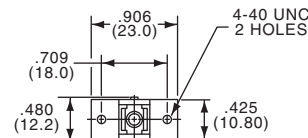
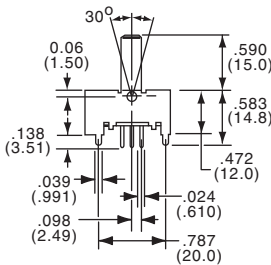
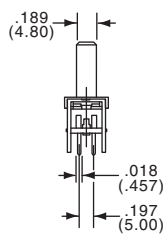
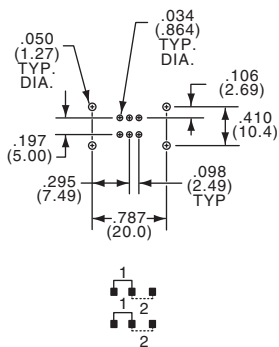
Operating Temperature.....+5°F to +131°F (-15°C to +55°C)  
 Storage Temperature.....-4°F to +140° F (-20°C to +60°C)  
 Solder Heat Resistance.....Hand: 300°C for 3 seconds  
 Wave: 250°C for 5 seconds

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....300 mA @ 125 VAC, 200 mA @ 12VDC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....See table below  
 Insulation Resistance .....500 Megohms min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuation Force .....450 ± 250 Grams  
 Plunger/Actuator Travel .....30°  
 Life Expectancy .....Up to 10,000 Cycles

**B**  
CST Series

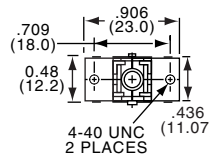
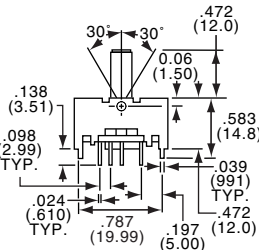
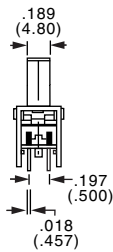
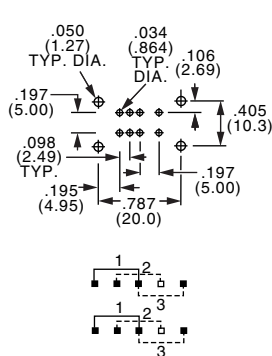
**DPDT**



CST022NK

Part Number					Contact Timing
Tyco Electronics	Alcoswitch				
1437576-2	CST022NK	None	On	On	Non Shorting - Break-Before-Make (On) indicates momentary position.

**DP3T**



CST023NK

Part Number					Contact Timing
Tyco Electronics	Alcoswitch				
1437576-4	CST023NK	On	On	On	Non Shorting



**Slide Switches, Baton-Toggle, Multi Pole**

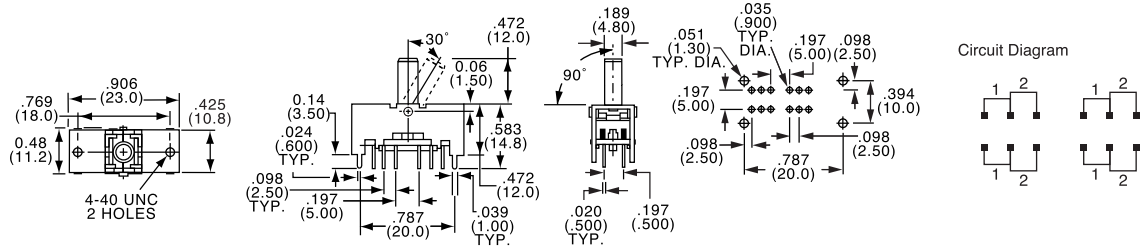
SEE PAGE B45 FOR PRODUCT SPECIFICATIONS

**B**  
CST Series

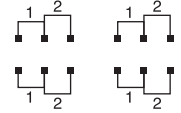
**4PDT**



CST042NK



Circuit Diagram

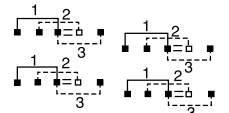
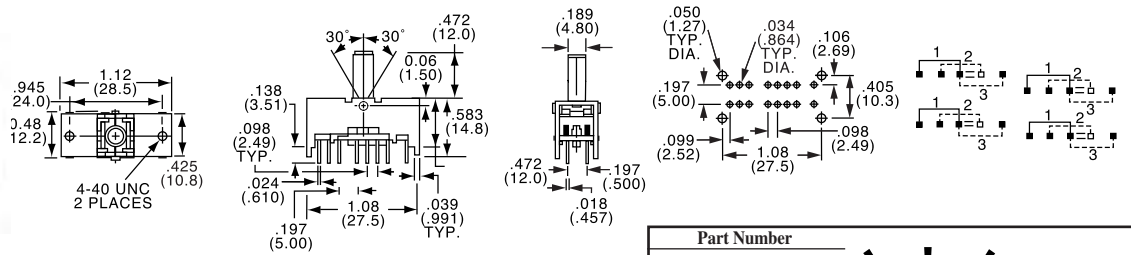


Part Number					
Tyco Electronics	Alcoswitch				Contact Timing
1437576-5	CST042NK	None	On	On	Non Shorting

**4P3T**



CST043NK

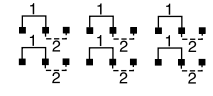
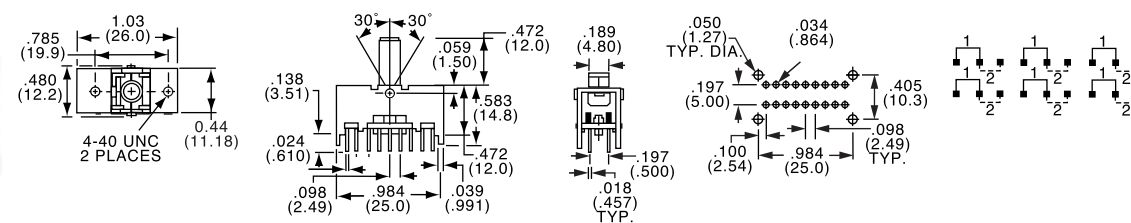


Part Number					
Tyco Electronics	Alcoswitch				Contact Timing
1437576-6	CST043NK	On	On	On	Non Shorting

**6PDT**



CST062NK



Part Number					
Tyco Electronics	Alcoswitch				Contact Timing
1437576-7	CST062NK	None	On	On	Non Shorting

**Slide Switches, Miniature, Right Angle, Surface Mount**

**MATERIAL SPECIFICATIONS:**

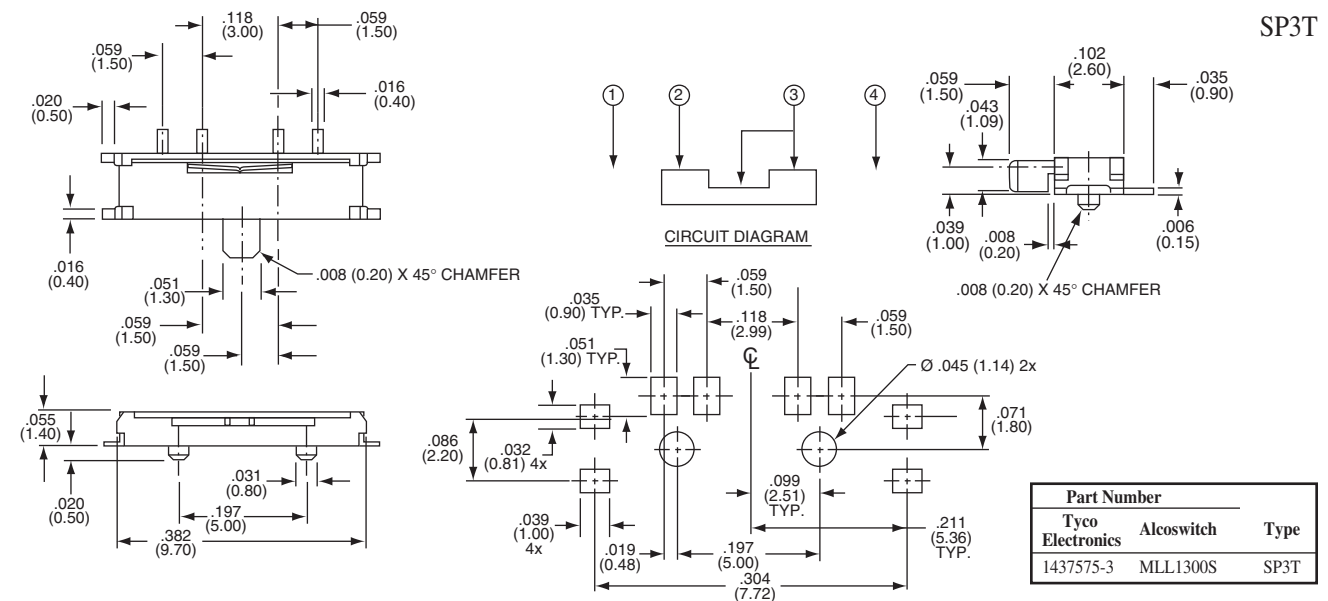
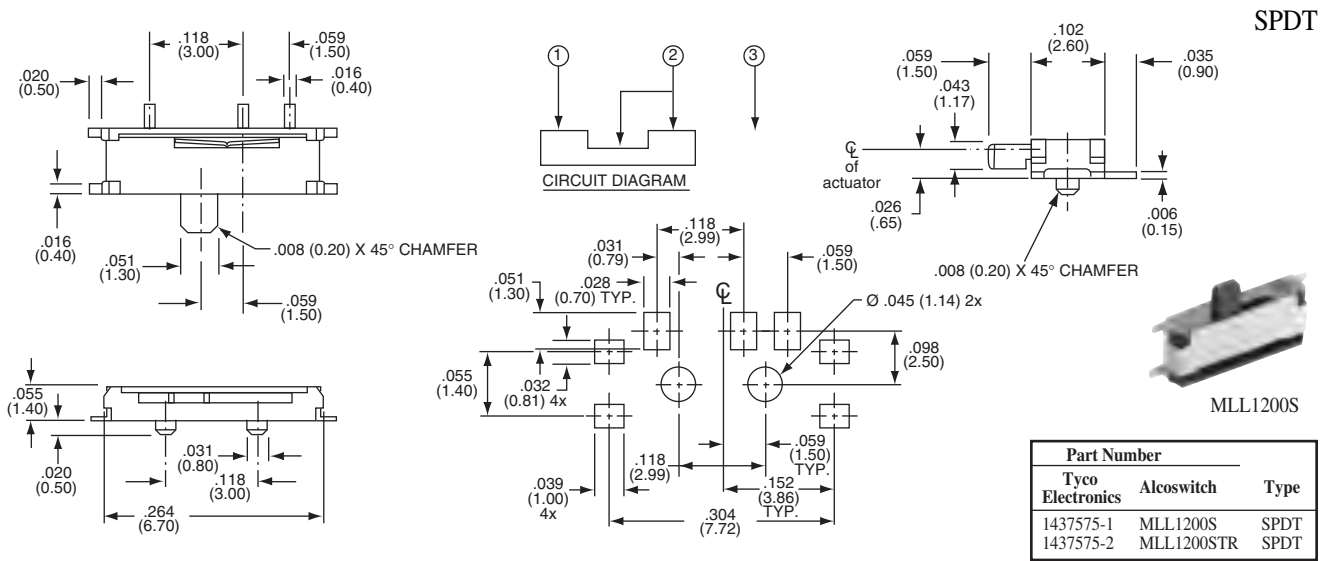
Contacts .....BeCu, copper alloy, 1 micron silver plate  
 Case Material .....40% G.F. PPS, UL94V-0  
 Frame .....Stainless steel, silver plated  
 Actuator Material .....Nylon, UL94HB polyamide  
 Terminals .....Brass, copper alloy, 1 micron silver plate  
 Terminal Seal .....Epoxy

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.3 Amp, 4 VDC  
 Initial Contact Resistance .....70 Milliohms  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....100 VAC min.  
 Actuation Force .....175 ±100 Grams  
 Life Expectancy .....Up to 10,000 Cycles  
 Travel .....0.059 (1.5mm)

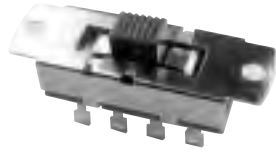
**ENVIRONMENTAL SPECIFICATIONS:**

Humidity .....MIL-STD-202, Method 103, Condition B  
 Moisture Resistance .....MIL-STD-202, Method 106  
 Thermal Shock .....MIL-STD-202, Method 107, Condition A  
 Solder Heat Resistance ...230°C per EIA 364-56 Level 2





**13 Amp & 6 Amp, Panel Mount**



**MATERIAL SPECIFICATIONS:**

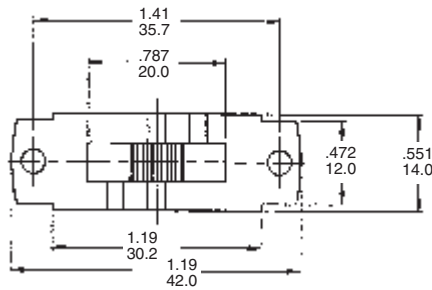
Contacts .....Copper alloy, silver plate  
 Board .....Phenolic, UL94V0  
 Frame .....Steel, nickel plate  
 Actuator Material .....Nylon, UL94V-2  
 Terminals .....Copper alloy, silver plate  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SEPCIFICATIONS:**

Operating Temperature ..-4°F to 149°F (-20° to +65°C)  
 Storage Temperature .....-13°F to 158°F (-25° to +70°C)  
 Solder Heat Resistance ..Per EIA-364-56A, Procedure 3, Condition B  
 Solderability .....Per EIA-364-52, Class 2, Category 1, 95%  
 minimum coverage

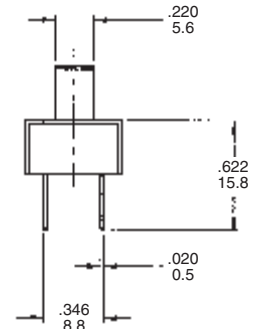
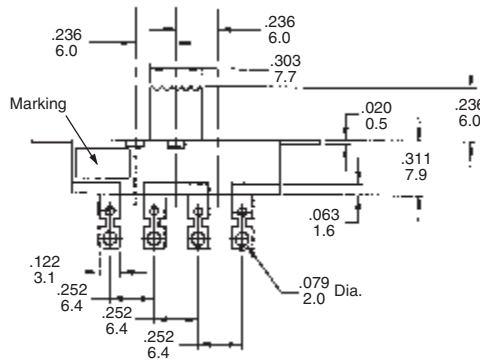
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....13 Amp, 125 VAC or 6.5 Amp, 250 VAC  
 Initial Contact Resistance.....50 Milliohms max.  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....1200 VAC  
 Actuation Force .....100-900 Grams  
 Life Expectancy .....Up to 5000 Cycles  
 Travel .....0.236 (6.0mm)



DP3T

Part Number 1571490-1



**MATERIAL SPECIFICATIONS:**

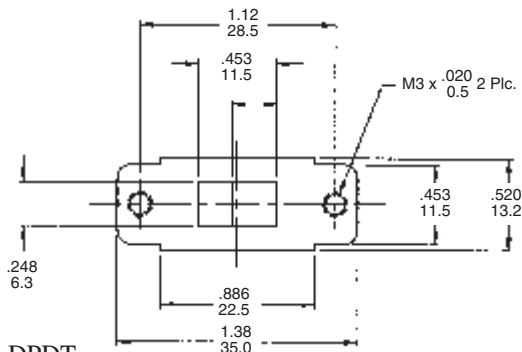
Contacts .....Copper alloy, silver plate  
 Board .....Phenolic, UL94HB  
 Frame .....Steel, nickel plate  
 Actuator Material .....Polycarbonate, UL94V-2  
 Terminals .....Copper alloy, silver plate  
 Terminal Seal .....Epoxy

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....6 Amp, 125 VAC or 3 Amp, 250 VAC  
 Initial Contact Resistance.....50 Milliohms max.  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....1800 VAC  
 Actuation Force .....500-900 Grams  
 Life Expectancy .....5000 Cycles  
 Travel .....0.197 (5.0mm)

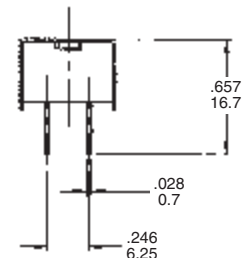
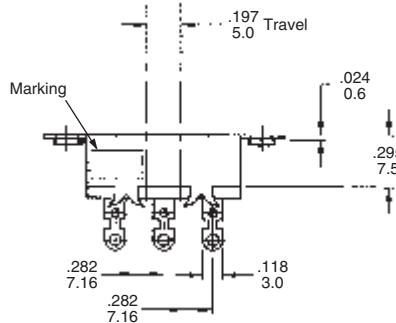
**ENVIRONMENTAL SEPCIFICATIONS:**

Operating Temperature ..-4°F to 149°F (-20° to +65°C)  
 Storage Temperature .....-13°F to 158°F (-25° to +70°C)  
 Solder Heat Resistance ..Per EIA-364-56A, Procedure 3, Condition B  
 Solderability .....Per EIA-364-52, Class 2, Category 1, 95% minimum  
 coverage



DPDT

Part Number 1571491-1





*TST Series - Page C5*



*TT Series - Page C8*



*ATE Series - Page C19*



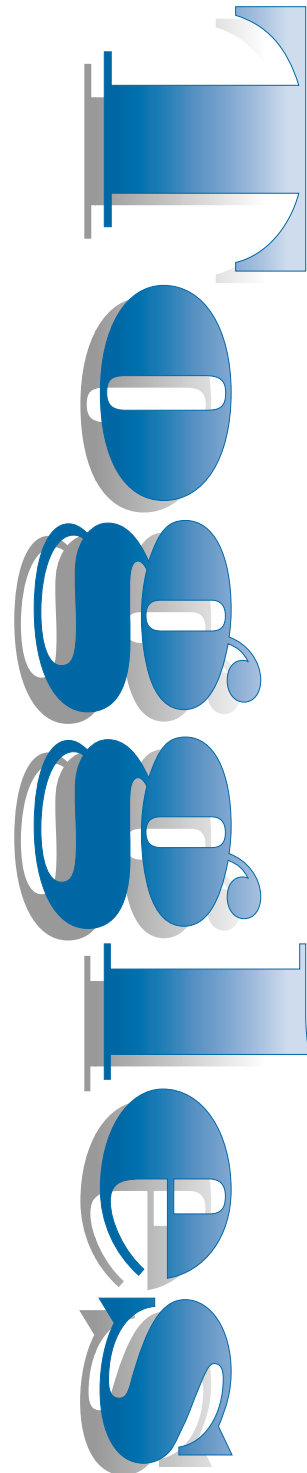
*A Series - Page C22*



*AE Series - Page C35*



*MT Series - Page C43*



**Toggle Switches Part Number Index**

A101K1V30B .....C22	A107KAV2Q.....C22	A208SD9AV2Q .....C22,C31	AE108SD1V30B .....C35
A101KAB .....C22	A107KZB .....C22	A208SDCQ .....C30	AE201MD1AB .....C40
A101KAQ .....C22	A107MD9AV2B .....C22	A208SYAB .....C28	AE201MD1AQ .....C40
A101KCC .....C22	A107MD9CQ .....C22	A208SYCB .....C22,C28	AE201MD1AV2B .....C41
A101KD9AQ .....C22	A107MD9V30Q .....C22	A208SYCQ .....C22	AE201MD1AV2Q .....C41
A101KZQ .....C22,C31	A107P3YZQ .....C22,C33	A208SYZQ .....C22,C27	AE201MD1CB .....C41
A101KZQ2 .....C22	A107SYAQ .....C22	A208TIZQ .....C22,C34	AE201MD1CQ .....C41
A101MD9AB .....C22,C32	A107SYCB .....C22	A208TZQ .....C22	AE201MD1V30B .....C35
A101MD9AG .....C22	A107SYCQ .....C22	A211KZB .....C22,C31	AE201SD1AB .....C42
A101MD9AQ .....C22,C32	A107SYZB .....C27	A211KZQ .....C31	AE201SD1AG .....C35
A101MD9AV2B .....C22,C32	A107SYZQ .....C22,C27	A211MD9AQ .....C22	AE201SD1AQ .....C42
A101MD9AV2G .....C22	A107TZB .....C22	A211MYCQ .....C22	AE201SD1AV2B .....C42
A101MD9AV2Q .....C22,C32	A108MD9AB .....C22,C32	A211P3YCQ .....C22	AE201SD1AV2Q .....C42
A101MD9V30B .....C22	A108MD9AQ .....C32	A211P3YV40GUL .....C22	AE201SD1CB .....C39
A101MDAQ .....C22	A108MD9AV2Q .....C32	A211P3YZQ .....C22,C33	AE201SD1CQ .....C39
A101MDAV2B .....C22	A108MD9CQ .....C22,C32	A211SCWCQO .....C22	AE201SD1CQUL .....C35
A101MDCG .....C22	A108MD9AQ .....C32	A211SDZQ .....C22	AE203MD1AB .....C40
A101MDZG .....C22	A108MD9AV2Q .....C32	A211SHZQ .....C22	AE203MD1AQ .....C40
A101MYCQ .....C22	A108P3CWV30B .....C22	A211SY9AQ .....C22	AE203MD1AV2B .....C41
A101MYZQ .....C22	A108P3YCQ .....C22	A211SY9CQ .....C22	AE203MD1AV2Q .....C41
A101P3CWV30B .....C22	A108P3YZQ .....C22,C32	A211SYZB .....C22	AE203MD1CB .....C41
A101P3YCB .....C22	A108SD9AQ .....C22,C30	A211SYZQ .....C22,C27	AE203MD1CQ .....C41
A101P3YZQ .....C22,C33	A108SDZQ .....C22	A211TIZQ .....C22,C34	AE203MD1V30Q .....C35
A101P4DCB .....C22	A108SYCB .....C22,C28	A211TZQ .....C33	AE203SD1AB .....C42
A101P4YCB .....C22	A108SYCQ .....C22	A213P4YZQ .....C22	AE203SD1AQ .....C42
A101SCWCQO .....C22	A108SYZQ .....C22,C27	A213SYZQ .....C22,C27	AE203SD1AV2B .....C42
A101SCWZQ .....C22	A108SYZQL .....C22	A215P3YZQ .....C33	AE203SD1AV2Q .....C42
A101SD9AB .....C22,C30	A108TIZB .....C34	A215SD9V30B .....C22	AE203SD1CB .....C39
A101SD9AQ .....C22,C30	A201KAB .....C22	A215SY9AQ .....C22	AE203SD1CQ .....C35,C39
A101SD9AV2B .....C22	A201KD9AQ .....C22	A215SYZQ .....C22,C27	AE205MD1AV2B .....C35
A101SD9AV2Q .....C22,C31	A201KZB .....C31	AE101MD1AB .....C40	AE205MD1CB .....C41
A101SD9V30B .....C22	A201KZQ .....C22,C31	AE101MD1AG .....C35	AE205MD1CQ .....C41
A101SD9V30Q .....C22	A201KZQL .....C22	AE101MD1AGUL .....C35	AE205SD1CB .....C39
A101SDCQ .....C22,C30	A201MD9AB .....C22,C32	AE101MD1AGUL .....C35	AE205SD1CQ .....C41
A101SDZQ .....C22,C29	A201MD9AQ .....C22,C32	AE101MD1AQ .....C40	AE205SD1CQUL .....C35
A101SHZQ .....C22	A201MD9AV2B .....C22,C32	AE101MD1AV2B .....C40	AE207MD1AB .....C35
A101SY9CQUL .....C22	A201MD9AV2Q .....C22,C32	AE101MD1AV2Q .....C40	AE207MD1CB .....C41
A101SYAB .....C22,C28	A201MDAQ .....C22	AE101MD1AV2QUL .....C35	AE207MD1CQ .....C41
A101SYAQ .....C22	A201MPY9AV2Q .....C22	AE101MD1CB .....C41	AE207SD1CB .....C39
A101SYCB .....C22,C28	A201MYAQ .....C22	AE101MD1CG .....C35	AE208MD1AB .....C40
A101SYCQ .....C22	A201MYCB .....C22	AE101MD1CQ .....C41	AE208MD1AQ .....C40
A101SYCQUL .....C22	A201MYZQ .....C22	AE101MD1V30B .....C35	AE208MD1AV2B .....C41
A101SYWQ .....C22,C29	A201P3YZQ .....C22,C33	AE101MD1V30QUL .....C35	AE208MD1AV2Q .....C41
A101SYZB .....C22,C27	A201SCWZB .....C22	AE101MD1ZQ .....C35	AE208MD1CB .....C41
A101SYZQ .....C22,C27	A201SD9AB .....C30	AE101SD1AB .....C42	AE208MD1CQ .....C41
A101SYZQN .....C22	A201SD9AQ .....C22,C30	AE101SD1AQ .....C42	AE208MD1CQUL .....C41
A101SYZQL .....C22	A201SD9AV2Q .....C22,C31	AE101SD1AQL .....C35	AE208SD1AB .....C42
A101TIZB .....C22	A201SDCB .....C22	AE101SD1AV2B .....C42	AE208SD1AV2B .....C42
A101TIZQ .....C22,C34	A201SDCQ .....C30	AE101SD1AV2Q .....C42	AE208SD1AV2Q .....C42
A101TCQ .....C22	A201SDZQ .....C22,C29	AE101SD1CB .....C39	AE208SD1AV2B .....C42
A101TZQ .....C22,C33	A201SY9AB .....C22	AE101SD1CQ .....C39	AE208SD1CQ .....C42
A103KZQ .....C22,C31	A201SYAB .....C22,C28	AE101SD1V30B .....C35	AE208SD1CQUL .....C39
A103MD9AB .....C22,C32	A201SYAQ .....C22	AE101SD1V30QUL .....C35	AE211MD1CB .....C41
A103MD9AG .....C22	A201SYCB .....C22,C28	AE103MD1AB .....C40	AE211MD1CQ .....C41
A103MD9AQ .....C22,C32	A201SYCQ .....C22	AE103MD1AQ .....C40	AE211MD1V30B .....C35
A103MD9AV2B .....C22,C32	A201SYZQ .....C22,C27	AE103MD1AV2B .....C40	AE211SD1CB .....C39
A103MD9AV2Q .....C32	A201TIZQ .....C22,C34	AE103MD1AV2Q .....C40	AE211SD1CQ .....C39
A103P3YZQ .....C22,C33	A201TCWZQ .....C22	AE103MD1CB .....C41	AE211SD1CQUL .....C35
A103SD9AB .....C30	A201TZQ .....C22,C33	AE103MD1CQ .....C41	AE215MD1CB .....C41
A103SD9AQ .....C22,C30	A203KZB .....C31	AE103MD1V30B .....C35	AE215MD1CQ .....C41
A103SD9AV2B .....C22	A203KZQ .....C22,C31	AE103SD1AB .....C42	AE215SD1CB .....C39
A103SD9AV2Q .....C22,C31	A203MD9AB .....C22,C32	AE103SD1AQ .....C42	AE215SD1CQUL .....C39
A103SDCB .....C22	A203MD9AV2B .....C32	AE103SD1AV2B .....C42	ATE1DGP7 .....C20
A103SDCQ .....C22,C30	A203MD9AV2Q .....C32	AE103SD1AV2Q .....C42	ATE1DGP7 .....C20
A103SDZQ .....C22,C29	A203P3YAV2Q .....C22	AE103SD1CB .....C39	ATE1DGRA1 .....C21
A103SYAB .....C28	A203P3YZQ .....C22,C33	AE103SD1CQUL .....C35	ATE1DGRA7 .....C21
A103SYAQ .....C22	A203SD9AV2B .....C22	AE103SD1V30B .....C35	ATE1EGPC1 .....C20
A103SYAV2Q .....C22	A203SD9AV2Q .....C22,C31	AE105MD1AB .....C35	ATE1EGRA1 .....C21
A103SYCB .....C22,C28	A203SDCQ .....C30	AE105MD1AG .....C35	ATE1EGRA7 .....C21
A103SYCQ .....C22	A203SDZQ .....C22,C29	AE105MD1AV2B .....C35	ATE1FGPC1 .....C20
A103SYWB .....C22	A203SYCB .....C22,C28	AE105MD1CB .....C41	ATE1FGRA1 .....C21
A103SYWQ .....C22,C29	A203SYCQ .....C22	AE105MD1CQ .....C41	ATE1FGRA7 .....C21
A103SYZB .....C22,C27	A203SYWQ .....C29	AE105SD1CB .....C39	ATE1GGPC1 .....C20
A103SYZQ .....C22,C27	A203SYZQ .....C22,C27	AE105SD1CQ .....C39	ATE1GGRA1 .....C21
A103TICG .....C22	A203TIZQ .....C22,C34	AE105SD1V30B .....C35	ATE2DGP7 .....C20
A103TIZQ .....C22,C34	A203TZQ .....C22,C32	AE107MD1AB .....C40	ATE2DGP7 .....C20
A103TZQ .....C22,C33	A205KZB .....C22,C31	AE107MD1CB .....C41	ATE2DGP7 .....C20
A105MD9AB .....C22	A205KZQ .....C31	AE107MD1CQ .....C41	ATE2DGRA1 .....C21
A105MD9AQ .....C22	A205P3YZQ .....C22,C33	AE107MD1CQUL .....C35	ATE2EGPC1 .....C20
A105MYV30Q .....C22	A205SD9AB .....C22	AE107SD1AB .....C40	ATE2EGRA1 .....C21
A105P3YCG .....C22	A205SYCB .....C22	AE107SD1AG .....C35	ATE2GGRA1 .....C21
A105P3YCQ .....C22	A205SYCQ .....C22	AE107SD1CB .....C39	ATE4DGP2 .....C19
A105P3YQ .....C22	A205SYZQ .....C22,C27	AE107SD1CQ .....C39	ATE4DGRA2 .....C19
A105P3YZQ .....C22,C33	A205TZQ .....C22,C34	AE107SD1V30B .....C35	ATE4DGRA2 .....C19
A105P4YAV2B .....C22	A205TZQ .....C22	AE108MD1AB .....C40	B10480 .....C55
A105SD9AB .....C22	A207P3YZQ .....C22,C33	AE108MD1AQ .....C40	B10482 .....C55
A105SD9AV2QUL .....C22	A207SYCB .....C22	AE108MD1AV2B .....C40	B10488 .....C55
A105SD9V30B .....C22	A207SYCQ .....C22	AE108MD1AV2Q .....C40	B14400 .....C55
A105SYAB .....C22	A207SYZQ .....C22,C27	AE108MD1CB .....C41	B14402 .....C55
A105SYAV2B .....C22	A207TIZQ .....C22,C34	AE108MD1CQ .....C41	B14408 .....C55
A105SYCB .....C22	A207TZQ .....C22	AE108SD1AB .....C42	B15320 .....C55
A105SYCQ .....C22	A208KZGUL .....C22	AE108SD1AQ .....C42	B15322 .....C55
A105SYZB .....C22,C27	A208MD9AV2B .....C32	AE108SD1AV2B .....C42	B15328 .....C55
A105SYZQ .....C22,C27	A208MD9AV2Q .....C32	AE108SD1AV2Q .....C42	B2100 .....C55
A105TIZB .....C22	A208P3YZQ .....C22,C33	AE108SD1CB .....C39	B2210 .....C55
A105TIZQ .....C22,C34	A208SD9AB .....C30	AE108SD1CQ .....C39	BT14400 .....C55
A105TZQ .....C22	A208SD9AQ .....C22,C30	AE108SD1CQUL .....C35	BT14402 .....C55

Toggle Switches

Toggle Switches Part Number Index

- BT14408 .....C55
- BT15320 .....C55
- BT15322 .....C55
- BT15328 .....C55
- LW1 .....C54
- LW12-AG .....C54
- LW5-AG .....C54
- MTA106D .....C43
- MTA106DPC .....C44
- MTA106E .....C43
- MTA106EPC .....C44
- MTA106F .....C43
- MTA106FPC .....C44
- MTA106G .....C43
- MTA106GPC .....C44
- MTA106H .....C43
- MTA106HPC .....C44
- MTA206N .....C43
- MTA206NPC .....C44
- MTA206P .....C43
- MTA206PA .....C43
- MTA206PAPC .....C44
- MTA206PPC .....C44
- MTA206R .....C43
- MTA206RPC .....C44
- MTA206S .....C43
- MTA206SA .....C43
- MTA206SAPC .....C44
- MTA206SPC .....C44
- MTA206T .....C43
- MTA206TA .....C43
- MTA206TPC .....C44
- MTA306D .....C43
- MTA306DPC .....C44
- MTA306E .....C43
- MTA306EPC .....C44
- MTA306F .....C43
- MTA306FPC .....C44
- MTA306H .....C43
- MTA306HPC .....C44
- MTA406N .....C43
- MTA406NPC .....C44
- MTA406P .....C43
- MTA406PA .....C43
- MTA406PAPC .....C44
- MTA406PPC .....C44
- MTA8106DRA .....C52
- MTA8106DVRA .....C53
- MTA8106GERA .....C52
- MTA8106GEVRA .....C53
- MTA8106FRA .....C53
- MTA8106FVRA .....C53
- MTA8206NRA .....C53
- MTA8206NVRA .....C54
- MTA8206PRA .....C53
- MTA8206PVRA .....C54
- MTA8206RRRA .....C53
- MTB106D .....C45
- MTB106E .....C45
- MTB106F .....C45
- MTB106G .....C45
- MTB206N .....C45
- MTB206P .....C45
- MTB206T .....C45
- MTB306D .....C45
- MTB406N .....C45
- MTE106D .....C46
- MTE106E .....C46
- MTE106F .....C46
- MTE106G .....C46
- MTE206N .....C46
- MTE206P .....C46
- MTE206PA .....C46
- MTE206R .....C46
- MTE206S .....C46
- MTE206T .....C46
- MTE306D .....C46
- MTE306E .....C46
- MTE406N .....C46
- MTE406P .....C46
- MTF106D .....C47
- MTF106E .....C47
- MTF106F .....C47
- MTF106G .....C47
- MTF106H .....C47
- MTF126D .....C47
- MTF126E .....C47
- MTF126F .....C47
- MTF126G .....C47
- MTF206N .....C47
- MTF206P .....C47
- MTF206PA .....C47
- MTF206R .....C47
- MTF206S .....C47
- MTF206SA .....C47

- MTF206T .....C47
- MTF226N .....C47
- MTF226P .....C47
- MTF226PA .....C47
- MTF226S .....C47
- MTF226SA .....C47
- MTF306D .....C47
- MTF326D .....C47
- MTF406N .....C47
- MTF426N .....C47
- MTG106D .....C48
- MTG106E .....C48
- MTG106F .....C48
- MTG106G .....C48
- MTG106H .....C48
- MTG126D .....C49
- MTG126E .....C49
- MTG206N .....C48
- MTG206P .....C48
- MTG206PA .....C48
- MTG206R .....C48
- MTG206S .....C48
- MTG206T .....C48
- MTG226N .....C49
- MTG226P .....C49
- MTG226PA .....C49
- MTG306D .....C48
- MTG306E .....C48
- MTG326D .....C49
- MTG406N .....C48
- MTG406P .....C48
- MTG426N .....C49
- MTL106D .....C50
- MTL106E .....C50
- MTL206N .....C50
- MTL206P .....C50
- MTL206PA .....C50
- MTL206S .....C50
- MTL306D .....C50
- MTL406N .....C50
- MTL406PA .....C50
- MTM106DPC .....C51
- MTM106EPC .....C51
- MTM106FPC .....C51
- MTM206NPC .....C51
- MTM206PAPC .....C51
- MTM206SPC .....C51
- MTM306DPC .....C51
- MTM406NPC .....C51
- MTM8106DRA .....C52
- MTM8106DVRA .....C53
- MTM8106GERA .....C52
- MTM8106GEVRA .....C53
- MTM8106FRA .....C53
- MTM8106FVRA .....C53
- MTM8206NRA .....C52
- MTM8206NVRA .....C53
- MTM8206PRA .....C52
- MTM8206PVRA .....C53
- MTM8206RRRA .....C52
- MTM8206VRRA .....C53
- N11-AG .....C54
- N1A .....C54
- N1A0 .....C54
- N1-AG .....C54
- N1B .....C54,D32
- N1C .....C54
- N2-AG .....C54
- N35-AG .....C54,D32
- N3-AG .....C54
- N40-AG .....C54
- N43-AG .....C54
- N45-AG .....C54,D32
- SPA32 .....C55
- SPA42 .....C55
- TST11DGPC1D .....C5,C6
- TST11DGPC4D .....C5
- TST11DGRA1D .....C5,C7
- TST11DGRA2D .....C5
- TST11DGSPC1D .....C5,C6
- TST11DGSRAB1D .....C5,C6
- TST11DGSRAB2D .....C5,C7
- TST11DGVRA1D .....C5
- TST11DGVRA2D .....C5
- TST11EGPC1D .....C5
- TST11EGRA1D .....C5
- TST11EGSRA1D .....C5
- TST11EGSRA2D .....C5
- TST11EGVRA1D .....C5
- TST11FGPC1D .....C5
- TST11FGRA1D .....C5
- TST11FGSPC1D .....C5
- TST11FGSRA1D .....C5
- TST11FGVRA1D .....C5
- TST11GGPC1D .....C5
- TST11GGPC4D .....C5
- TST11GGRA1D .....C5

- TST11GGSRA1D .....C5
- TST11GGSRA4D .....C5
- TT11AGPC1 .....C10
- TT11AGPC1ES .....C16
- TT11AGPC9T1/4 .....C11
- TT11AGPC9T1/4ES .....C16
- TT11DGPC1 .....C10
- TT11DGPC1ES .....C16
- TT11DGPC2TES .....C8
- TT11DGPC3 .....C8
- TT11DGPC42 .....C8
- TT11DGPC5T1/42 .....C8
- TT11DGPC7T1/4 .....C8
- TT11DGPC8T1/4 .....C8
- TT11DGPC9T1/4 .....C11
- TT11DGPC9T1/4ES .....C16
- TT11DGRA1 .....C8
- TT11DGRA1ES .....C8
- TT11DGRA1T .....C8
- TT11DGRA40 .....C8
- TT11DGRA42 .....C8
- TT11DGRA46 .....C8
- TT11DGRA49 .....C8
- TT11DGRA7T1/4 .....C12
- TT11DGRA8T1/4 .....C8
- TT11DGRA9T1/4 .....C8
- TT11DGVR1 .....C11
- TT11DGVR3T .....C11
- TT11DGWW2T .....C13
- TT11EGPC1 .....C10
- TT11EGPC1T .....C8
- TT11EGPC3 .....C8
- TT11EGPC40 .....C8
- TT11EGPC5T1/40 .....C8
- TT11EGPC7T1/4 .....C8
- TT11EGPC8T1/4 .....C8
- TT11EGPC9T1/4 .....C11
- TT11EGPC9T1/4ES .....C16
- TT11EGRA1 .....C8
- TT11EGRA3 .....C8
- TT11EGRA40 .....C8
- TT11EGRA42 .....C8
- TT11EGRA46 .....C8
- TT11EGRA7T1/4 .....C12
- TT11EGRA9T1/4 .....C8
- TT11EGVRA1 .....C11
- TT11EGVRA1T .....C11
- TT11EGVRA3T .....C11
- TT11EGVW2T .....C13
- TT11FGPC1T1/4 .....C8
- TT11FGPC9T1/4 .....C11
- TT11FGRA7T1/4 .....C12
- TT11FGRA9T1/4 .....C8
- TT11FVRA3T .....C8
- TT12K8T1/4 .....C8
- TT13A2T .....C14
- TT13A3T .....C15
- TT13A6T .....C8
- TT13A6T0 .....C8
- TT13A6T2 .....C8
- TT13A9T1/4 .....C15
- TT13D2T .....C14
- TT13D2T1/4 .....C8
- TT13D3T .....C15
- TT13D4T0 .....C8
- TT13D4T1/49 .....C8
- TT13D6T0 .....C8
- TT13D7T1/4 .....C14
- TT13D9T1/4 .....C15
- TT13D9T1/4ES .....C8
- TT13DPC2TE .....C8
- TT13E2T .....C14
- TT13E3T .....C15
- TT13E7T1/4 .....C14
- TT13E9T1/4 .....C15
- TT21KGPC1 .....C10
- TT21KGPC9T1/4 .....C11
- TT21KGPC9T1/4ES .....C16
- TT21NG2T .....C8
- TT21NGPC1 .....C10
- TT21NGPC1ES .....C16
- TT21NGPC1T .....C8
- TT21NGPC1T1/4 .....C8
- TT21NGPC2T1/4 .....C8
- TT21NGPC4 .....C8
- TT21NGPC7T1/4 .....C8
- TT21NGPC8T1/4 .....C8
- TT21NGPC9T1/4 .....C11
- TT21NGPC9T1/4ES .....C16
- TT21NGRA1 .....C8
- TT21NGRA1ES .....C8
- TT21NGRA3T1/4 .....C8
- TT21NGRA7T1/4 .....C12
- TT21NGRA8T1/4 .....C8
- TT21NGRA9T1/4 .....C8
- TT21NGVRA1 .....C11

- TT21NGVRA3T .....C11
- TT21NGWW2T .....C13
- TT21PGPC1 .....C10
- TT21PGPC3 .....C8
- TT21PGPC7T1/4 .....C8
- TT21PGPC8T1/4 .....C8
- TT21PGPC9T1/4 .....C11
- TT21PGPC9T1/4ES .....C16
- TT21PGRA1 .....C8
- TT21PGRA7T1/4 .....C12
- TT21PGRA8T1/4 .....C8
- TT21PGRA9T1/4 .....C8
- TT21PGVRA1 .....C11
- TT21PGWW2T .....C13
- TT21RGPC1 .....C8
- TT21RGPC7T1/4 .....C8
- TT21RGPC9T1/4 .....C11
- TT23K2T .....C14
- TT23K3T .....C15
- TT23K9T1/4 .....C15
- TT23N2T .....C14
- TT23N3T .....C15
- TT23N4T1/40 .....C8
- TT23N6T0 .....C8
- TT23N6T6 .....C8
- TT23N7T1/4 .....C14
- TT23N9T1/4 .....C15
- TT23NRA1 .....C8
- TT23P2T .....C14
- TT23P3T .....C15
- TT23P6T0 .....C8
- TT23P7T1/4 .....C14
- TT23P8T1/4 .....C8
- TT23P9T1/4 .....C15
- TT41NGPC1 .....C10
- TT41NGPC8T1/4 .....C8
- TT41NGPC9T1/4 .....C11
- TT41NGRA1 .....C8
- TT41NGRA2T1/4 .....C8
- TT41NGRA3 .....C8
- TT41NGRA7T1/4 .....C12
- TT41NGRA9T1/4 .....C8
- TT41NGWW2T .....C13
- TT41PGPC9T1/4 .....C11
- TT43N2T .....C14
- TT43N7T1/4 .....C14
- TT43N9T1/4 .....C15
- TT43P3T .....C15
- TT43P7T1/4 .....C14
- TT43P9T1/4 .....C15
- TT41NGWW2T .....C13
- TTE11AG9T1/4ES .....C8
- TTE11AGPC3TES .....C18
- TTE11AGPC9T1/4 .....C8
- TTE11AGPC9T1/4ES .....C18
- TTE11DGPC1ES .....C17
- TTE11DGPC3TES .....C18
- TTE11DGPC9T1/4ES .....C18
- TTE11DGRA1ES .....C17
- TTE11EG1 .....C8
- TTE11EGPC1ES .....C17
- TTE11EGPC3TES .....C18
- TTE11EGPC9T1/4ES .....C18
- TTE11EGRA1ES .....C17
- TTE13A9T1/4 .....C8
- TTE13D2T .....C8
- TTE13D8T1/4 .....C8
- TTE13D9T1/4 .....C8
- TTE13DG2T .....C8
- TTE13E8T1/4 .....C8
- TTE21KGPC9T1/4ES .....C18
- TTE21NG2T1/4ES .....C8
- TTE21NGPC1ES .....C8,C17
- TTE21NGPC3TES .....C8,C18
- TTE21NGPC9T1/4ES .....C18
- TTE21NGPC9T1/4ES .....C8
- TTE21NGRA1ES .....C8,C17
- TTE21NGT .....C17
- TTE21PGPC3TES .....C18
- TTE21PGPC9T1/4ES .....C18
- TTE21PGRA1ES .....C17
- TTE23N2T .....C8
- TTE23N8T1/4 .....C8
- TTE23N9T1/4 .....C8
- TTE23NG2T .....C8
- TTE23P8T1/4 .....C8
- TTE41NGPC1 .....C17
- TTE41NGWW2T .....C8
- TTE43N8T1/4 .....C8
- TTE43N9T1/4 .....C8
- TTE43N9T1/4E .....C8
- TTE43P8T1/4 .....C8



**Toggle Switches, Poles, Throws & Functions Selection Guide**

SERIES/CURRENT RATING/PAGE NUMBER

ATE Series .....0.4VA .....Page C19  
 A/AE Series 0.4VA ..5 Amps.....Page C22/35

TT Series .....0.4VA 3 Amps .....Page C8  
 TST Series .....0.4VA .....Page C5  
 MT Series .....6 Amps .....Page C43

**C**  
Toggle Switch Selection Guide

	SPDT	DPDT	3PDT	4PDT
On - None - On 2 Position	ATE Gemini Tiny/TST Green	ATE Gemini Tiny Green	Green	Tiny Green ATE
On - Off - On 3 Position	ATE Gemini Tiny/TST Green	ATE Gemini Tiny Green	Green	Tiny Green
On - None - (On) 2 Position	ATE Gemini Tiny/TST Green	Gemini Tiny Green	Green	Tiny
(On) - Off - (On) 3 Position	ATE Gemini Green TST	ATE Gemini Green	Green	
On - Off - (On) 3 Position	Gemini Green	Gemini Green	Green	
On - On - On 3 Position		Gemini Green		Green
(On) - On - (On) 3 Positions		Gemini Green		
On - On - (On) 3 Position		Gemini Green		
On - Off 2 Position	Tiny	Tiny		

**Toggle Switches, Tiny, Sealed, Through Hole and Surface Mount**

**FEATURES:**

- Rating 0.4VA max. at 20VAC/DC
- High temperature plastics - Liquid crystal polymer (LCP)
- Specifically designed for thru-hole and surface mount applications - Tin lead plated terminals
- Washable process sealed construction - Internal actuator "O" Ring
- Ultrasonic welded case

**MATERIAL SPECIFICATIONS:**

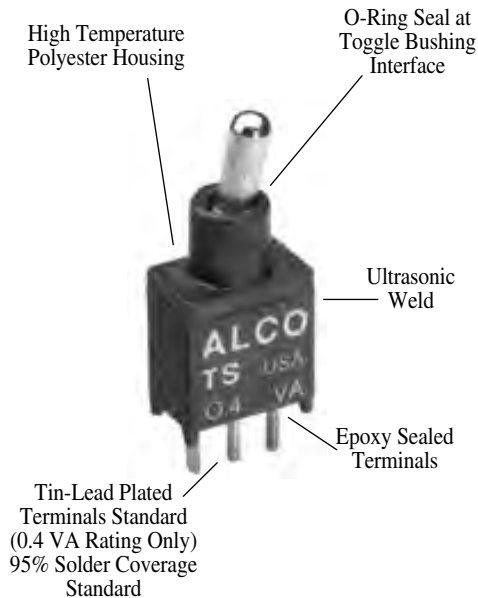
Contacts .....Copper alloy with gold over nickel plate  
 Case Material .....LCP  
 Actuator Material .....Nickel plated brass  
 Terminals .....Copper alloy with gold over nickel plating inside, tin plating outside  
 Terminal Seal .....Epoxy  
 Support Bracket .....Tin plated steel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VAC/DC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms 500 VDC min.  
 Dielectric Strength .....1,000 Volt RMS @ sea level  
 Actuator Travel .....22° for E and D function  
 18° for F, G function  
 Life Expectancy .....D Function: Up to 80,000 cycles  
 E Function: Up to 60,000 cycles  
 F, G Function: Up to 30,000 cycles

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....-22°F to +185°F (-30°C to +85°C)  
 Storage Temperature.....-67°F to +185°F (-55°C to +85°C)

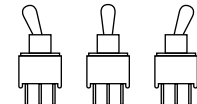


**FUNCTION CHART**

The following functions available in single pole.

- None - indicates no mechanical position.
- Off - indicates a mechanical position with no electrical connection.
- (On) - indicates momentary connection.

<b>D</b>	2 Positions	On	None	On
<b>E</b>	3 Positions	On	Off	On
<b>F</b>	2 Positions	On	None	(On)
<b>G</b>	3 Positions	(On)	Off	(On)
Terminals Connected		1-2	-	2-3



**PART NUMBERING MATRIX**

Model	No. of Poles	Contact Rating	Function	Contact Plating	Terminations	Actuator	Bushing (Plain)
TST	1	1	<ul style="list-style-type: none"> <li>D on none on</li> <li>E on off on</li> <li>F on none(on)</li> <li>G (on) off (on)</li> </ul>	G	<ul style="list-style-type: none"> <li>PC P.C.</li> <li>RA Right Angle</li> <li>VRA Vertical Right Angle</li> <li>SPC SurfaceMount</li> <li>SRA Surface Mount R.A.</li> <li>SRAB SurfaceMount R.A. Butt</li> </ul>	<ul style="list-style-type: none"> <li>1 .206"</li> <li>2 .250"</li> <li>4 .400"</li> </ul>	D

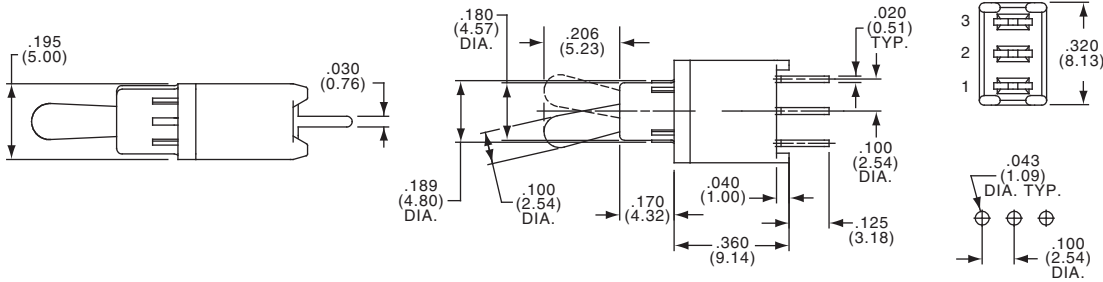
**APPLICATION NOTE:**

For sealed pushbutton switches, see page D3 - D5



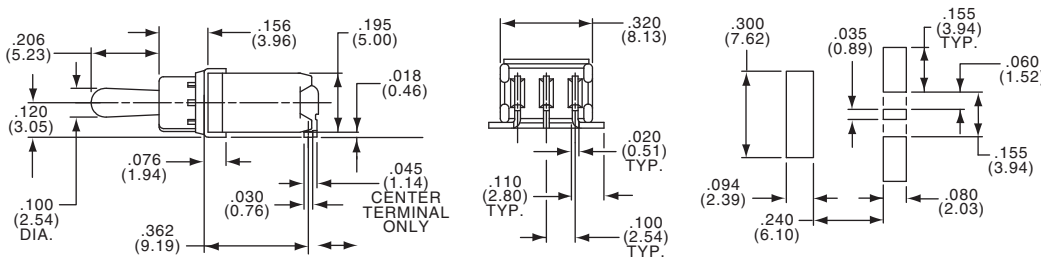
**Toggle Switches, Tiny, Sealed, Through Hole and Surface Mount**

PC MOUNT **PC**



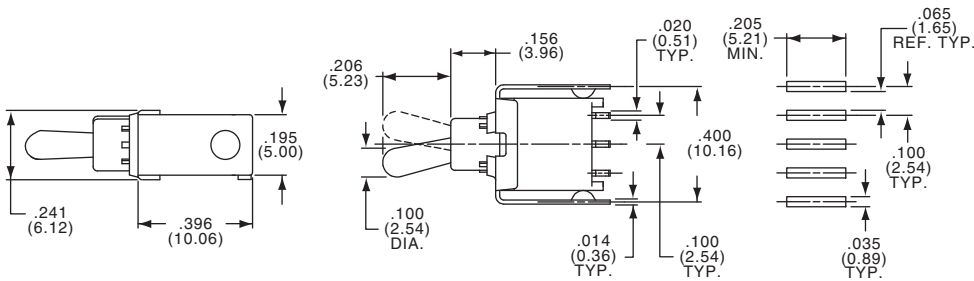
TST11DGPC1D

SURFACE MOUNT RIGHT ANGLE "L" BEND **SRA**



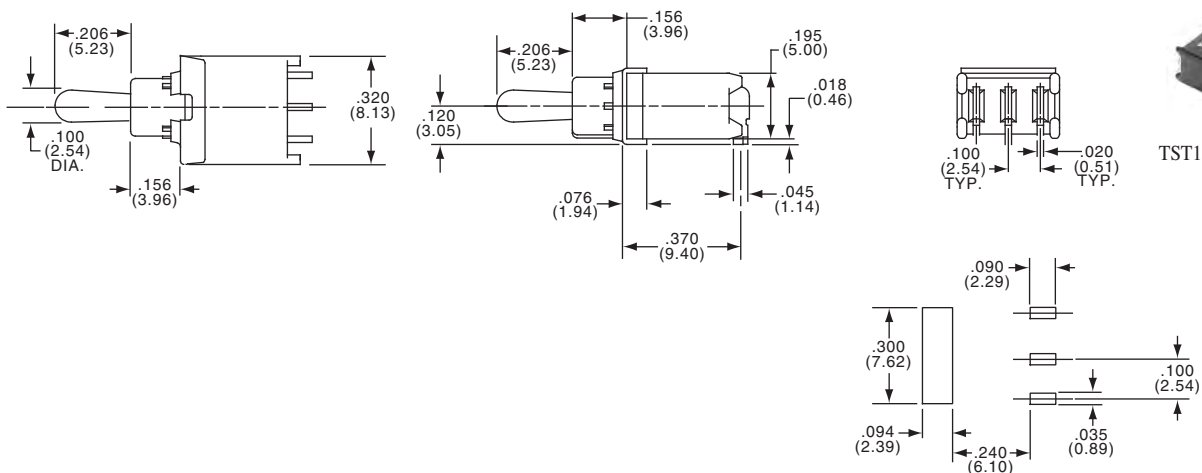
TST11DGSRA1D

SURFACE MOUNT **SPC**



TST11DGSPC1D

SURFACE MOUNT RIGHT ANGLE BUTT **SRAB**



TST11DGSRA1D



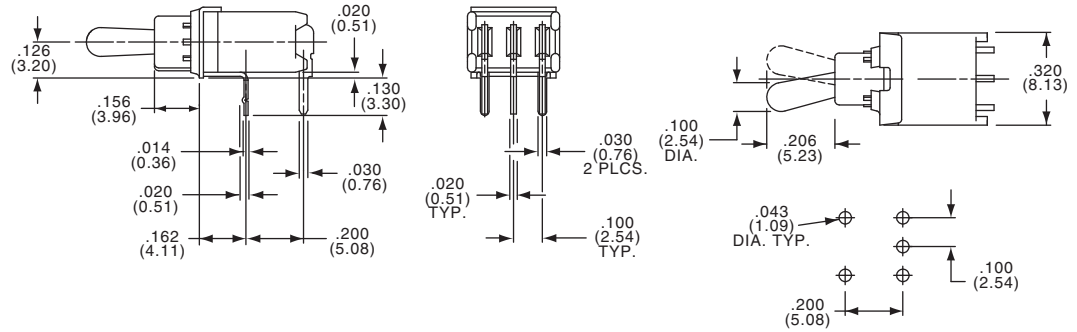
**Toggle Switches, Tiny, Sealed, Through Hole and Surface Mount**

**RA**

Right Angle



TST11DGRA1D

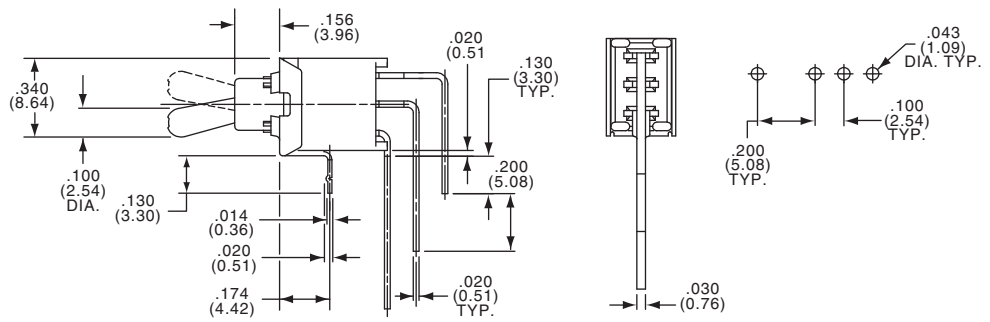


**VRA**

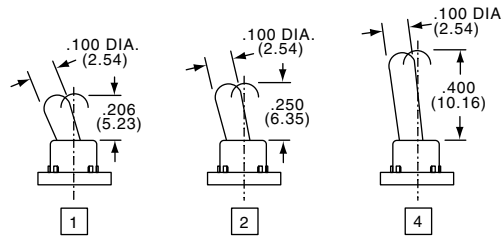
Vertical Right Angle



TST11DGVRA1D



**ACTUATORS**



TST Series

**Toggle Switches, Tiny, Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

Contacts.....Gold over nickel or silver plate  
 Case Material.....Thermoplastic 94V-0  
 Terminals/Fixed Contacts.....Tin lead plate  
 Terminal Seal.....Epoxy on single pole, optional  
 on double pole  
 Process Seal.....ES version only (see page C16 - C17)

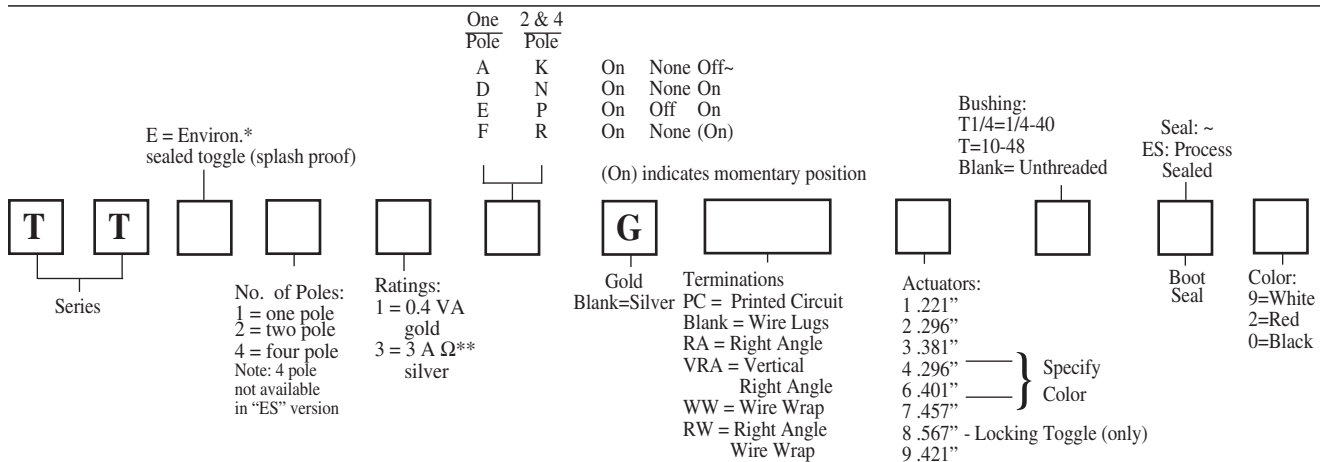
**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....-22°F to +185°F (-30°C to +85°C)  
 Storage Temperature.....-67°F to +185°F (-55°C to +85°C)  
 Solder Heat Resistance.....See page M3-4  
 U.L. (File E-46765).....Silver only

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating..... Gold: 0.4 VA max. @ 20 VDC or peak AC  
 Silver (2 pos.): 3 A @ 125 VAC or 28 VDC  
 Silver (3 pos.): 2 A @ 125 VAC or 28 VDC  
 Initial Contact Resistance..... 20 Milliohms max.  
 Contact Timing..... Break before Make  
 Insulation Resistance..... 1,000 Megohms 500 VDC min.  
 Dielectric Strength..... 1,000 Volts RMS @ sea level  
 Plunger/Actuator Travel..... 26°  
 High Torque Bushing Shoulder ..... Yes  
 Life Expectancy..... See chart below  
 Note: Hardware included with switch

TT Series



One Pole	0.4VA	80,000 (2 Pos.)	60,000 (3 Pos.)
Two Pole	0.4VA	80,000 (2 Pos.)	60,000 (3 Pos.)
Three Pole	3 Amp	20,000 (2 Pos.)	10,000 (3 Pos.)
Four Pole	0.4VA	80,000 (2 Pos.)	60,000 (3 Pos.)
Five Pole	3 Amp	20,000 (2 Pos.)	10,000 (3 Pos.)

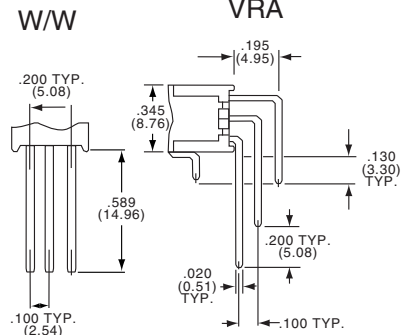
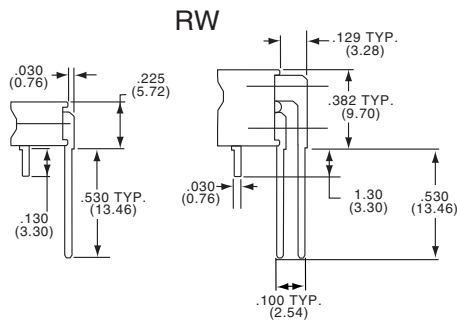
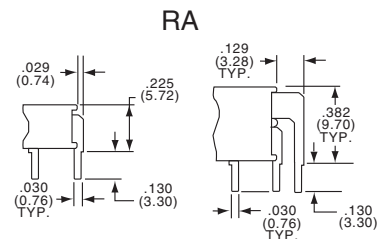
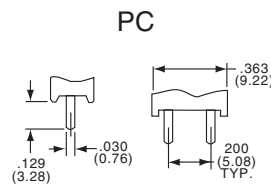
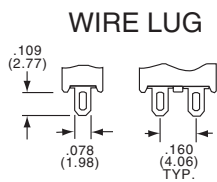
**APPLICATION NOTE:**

For surface mount termination, use the "TST" series on page C5.  
 For 3 pole refer to the MT Series on page C43

Actuator Dimensions shown with	
1,2,3,4,6	10-48 bushing
7,8,9	1/4-40 bushing

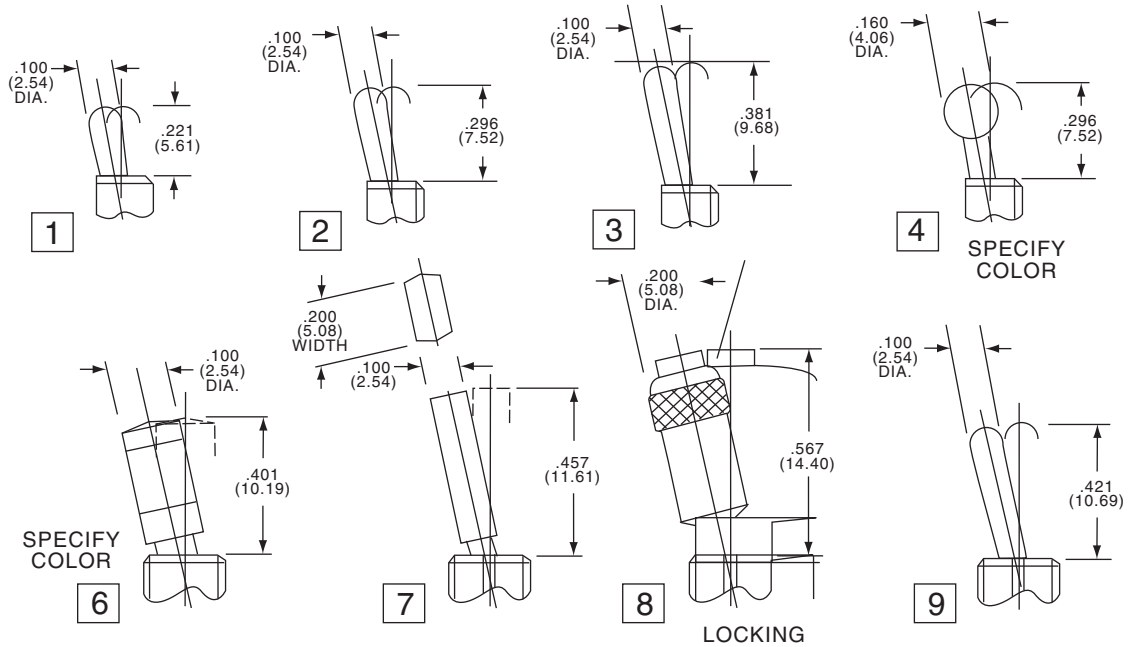
\* Not available on 7 actuator or with VRA.  
 \*\* Not available in RA.  
 Ω Available in PC & WL only.  
 ~ Available in WL & PC only.

**TERMINATIONS**

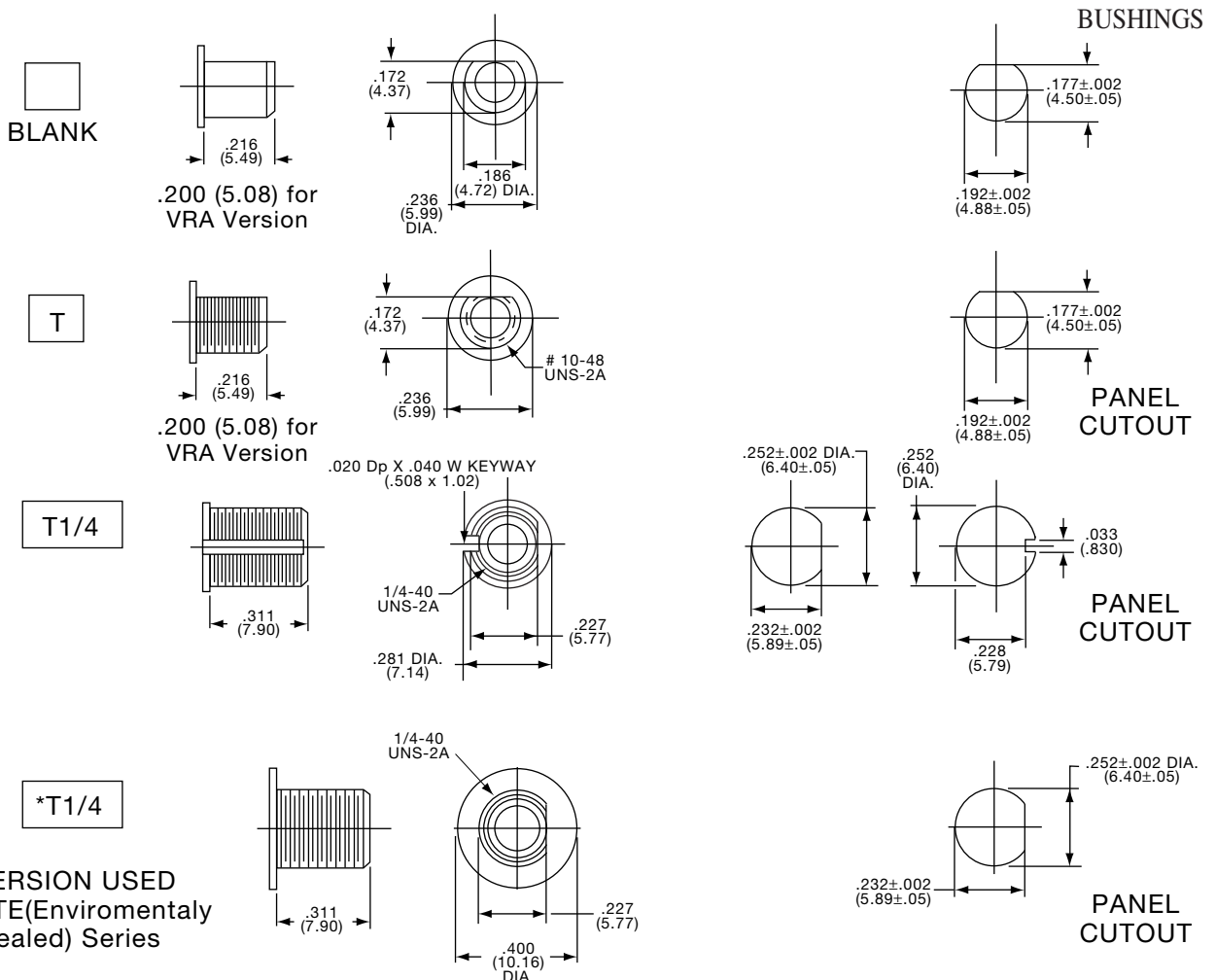


**Toggle Switches, Tiny, Actuator and Bushing Options**

Toggle Cap  
Series C-11\*  
Available

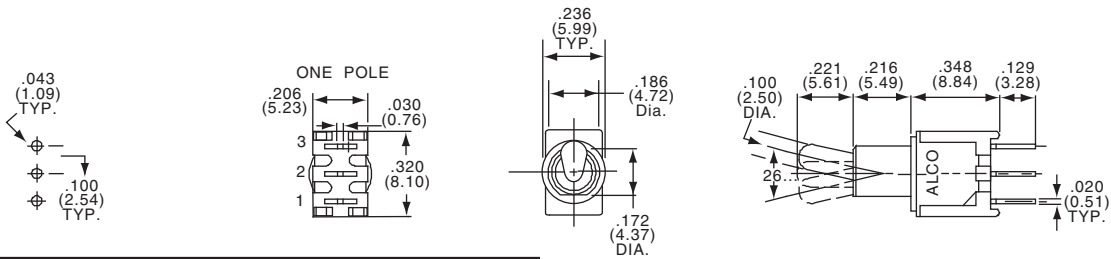


TT Series



\*VERSION USED  
ON TTE(Enviromental  
Sealed) Series

**Toggle Switches, Tiny, Vertical, PC Mount**



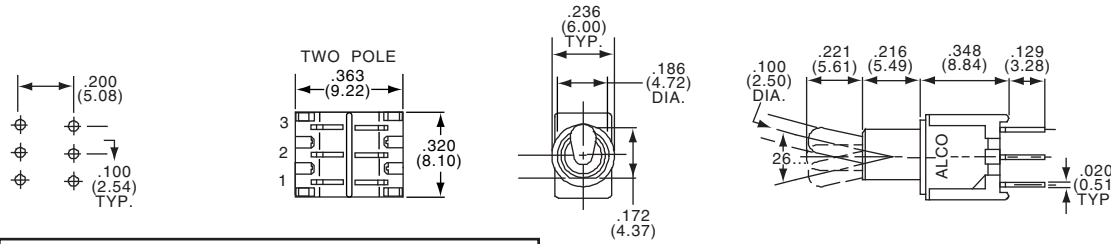
**1 POLE**  
For Terminal Connections refer to Code Chart (see page M5-6)



TT11DGPC1

Tyco Electronics	Alcoswitch	Type	Act. Code	P.	M5	↖	↓	↗
2-1437561-3	TT11AGPC1	SPST	A	On	None	Off		
2-1437561-6	TT11DGPC1	SPDT	D	On	None	On		
5-1437561-1	TT11EGPC1	SPDT	E	On	Off	On		

Note: No center terminal on "A" switches



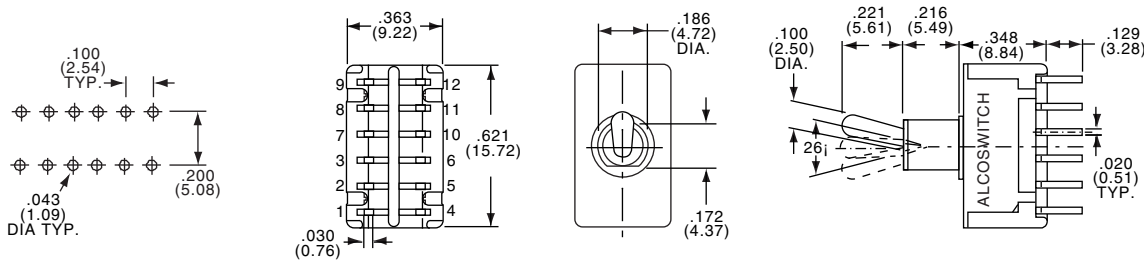
**2 POLE**  
For Terminal Connections refer to Code Chart (see page M5-6)



TT21NGPC1

Tyco Electronics	Alcoswitch	Type	Act. Code	P.	M5	↖	↓	↗
9-1437561-9	TT21KGPC1	DPST	K	On	None	Off		
1437562-3	TT21NGPC1	DPDT	N	On	None	On		
3-1437562-4	TT21PGPC1	DPDT	P	On	Off	On		

Note: No center terminal on "K" switches



**4 POLE**



TT41NGPC1

Tyco Electronics	Alcoswitch	Type	Act. Code	P.	M5	↖	↓	↗
6-1437562-6	TT41NGPC1	4PDT	N	On	None	On		

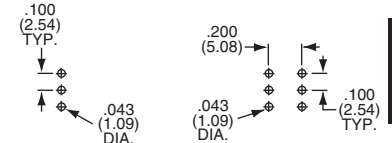
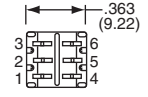
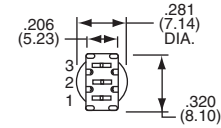
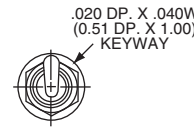
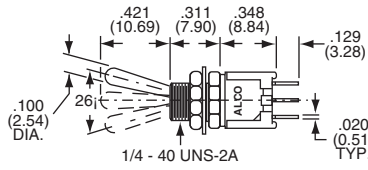
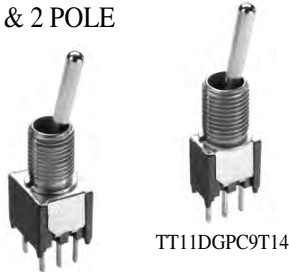
TT Series

**Toggle Switches, Tiny, Vertical and Vertical Right Angle, PC Mount**

SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

For terminal connections refer to Code Chart on page M5-6

1 & 2 POLE



TT21NGPC9T1/4

TT1DGPC9T14

4 POLE



TT41NGPC9T1/4

Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5	Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5
2-1437561-5	TT11AGPC9T1/4	SPST	A	On	None	Off	1-1437562-1	TT21NGPC9T1/4	DPDT	N	On	None	On
3-1437561-5	TT11DGPC9T1/4	SPDT	D	On	None	On	3-1437562-8	TT21PGPC9T1/4	DPDT	P	On	Off	On
5-1437561-9	TT11EGPC9T1/4	SPDT	E	On	Off	On	4-1437562-6	TT21RGPC9T1/4	DPDT	R	On	None	(On)
7-1437561-3	TT11FGPC9T1/4	SPDT	F	On	None	On	6-1437562-8	TT41NGPC9T1/4	4PDT	N	On	None	On
1437562-1	TT21KGPC9T1/4	DPST	K	On	None	Off	7-1437562-5	TT41PGPC9T1/4	4PDT	P	On	Off	On

Note: No center terminal on "A" or "K" switches.

(On) indicates momentary position.

Note: Hardware Included

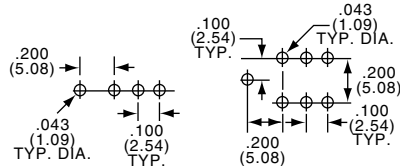
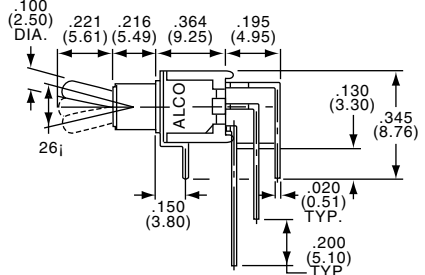
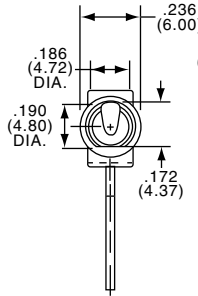
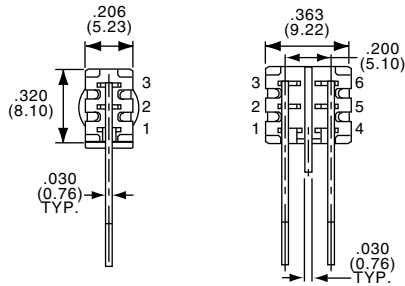
1 & 2 POLE



TT1DGVRA1  
Vertical Actuation



TT21NGVRA1  
Vertical Actuation



Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5
4-1437561-8	TT11DGVRA1	SPDT	D	On	None	On
6-1437561-9	TT11EGVRA1	SPDT	E	On	Off	On
2-1437562-2	TT21NGVRA1	DPDT	N	On	None	On
4-1437562-3	TT21PGVRA1	DPDT	P	On	Off	On

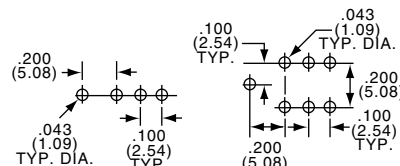
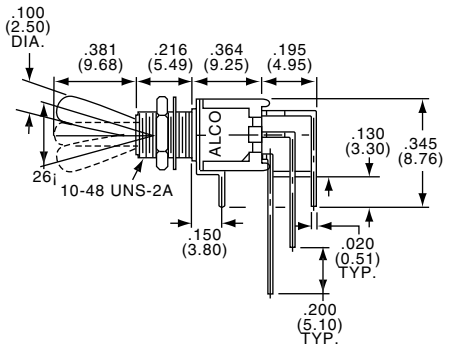
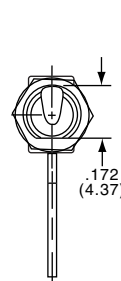
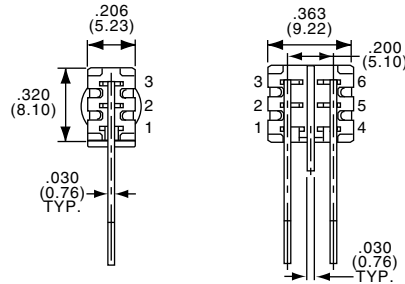
1 & 2 POLE



TT1DGVRA3T  
Vertical Actuation



TT21NGVRA3T  
Vertical Actuation



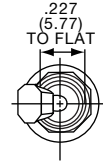
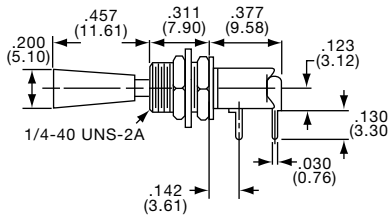
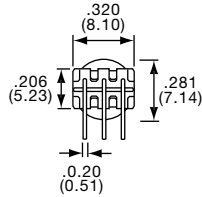
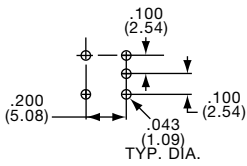
Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5
4-1437561-9	TT11DGVRA3T	SPDT	D	On	None	On
7-1437561-0	TT11EGVRA3T	SPDT	E	On	Off	On
2-1437562-3	TT21NGVRA3T	DPDT	N	On	None	On

**Toggle Switches, Tiny, Right Angle, Flat Actuator**

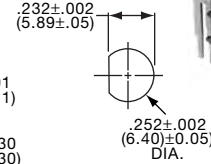
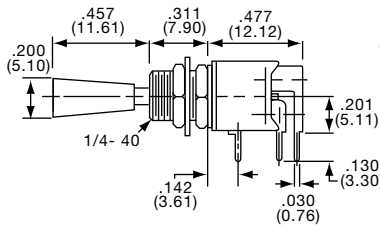
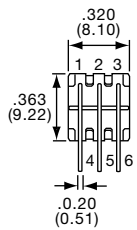
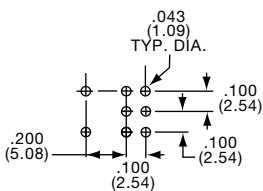
SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

\* Refer to Page C8 for Other Options \*

1 & 2 POLE FLAT



TT11DGRA7T1/4  
Horizontal Actuation



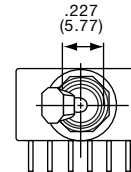
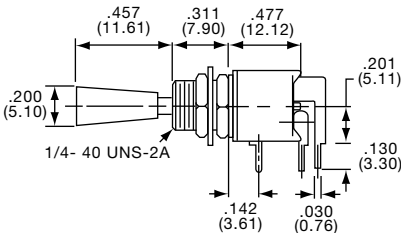
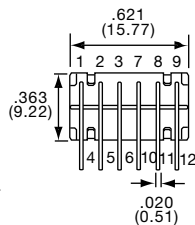
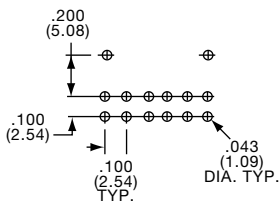
TT21NGRA7T1/4  
Horizontal Actuation

Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	↘	↓	↙
4-1437561-5	TT11DGRA7T1/4	SPDT	D		On	None	On
6-1437561-7	TT11EGRA7T1/4	SPDT	E		On	Off	On
7-1437561-4	TT11FGRA7T1/4	SPDT	F		On	None	(On)
1-1437562-9	TT21NGRA7T1/4	DPDT	N		On	None	On
4-1437562-0	TT21PGRA7T1/4	DPDT	P		On	Off	On

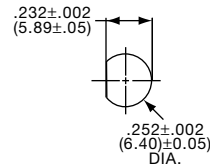
(On) indicates momentary position

Pinned for Anti-Rotation

4 POLE FLAT



TT41NGRA7T14  
Horizontal Actuation



Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	↘	↓	↙
7-1437562-2	TT41NGRA7T1/4	4PDT	N		On	None	On

Pinned for Anti-Rotation

**Toggle Switches, Tiny, Wire Wrap Termination**

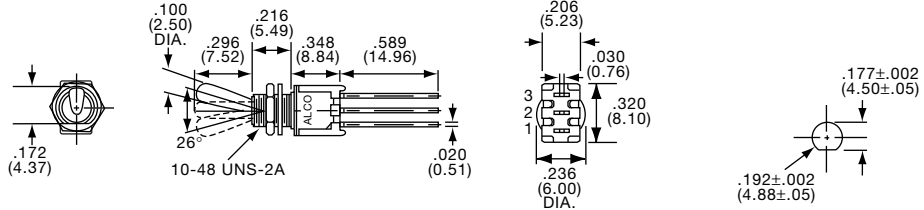
SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

For terminal connections refer to Code Chart on page M5-6

1 POLE



TT11DGWW2T

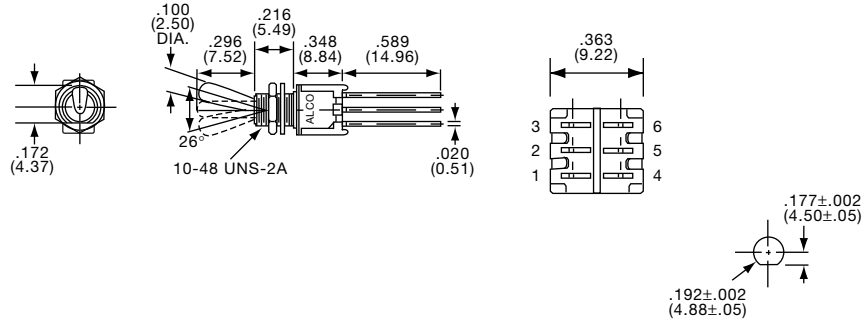


Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	
5-1437561-0	TT11DGWW2T	SPDT	D	On None On
7-1437561-1	TT11EGWW2T	SPDT	E	On Off On

2 POLE



TT21NGWW2T

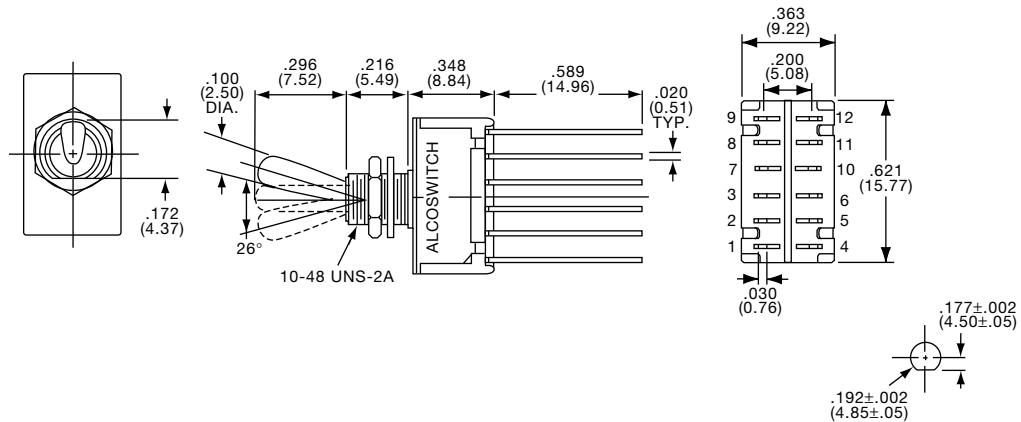


Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	
2-1437562-4	TT21NGWW2T	DPDT	N	On None On
4-1437562-4	TT21PGWW2T	DPDT	P	On Off On

4 POLE



TT41NGWW2T



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	
7-1437562-4	TT41NGWW2T	4PDT	N	On None On

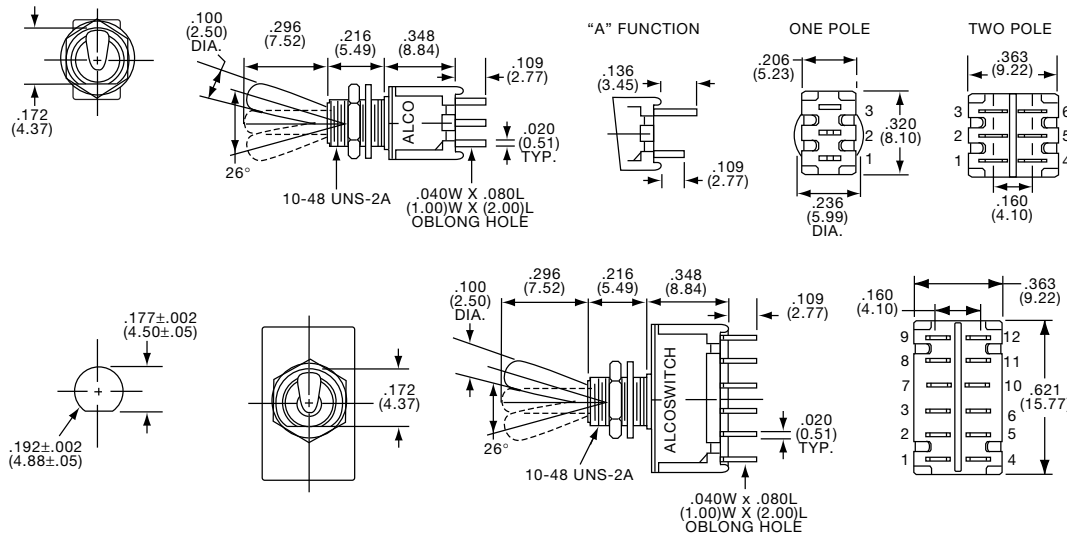


**Toggle Switches, Tiny, Wire Lug, Round or Flat Actuators**

SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

For terminal connections refer to Code Chart on page M5-6

NOTICE: Wire lug terminals accept two No. 20 AWG wires.



1 & 2 POLE



TT13D2T



TT23N2T

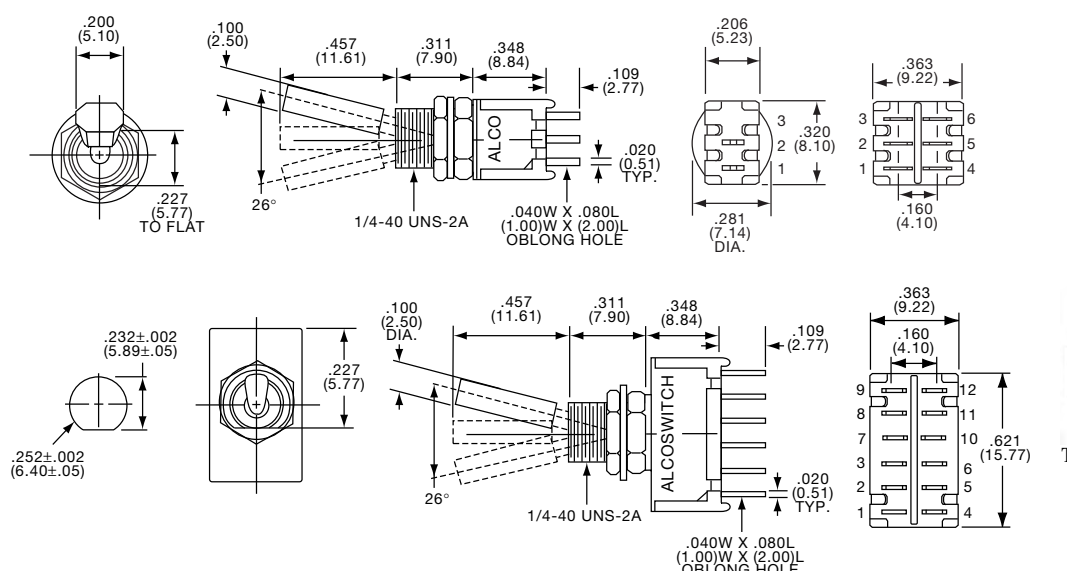
4 POLE



TT43N2T

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	Off	Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	Off
7-1437561-8	TT13A2T	SPST	A	On	None	Off	5-1437562-1	TT23N2T	DPDT	N	On	None	On
8-1437561-5	TT13D2T	SPDT	D	On	None	On	5-1437562-7	TT23P2T	DPDT	P	On	Off	On
9-1437561-5	TT13E2T	SPDT	E	On	Off	On	7-1437562-6	TT43N2T	4PDT	N	On	None	On
4-1437562-7	TT23K2T	DPST	K	On	None	Off							

Note: No center terminal "A" or "K" action switches.



1 & 2 POLE



TT13D7T1/4



TT23N7T1/4

4 POLE



TT43N7T1/4

Pinned for Anti-Rotation

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	Off	Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	Off
9-1437561-1	TT13D7T1/4	SPDT	D	On	None	On	6-1437562-0	TT23P7T1/4	DPDT	P	On	Off	On
9-1437561-7	TT13E7T1/4	SPDT	E	On	Off	On	7-1437562-8	TT43N7T1/4	4PDT	N	On	None	On
5-1437562-5	TT23N7T1/4	DPST	N	On	None	On		TT43P7T1/4	4PDT	P	On	Off	On

**Toggle Switches, Tiny, Wire Lug, Long Actuators**

SEE PAGE C8 FOR PRODUCT SPECIFICATIONS

For terminal connections refer to Code Chart on page M5-6

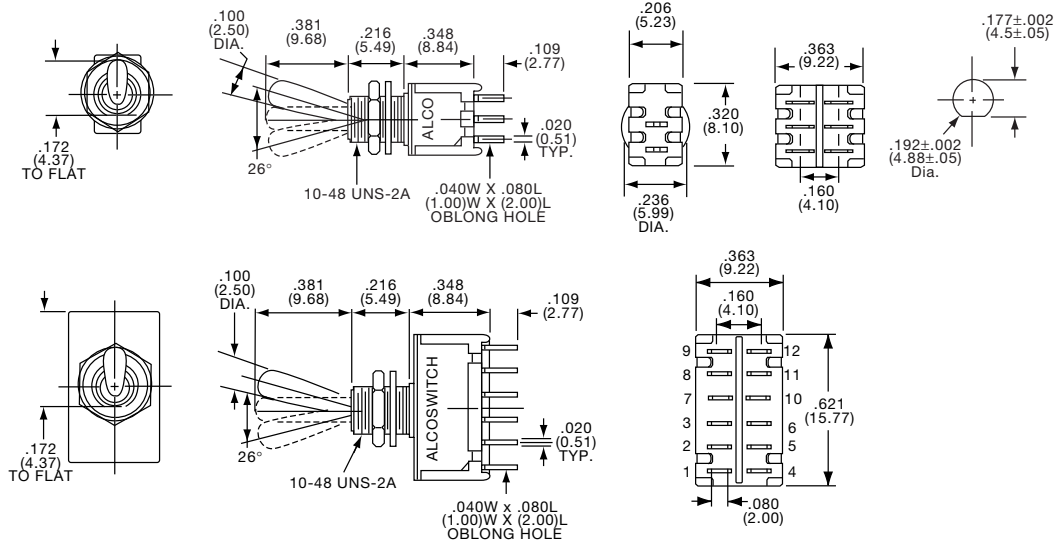
1 & 2 POLE



TT13D3T



TT23N3T



Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off
8-1437561-0	TT13A3T	SPST	A		On	None	Off	5-1437562-8	TT23P3T	DPDT	P		On	None	Off
8-1437561-8	TT13D3T	SPDT	D		On	None	On	7-1437562-7	TT43N3T	4PDT	N		On	None	On
9-1437561-6	TT13E3T	SPDT	E		On	Off	On	8-1437562-0	TT43P3T	4PDT	P		On	Off	On
4-1437562-8	TT23K3T	DPST	K		On	None	Off								
5-1437562-2	TT23N3T	DPDT	N		On	None	On								

Note: No center terminal on "A" or "K" action switches.

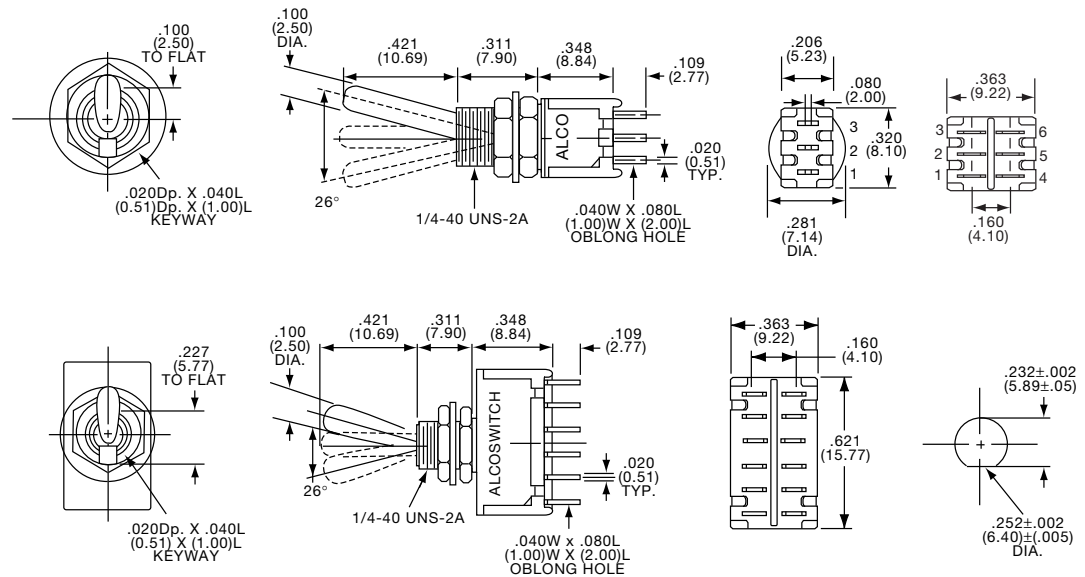
1 & 2 POLE



TT13A9T1/4



TT23N9T1/4



Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off
8-1437561-4	TT13A9T1/4	SPST	A		On	None	Off	6-1437562-2	TT23P9T1/4	DPDT	P		On	None	Off
9-1437561-2	TT13D9T1/4	SPDT	D		On	None	On	7-1437562-9	TT43N9T1/4	4PDT	N		On	None	On
9-1437561-8	TT13E9T1/4	SPDT	E		On	Off	On	8-1437562-1	TT43P9T1/4	4PDT	P		On	Off	On
4-1437562-9	TT23K9T1/4	DPST	K		On	None	Off								
5-1437562-6	TT23N9T1/4	DPDT	N		On	None	On								

Note: No center terminal on "A" or "K" action switches.

4 POLE



TT43N9T1/4

**Toggle Switches, Process Sealed, Vertical**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold over nickel  
 Inner Case Material .....High temperature polyester  
 Outer Case Material .....Polyamide  
 Terminals/Fixed Contacts .....Tin lead plate  
 Terminal Seal .....Epoxy  
 Process Seal .....Disposable boot, epoxied double case

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4VA Max. @ 20 VDC or peak AC  
 Initial Contact Resistance.....20 Milliohms max.  
 Contact Timing.....Break-before-make  
 Insulation Resistance .....1,000 Megohms min. 500 VDC  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Plunger/Actuator Travel.....26°  
 Life Expectancy .....See page C8

**ENVIRONMENTAL SPECIFICATIONS**

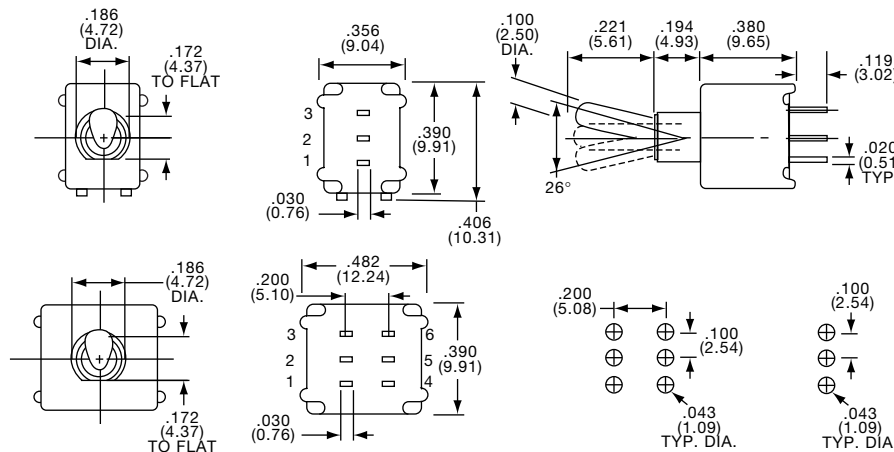
Operating Temperature .....-22°F to +185°F (-30°C to +85°C)  
 Storage Temperature .....-67°F to +185°F (-55°C to +85°C)  
 Solder Heat Resistance.....See page M3-4

**APPLICATION NOTE: Each switch is provided with a disposable boot used only during cleaning operation.**

**\* Refer to Page C8 for Other Options \***

Note: Hardware included with switch

TT-ES Series



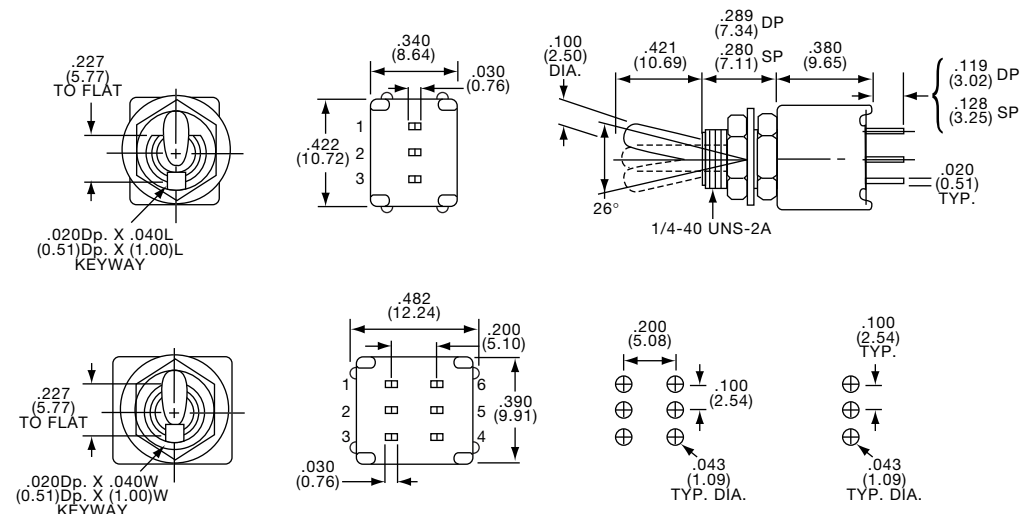
**1 & 2 POLE UNTHREADED BUSHING**



TT11DGPC1ES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	Off	Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	On
2-1437561-4	TT11AGPC1ES	SPST	A	On	None	Off	1437562-4	TT21NGPC1ES	DPDT	N	On	None	On
2-1437561-7	TT11DGPC1ES	SPDT	D	On	None	On							

Note: No center terminal "A".



**1 & 2 POLE THREADED BUSHING**



TT11DGPC9T1/4ES



TT21NGPC9T1/4ES

Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	Off	Tyco Electronics	Alcoswitch	Type	Act. Code P. M5	On	None	On
	TT11AGPC9T1/4ES	SPST	A	On	None	Off	1-1437562-2	TT21NGPC9T1/4ES	DPDT	N	On	None	On
6-1437830-2	TT11DGPC9T1/4ES	SPDT	D	On	None	On		TT21PGPC9T1/4ES	DPDT	P	On	Off	On
	TT11EGPC9T1/4ES	SPDT	E	On	Off	(On)							
	TT21KGPC9T1/4ES	DPST	K	On	None	Off							

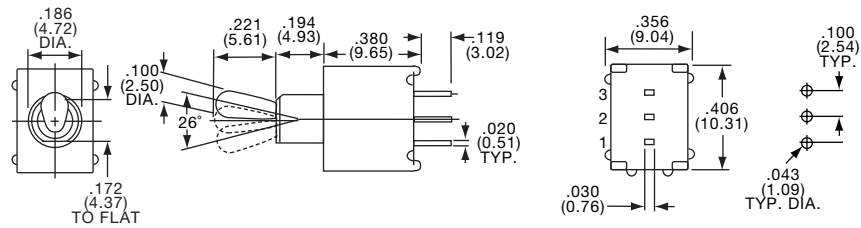
Note: No center terminal "A" or "K" action switches.  
 (On) indicates momentary position.

**Toggle Switches, Tiny, Enviromental and Process Sealed**

SEE PAGE C16 FOR PRODUCT SPECIFICATIONS

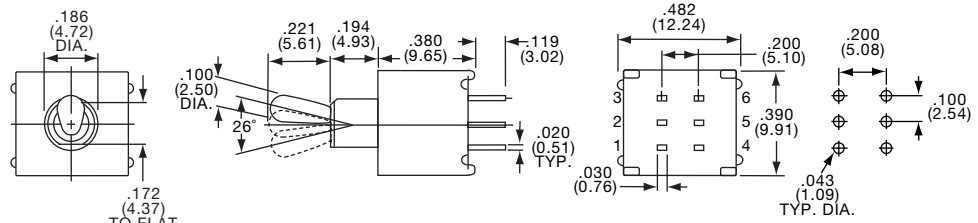
For terminal connections refer to Code Chart on page M5-6

**1 POLE-PC VERTICAL MOUNT**



Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
8-1437562-6	TTE11DGPC1ES	SPDT	D		On	None	On
	TTE11EGPC1ES	SPDT	E		On	Off	On

**2 POLE-PC VERTICAL MOUNT**

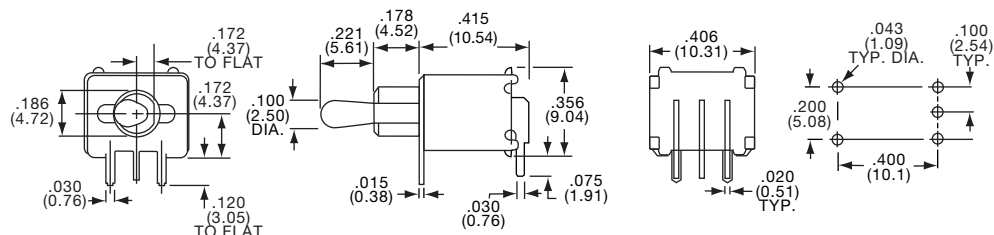


Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
1437563-1	TTE21NGPC1ES	DPDT	N		On	None	On
	TTE21PGPC1ES	DPDT	P		On	Off	On

**1 POLE-PC RIGHT ANGLE**



TTE11DGRA1ES  
Horizontal Actuation

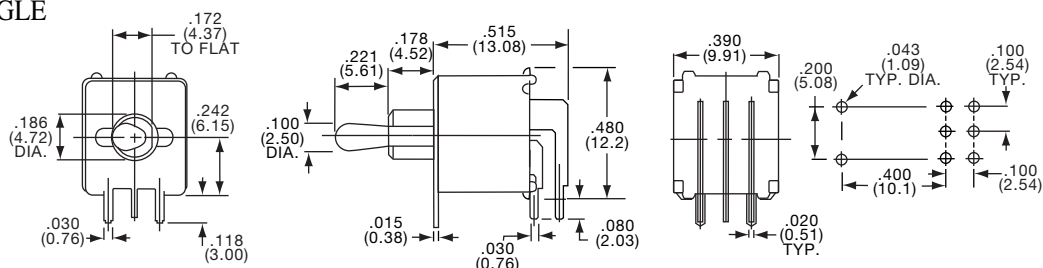


Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
8-1437562-9	TTE11DGRA1ES	SPDT	D		On	None	On
9-1437562-2	TTE11EGRA1ES	SPDT	E		On	Off	On

**2 POLE-PC RIGHT ANGLE**



TTE21NGRA1ES  
Horizontal Actuation



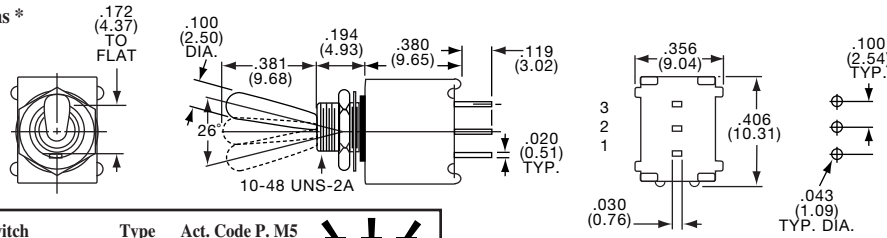
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
1437563-4	TTE21NGRA1ES	DPDT	N		On	None	On
	TTE21PGRA1ES	DPDT	P		On	Off	On

**Toggle Switches, Tiny, Enviromental and Process Sealed**

For terminal connections refer to Code Chart on page M5-6.

SEE PAGE C16 FOR PRODUCT SPECIFICATIONS

\* Refer to Page C8 for Other Options \*



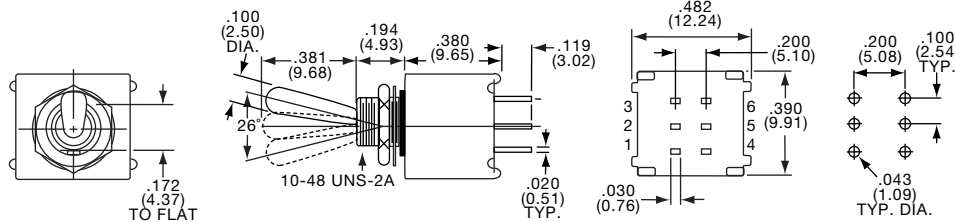
1 POLE



TTE11DGPC3TES

Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off
8-1437562-5	TTE11AGPC3TES	SPST	A		On	None	Off
8-1437562-7	TTE11DGPC3TES	SPDT	D		On	None	On
9-1437562-0	TTE11EGPC3TES	SPDT	E		On	Off	On

Note: No center terminal on "A" action switches.

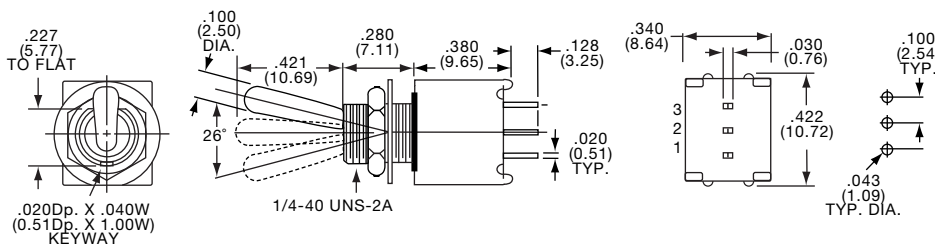


2 POLE



TTE21NGPC3TES

Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	On
1437563-2	TTE21NGPC3TES	DPDT	N		On	None	On
	TTE21PGPC3TES	DPDT	P		On	Off	On



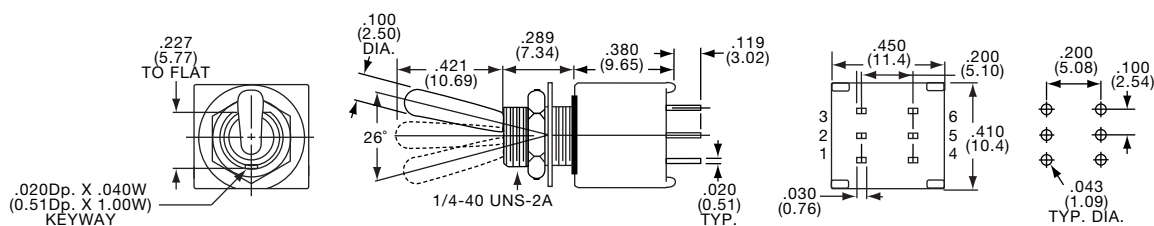
1 POLE



TTE11DGPC9T4ES

Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off
	TTE11AGPC9T1/4ES	SPST	A		On	None	Off
8-1437562-8	TTE11DGPC9T1/4ES	SPDT	D		On	None	On
9-1437562-1	TTE11EGPC9T1/4ES	SPDT	E		On	Off	On

Note: No center terminal on "A" action switches.



2 POLE



TTE21NGPC9T4ES

Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off
	TTE21KGPC9T1/4ES	DPST	K		On	None	Off
1437563-3	TTE21NGPC9T1/4ES	DPDT	N		On	None	On
	TTE21PGPC9T1/4ES	DPDT	P		On	Off	On

Note: No center terminal on "K" action switches.

**Toggle Switches, Process Sealed, Vertical and Right Angle, Round Actuator**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold over nickel plate  
 Case Material .....Polyester 94V-0  
 Actuator Material .....Nickel plated copper alloy  
 Terminals .....Phosphor bronze  
 Terminal Seal .....Epoxy  
 Process Seal .....Tested to MIL-STD-202, method 112  
 (Internal O-Ring) test condition A and D, 85°C

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA Max. @ 20 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....500 Megohms @ 250 VDC min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuation Force .....400 Grams  
 Life Expectancy .....Up to 10,000 Cycles

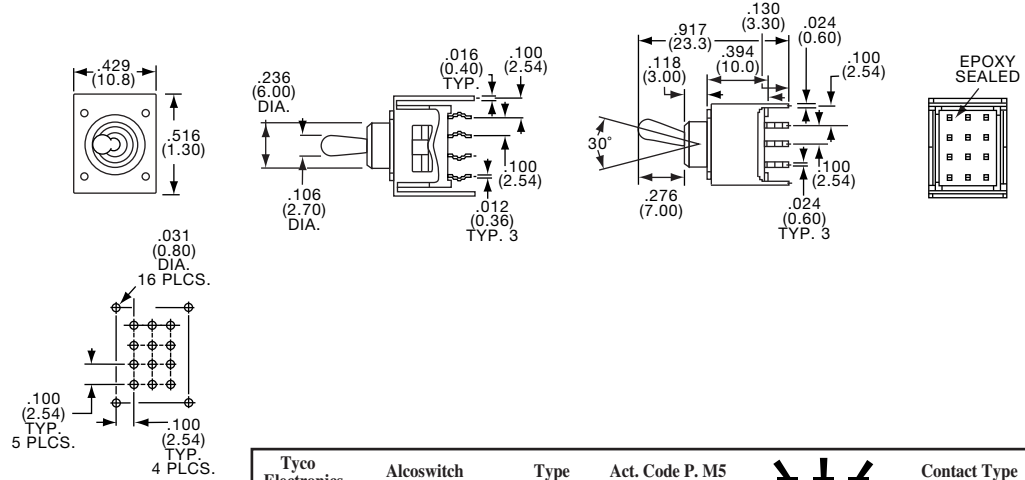
**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-40°F to +176°F (-40°C to +80°C)

**4PDT**



ATE4DGPC2

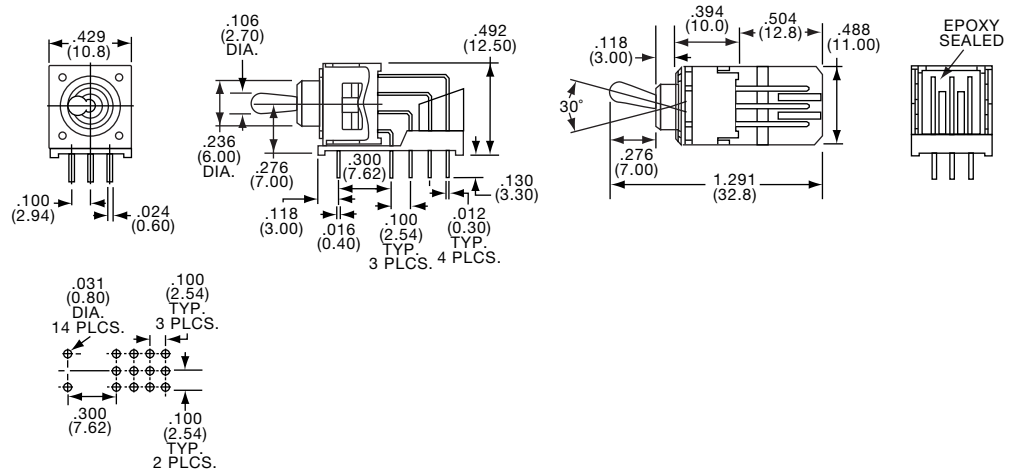


Tyco Electronics	Alcoswitch	Type	Act. Code P. M5		Contact Type
2-1437557-1	ATE4DGPC2	4PDT	8	On None On	Gold

**4PDT**



ATE4DGRA2

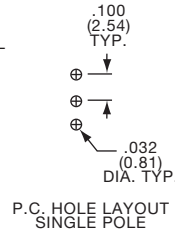
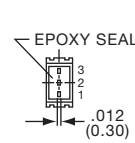
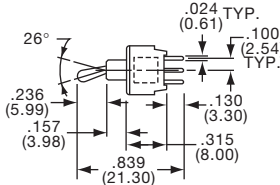
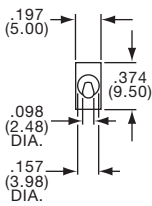


Tyco Electronics	Alcoswitch	Type	Act. Code P. M5		Contact Type
2-1437557-2	ATE4DGRA2	4PDT	8	On None On	Gold



**Toggle Switches, Process Sealed, Vertical, Round or Flat Actuators**

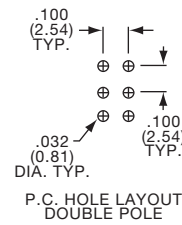
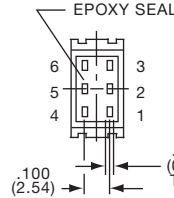
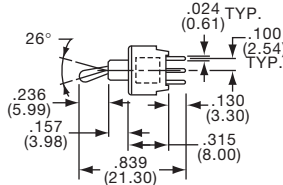
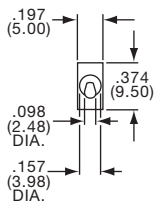
SEE PAGE C19 FOR PRODUCT SPECIFICATIONS



SPDT/DPDT



ATE1DGPC1



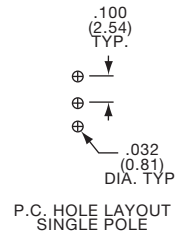
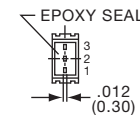
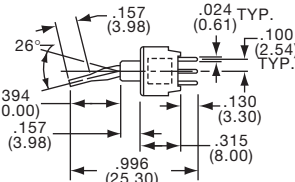
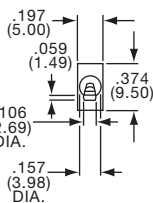
Extra compact double pole saves PCB real estate.



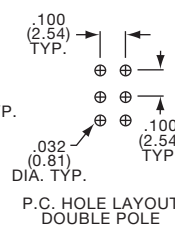
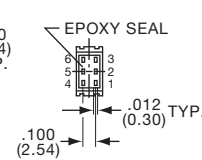
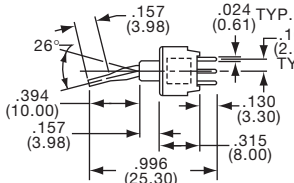
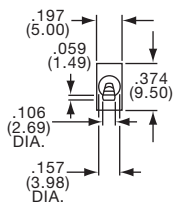
ATE2DGPC1

Tyco Electronics	Alcoswitch	Type				Contact Type	Tyco Electronics	Alcoswitch	Type				Contact Type
1437557-2	ATE1DGPC1	SPDT	On	None	On	Gold	1-1437557-5	ATE2DGPC1	DPDT	On	None	On	Gold
1437557-6	ATE1EGPC1	SPDT	On	Off	On	Gold	1-1437557-9	ATE2EGPC1	DPDT	On	Off	On	Gold
1-1437557-2	ATE1GGPC1	SPDT	On (On)	None (On)	On (On)	Gold	Terminals Connected:						
Terminals Connected:						2-3	5-6	2-1	5-4				
(On) indicates momentary position.													

SPDT/DPDT



ATE1DGPC7



Extra compact double pole saves PCB real estate.



ATE2DGPC7

Tyco Electronics	Alcoswitch	Type				Contact Type	Tyco Electronics	Alcoswitch	Type				Contact Type
1437557-3	ATE1DGPC7	SPDT	On	None	On	Gold	1-1437557-6	ATE2DGPC7	DPDT	On	None	On	Gold
1-1437557-3	ATE1GGPC7	SPDT	On (On)	Off (On)	On (On)	Gold	Terminals Connected:						
Terminals Connected:						2-3	5-6	2-1	5-4				
(On) indicates momentary position.													



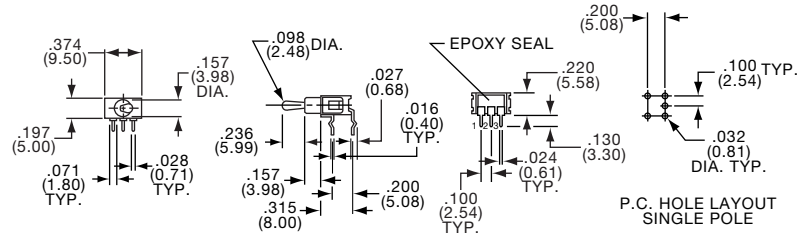
**Toggle Switches, Process Sealed, Right Angle, Retention Feature**

SEE PAGE C19 FOR PRODUCT SPECIFICATIONS

**SPDT/DPDT**



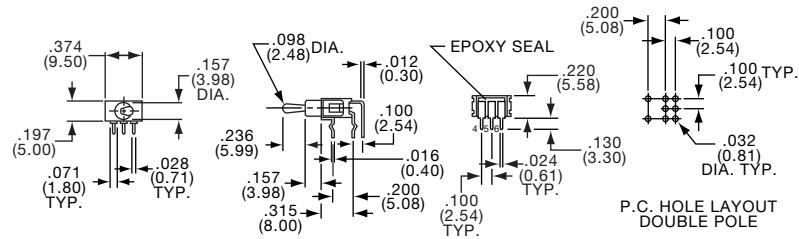
ATE1DGRA1  
Horizontal Actuation



Extra compact double pole saves PCB real estate.



ATE2DGRA1  
Horizontal Actuation

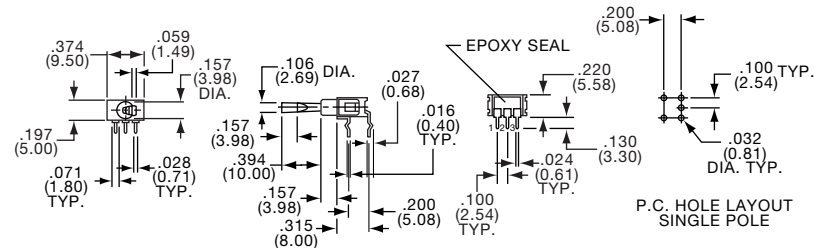


Tyco Electronics	Alcoswitch	Type	↘	⬇	↙	Contact Type	Tyco Electronics	Alcoswitch	Type	↘	⬇	↙	Contact Type
1437557-4	ATE1DGRA1	SPDT	On	None	On	Gold	1-1437557-7	ATE2DGRA1	DPDT	On	None	On	Gold
1437557-8	ATE1EGRA1	SPDT	On	Off	On	Gold	3-1437592-7	ATE2EGRA1	DPDT	On	Off	On	Gold
1-1437557-0	ATE1FGRA1	SPDT	On	None (On)		Gold		ATE2GGRA1	DPDT	(On)	Off	(On)	Gold
1-1437557-4	ATE1GGRA1	SPDT	(On)	Off	(On)	Gold	Terminals Connected:			2-3		2-1	
Terminals Connected: (On) indicates momentary position.							Terminals Connected: (On) indicates momentary position.						

**SPDT/DPD**



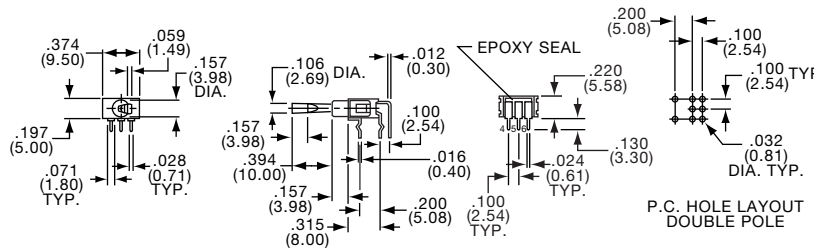
ATE1DGRA7  
Horizontal Actuation



Extra compact double pole saves PCB real estate.



ATE2DGRA7  
Horizontal Actuation



Tyco Electronics	Alcoswitch	Type	↘	⬇	↙	Contact Type	Tyco Electronics	Alcoswitch	Type	↘	⬇	↙	Contact Type
1437557-5	ATE1DGRA7	SPDT	On	None	On	Gold	1-1437557-8	ATE2DGRA7	DPDT	On	None	On	Gold
1437557-9	ATE1EGRA7	SPDT	On	Off	On	Gold	Terminals Connected:						
1-1437557-1	ATE1FGRA7	SPDT	On	None (On)		Gold				2-3		2-1	
Terminals Connected: (On) indicates momentary position.							Terminals Connected: (On) indicates momentary position.						

ATE Series

**Toggle Switches, A Series, Part Number Matrix**

**"A" SERIES DESIGN FEATURES**

- Toggle – Machined brass, heavy nickel plated.
- Bushing & Frame – Rigid one-piece die cast, copper flashed, heavy nickel plated.
- Fixed Contact – Welded construction.
- Terminal Seal – Epoxy sealing of terminals is standard.

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold/gold flash  
 Silver/tin lead  
 Case Material .....Thermoset  
 Terminal Seal .....Epoxy

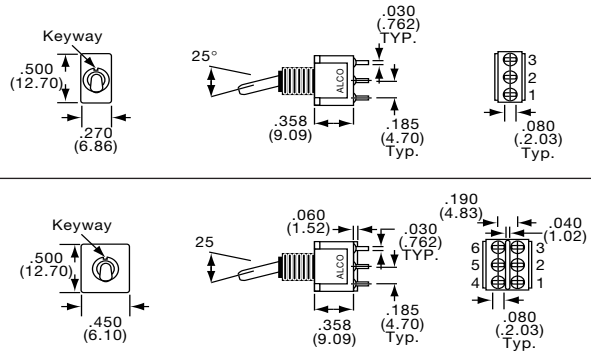
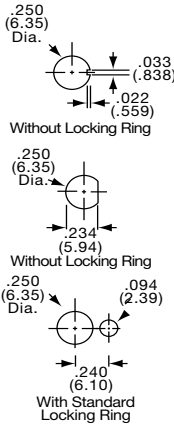
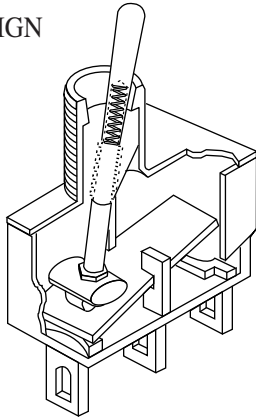
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Silver: 2 A @ 250 VAC or 5 A @ 125 VAC  
 Silver: 2 A @ 30 VDC  
 Gold: 0.4 VA @ 20 VAC/DC max.  
 Insulation Resistance .....1,000 Megohms min. @ 500 VDC.  
 Dielectric Strength .....1,000 Volts RMS @ sea level initial  
 Electrical Life .....Up to 30,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....-4°F to + 185°F (-20°C to + 85°C)  
 Storage Temperature.....-49°F to + 212°F (-45°C to + 100°C)  
 Note: Hardware included with switch

**DESIGN**



**PART NUMBERING**

Model	Function	Toggle	Bushing	Terminal	Contact	K, K1: Cap Color	Option																																																							
<b>A1</b> Single Pole	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>A2</b> Double Pole	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>01</b> On-On	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>03</b> On-Off-On	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>05</b> (On)-Off-(On)	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>07</b> On-Off-(On)	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>08</b> On-(On)	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>11</b> On-On-On	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>13</b> On-On-(On)	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													
<b>15</b> (On)-On-(On)	<table border="0"> <tr><td><b>S</b></td><td>Bat. Long</td></tr> <tr><td><b>K</b></td><td>Locking</td></tr> <tr><td><b>K1</b></td><td>Locking</td></tr> <tr><td><b>M</b></td><td>Bat. Short</td></tr> <tr><td><b>P3</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>P4</b></td><td>Flatted (with <b>Y</b> only)</td></tr> <tr><td><b>T</b></td><td>Large Toggle</td></tr> <tr><td><b>T1</b></td><td>Large Toggle &amp; Bushing (15/32)</td></tr> <tr><td><b>T2P</b></td><td>Large Flatted Toggle and Bushing (15/32)</td></tr> </table>	<b>S</b>	Bat. Long	<b>K</b>	Locking	<b>K1</b>	Locking	<b>M</b>	Bat. Short	<b>P3</b>	Flatted (with <b>Y</b> only)	<b>P4</b>	Flatted (with <b>Y</b> only)	<b>T</b>	Large Toggle	<b>T1</b>	Large Toggle & Bushing (15/32)	<b>T2P</b>	Large Flatted Toggle and Bushing (15/32)	<table border="0"> <tr><td><b>Y</b></td><td>1/4-40 threaded, .35" long, slotted</td></tr> <tr><td><b>Y9</b></td><td>unthreaded, .35" long</td></tr> <tr><td><b>CW</b></td><td>1/4-40 threaded, .37" long, actuator &amp; bushing flange environmental seals S &amp; M Toggles only</td></tr> <tr><td><b>D</b></td><td>1/4-40 threaded, .28" long, slotted</td></tr> <tr><td><b>D9</b></td><td>Unthreaded, .28" long</td></tr> <tr><td><b>H</b></td><td>1/4-40 threaded, flanged, .30" long</td></tr> </table>	<b>Y</b>	1/4-40 threaded, .35" long, slotted	<b>Y9</b>	unthreaded, .35" long	<b>CW</b>	1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only	<b>D</b>	1/4-40 threaded, .28" long, slotted	<b>D9</b>	Unthreaded, .28" long	<b>H</b>	1/4-40 threaded, flanged, .30" long	<table border="0"> <tr><td><b>Z</b></td><td>Wire Lug</td></tr> <tr><td><b>A</b></td><td>Right Angle</td></tr> <tr><td><b>AV2</b></td><td>Vertical Right Angle</td></tr> <tr><td><b>C</b></td><td>Printed Circuit</td></tr> <tr><td><b>V30</b></td><td rowspan="3">Vertical Support</td></tr> <tr><td><b>V40</b></td></tr> <tr><td><b>V90</b></td></tr> <tr><td><b>W</b></td><td>Wire Wrap</td></tr> <tr><td><b>Z3</b></td><td>Quick Connect</td></tr> </table>	<b>Z</b>	Wire Lug	<b>A</b>	Right Angle	<b>AV2</b>	Vertical Right Angle	<b>C</b>	Printed Circuit	<b>V30</b>	Vertical Support	<b>V40</b>	<b>V90</b>	<b>W</b>	Wire Wrap	<b>Z3</b>	Quick Connect	<table border="0"> <tr><td><b>Q</b></td><td>Silver</td></tr> <tr><td><b>B</b></td><td>Gold</td></tr> <tr><td><b>G</b></td><td>Gold over Silver</td></tr> </table>	<b>Q</b>	Silver	<b>B</b>	Gold	<b>G</b>	Gold over Silver	<table border="0"> <tr><td><b>0</b></td><td>Black</td></tr> <tr><td><b>2</b></td><td>Red</td></tr> </table>	<b>0</b>	Black	<b>2</b>	Red	U.L.(Q or G contact only)  Note: For surface mount termination, use the "TST" series, Page C7
<b>S</b>		Bat. Long																																																												
<b>K</b>		Locking																																																												
<b>K1</b>		Locking																																																												
<b>M</b>		Bat. Short																																																												
<b>P3</b>		Flatted (with <b>Y</b> only)																																																												
<b>P4</b>		Flatted (with <b>Y</b> only)																																																												
<b>T</b>		Large Toggle																																																												
<b>T1</b>		Large Toggle & Bushing (15/32)																																																												
<b>T2P</b>		Large Flatted Toggle and Bushing (15/32)																																																												
<b>Y</b>		1/4-40 threaded, .35" long, slotted																																																												
<b>Y9</b>		unthreaded, .35" long																																																												
<b>CW</b>		1/4-40 threaded, .37" long, actuator & bushing flange environmental seals S & M Toggles only																																																												
<b>D</b>		1/4-40 threaded, .28" long, slotted																																																												
<b>D9</b>		Unthreaded, .28" long																																																												
<b>H</b>	1/4-40 threaded, flanged, .30" long																																																													
<b>Z</b>	Wire Lug																																																													
<b>A</b>	Right Angle																																																													
<b>AV2</b>	Vertical Right Angle																																																													
<b>C</b>	Printed Circuit																																																													
<b>V30</b>	Vertical Support																																																													
<b>V40</b>																																																														
<b>V90</b>																																																														
<b>W</b>	Wire Wrap																																																													
<b>Z3</b>	Quick Connect																																																													
<b>Q</b>	Silver																																																													
<b>B</b>	Gold																																																													
<b>G</b>	Gold over Silver																																																													
<b>0</b>	Black																																																													
<b>2</b>	Red																																																													

See page C23 for SP3T wiring diagram.

**Other Options**

**N** Black finish toggle, bushing and hardware. Add "N" to end of part number, but before U.L. option.

**O** Internal O-ring environmental actuator seal. Add letter after toggle option: S & M.

**P** Anti-Push-In/Anti rotate. Add letter after toggle S & M.

**Toggle Switches, A Series, Options**

**FUNCTIONS**

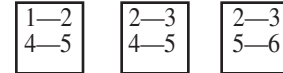
The following functions available in SP or DP.

<b>01</b>	2 Positions	None indicates no mechanical position		None		
<b>03</b>	3 Positions	Off indicates a mechanical position with no electrical connection.		Off		
<b>05</b>	3 Positions	(On) indicates momentary action.		Off		
<b>07</b>	3 Positions			Off		
<b>08</b>	2 Positions			None		
SPDT, connect terminals:						
DPDT, connect terminals:						

<b>11</b>	3 Positions				
<b>13</b>	3 Positions				
<b>15</b>	3 Positions				

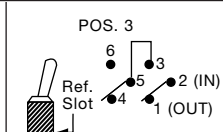
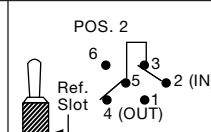
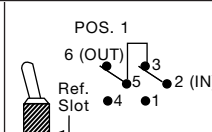
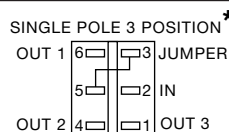
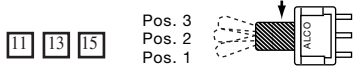
Functions available in DP case only

Connect terminals:

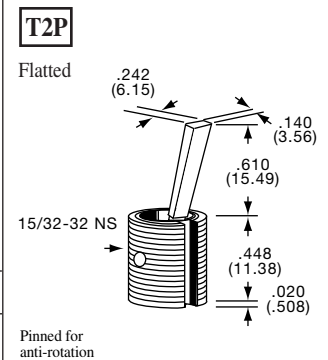
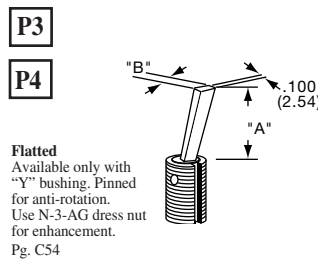
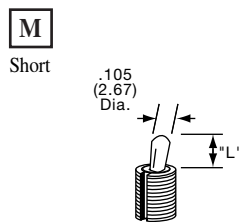
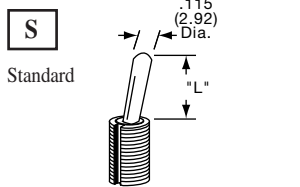


\* SP3T functions achieved with external jumper installed by customer

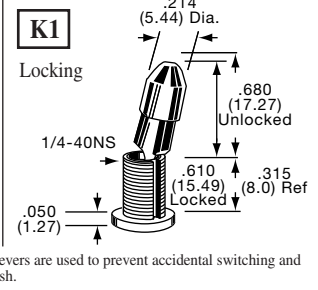
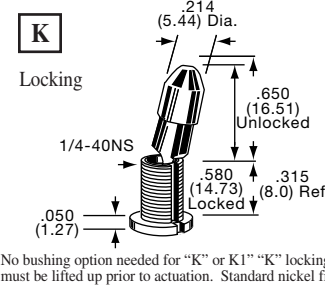
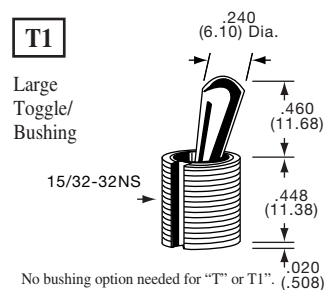
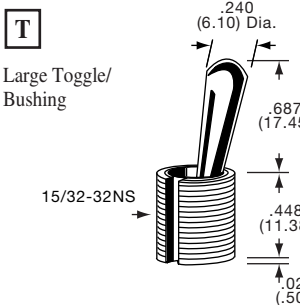
**WIRING DIAGRAM FOR FUNCTIONS**



**TOGGLES**



Dimension "L"	Bushing	Dimension "L"	Bushing Type	Actuator	"Dimension" "B"	
.410 (10.41)	"Y", "H", "CW"	.200 (5.08)	"Y", "H", "CW"	P3	.450 (11.43)	.200 (5.08)
.480 (12.19)	"D", "D9"	.270 (6.86)	"D", "D9"	P4	.250 (6.35)	.165 (4.19)



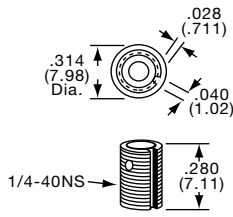
No bushing option needed for "K" or "K1" "K" locking levers are used to prevent accidental switching and must be lifted up prior to actuation. Standard nickel finish.

**Toggle Switches, A Series, Options**

**BUSHINGS**

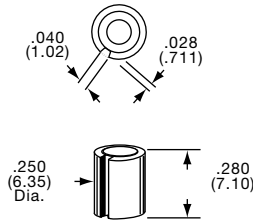
**Y**

1/4-40 Thread  
.35" long, slotted  
(Standard)



**D9**

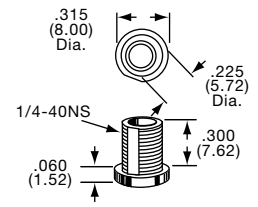
Unthreaded  
.28" long



Used with  
**Z, C & W**  
terminations

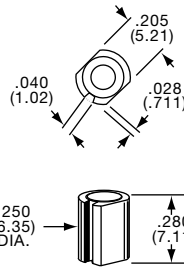
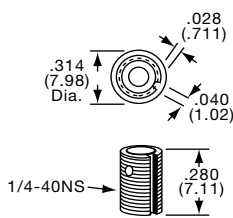
**H**

1/4-40 Thread  
Flanged, .30" long



**D**

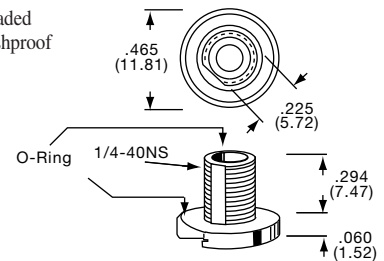
1/4-40 Thread  
.28" long, slotted



Used with  
**A, AV2, V30**  
**V80 & V90**  
terminations

**CW**

Threaded  
Splashproof

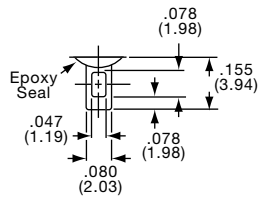


For S & M Toggles

**TERMINALS**

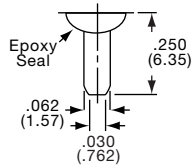
**Z**

Wire Lug



**Z3**

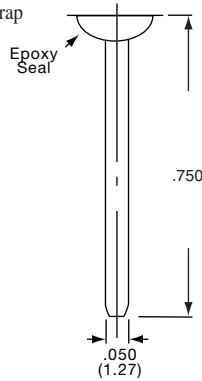
Quick Connect



Mates with Tyco  
61454 or 60900.

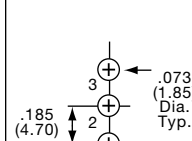
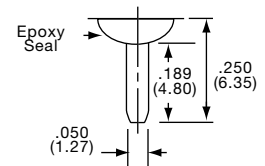
**W**

Wire Wrap

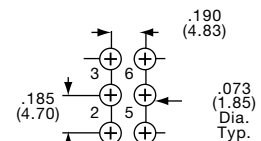


**C**

Printed Circuit



Single pole



Double pole

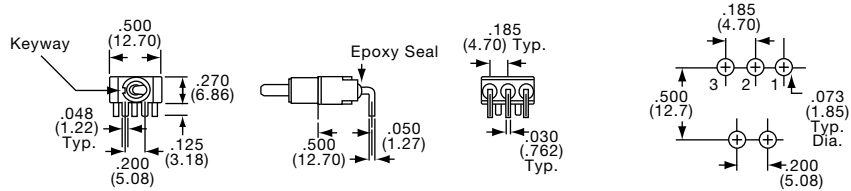
Gemini Series

**Toggle Switches, A Series, Options**

TERMINALS

**A**

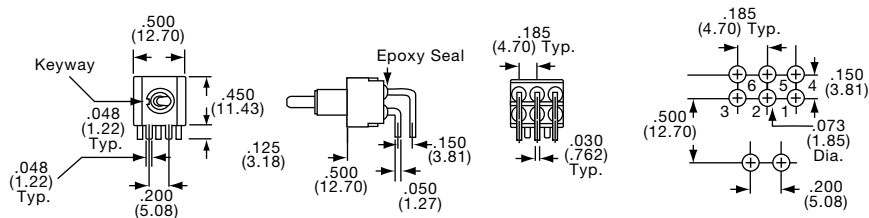
**Right Angle**  
Single Pole



Note: Terminal numbers viewed from top of P.C. boards.

**A**

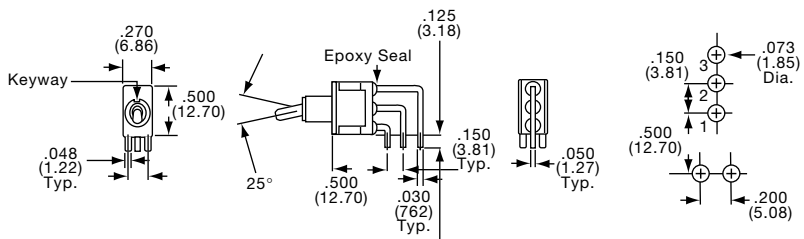
**Right Angle**  
Double Pole



Note: Terminal numbers viewed from top of P.C. boards.

**AV2**

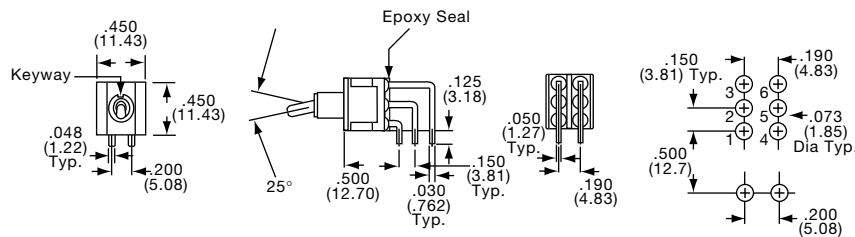
**Vertical Right Angle**  
Single Pole



Note: Terminal numbers viewed from top of P.C. boards.

**AV2**

**Vertical Right Angle**  
Double Pole



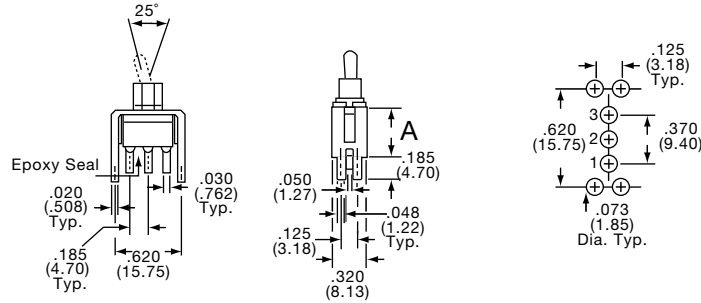
Note: Terminal numbers viewed from top of P.C. boards.

**Toggle Switches, A Series, Options**

TERMINALS NOTE: Terminal numbers viewed from top of P.C. board

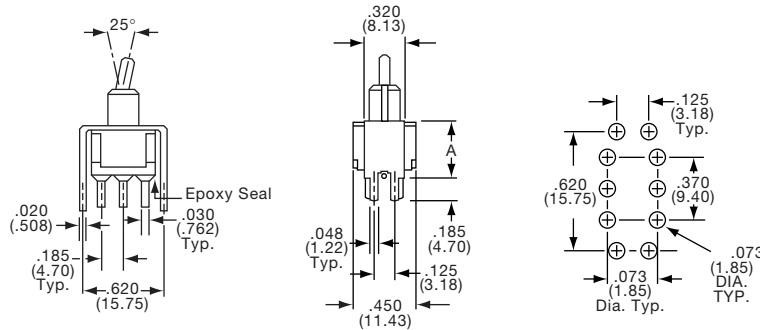
**V30 V40 V90**

Vertical Support Bracket  
Single Pole



Option Code	Dim."A"
V30	.460 (11.68)
V40	.630 (16.00)
V90	1.150 (29.21)

Vertical Support Bracket  
Double Pole



Option Code	Dim."A"
V30	.460 (11.68)
V40	.630 (16.00)
V90	1.150 (29.21)

**CONTACTS**

**B** CONTACTS: Copper alloy with gold plate, welded button.

TERMINALS: Brass with gold plate.

ELECTRICAL RATING: 0.4 VA @ 20 VAC/DC.

**Q** CONTACTS: Copper alloy with silver, welded button.

TERMINALS: Brass with tin/lead plate.

ELECTRICAL RATING: 5 A @ 125 VAC, 2 A @ 250 VAC, 2 A @ 30 VDC.

UL/CSA RATING: 5A @ 125 VAC, 3A @ 250 VAC. (Specify "UL" option code)

**G** CONTACTS: Copper alloy with gold plate over silver, welded button.

TERMINALS: Brass alloy, with gold plate.

Note: This contact option can be used for low-level or power switching. If level is above 0.4 VA @ 20 VAC/DC, the switch is rendered usable only for power switching due to arc-removal of gold plate.

UL/CSA RATING: 5A @ 125 VAC, 3A @ 250 VAC (Specify "UL" option code)

ELECTRICAL RATING: 0.4 VA @ 20 VAC/DC or 5 A @ 125 VAC, 2 A @ 250 VAC, 2 A @ 30 VDC.

Gemini Series

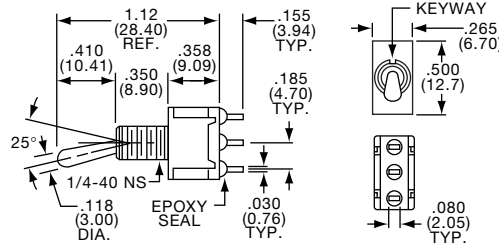
**Toggle Switches, A Series, Vertical, Wire Lug, Long Bat Actuator**

\* Refer to Pages C22-C26 for Additional Options \*

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS

SPDT

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5			
<b>Silver Contacts</b>							
5-1437554-0	A101SYZQ	SPDT	1		On	None	On
7-1437554-7	A103SYZQ	SPDT	5		On	Off	On
9-1437554-6	A105SYZQ	SPDT	5		(On)	Off	(On)
1437555-9	A107SYZQ	SPDT	5		On	Off	(On)
2-1437555-0	A108SYZQ	SPDT	1		On	None	(On)
<b>Gold Contacts</b>							
4-1437554-9	A101SYZB	SPDT	1		On	None	On
7-1437554-6	A103SYZB	SPDT	5		On	Off	On
9-1437554-5	A105SYZB	SPDT	5		(On)	Off	(On)
	A107SYZB	SPDT	5		On	Off	(On)

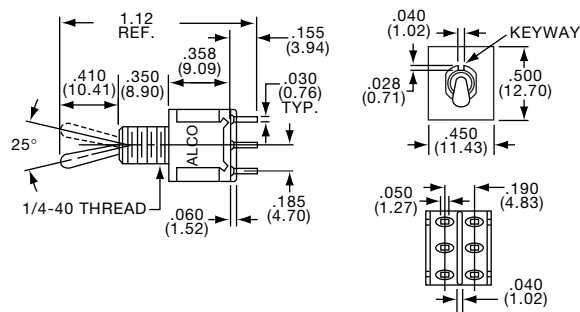


A101SYZQ

**G**  
Gemini Series

DPDT

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5			
<b>Silver Contacts</b>							
4-1437555-9	A201SYZQ	DPDT	2		On	None	On
6-1437555-2	A203SYZQ	DPDT	6		On	Off	On
7-1437555-0	A205SYZQ	DPDT	6		(On)	Off	(On)
7-1437555-6	A207SYZQ	DPDT	6		On	Off	(On)
8-1437555-5	A208SYZQ	DPDT	2		On	None	(On)
1437556-1	A211SYZQ	SP3T	11		On	On	On
1437556-4	A213SYZQ	SP3T	11		On	On	(On)
1437556-7	A215SYZQ	SP3T	11		(On)	On	(On)



A201SYZQ



**Toggle Switches, A Series, PC Terminals, Long Bat Actuators**

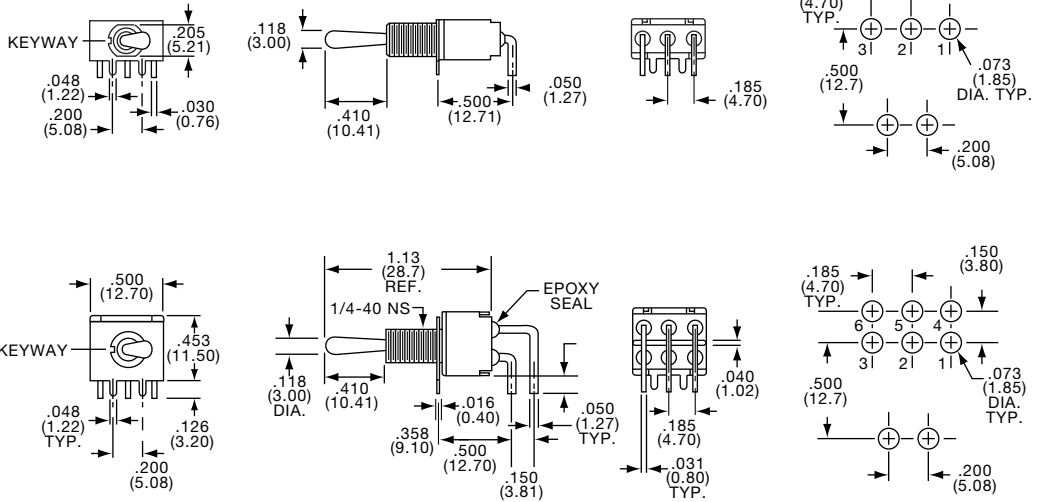
\* Refer to Pages C22-C26 for Additional Options \*

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS

SPDT/DPDT



A101SYAB  
Horizontal Actuation



Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↘	↓	↙
<b>Gold Contacts</b>							
4-1437554-3	A101SYAB	SPDT	1		On	None	On
	A103SYAB	SPDT	5		On	Off	On
4-1437555-3	A201SYAB	DPDT	2		On	None	On
	A208SYAB	DPDT	2		On	None	(On)

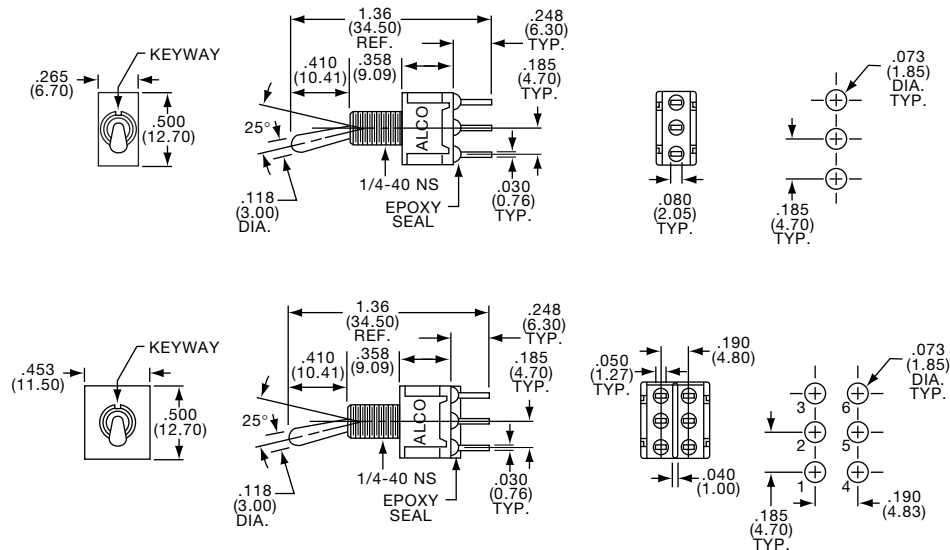
SPDT/DPDT



A101SYCB



A201SYCB

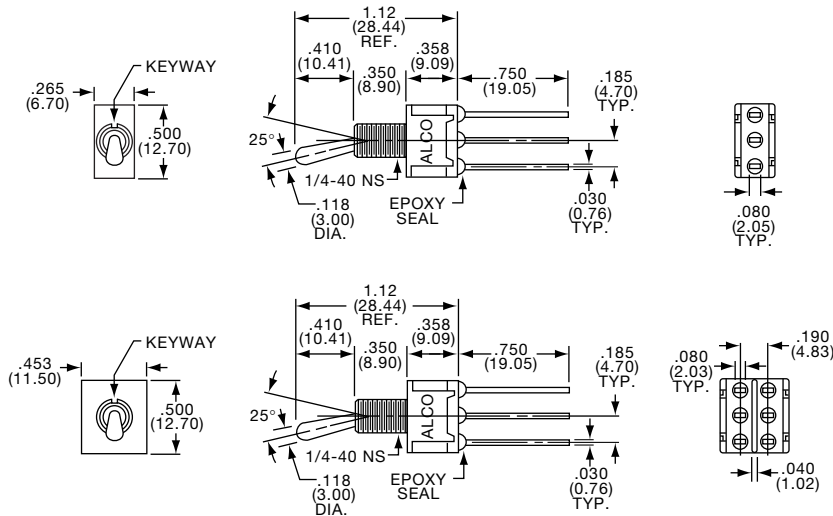


Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↘	↓	↙
<b>Gold Contacts</b>							
4-1437554-5	A101SYCB	SPDT	1		On	None	On
7-1437554-2	A103SYCB	SPDT	5		On	Off	On
1-1437555-8	A108SYCB	SPDT	1		On	None	(On)
4-1437555-5	A201SYCB	DPDT	2		On	None	On
6-1437555-0	A203SYCB	DPDT	6		On	Off	On
8-1437555-3	A208SYCB	DPDT	2		On	None	(On)

**Toggle Switches, A Series, Wire Wrap or Wire Lug, Long Bat Actuators**

\* Refer to Pages C22-C26 for Additional Options \*

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS



SPDT/DPDT

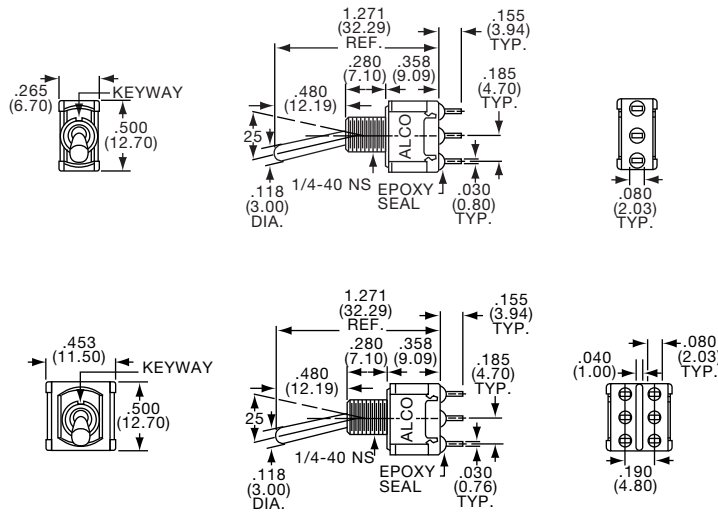


A101SYWQ



A201SYWQ

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5			
<b>Silver Contacts</b>							
4-1437554-8	A101SYWQ	SPDT	1	On	None	On	
7-1437554-5	A103SYWQ	SPDT	5	On	Off	On	
4-1437555-7	A201SYWQ	DPDT	2	On	None	On	
	A203SYWQ	DPDT	6	On	Off	On	



SPDT/DPDT



A101SDZQ



A201SDZQ

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5			
<b>Silver Contacts</b>							
4-1437554-0	A101SDZQ	SPDT	1	On	None	On	
6-1437554-9	A103SDZQ	SPDT	5	On	Off	On	
4-1437555-1	A201SDZQ	DPDT	2	On	None	On	
5-1437555-9	A203SDZQ	DPDT	6	On	Off	On	

**Toggle Switches, A Series, PC Tail, Straight or Right Angle, Long Bat Actuator**

\* Refer to Pages C22-C26 for Additional Options \*

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS

SPDT

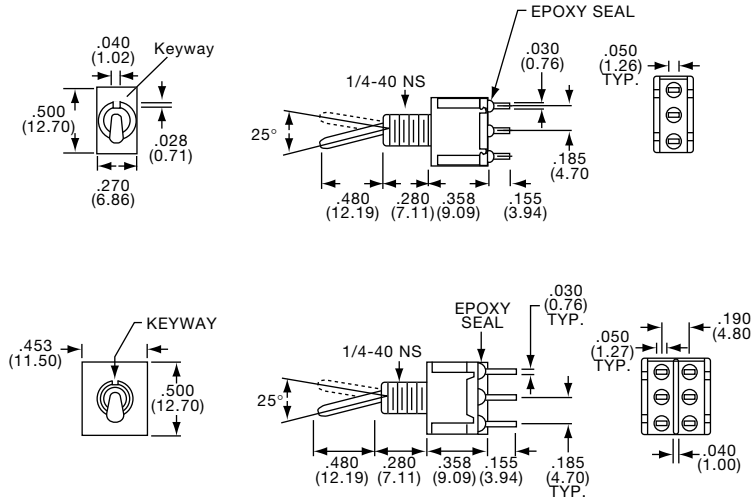


A101SDCQ

DPDT



A201SDCQ



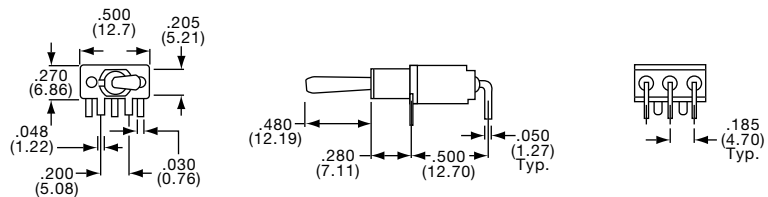
Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↖	↓	↗
<b>Silver Contacts</b>							
3-1437554-9	A101SDCQ	SPDT	1		On	None	On
6-1437554-8	A103SDCQ	SPDT	5		On	Off	On
1571670-1	A201SDCQ	DPDT	2		On	None	On
	A203SDCQ	DPDT	6		On	Off	On
	A208SDCQ	DPDT	2		On	None	(On)

SPDT/DPDT



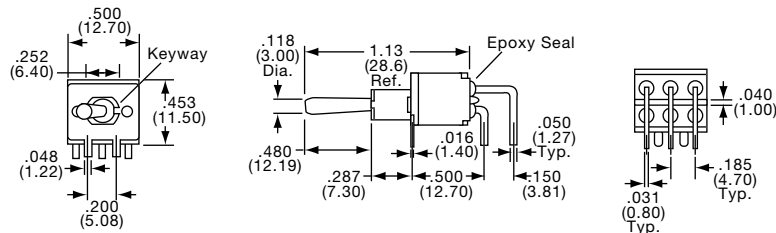
A101SD9AQ

Horizontal Actuation



A201SD9AQ

Horizontal Actuation

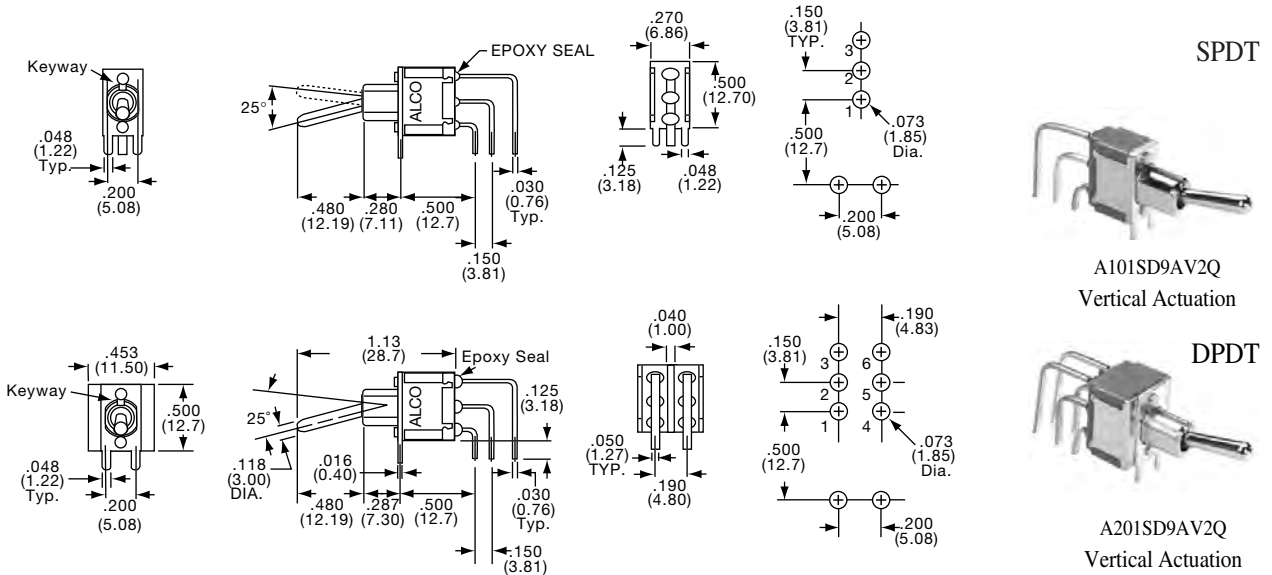


Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	↖	↓	↗		
<b>Silver Contacts</b>											
3-1437554-4	A101SD9AQ	<b>Gold Contacts</b>		3-1437554-3	A101SD9AB	SPDT	1		On	None	On
6-1437554-4	A103SD9AQ				A103SD9AB	SPDT	5		On	Off	On
1-1437555-6	A108SD9AQ					SPDT	1		On	None	(On)
3-1437555-8	A201SD9AQ				A201SD9AB	DPDT	2		On	None	On
8-1437555-1	A208SD9AQ				A208SD9AB	DPDT	2		On	None	(On)

**Toggle Switches, A Series, Vertical, Right Angle, Long Bat Actuator**

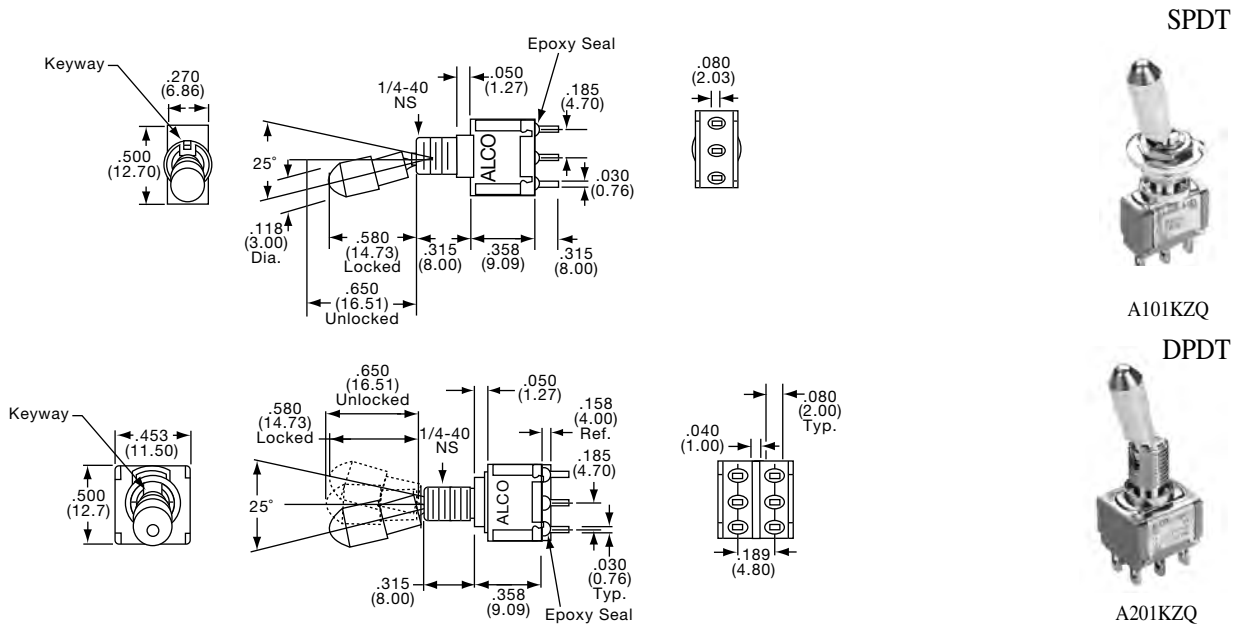
\* Refer to Pages C22-C26 for Additional Options \*

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS



Tyco Electronics	Alcoswitch	Type	Act. Code P.M5				Tyco Electronics	Alcoswitch	Type	Act. Code P.M5			
<b>Silver Contacts</b>							<b>Silver Contacts</b>						
3-1437554-6	A101SD9AV2Q	SPDT	1	On	None	On	3-1437555-9	A201SD9AV2Q	DPDT	2	On	None	On
6-1437554-6	A103SD9AV2Q	SPDT	5	On	Off	On	5-1437555-8	A203SD9AV2Q	DPDT	6	On	Off	On
							8-1437555-2	A208SD9AV2Q	DPDT	2	On	None	(On)

**Toggle Switches, A Series, Wire Lug, Locking Toggle**



Tyco Electronics	Alcoswitch	Type	Act. Code P. M5				Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Type	Act. Code P. M5			
<b>Silver Contacts</b>							<b>Gold Contacts</b>								
1437554-9	A101KZQ	SPDT	1	On	None	On	A201KZB	A201KZQ	2-1437555-5	A201KZQ	DPDT	2	On	None	On
5-1437554-8	A103KZQ	SPDT	5	On	Off	On	A203KZB	A203KZQ	5-1437555-3	A203KZQ	DPDT	6	On	Off	On
							6-1437555-5	A205KZB	A205KZQ	A205KZQ	DPDT	6	(On)	Off	(On)
							8-1437555-8	A211KZB	A211KZQ	A211KZQ	SP3T	11	On	On	On

\* Refer to Pages C22-C26 for Additional Options \*

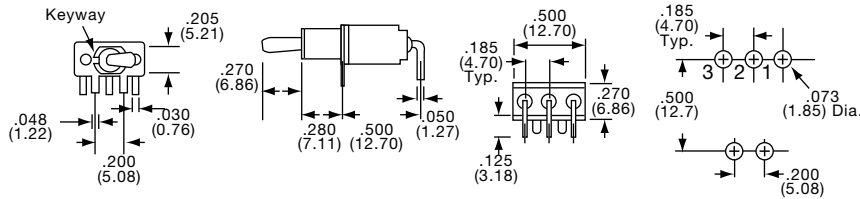
**Toggle Switches, A Series, Right Angle, Short Bat Actuators**

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS

**SPDT**



**A101MD9AQ**  
Horizontal Actuation

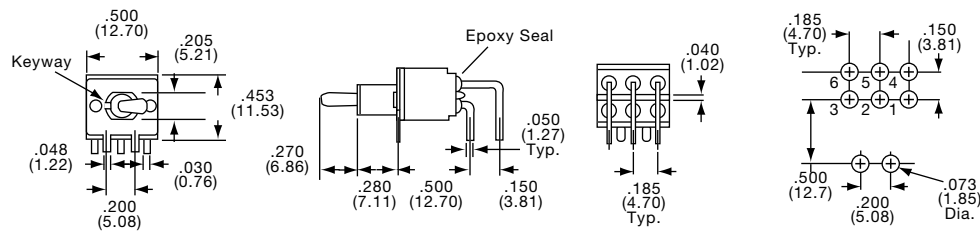


Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
<b>Silver Contacts</b>		<b>Gold Contacts</b>							
1-1437554-6	A101MD9AQ	1-1437554-4	A101MD9AB	SPDT	1		On	None	On
6-1437554-1	A103MD9AQ	5-1437554-9	A103MD9AB	SPDT	5		On	Off	On
	A108MD9AQ	1-1437555-2	A108MD9AB	SPDT	1		On	None	(On)

**DPDT**



**A201MD9AQ**  
Horizontal Actuation

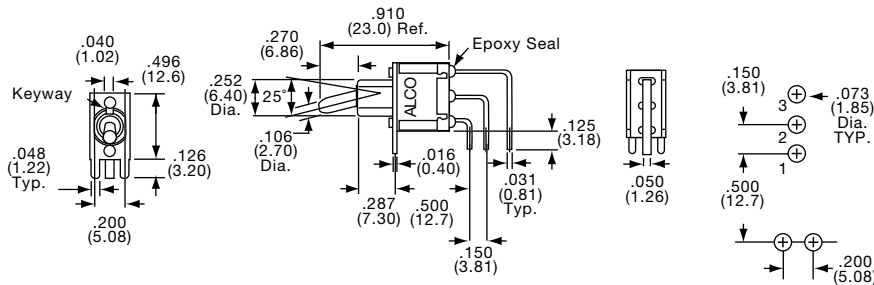


Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
<b>Silver Contacts</b>		<b>Gold Contacts</b>							
2-1437555-8	A201MD9AQ	2-1437555-7	A201MD9AB	DPDT	2		On	None	On
		5-1437555-4	A203MD9AB	DPDT	6		On	Off	On

**SPDT**



**A101MD9AV2Q**  
Vertical Actuation

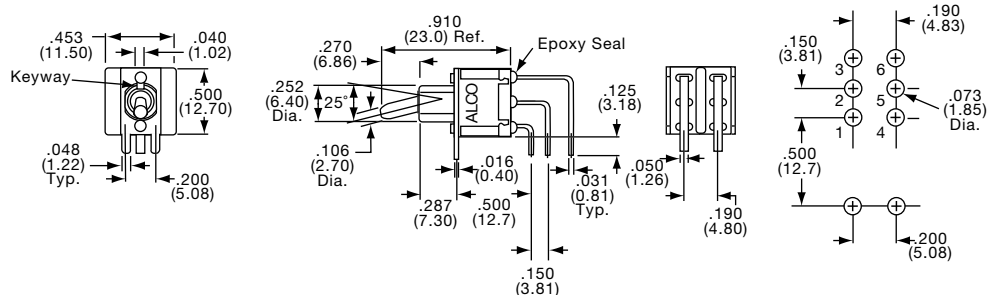


Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
<b>Silver Contacts</b>		<b>Gold Contacts</b>							
1-1437554-9	A101MD9AV2Q	1-1437554-7	A101MD9AV2B	SPDT	1		On	None	On
	A103MD9AV2Q	6-1437554-2	A103MD9AV2B	SPDT	5		On	Off	On
	A108MD9AV2Q			SPDT	1		On	None	(On)

**DPDT**



**A201MD9AV2AQ**  
Vertical Actuation

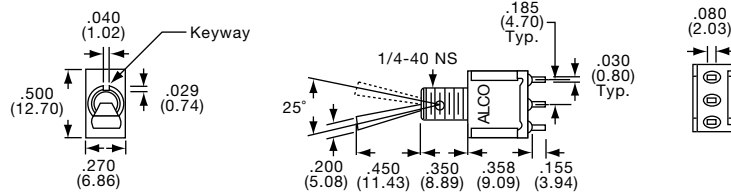


Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5			
<b>Silver Contacts</b>		<b>Gold Contacts</b>							
3-1437555-0	A201MD9AV2Q	2-1437555-9	A201MD9AV2B	DPDT	2		On	None	On
	A203MD9AV2Q		A203MD9AV2B	DPDT	6		On	Off	On
	A208MD9AV2Q		A208MD9AV2B	DPDT	2		On	None	(On)

**Toggle Switches, A Series, Vertical, Wire Lug, Flat or Long Bat Actuator**

\* Refer to Pages C22-C26 for Additional Options \*

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS



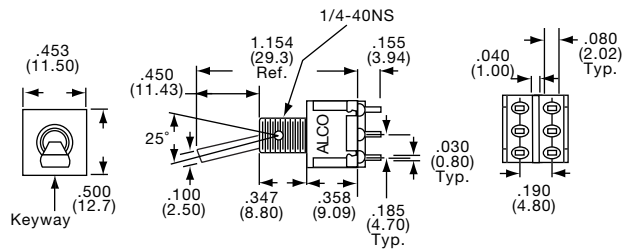
SPDT



A101P3YZQ

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↖	↓	↗
<b>Silver Contacts</b>							
2-1437554-9	A101P3YZQ	SPDT	1		On	None	On
6-1437554-3	A103P3YZQ	SPDT	5		On	Off	On
8-1437554-7	A105P3YZQ	SPDT	5		(On)	Off	(On)
1437555-5	A107P3YZQ	SPDT	5		On	Off	(On)
1-1437555-5	A108P3YZQ	SPDT	1		On	None	(On)

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↖	↓	↗
<b>Silver Contacts</b>							
3-1437555-6	A201P3YZQ	DPDT	2		On	None	On
5-1437555-6	A203P3YZQ	DPDT	6		On	Off	On
6-1437555-6	A205P3YZQ	DPDT	6		(On)	Off	(On)
7-1437555-3	A207P3YZQ	DPDT	6		On	Off	(On)
8-1437555-0	A208P3YZQ	DPDT	2		On	None	(On)
9-1436555-3	A211P3YZQ	SP3T	11		On	On	On
	A215P3YZQ	SP3T	11		(On)	On	(On)

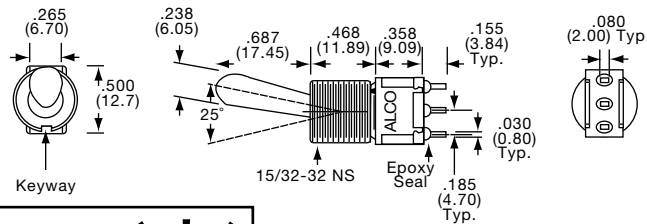


DPDT



A201P3YZQ

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↖	↓	↗
<b>Silver Contacts</b>							
5-1437554-6	A101TZQ	SPDT	1		On	None	On
8-1437554-0	A103TZQ	SPDT	5		On	Off	On

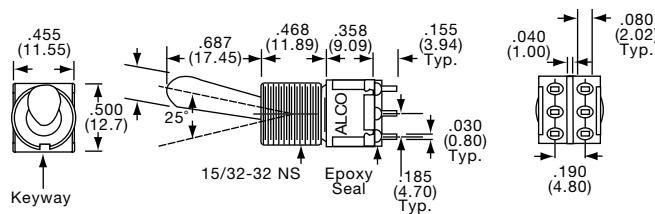


SPDT



A101TZQ

Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↖	↓	↗
<b>Silver Contacts</b>							
5-1437555-2	A201TZQ	DPDT	2		On	None	On
6-1437555-4	A203TZQ	DPDT	6		On	Off	On
	A211TZQ	SP3T	11		On	On	On



DPDT



A201TZQ



**Toggle Switches, A Series, Wire Lug, 15/32 Bushing, Short Bat Actuator**

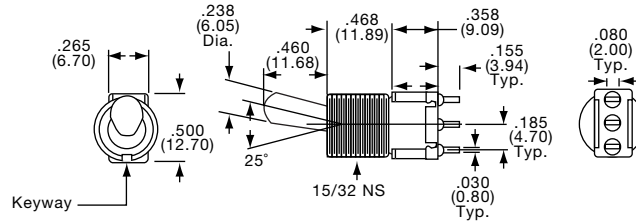
\* Refer to Pages C22-C26 for Additional Options \*

SEE PAGE C22 FOR PRODUCT SPECIFICATIONS

SPDT



A103T1ZQ

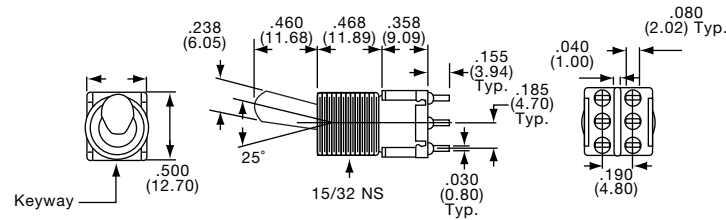


Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↘	↓	↙
<b>Silver Contacts</b>							
5-1437554-4	A101T1ZQ	SPDT	1		On	None	On
7-1437554-9	A103T1ZQ	SPDT	5		On	Off	On
9-1437554-8	A105T1ZQ	SPDT	5		(On)	Off	(On)
	A108T1ZQ	SPDT	1		On	None	(On)

DPDT



A201T1ZQ



Tyco Electronics	Alcoswitch	Type	Act. Code	P.M5	↘	↓	↙
<b>Silver Contacts</b>							
5-1437555-0	A201T1ZQ	DPDT	2		On	None	On
6-1437555-3	A203T1ZQ	DPDT	6		On	Off	On
7-1437555-1	A205T1ZQ	DPDT	6		(On)	Off	(On)
7-1437555-7	A207T1ZQ	DPDT	6		On	Off	(On)
8-1437555-6	A208T1ZQ	DPDT	2		On	None	(On)
1437556-2	A211T1ZQ	SP3T	11		On	On	On



**Toggle Switches, AE Series, Process Sealed, Part Number Matrix**

**"AE" SERIES DESIGN FEATURES**

- MIL-STD-202 Method 112C Leak Test
- Toggle – Machined brass, heavy nickel plated.
- Bushing & Cover - Nylon, ultrasonically welded to case, with integral "O-ring", UL94VO.
- Fixed Contact – Welded construction.
- Terminal Seal – Epoxy sealing of terminals is standard.
- Termination – Precious metal (gold or silver)/brass or copper strip with welded contact area.

**MATERIAL SPECIFICATIONS:**

Process Sealing ..... "O-ring" seals will withstand wave soldering and various subsequent cleaning operations. Meets MIL-STD-202, Method 112C, Test Condition A & D, 85°C.

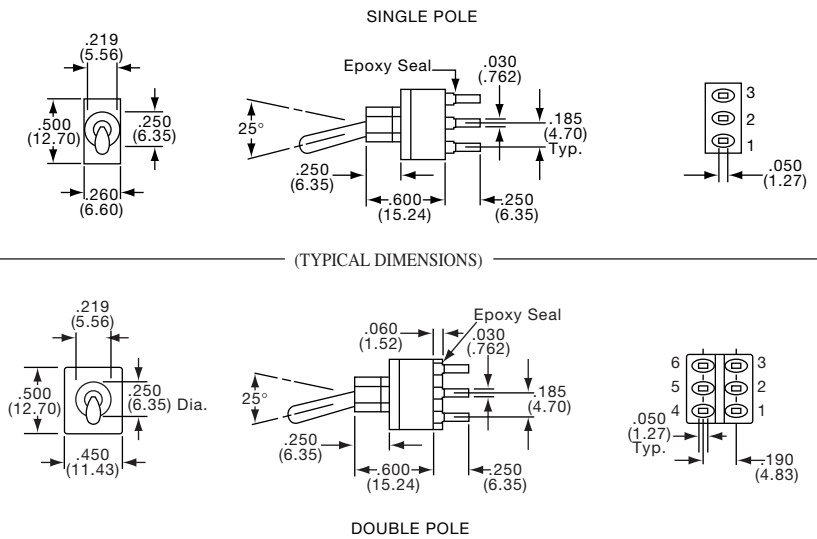
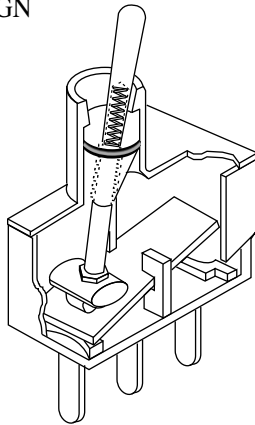
**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....-4°F to + 185°F (-20°C to + 85°C)  
 Storage Temperature.....-49°F to + 212°F (-45°C to + 100°C)  
 Solder Heat Resistance .....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Silver: 2 A @ 250 VAC or 5 A @ 125 VAC  
 Silver: 2 A @ 30 VDC  
 Gold: 0.4 VA @ 20 VAC/DC  
 Contact Resistance .....30 Milliohms max. initial  
 Insulation Resistance .....1,000 Megohms min. @ 500 VDC.  
 Dielectric Strength .....1,000 Volts RMS @ sea level initial  
 Static Withstanding.....15 KV per IEC 801-2  
 Electrical Life .....Up to 30,000 Cycles

**"O-RING" DESIGN**



**PART NUMBERING**

Model	Function	Toggle	Bushing	Terminal	Contact	Option
<b>AE1</b> Single Pole	<b>S</b> Bat. Long		<b>D1</b> Unthreaded	<b>A</b> Right Angle	<b>B</b> Gold	U.L. (Q or G contact only)
<b>AE2</b> Double Pole	<b>L</b> Lever			<b>AV2</b> Vertical Right Angle	<b>Q</b> Silver	
	<b>L1</b> Lever			<b>C</b> Printed Circuit	<b>G</b> Gold over Silver	
	<b>L2</b> Lever			<b>V30</b> Vertical Support Bracket		
<b>01</b> On-On	<b>M</b> Bat. Short			<b>W</b> Wire Wrap		
<b>03</b> On-Off-On				<b>Z3</b> Quick Connect		
<b>05</b> (On)-Off-(On)				<b>Z</b> Wire Lug		
<b>07</b> On-Off-(On)						
<b>08</b> On-(On)						
<b>11</b> On-On-On						
<b>13</b> On-On-(On)						
<b>15</b> (On)-On-(On)						

Double Pole case only

Application Note: For surface mount termination, use the "TST" series, Page C5

**Other Options**  
**N** Black finish toggle, add "N" to end of part number, but before U.L. option.

See page C36 for SP3T wiring diagram.

**Pushbutton Switches, Panel Mount, Wire Lug or PC Tails, 6 Amp**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver clad copper with gold flash  
 Case Material.....Thermoset  
 Actuator Material .....Nickel plated copper alloy  
 Terminals.....Copper with gold flash  
 Terminal Seal .....Molded in

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature .....-40°F to +176°F (-40°C to +80°C)  
 Solder Heat Resistance .....See page M3-4

Note: Hardware included with switches

**TYPICAL PERFORMANCE CHARACTERISTICS:**

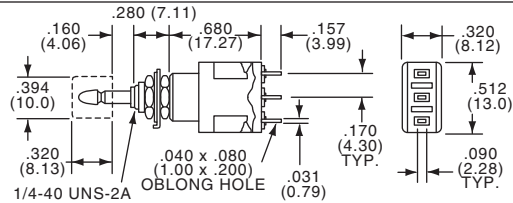
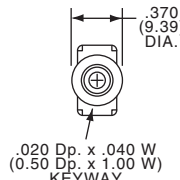
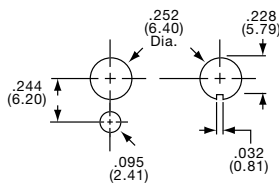
Contact Rating.....6 A @ 125 VAC, 3 A @ 250 VAC  
 Initial Contact Resistance .....10 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance.....1,000 Megohms min.  
 Dielectric Strength.....1,500 Volts RMS @ sea level  
 Actuation Force .....1.3 to 2.7 lbs.  
 Actuator Travel ......140" (3.56)  
 Life Expectancy.....Up to 50,000 Actuations

**Cap not supplied, order separately**  
 (See Cap Model C22 and C23 on page D32.)

**SPDT**



MPA106D

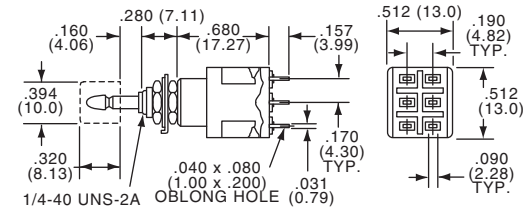
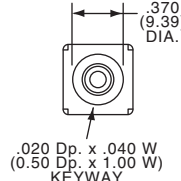
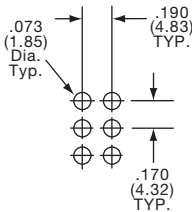


Part Number					
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Action
2-1437567-8	MPA106D	SPDT	23		Push-on/Push-off
2-1437567-9	MPA106F	SPDT	19		Momentary

**DPDT**



MPA206N



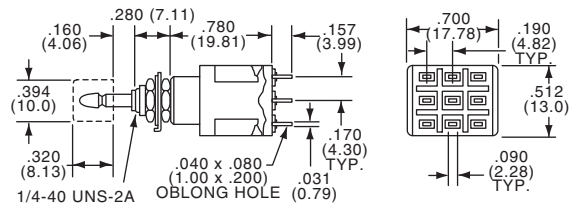
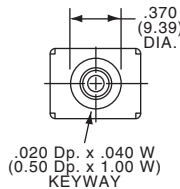
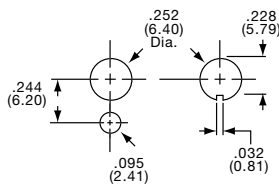
Part Number					
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Action
Wirelug Terminals					
3-1437567-1	MPA206N	DPDT	24		Push-on/Push-off
3-1437567-3	MPA206R	DPDT	20		Momentary

Part Number					
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Action
PC Terminals					
3-1437567-2	MPA206NPC	DPDT	24		Push-on/Push-off
3-1437567-4	MPA206RPC	DPDT	20		Momentary

**3PDT**



MPA306D

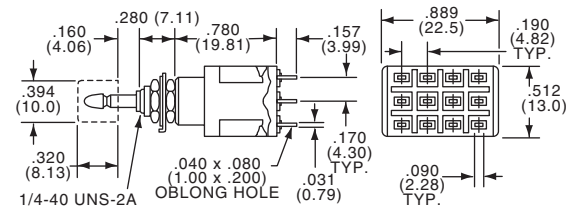
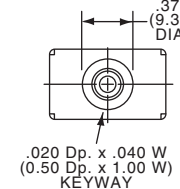
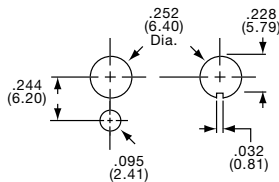


Part Number					
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Action
3-1437567-5	MPA306D	3PDT	25		Push-on/Push-off
3-1437567-6	MPA306F	3PDT	21		Momentary

**4PDT**



MPA406N



Part Number					
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Action
3-1437567-7	MPA406N	4PDT	26		Push-on/Push-off
3-1437567-8	MPA406R	4PDT	22		Momentary

**Pushbutton Switches, Splashproof, Panel Mount, Wire Lug, 6 Amp**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver clad copper with gold flash  
Case Material .....Thermoset  
Actuator Material .....Nickel plated copper alloy  
Terminals .....Copper with gold flash  
Terminal Seal .....Molded in

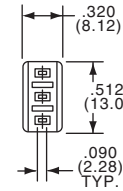
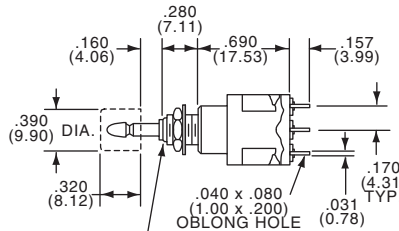
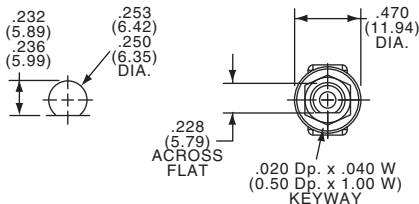
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4°F to +176°F (-20°C to +80°C)  
Storage Temperature .....-40°F to +176°F (-40°C to +80°C)  
Note: Hardware included with switches

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....6 A @ 125 VAC, 3 A @ 250 VAC  
Initial Contact Resistance .....10 Milliohms max.  
Contact Timing .....Break-before-make  
Insulation Resistance .....1,000 Megohms min.  
Dielectric Strength .....1,500 Volts RMS @ sea level  
Actuation Force .....1.3 to 2.7 lbs.  
Actuator Travel ......140" (3.56)  
Life Expectancy .....Up to 50,000 Actuations

**Notice: O-ring on shoulder and inside moveable shaft provides splashproof seal. Meets IP65**



SPDT

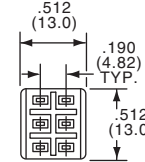
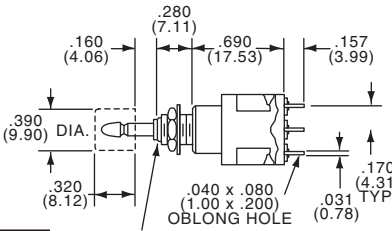
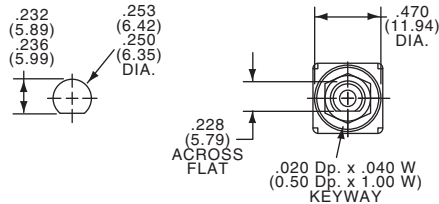


MPE106D

Part Number		Act. Code		
Tyco Electronics	Alcoswitch	Type	P. M6	Action
4-1437567-2	MPE106D	SPDT	23	Push on/Push off
4-1437567-3	MPE106F	SPDT	19	Momentary

1/4-40 UNS-2A

Cap not supplied, order separately (See Cap Model C22 and C23 on page D32).



DPDT

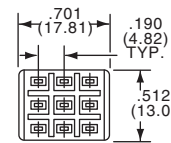
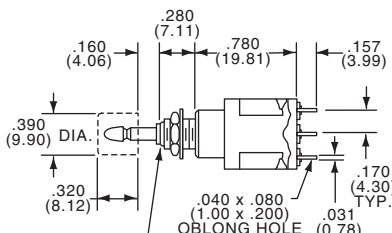
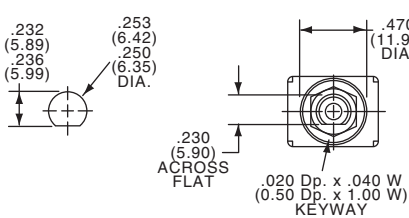


MPE206N

Part Number		Act. Code		
Tyco Electronics	Alcoswitch	Type	P. M6	Action
4-1437567-4	MPE206N	DPDT	24	Push on/Push off
4-1437567-5	MPE206R	DPDT	20	Momentary

1/4-40 UNS-2A

Cap not supplied, order separately (See Cap Model C22 and C23 on page D32).



3PDT

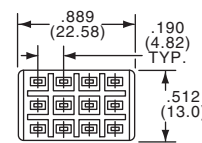
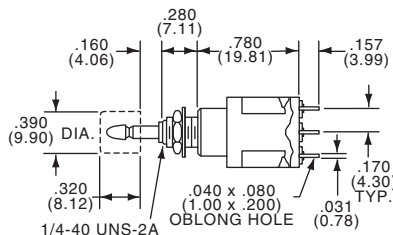
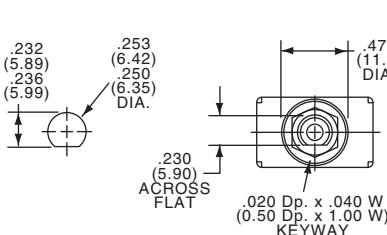


MPE306F

Part Number		Act. Code		
Tyco Electronics	Alcoswitch	Type	P. M6	Action
—	MPE306D	3PDT	25	Push on/Push off
4-1437567-6	MPE306F	3PDT	21	Momentary

1/4-40 UNS-2A

Cap not supplied, order separately (See Cap Model C22 and C23 on page D32).



4PDT



MPE406N

Part Number		Act. Code		
Tyco Electronics	Alcoswitch	Type	P. M6	Action
4-1437567-7	MPE406N	4PDT	26	Push on/Push off
4-1437567-8	MPE406R	4PDT	22	Momentary

1/4-40 UNS-2A

Cap not supplied, order separately (See Cap Model C22 and C23 on page D32).

**Pushbutton Switches, 15/32 Bushing, Mustang, Wire Lug or PC Tails, 6 Amp**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver clad copper with gold flash  
 Case Material .....Thermoset  
 Terminals .....Copper with gold flash finish  
 Terminal Seal .....Molded in

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....6 A @ 125 VAC, 3 A @ 250 VAC  
 Initial Contact Resistance .....10 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....1,500 Volts RMS @ sea level  
 Actuation Force .....1.3 to 2.7 lbs.  
 Actuator Travel ......138" (3.51)  
 Life Expectancy .....Up to 50,000 Actuations  
 Note: Hardware included with switches

**ENVIRONMENTAL SPECIFICATIONS:**

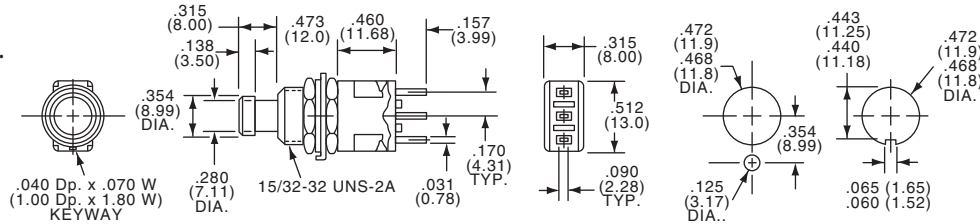
Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-40°F to +176°F (-40°C to +80°C)  
 Solder Heat Resistance .....See page M3-4

**SPDT**

Black Cap supplied.



MPG106D



Other Caps Available, order separately  
 (See Cap Model C9 on page D32.)

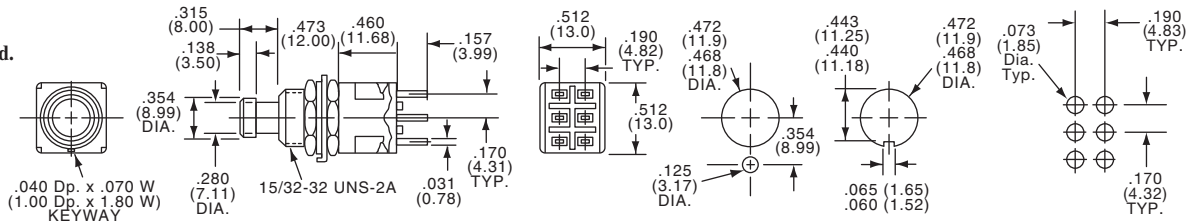
Part Number		Type	Act. Code	P. M6	Action	Terminals
Tyco Electronics	Alcoswitch					
4-1437567-9	MPG106D	SPDT	23		Push on/Push off	Wire Lug
5-1437567-0	MPG106F	SPDT	19		Momentary	Wire Lug

**DPDT**

Black Cap supplied.



MPG206NPC



Other Caps Available, order separately  
 (See Cap Model C9 on page D32.)

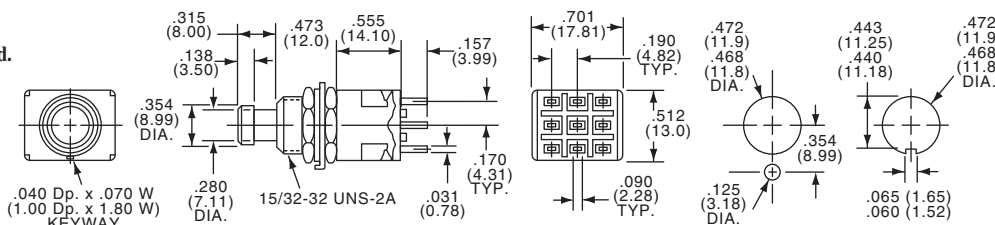
Part Number		Type	Act. Code	P. M6	Action	Terminals
Tyco Electronics	Alcoswitch					
5-1437567-1	MPG206N	DPDT	24		Push on/Push off	Wire Lug
5-1437567-3	MPG206R	DPDT	20		Momentary	Wire Lug
5-1437567-2	MPG206NPC	DPDT	24		Push on/Push off	PC
5-1437567-4	MPG206RPC	DPDT	20		Momentary	PC

**3PDT**

Black Cap supplied.



MPG306D



Other Caps Available, order separately  
 (See Cap Model C9 on page D32.)

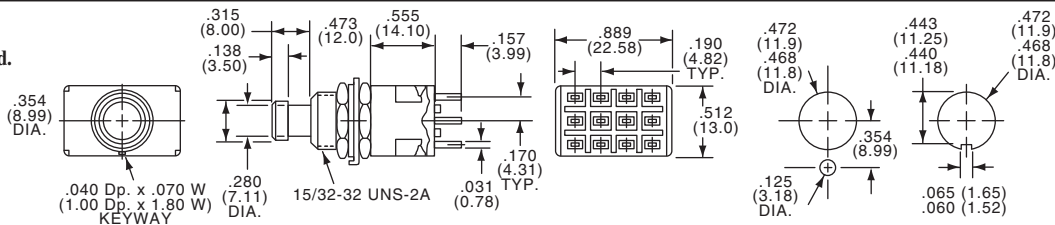
Part Number		Type	Act. Code	P. M6	Action	Terminals
Tyco Electronics	Alcoswitch					
5-1437567-5	MPG306D	3PDT	25		Push on/Push off	Wire Lug
5-1437567-6	MPG306F	3PDT	21		Momentary	Wire Lug

**4PDT**

Black Cap supplied.



MPG406N



Other Caps Available, order separately  
 (See Cap Model C9 on page D32.)

Part Number		Type	Act. Code	P. M6	Action	Terminals
Tyco Electronics	Alcoswitch					
5-1437567-7	MPG406N	4PDT	25		Push on/Push off	Wire Lug
5-1437567-8	MPG406R	4PDT	21		Momentary	Wire Lug

**Pushbutton Switches, Snap Action, Wire Lug, 3 Amp**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver  
 Case Material .....Epoxy resin  
 Actuator Material .....Copper alloy, nickel plate  
 Terminals .....Silver  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....+5°F to +158°F (-15°C to +70°C)  
 Storage Temperature.....+5°F to +158°F (-15°C to +70°C)  
 Solder Heat Resistance .....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....3 A @ 115 VAC or 28 VDC  
 Initial Contact Resistance .....10 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms @ 500 VDC min.  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Actuation Force .....Single pole - 7 to 14 oz. (200 to 400 grams)  
 .....Double pole - 14 to 25 oz. (400 to 700 grams)  
 Actuator Travel.....Momentary .040" (1.02)  
 .....Push on/off .098" (2.49)  
 Life Expectancy .....Up to 50,000 Actuations

Part Number		Type	Action	Dim."A"	Terminals
Tyco Electronics	Alcoswitch				
5-1437567-9	MPS103D	SPDT	Push-on/Off	.100	Wire Lug
6-1437567-3	MPS103F	SPDT	Momentary	.040	Wire Lug
6-1437567-8	MPS203N	DPDT	Push-on/Off	.100	Wire Lug
7-1437567-2	MPS203R	DPDT	Momentary	.040	Wire Lug

**Note: Hardware included with switches  
 Caps not supplied, order separately. (See Cap Model C22 and C23 on Page D32.)**

Part Number		Type	Action	Dim."A"	Terminals
Tyco Electronics	Alcoswitch				
8-1437567-0	MPSN103F	SPDT	Momentary	.040	Wire Lug

**Note: LEDs are red and green.**

**LED Specifications:**  
 Max. Vfwd. @ 20 mA dc : 3 Vdc.  
 Max. V rev. : 5 Vdc.  
 Max. I fws. : 30 mA dc.  
 Recommended series resistance: R = 120 ohm @ 5 Vdc.  
 (add 50 ohms/volt above 5 volts)

Part Number		Type	Action	Terminals
Tyco Electronics	Alcoswitch			
8-1437567-1	MPSR103F	SPDT	Momentary	Wire Lug
8-1437567-2	MPSR203R	DPDT	Momentary	Wire Lug

Model	Description	Color
2-1437628-2	SDR0 Plastic beveled frame	Black
5-1437627-5	C330 Square button for MPSR	Black
5-1437627-6	C332 Square button "	Red
5-1437627-8	C339 Square button "	White

**C-33(\*) Button not supplied, Plastic (black) beveled edged frame Model SDR0, not supplied.  
 ORDER SEPARATELY**



**Pushbutton Switches, Snap Action, PC or Wire Wrap Tails, 3 Amp**

SPDT/DPDT

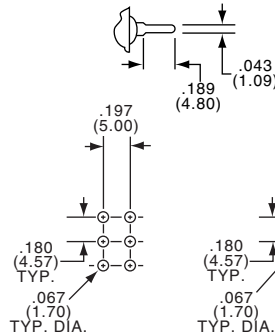
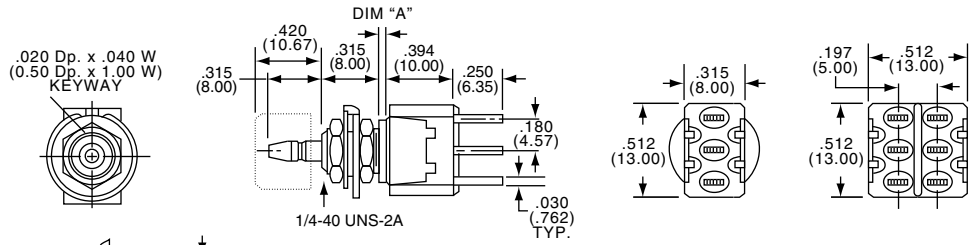
SEE PAGE D25 FOR PRODUCT SPECIFICATIONS



MPS103FPC



MPS203RPC



Part Number					
Tyco Electronics	Alcoswitch	Type	Action	Dim."A"	Terminals
6-1437567-0	MPS103DPC	SPDT	Push-on/Off	.100	PC Terminals
6-1437567-4	MPS103FPC	SPDT	Momentary	.040	PC Terminals
6-1437567-9	MPS203NPC	DPDT	Push-on/Off	.100	PC Terminals
7-1437567-3	MPS203RPC	DPDT	Momentary	.040	PC Terminals

Caps not supplied, order separately. (See Cap Model C22 and C23 on Page D32.)

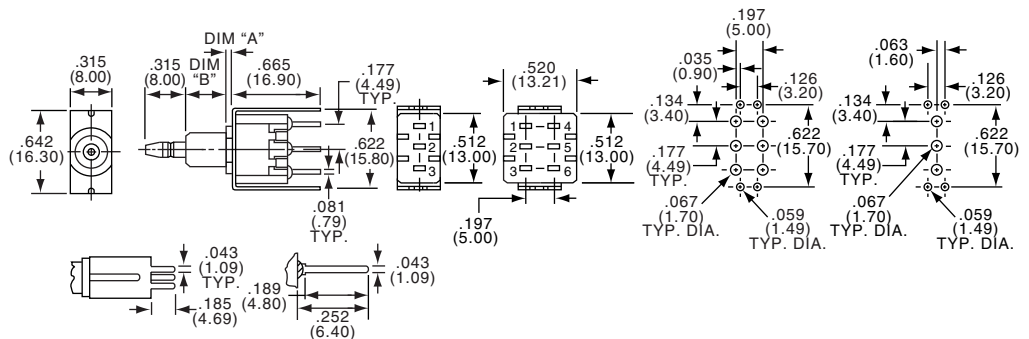
SPDT/DPDT



MPS103FPCV



MPS203RPCV



Part Number						
Tyco Electronics	Alcoswitch	Type	Action	Dim."A"	Dim."B"	Terminals
6-1437567-1	MPS103DPCV	SPDT	Push-on/Off	.080(2.03)	.315(8.00)	PC w/support
6-1437567-5	MPS103FPCV	SPDT	Momentary	.040(1.01)	.295(7.49)	PC w/support
7-1437567-4	MPS203RPCV	DPDT	Momentary	.040(1.01)	.295(7.49)	PC w/support

Caps not supplied, order separately. (See Cap Model C22 and C23 on Page D32.)

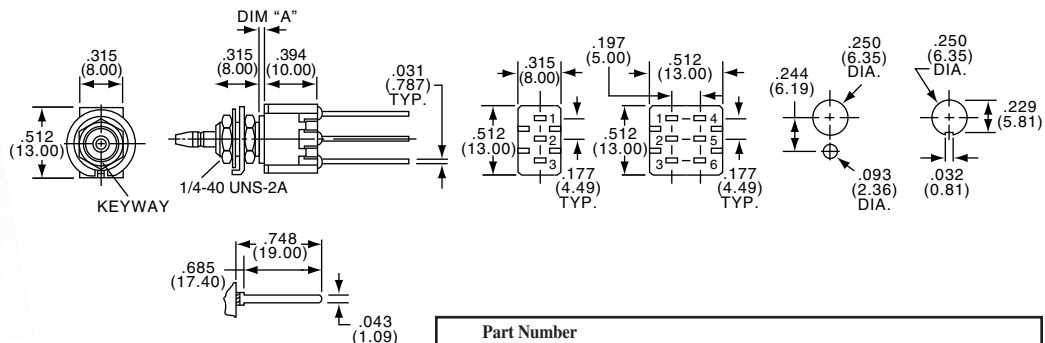
SPDT/DPDT



MPS103FWW



MPS203RWW



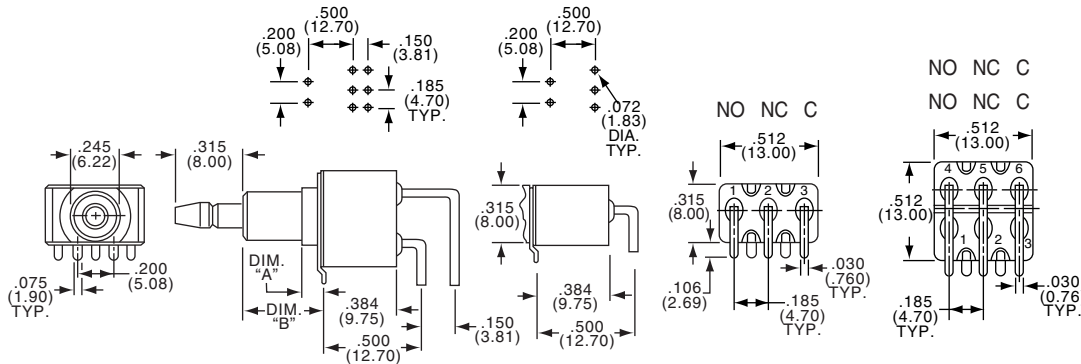
Part Number					
Tyco Electronics	Alcoswitch	Type	Action	Dim."A"	Terminals
6-1437567-7	MPS103FWW	SPDT	Momentary	.040(1.01)	Extended PC
-	MPS203NWW	DPDT	Push-on/Off	.100(2.54)	Extended PC
7-1437567-6	MPS203RWW	DPDT	Momentary	.040(1.01)	Extended PC

Caps not supplied, order separately. (See Cap Model C22 and C23 on Page D32.)

D  
MPS Series

**Pushbutton Switches, Snap Action, Right Angle, 3 Amp**

SEE PAGE D25 FOR PRODUCT SPECIFICATIONS



SPDT/DPDT



MPS103DRA



MPS203NRA

Part Number						
Tyco Electronics	Alcoswitch	Type	Action	Dim."A"	Dim."B"	Terminals
6-1437567-2	MPS103DRA	SPDT	Push-on/Off	.100(2.54)	.423(10.7)	Right Angle PC
6-1437567-6	MPS103FRA	SPDT	Momentary	.060(1.52)	.364(9.24)	Right Angle PC
7-1437567-1	MPS203NRA	DPDT	Push-on/Off	.100(2.54)	.423(10.7)	Right Angle PC
7-1437567-5	MPS203RRA	DPDT	Momentary	.060(1.52)	.364(9.24)	Right Angle PC

Caps not supplied, order separately.  
(See Cap Model C22 and C23 on Page D32.)

MSP3/MSPS

**Pushbutton Switches, 2.5mm Travel, Panel Mount**

**MATERIAL SPECIFICATIONS:**

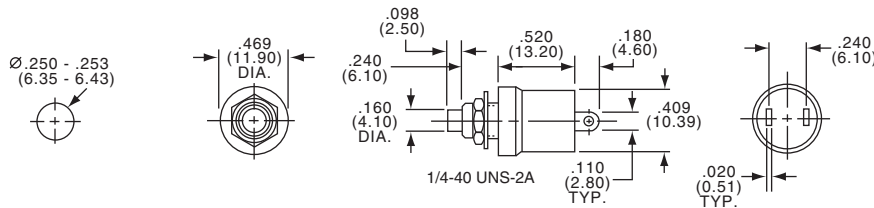
Contacts .....Silver plate over copper alloy  
Case Material .....Thermoplastic  
Actuator Material .....Thermoplastic  
Terminals .....Silver plate

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....MSP103 - 3 Amps @ 125 VAC  
(with over travel) .059" (1.5mm)  
MSPS103 - 0.5 Amps @ 125 VAC  
(Butt contact)  
Initial Contact Resistance .....100 Milliohms  
Contact Timing .....Break-before-make  
Insulation Resistance .....1,000 Megohms min.  
Dielectric Strength .....1,000 Volts RMS @ sea level  
Life Expectancy .....Up to 10,000 Cycles  
Travel .....2.5 mm

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
Storage Temperature.....+5°F to +153°F (-15°C to +75°C)  
Solder Heat Resistance .....See page M3-4  
Note: Hardware included with switches



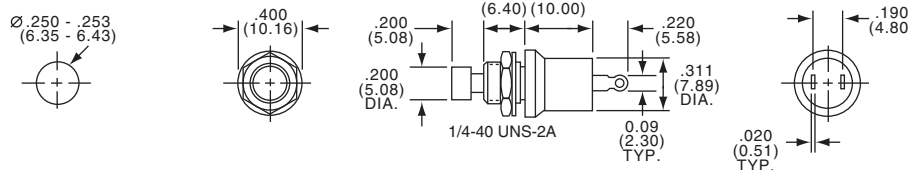
SPST



MSP103B

3 AMPS

Part Number						
Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	Momentary Action	Bushing Length	Actuator Color
8-1437567-3	MSP103B	SPST	14	Normally Closed	.236	Black
8-1437567-4	MSP103C	SPST	13	Normally Open	.236	Red
8-1437567-5	MSP103C0	SPST	13	Normally Open	.236	Black
8-1437567-6	MSP103C2	SPST	13	Normally Open	.374	Red



MSPS103B



0.5 AMPS

Part Number						
Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	Momentary Action	Bushing Length	Actuator Color
1437568-5	MSPS103B	SPST	14	Normally Closed	.245	Black
1437568-6	MSPS103C2	SPST	13	Normally Open	.245	Red
1437568-7	MSPS103C0	SPST	13	Normally Open	.245	Black



**Pushbutton Switches, Front or Rear Entry Mount, 15/32 Bushing**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver plate  
 Case Material .....Thermoset  
 Actuator Material .....Thermoplastic  
 Terminals .....Silver plate  
 Terminal Seal .....Epoxy

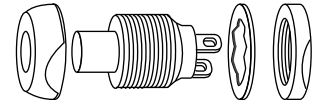
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.5 A @ 125 VAC  
 Initial Contact Resistance .....100 Milliohms  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Actuator Travel......098" (2.49)  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-4F to +176°F (-20°C to +80°C)

Application Note: Illustration shows versatile front or rear entry usage, with hardware supplied.



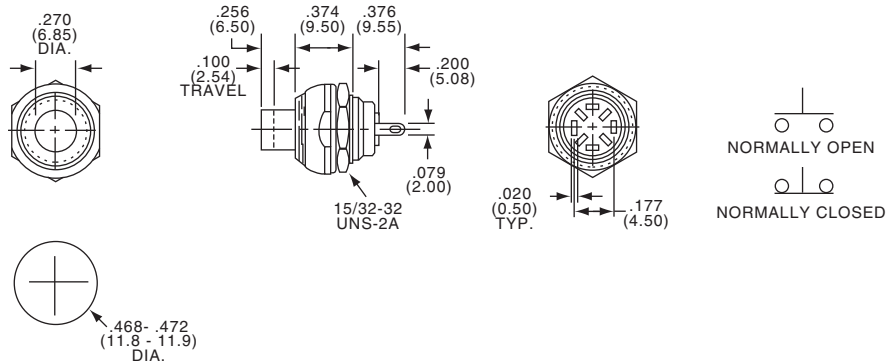
**D**

**MSPF Series**

**SPST**



MSPF101B

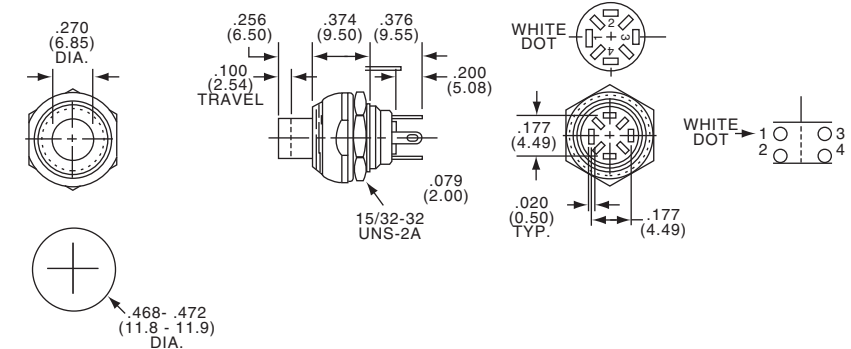


Part Number				
Tyco Electronics	Alcoswitch	Type	Action	Actuator Color
8-1437567-8	MSPF101B	SPST	Normally Closed	Black
9-1437567-3	MSPF101C	SPST	Normally Open	Red

**2 CIRCUIT**



MSPF101BC



Part Number				
Tyco Electronics	Alcoswitch	Type	Action	Actuator Color
8-1437567-9	MSPF101BC0	2 Circuit	Normally open-normally closed	Black
9-1437567-0	MSPF101BC2	2 Circuit	Normally open-normally closed	Red
9-1437567-1	MSPF101BC6	2 Circuit	Normally open-normally closed	Blue
9-1437567-2	MSPF101BC9	2 Circuit	Normally open-normally closed	White

**Pushbutton Switches, Magnetic Reed, Long Life, Hermetically Sealed**

**MATERIAL SPECIFICATIONS:**

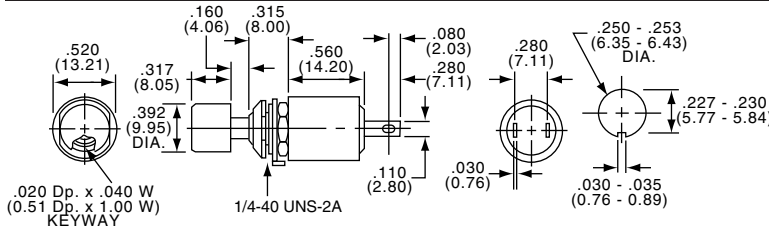
Contacts .....Gold  
 Case Material .....Steel  
 Actuator Material .....Polyamide  
 Terminals/Fixed Contacts.....Wire Lug  
 Pin useable for PC applications

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....1.0 VA optimum (100 mA max., 100 VDC max.)  
 Initial Contact Resistance .....100 Milliohms max.  
 Actuation Force .....Tactile "keyboard feel" 4 to 7 oz.  
 "breakaway" reducing immediately to 1.5 oz.  
 "follow-through"  
 Actuator Travel .....0.078" nominal  
 Life Expectancy.....Up to 5,000,000 Cycles @ .1 VA; 50,000 cycles @ 5VA  
 Solder Heat Resistance .....See page M3-4  
 Note: Hardware included with switches

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....+14°F to +176°F (-10°C to +80°C)  
 Storage Temperature.....+14°F to +176°F (-10°C to +80°C)

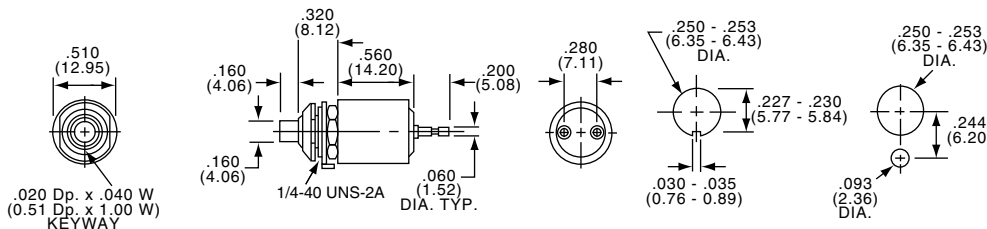


N.C. OR N.O.  
SOFT DETENT



Part Number						
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Action	Terminals
9-1437567-4	MSPM101B0	SPST	14		Normally Closed	Pin
1437568-1	MSPM101C2	SPST	13		Normally Open	Pin
9-1437567-5	MSPM101B1	SPST	14		Normally Closed	Lug
9-1437567-9	MSPM101C1	SPST	13		Normally Open	Lug

Cap Model C22 supplied with unit.



N.C. OR N.O.  
AUDIBLE DETENT



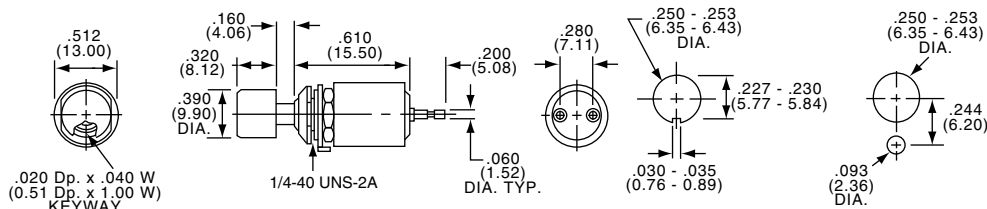
Part Number						
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Action	Terminals
9-1437567-7	MSPM101BS	SPST	14		Normally Closed	Pin
1437568-3	MSPM101CS	SPST	13		Normally Open	Pin
9-1437567-8	MSPM101BS1	SPST	14		Normally Closed	Lug
1437568-4	MSPM101CS1	SPST	13		Normally Open	Lug

**Pushbutton Switches, Push-Pull, Magnetic Reed, Long Life, Hermetically Sealed**

**SPECIFICATIONS (Same as above except):**

Travel ..... .125" (3.18) nominal

Actuation Force .....Tactile feel 5 to 8 oz. "breakaway" with magnetically accelerated "follow-through"



N.C. OR N.O.



Part Number						
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M6	Push Pull	Terminals
9-1437567-6	MSPM101BP	SPST	18		Open Closed	Pin
1437568-2	MSPM101CP	SPST	17		Closed Open	Pin

Cap Model C22 supplied with unit.  
 Model C23 available, order separately. (See Page D32.)

**Push Switch, JLS Series**

**MATERIAL SPECIFICATIONS:**

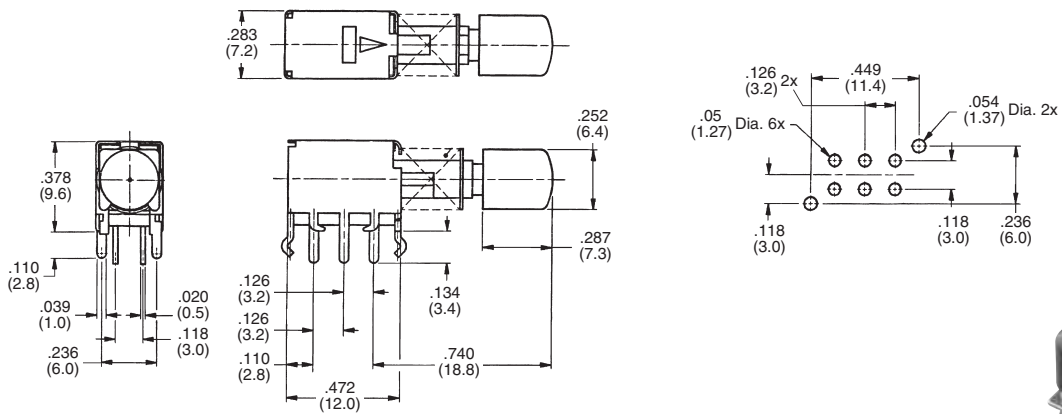
Contacts .....Silver clad copper  
 Frame .....Steel  
 Actuator Material .....Acetal  
 Terminals/Fixed Contacts.....Brass, silver plate  
 Insulator .....Phenol

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....1 Amp @25 VDC  
 Initial Contact Resistance .....100 Milliohms  
 Actuation Force .....300±150 gms  
 Actuator Travel .....0.091 (2.3)  
 Life Expectancy.....Up to 10,000 cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....+14°F to +140°F (-10°C to +60°C)



Part Number			
Tyco Electronics	Alcoswitch	Act. Code P. M6	Actuator Type
1437566-8	JLS91439FKBC	N	Black Cap
1437566-7	JLS91439FK	N	Gray Cap
1437566-9	JLS91439FWC	N	White Cap

**D**  
MSPM, JLS Series

**Pushbutton Switches, Splashproof Boot Seals**

A wide selection of stock boot seals for pushbuttons are available in a variety of styles and thread sizes. ALCOSWITCH seals replace standard mounting hardware to provide environmental seal. Fabricated of Neoprene in black and optional red or gray. Custom colors and thread sizes are also available on special order.

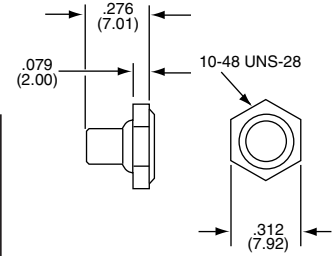


BP10480

**10-48 PUSHBUTTON BOOT SEALS**

Splashproof seal designed for "TINY" pushbutton switches having a 10-48 bushing and .14" long button actuators. The hex nut is molded-in to the Neoprene seal. No O-Ring is required. Custom colors are available on special order.

Part Number					
Tyco Electronics	Alcoswitch	Mount Color	Boot Color	Thread Size	Use with Switch Types
1-1437626-4	BP10480	Black	Black	10-48	TP Series
1-1437626-5	BP10482	Red	Red	10-48	TP Series
1-1437626-6	BP10488	Gray	Gray	10-48	TP Series



BPA14400

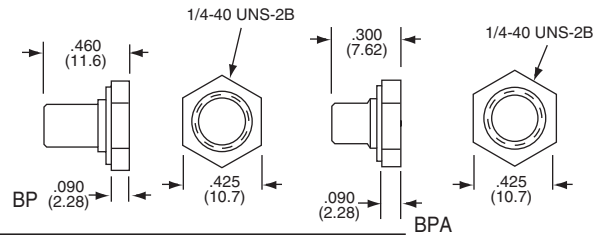


BP14400

**1/4-40 PUSHBUTTON BOOT SEALS**

Splashproof seals for miniature pushbuttons having a 1/4-40 bushing. The two models allow use with buttons that extend up to .17" (BPA) or up to .33" (BP). The hex nut is molded-in and no O-Ring is required.

Part Number					
Tyco Electronics	Alcoswitch	Mount Color	Boot Color	Thread Size	Use with Switch Types
1-1437626-7	BP14400	Black	Black	1/4-40	MSPM, MPA3, MPS and TP Series
1-1437626-8	BP14402	Red	Red	1/4-40	MSPM, MPA3, MPS and TP Series
1-1437626-9	BP14408	Gray	Gray	1/4-40	MSPM, MPA3, MPS and TP Series
2-1437626-7	BPA14400	Black	Black	1/4-40	MSPMBS, MSPMCS, MSP3, MPA3, TP Series
2-1437626-8	BPA14402	Red	Red	1/4-40	MSPMBS, MSPMCS, MSP3, MPA3, TP Series
2-1437626-9	BPA14408	Gray	Gray	1/4-40	MSPMBS, MSPMCS, MSP3, MPA3, TP Series



BP20100

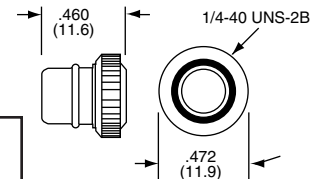


BP1900

**1/4-40 PUSHBUTTON BOOT SEALS**

Splashproof seals having 1/4-40 blind nuts integrally mounted to the black Neoprene seal. Supplied with a captive O-Ring to complete the panel seal. Used with actuators up to .37" long. Choice of two-tone with nickel finish knurled ring or all black.

Part Number					
Tyco Electronics	Alcoswitch	Mount Color	Boot Color	Thread Size	Use with Switch Types
2-1437626-3	BP1900	Nickel	Black	1/4-40	MSPM, MSP3, MPA3 and TP Series
2-1437626-4	BP2010	Black	Black	1/4-40	MSPM, MSP3, MPA3 and TP Series

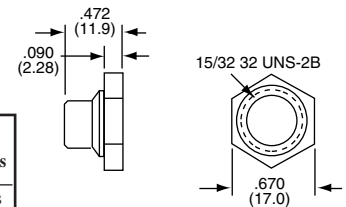


BP15320

**15/32-32 PUSHBUTTON BOOT SEALS**

Splashproof seals incorporating a molded-in hex nut for water tight and dust tight protection. Replaces standard hardware usually supplied. Recommended for large size pushbutton switches with actuators extending up to .31" long.

Part Number					
Tyco Electronics	Alcoswitch	Mount Color	Boot Color	Thread Size	Use with Switch Types
2-1437626-0	BP15320	Black	Black	15/32-32	MSPF and MPG Series
2-1437626-1	BP15322	Red	Red	15/32-32	MSPF and MPG Series
2-1437626-2	BP15328	Gray	Gray	15/32-32	MSPF and MPG Series



BP5900

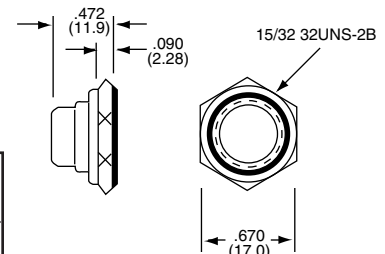


BP5890

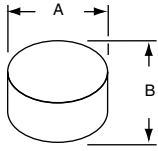
**15/32-32 PUSHBUTTON BOOT SEALS**

Splashproof seals having 15/32-32 hex shape mounts integrally bonded onto the black Neoprene seal. Supplied with a captive O-Ring for use against the panel. Readily accepts actuators up to .38" in length. Available in two tone with nickel finish hex-mount, or all black.

Part Number					
Tyco Electronics	Alcoswitch	Mount Color	Boot Color	Thread Size	Use with Switch Types
2-1437626-5	BP5890	Nickel	Black	15/32-32	MSPF and MPG Series
2-1437626-6	BP5900	Black	Black	15/32-32	MSPF and MPG Series



**Pushbutton Switches, Accessories**



**CAPS**



C5



C22

Model	ID.	Description	Use Guard	Color	"A" Diameter	B Height
C5(*)	Snapfit	Small plastic cap for MPA3 Series	-	(0), (2), (5), (9)	.195	.120
C8(*)	Snapfit	Large plastic cap for MPA3 Series	-	(0), (2), (5), (9)	.310	.160
C9(*)	Snapfit	Spare color cap for MPG Series	-	(0), (2), (6), (9)	.354	.138
C22(*)	Snapfit	MPS/MSPM/MPE/MPA6	G12	(0), (2), (3), (4), (5), (6), (9)	.394	.315
C23(*)	Snapfit	MPS/MSPM/MPE/MPA6	G13	(0), (2), (3), (4), (5), (6), (9)	.590	.394
C33(*)	Snapfit	Square button for MSPR	-	(0), (2), (6), (9)	.378SQ.	.201

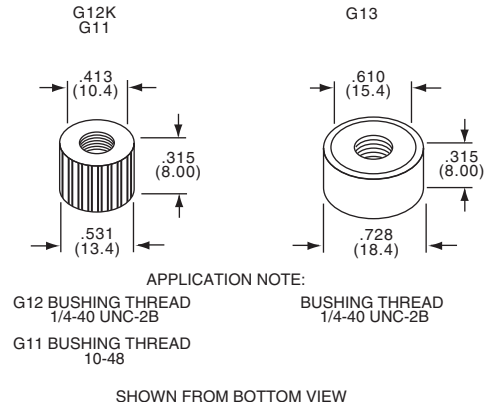
(\*) Specify color by adding suffix number: (0) Black, (2) Red, (3) Orange, (4) Yellow, (5) Green, (6) Blue, (9) White.

D

Accessories

Part Number		Type	Color	Finish	Can be Used with Cap
Tyco Electronics	Alcoswitch				
7-1437627-6	G11A	10-48	Clear aluminum	Plain	C22 —
7-1437627-7	G11B	10-48	Black aluminum	Plain	C22 —
7-1437627-8	G11C	10-48	Chromed Brass	Plain	C22 —
8-1437627-1	G12A	1/4-40	Clear aluminum	Plain	C12 C22
8-1437627-2	G12B	1/4-40	Black aluminum	Plain	C12 C22
8-1437627-3	G12C	1/4-40	Chromed brass	Plain	C12 C22
8-1437627-4	G12KA	1/4-40	Clear aluminum	Knurled	C12 C22
8-1437627-5	G12KB	1/4-40	Black aluminum	Knurled	C12 C22
8-1437627-6	G12KC	1/4-40	Chromed brass	Knurled	C12 C22
8-1437627-7	G13A	1/4-40	Clear aluminum	Plain	C13 C23
8-1437627-8	G13B	1/4-40	Black aluminum	Plain	C13 C23
8-1437627-9	G13C	1/4-40	Chromed brass	Plain	C13 C23
9-1437627-0	G13KA	1/4-40	Clear aluminum	Knurled	C13 C23
9-1437627-1	G13KB	1/4-40	Black aluminum	Knurled	C13 C23
9-1437627-2	G13KC	1/4-40	Chromed brass	Knurled	C13 C23
9-1437627-3	G15*	15/32"	Chromed brass	Plain	C13 C23

\*G15 Model used on the MSPF Series



**GUARDS**

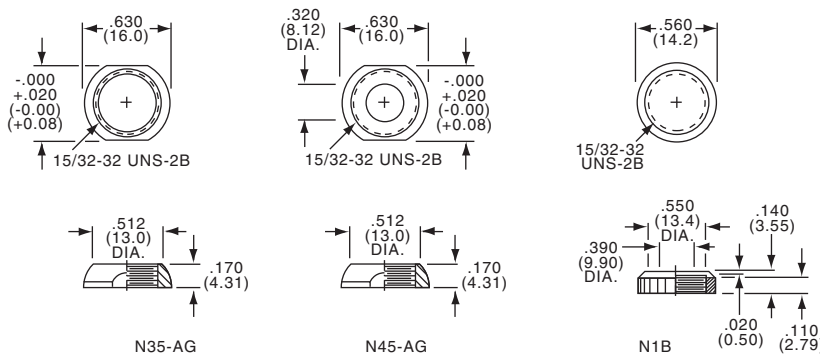


G12K



G13

**DECORATIVE HARDWARE**



N35-AG



N1B



N45-AG

Part Number		Type	Description
Tyco Electronics	Alcoswitch		
1-1437628-0	N1B	15/32"	"Perfect Fit" knurled nut
1-1437628-4	N35-AG	15/32"	Decorative nut (supplied on switch)
1-1437628-7	N45-AG	15/32"	"Perfect Fit" decorative nut

D32

**Pushbutton Switches, Panel Seal**

**FEATURES**

The BP Series offers a unique means of sealing pushbutton switches, using a standard 1/4-40 threading bushing, to almost any thickness panel. Simply install the BP adaptor into a 15/32" dia. or 1/2" dia. panel opening and secure with its hex nut. The switch is then threaded into the previously mounted adaptor and tightened into place. A complete and decorative panel seal is the result of the simple process.

**MATERIALS**

The flexible panel seal is custom molded of Neoprene rubber for long life, flexibility and chemical resistance. The threaded plastic adaptor is molded of ABS thermoplastic, is impact resistant and designed for ease of mounting.

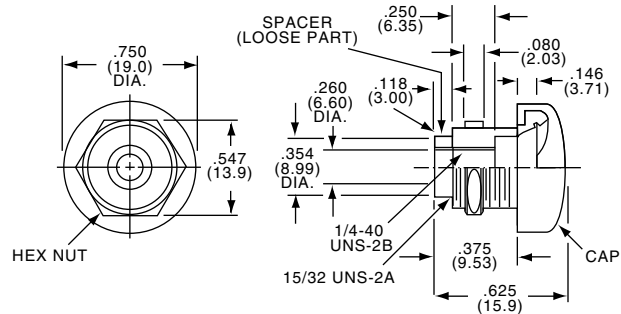
**BPM**

**For use with Miniature Pushbutton**

The BPM seal adaptor accommodates all AUGAT/ALCOSWITCH MPA Series of pushbutton switches utilizing the 1/4-40 threaded bushing.



BPM15320



Part Number		
Tyco Electronics	Alcoswitch	Color* of Seal
3-1437626-0	BPM15320	Black
3-1437626-1	BPM15322	Red
3-1437626-2	BPM15328	Gray

(\* Custom seal colors are available upon special request.

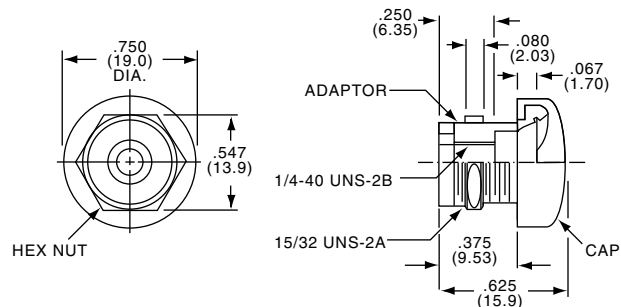
**BPT**

**For use with Tiny Series TPF Pushbutton**

The BPT seal adaptor accommodates all AUGAT/ALCOSWITCH TPF Series Tiny Pushbutton switches utilizing the 1/4-40 threading bushing.



BPT15328



Part Number		
Tyco Electronics	Alcoswitch	Color* of Seal
3-1437626-3	BPT15320	Black
3-1437626-4	BPT15322	Red
3-1437626-5	BPT15328	Grey

(\* Custom seal colors are available upon special request.

**Engineering Notes**



**D**  
Engineering Notes





*TSP Series - Page D3*



*TP Series - Page D6*



*TP-ES Series - Page D13*



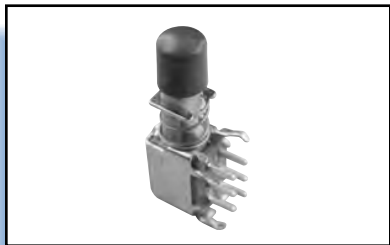
*APA Series - Page D16*



*MPA Series - Page D22*



*MSPM Series - Page D29*



*JLS Series - Page D29*



*BP Series - Page D31*

# PUSHBUTTON

**D**

Pushbutton Switches

Pushbutton Switches Part Number Index

Table listing various pushbutton switch part numbers and their corresponding designations across multiple columns.

D

Pushbutton Switches

**Pushbutton Switches, Tiny, Process Sealed**

**FEATURES:**

- High temperature plastics — liquid crystal polymer (LCP)
- Specifically designed for thru-hole and surface mount
- Tin-lead plated terminals
- Washable process sealed construction — internal actuator O-ring

**MATERIAL SPECIFICATIONS:**

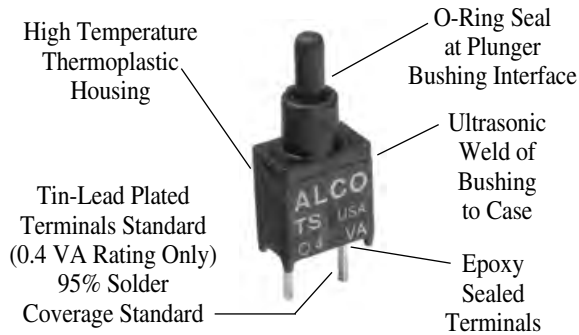
Contacts .....Copper Alloy with gold over nickel plating-  
 Case & Bushing .....Thermoplastic (LCP)  
 Actuator .....Glass reinforced nylon  
 Nickel Plating Inside .....Tin plating outside  
 Support Bracket .....Tin plated steel  
 Terminals .....Copper alloy with gold over nickel plating

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature..... -22°F to +185°F (-30°C to +85°C)  
 Storage Temperature.....-67°F to +185°F (-55°C to +85°C)

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VAC/DC  
 Initial Contact Resistance .....20 Milliohms max.  
 Insulation Resistance .....1,000 Megohms @ 500 VDC min.  
 Terminal Seal .....Epoxy  
 Actuator Travel.....0.035" (0,89)  
 Actuator Seal .....O-Ring  
 Dielectric Strength .....C - 1000 VDC RMS @ sea level  
 F - 500 VDC RMS @ sea level  
 Life Expectancy .....C - Up to 80,000 Cycles  
 F - Up to 60,000 Cycles

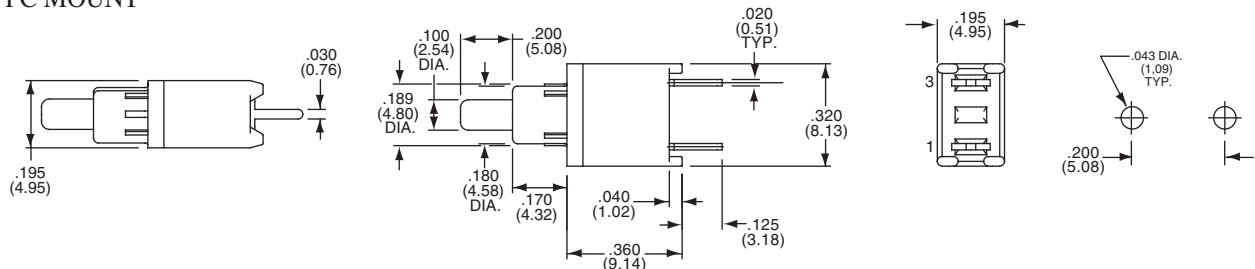


FUNCTION CHART				
The following functions available in single pole.				
<input type="checkbox"/> C	Function	2 Positions	Off	(On)
SPST		Terminals Connected	<input type="checkbox"/> 1-3	
Omit center terminal for function <input type="checkbox"/> C				
<input type="checkbox"/> F	Function	2 positions	On	(On)
SPDT		Terminal Connected	<input type="checkbox"/> 1-2	<input type="checkbox"/> 2-3
Off Indicates a mechanical position with no electrical connection. (ON) INDICATES MOMENTARY ACTION				

**PART NUMBERING MATRIX**

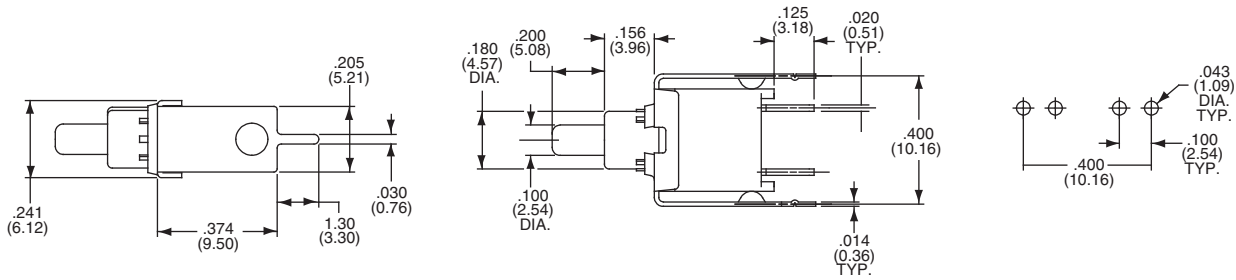
Model	Bushing (Plain)	Actuator	Poles	Rating	Function	Plating	Terminations	Colors
<input type="checkbox"/> TSP	<input type="checkbox"/> D	<input type="checkbox"/>	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/>	<input type="checkbox"/> G	<input type="checkbox"/>	<input type="checkbox"/>
		Std. .200" long F = Flush			C = Off (On) F = On (On)	G	PC = P.C. PCV = P.C. w/bracket RA = Right Angle VRA = Vertical Right Angle SPC = SurfaceMount SRA = Surface Mount R.A. SRAB = SurfaceMount R.A. Butt	0=Black 2=Red

**PC PC MOUNT**

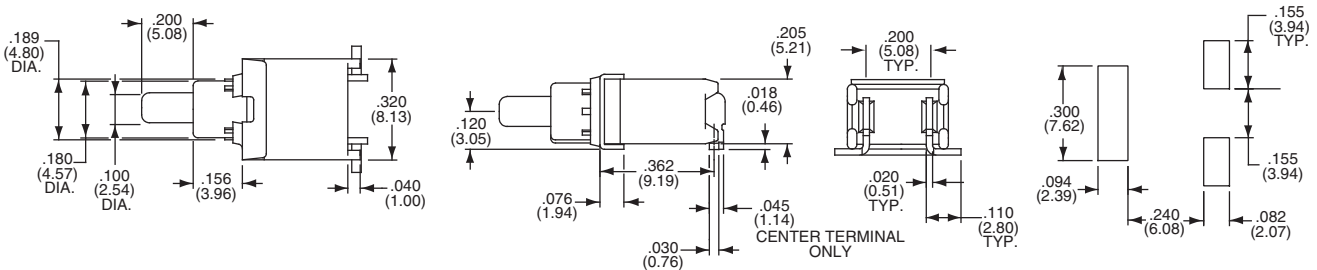


**Pushbutton Switches, Tiny, Process Sealed, Mounting Options**

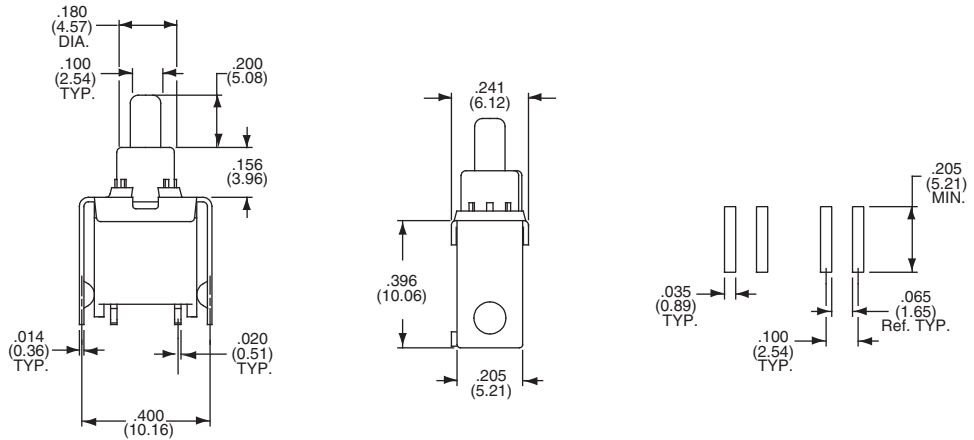
**PCV** PC WITH VERTICAL SUPPORT BRACKET



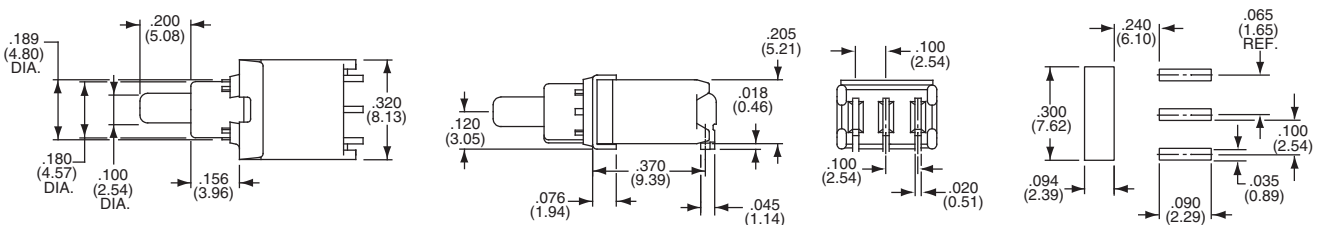
**SRA** SURFACE MOUNT RIGHT ANGLE "L" BEND



**SPC** SURFACE MOUNT WITH SUPPORT BRACKET



**SRAB** SURFACE MOUNT RIGHT ANGLE BUTT

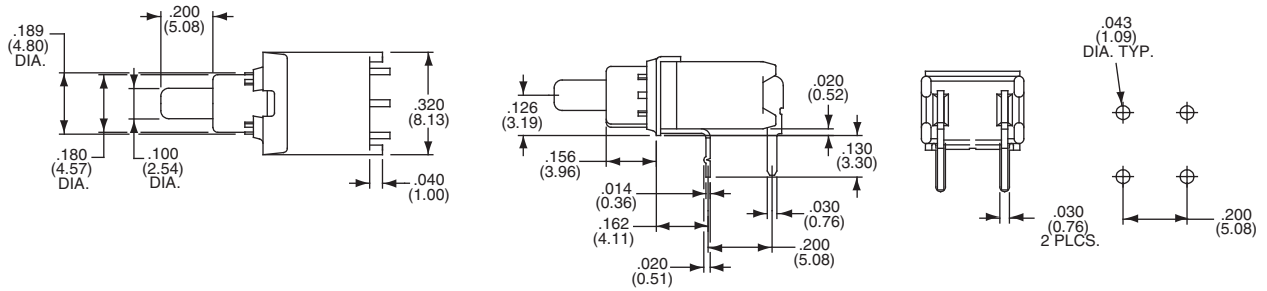


D

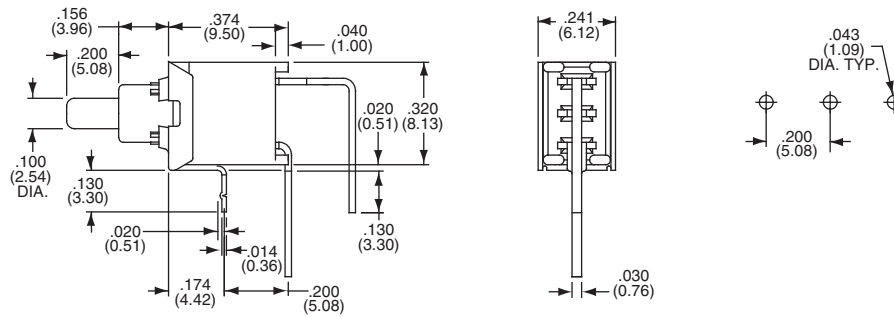
TSP Series

**Pushbutton Switches, Tiny, Process Sealed Options**

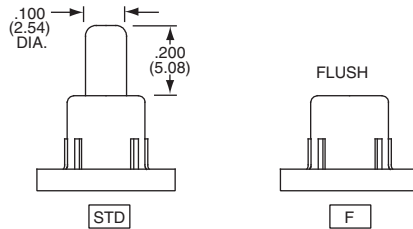
**RIGHT ANGLE RA**



**PC WITH VERTICAL SUPPORT BRACKET VRA**



**ACTUATORS**



**D**  
TSP Series

**Pushbutton Switches, Tiny, Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold - gold plate, silver - silver plate  
 Case Material .....High temperature polyester  
 Actuator Material.....Polyamide  
 Terminals/Fixed Contacts .....Tin lead plate  
 Terminal Seal.....SP epoxy, DP epoxy optional

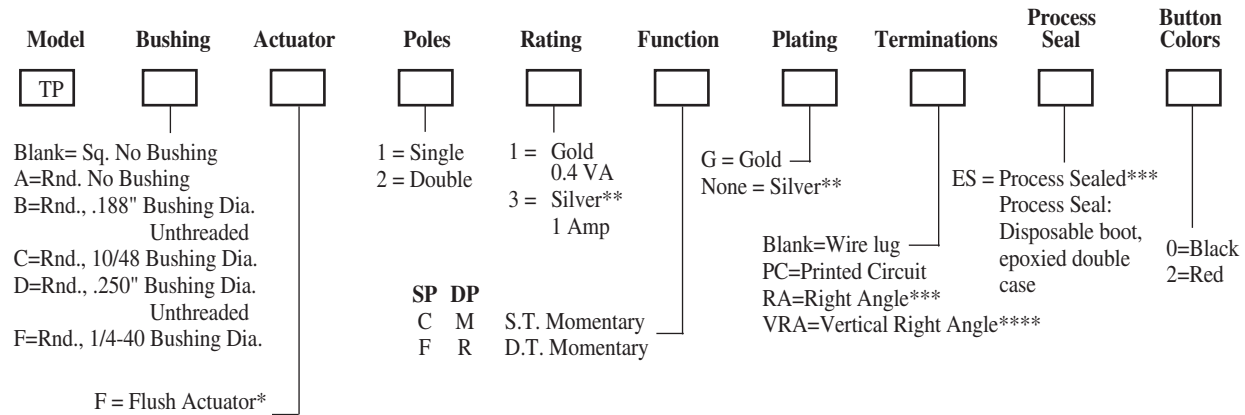
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-22°F to +149°F (-30°C to +65°C)  
 Storage Temperature .....-22°F to +149°F (-30°C to +65°C)  
 Solder Heat Resistance .....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA Max. @ 20 VDC or peak AC  
 Silver: 1A @ 125 VAC or 28 VDC resistive  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms @ 500VDC min.  
 Dielectric Strength.....1,000 Volts @ sea level  
 Actuation Force .....50 to 400 Grams  
 Plunger/Actuator Travel ......030" (.762)  
 Life Expectancy .....See below  
 Note: Hardware included with switches

**PART NUMBERING MATRIX**



- \* Available with "B" and "C" bushing only
- \*\* Silver - available only in wire lug and PC termination
- \*\*\* Right angle, ES available with "B" and "C" bushing only
- \*\*\*\* Available only in single pole

ES switches provided with disposable boot used only during cleaning operation.

**Application Note:**

For 3 pole and 4 pole, refer to pages D22 and D24 . . . "MP Series"  
 For Surface Mount termination, refer to pages D3-D5 . . . "TSP Series"

Pushbuttons	1 Pole	2 Pole
0.4 (Gold Plate)	100,000	80,000
1A (Silver Plate)	60,000	50,000

**PROCESS SEAL VERSION NOT**



TP



TPA

**PROCESS SEAL VERSION AVAILABLE**



TPB



TPC



TPD

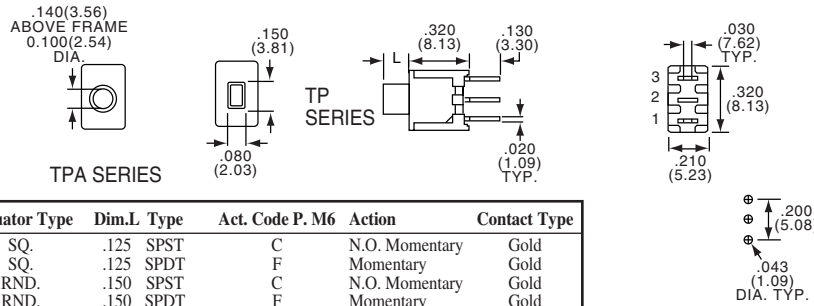


TPF

**SERIES (TP)**

**Pushbutton Switches, Tiny, Straight or Right Angle, Single or Dual Actuators**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS



SPST/SPDT



TP11CGPC0

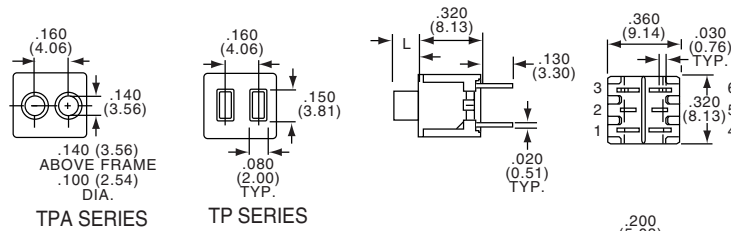


TPA11CGPC0

Model	Actuator Type	Dim.L	Type	Act. Code P. M6	Action	Contact Type
TP11CGPC(*)	SQ.	.125	SPST	C	N.O. Momentary	Gold
TP11FGPC(*)	SQ.	.125	SPDT	F	Momentary	Gold
TPA11CGPC(*)	RND.	.150	SPST	C	N.O. Momentary	Gold
TPA11FGPC(*)	RND.	.150	SPDT	F	Momentary	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

D  
TP/TPA Series



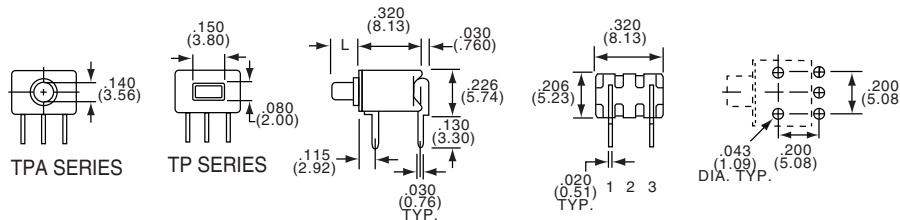
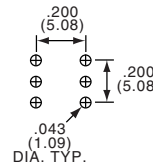
SPST/SPDT (DUAL)



TP21CCGPC0

Model	Actuator Type	Dim.L	Type	Act. Code P. M6	Action	Contact Type
TP21CCGPC(*)	SQ.	.125	2xSPST	C	N.O. Momentary	Gold
TPA21CCGPC(*)	RND.	.150	2xSPST	C	N.O. Momentary	Gold
TPA21FFGPC(*)	RND.	.150	2xSPDT	F	Momentary	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.



SPST/SPDT



TPA11CGRA



TP11CGRA

Model	Actuator Type	Dim.L	Type	Act. Code P. M6	Action	Contact Type
TP11CGRA(*)	SQ.	.125	SPST	C	N.O. Momentary	Gold
TP11FGRA(*)	SQ.	.125	SPDT	F	Momentary	Gold
TPA11CGRA(*)	RND.	.150	SPST	C	N.O. Momentary	Gold
TPA11FGRA(*)	RND.	.150	SPDT	F	Momentary	Gold

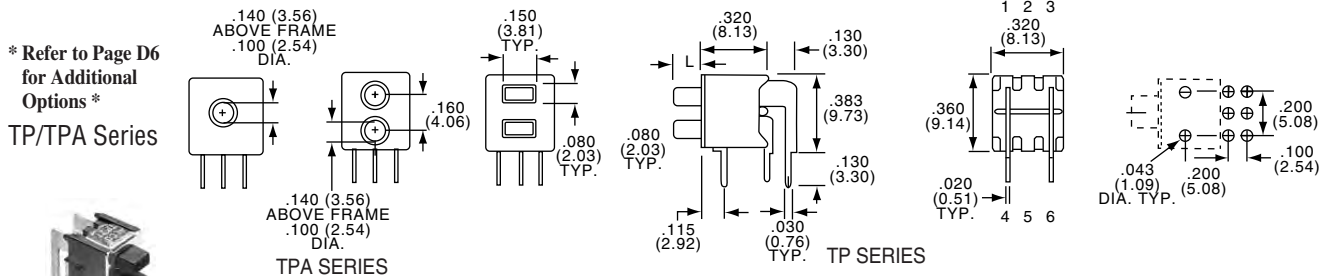
(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.





**Pushbutton Switches, Tiny, Right Angle, Single or Dual Actuators**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS



\* Refer to Page D6 for Additional Options\*  
TP/TPA Series



TP21CCGRA0

SPST/SPDT (DUAL)  
DPST

Model	Actuator Type	Dim.L	Type	Act. Code P. M6	Action	Contact Type
TP21CCGRA(*)	SQ.	.125	2xSPST	C	N.O. Momentary	Gold
TP21FFGRA(*)	SQ.	.125	2xSPDT	F	Momentary	Gold
TPA21MGRA(*)	RND.	.150	DPST	M	N.O. Momentary	Gold
TPA21CCGRA(*)	RND.	.150	2xSPST	C	N.O. Momentary	Gold
TPA21FFGRA(*)	RND.	.150	2xSPDT	F	Momentary	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" or "M" action switch.

**Pushbutton Switches, Tiny, Straight or Right Angle, Unthreaded or 10-48 Bushing**

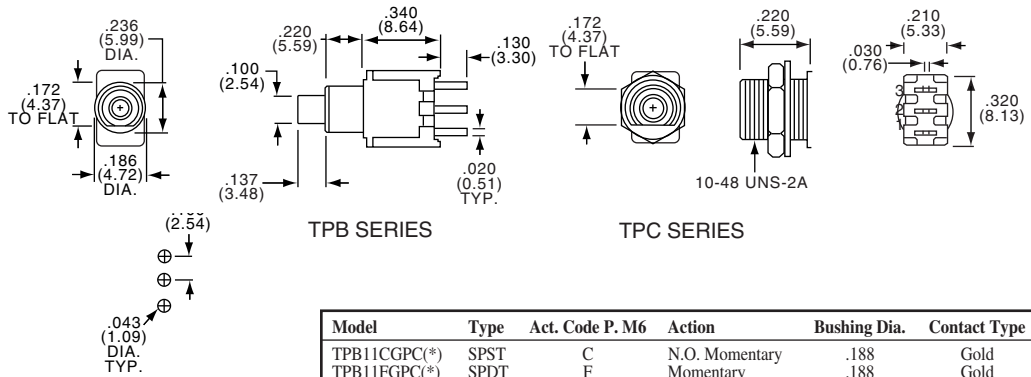
SPST/SPDT



TPB11CGPC



TPC11FGPC



Model	Type	Act. Code P. M6	Action	Bushing Dia.	Contact Type
TPB11CGPC(*)	SPST	C	N.O. Momentary	.188	Gold
TPB11FGPC(*)	SPDT	F	Momentary	.188	Gold
TPC11CGPC(*)	SPST	C	N.O. Momentary	10-48	Gold
TPC11FGPC(*)	SPDT	F	Momentary	10-48	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

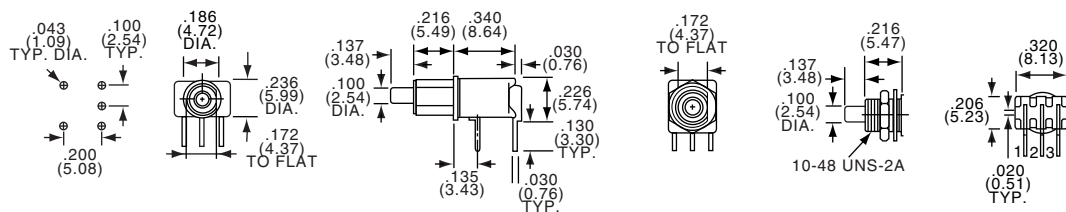
DPST/DPDT



TPB11CGRA



TPC11CGRA

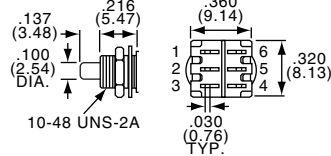
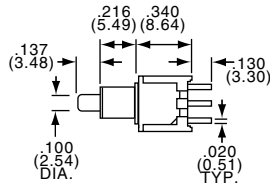
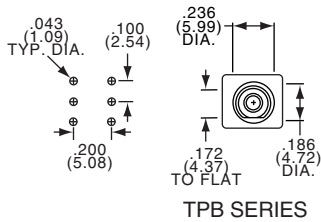


Model	Type	Act. Code P. M6	Action	Bushing Dia.	Contact Type
TPB11CGRA(*)	SPST	C	N.O. Momentary	.188	Gold
TPB11FGRA(*)	SPDT	F	Momentary	.188	Gold
TPC11CGRA(*)	SPST	C	N.O. Momentary	10-48	Gold
TPC11FGRA(*)	SPDT	F	Momentary	10-48	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

**Pushbutton Switches, Tiny, Straight or Right Angle, Unthreaded or 10-48 Bushing**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS  
DPST/DPDT



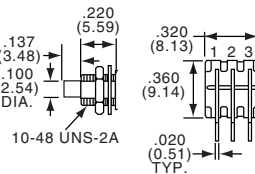
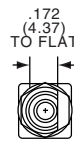
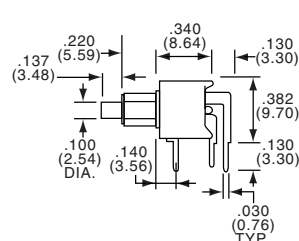
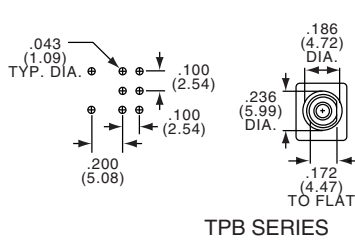
TPB21MGPC



TPC21RGPC

Model	Type	Act. Code P. M6	Action	Bushing Dia.	Contact Type
TPB21MGPC(*)	DPST	M	N.O. Momentary	.188	Gold
TPB21RGPC(*)	DPDT	R	Momentary	.188	Gold
TPC21MGPC(*)	DPST	M	N.O. Momentary	10-48	Gold
TPC21RGPC(*)	DPDT	R	Momentary	10-48	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "M" action switch.



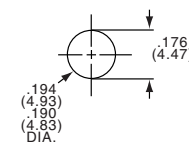
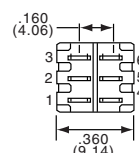
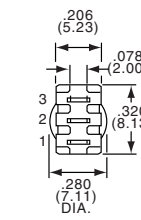
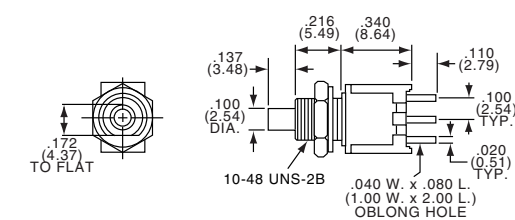
DPST/DPDT



TPC21MGRA

Model	Type	Act. Code P. M6	Action	Bushing Dia.	Contact Type
TPB21MGRA(*)	DPST	M	N.O. Momentary	.188	Gold
TPB21RGRA(*)	DPDT	R	Momentary	.188	Gold
TPC21MGRA(*)	DPST	M	N.O. Momentary	10-48	Gold
TPC21RGRA(*)	DPDT	R	Momentary	10-48	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "M" action switch.



1 & 2 POLE



TPC23M



TPC13C

Model	Type	Act. Code P. M6	Action	Contact Type
TPC13C(*)	SPST	C	N.O. Momentary	Silver
TPC13F(*)	SPDT	F	Momentary	Silver
TPC23M(*)	DPST	M	N.O. Momentary	Silver
TPC23R(*)	DPDT	R	Momentary	Silver

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" or "M" action switches.



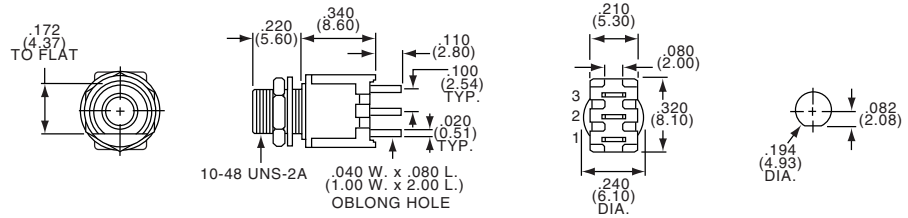
**Pushbutton Switches, Tiny, Straight or Right Angle, Flush Actuator**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS

SPST/SPDT  
Wire Lugs 10-48 Bushing



TPCF13C



Model	Silver Contacts	Type	Act. Code P. M6	Action	Bushing Type
TPCF13C(*)		SPST	C	N.O. Momentary	Threaded
TPCF13F(*)		SPDT	F	Momentary	Threaded

(\*) Specify button color by adding suffix numbers: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

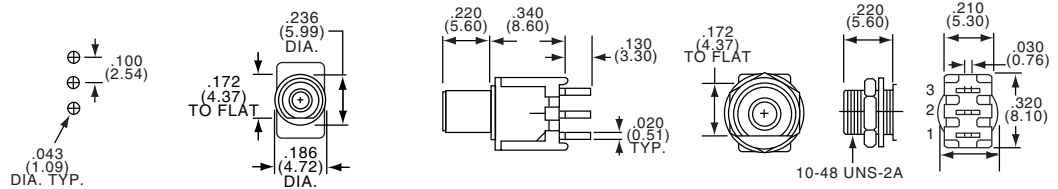
SPST/SPDT  
PC 10-48 Bushing



TPBF11FGPC



TPCF11CGPC



TPB SERIES

TPC SERIES

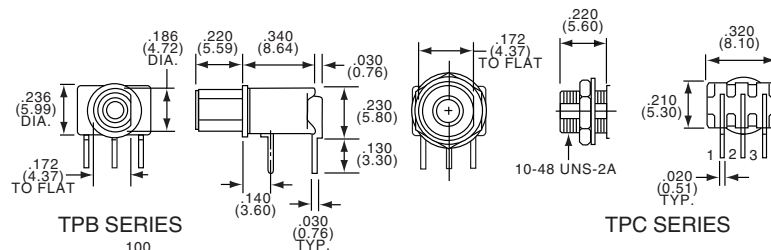
Model	Gold Contacts	Type	Act. Code P. M6	Action	Bushing Type
TPBF11CGPC(*)		SPST	C	N.O. Momentary	Unthreaded
TPBF11FGPC(*)		SPDT	F	Momentary	Unthreaded
TPCF11CGPC(*)		SPST	C	N.O. Momentary	Threaded
TPCF11FGPC(*)		SPDT	F	Momentary	Threaded

(\*) Specify button color by adding suffix numbers: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

SPST/SPDT  
RA 10-48 Bushing



TPBF11CGRA



TPB SERIES

TPC SERIES

Model	Gold Contacts	Type	Act. Code P. M6	Action	Bushing Type
TPBF11CGRA(*)		SPST	C	N.O. Momentary	Unthreaded
TPBF11FGRA(*)		SPDT	F	Momentary	Unthreaded
TPCF11CGRA(*)		SPST	C	N.O. Momentary	Threaded
TPCF11FGRA(*)		SPDT	F	Momentary	Threaded

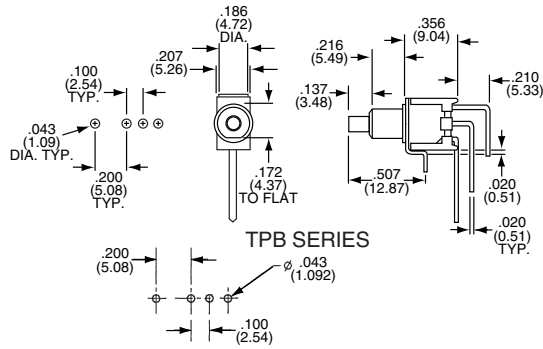
(\*) Specify button color by adding suffix numbers: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

D

TPB/TPC and TP Series

**Pushbutton Switches, Tiny, Vertical Right Angle, Unthreaded or 10-48 Bushing**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS

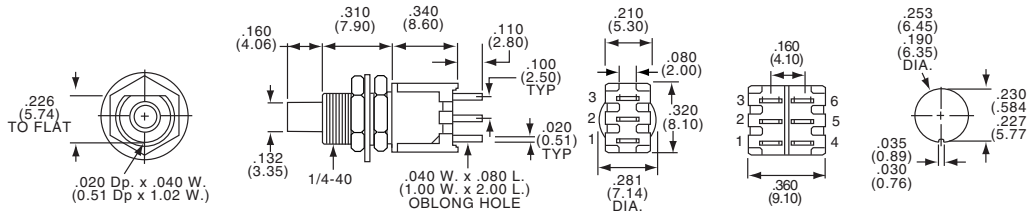


TPB11FGVRA

Model	Type	Act. Code	P. M6	Action	Contact Type
TPB11CGVRA(*)	SPST	C		N.O. Momentary	Gold
TPB11FGVRA(*)	SPDT	F		Momentary	Gold
TPC11CGVRA(*)	SPST	C		N.O. Momentary	Gold
TPC11FGVRA(*)	SPDT	F		Momentary	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switches.

**Pushbutton Switches, Tiny, Vertical, Unthreaded or 1/4-40 Bushing**



TPF23M

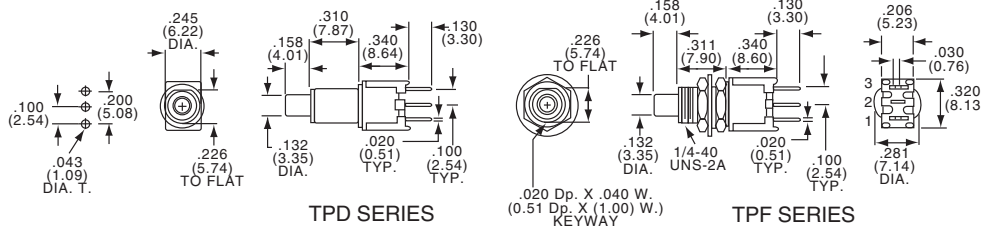


TPF13C

Model	Type	Act. Code	P. M6	Action	Contact Type
TPF13C(*)	SPST	C		N.O. Momentary	Silver
TPF13F(*)	SPDT	F		Momentary	Silver
TPF23M(*)	DPST	M		N.O. Momentary	Silver
TPF23R(*)	DPDT	R		Momentary	Silver

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" or "M" action switches.

1 & 2 POLE



SPST/SPDT



TPD11CGPC

Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPD11CGPC(*)	SPST	C		N.O. Momentary	.250	Gold
TPD11FGPC(*)	SPDT	F		Momentary	.250	Gold
TPF11CGPC(*)	SPST	C		N.O. Momentary	1/4-40	Gold
TPF11FGPC(*)	SPDT	F		Momentary	1/4-40	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
NOTE: No center terminal on "C" action switch.

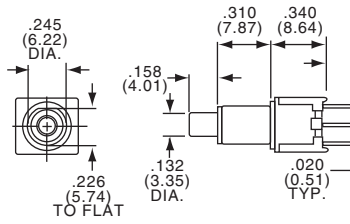
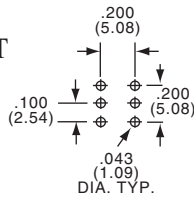
**Pushbutton Switches, Tiny, Vertical or Right Angle, Unthreaded or 1/4-40 Bushing**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS

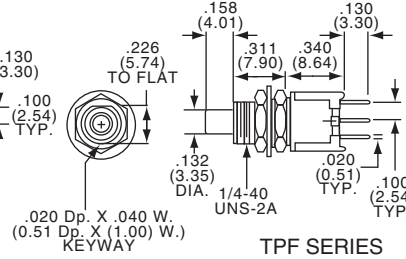
**DPST/DPDT**



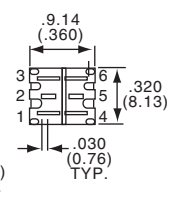
TPD21MGPC



TPD SERIES



TPF SERIES



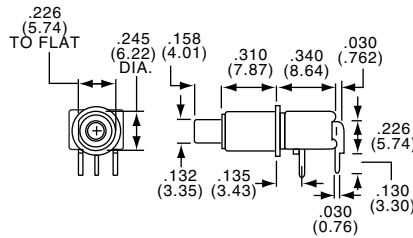
Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPD21MGPC(*)	DPST	M		N.O. Momentary	.250	Gold
TPD21RGPC(*)	DPDT	R		Momentary	.250	Gold
TPF21MGPC(*)	DPST	M		N.O. Momentary	1/4-40	Gold
TPF21RGPC(*)	DPDT	R		Momentary	1/4-40	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminals on "M" Action switches.

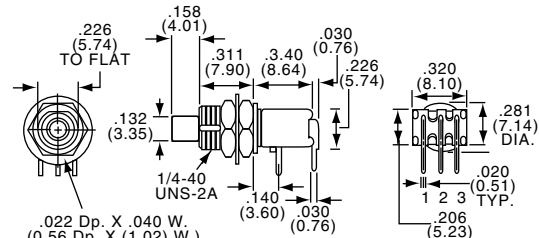
**SPST/SPDT**



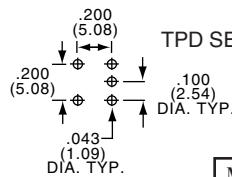
TPD11CGRA



TPD SERIES



TPF SERIES



TPF11CGRA

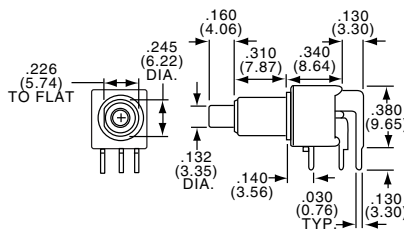
Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPD11CGRA(*)	SPST	C		N.O. Momentary	.250	Gold
TPD11FGRA(*)	SPDT	F		Momentary	.250	Gold
TPF11CGRA(*)	SPDT	C		N.O. Momentary	1/4-40	Gold
TPF11FGRA(*)	SPDT	F		Momentary	1/4-40	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

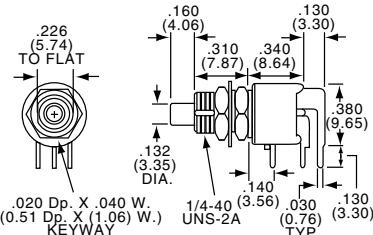
**DPST/DPDT**



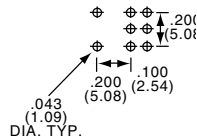
TPF21MGRA



TPD SERIES



TPF SERIES



TPD21MGRA

Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPD21MGRA(*)	DPST	M		N.O. Momentary	.250	Gold
TPD21RGRA(*)	DPDT	R		Momentary	.250	Gold
TPF21MGRA(*)	DPST	M		N.O. Momentary	1/4-40	Gold
TPF21RGRA(*)	DPDT	R		Momentary	1/4-40	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "M" Action switches.

**Pushbutton Switches, Tiny, Process Sealed, Straight**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS

\* Refer to Page D6 for Additional Options \*

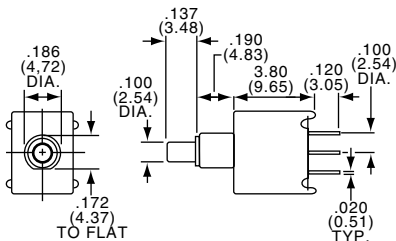
**SPST/SPDT**



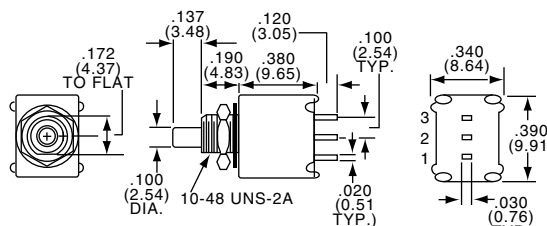
TPB11CGPCES



TPC11CGPCES



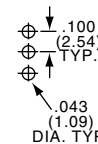
TPB SERIES



TPC SERIES

Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPB11CGPCES(*)	SPST	C		N.O. Momentary	.188	Gold
TPB11FGPCES(*)	SPDT	F		Momentary	.188	Gold
TPC11CGPCES(*)	SPST	C		N.O. Momentary	10-48	Gold
TPC11FGPCES(*)	SPDT	F		Momentary	10-48	Gold

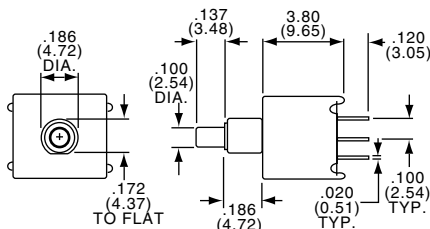
(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.



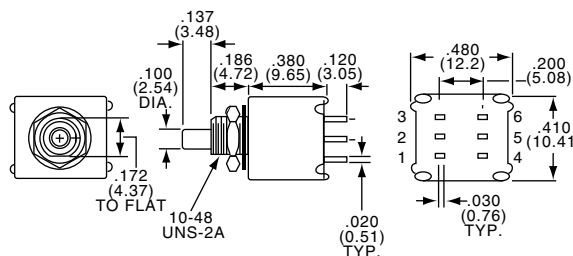
**DPST/DPDT**



TPB21RGPCEs



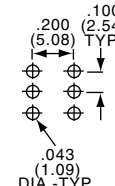
TPB SERIES



TPC SERIES

Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPB21MGPCEs(*)	DPST	M		N.O. Momentary	.188	Gold
TPB21RGPCEs(*)	DPDT	R		Momentary	.188	Gold
TPC21MGPCEs(*)	DPST	M		N.O. Momentary	10-48	Gold
TPC21RGPCEs(*)	DPDT	R		Momentary	10-48	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "M" action switch.



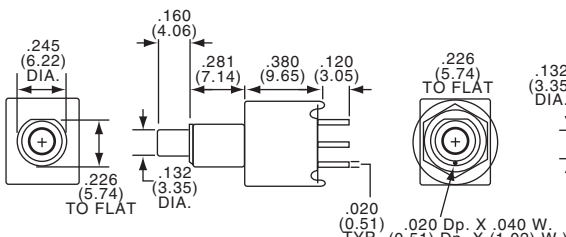
**SPST/SPDT**



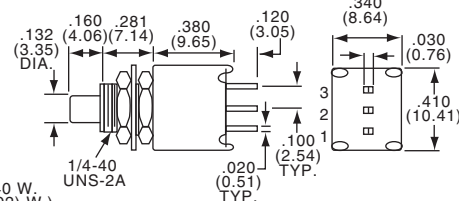
TPD11CGPCES



TPF11CGPCES



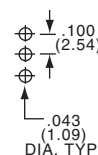
TPD SERIES



TPF SERIES

Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPD11CGPCES(*)	SPST	C		N.O. Momentary	.250	Gold
TPD11FGPCES(*)	SPDT	D		Momentary	.250	Gold
TPF11CGPCES(*)	SPST	C		N.O. Momentary	.250	Gold
TPF11FGPCES(*)	SPDT	F		Momentary	.250	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

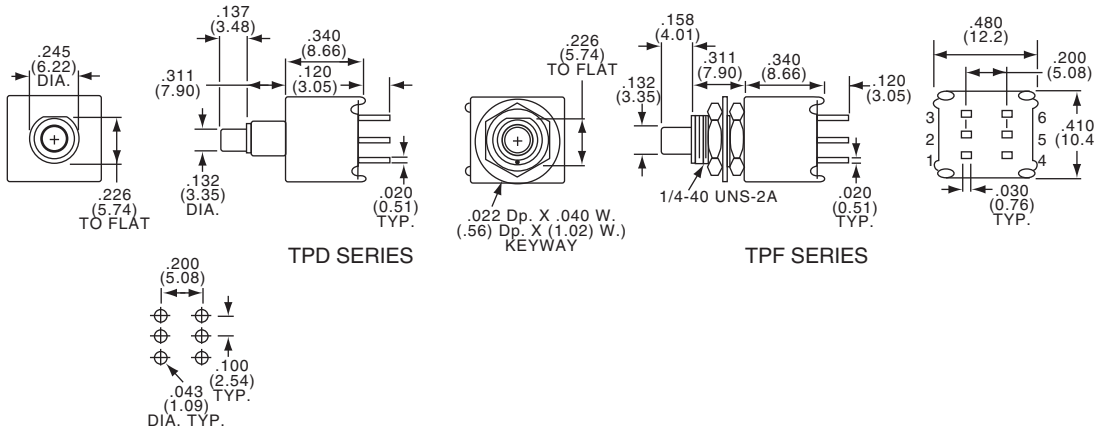




**Pushbutton Switches, Tiny, Process Sealed, Straight or Right Angle**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS

DPST/DPDT

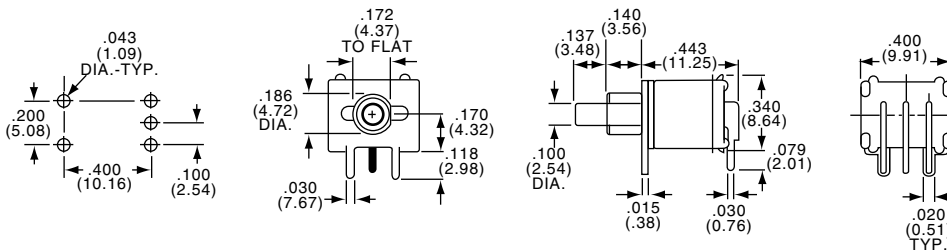


TPD21MGPCES

Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPD21MGPCES(*)	DPST	M		N.O. Momentary	.250	Gold
TPD21RGPCES(*)	DPDT	R		Momentary	.250	Gold
TPF21MGPCES(*)	DPST	M		N.O. Momentary	1/4-40	Gold
TPF21RGPCES(*)	DPDT	R		Momentary	1/4-40	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "M" action switch.

SPST/SPDT

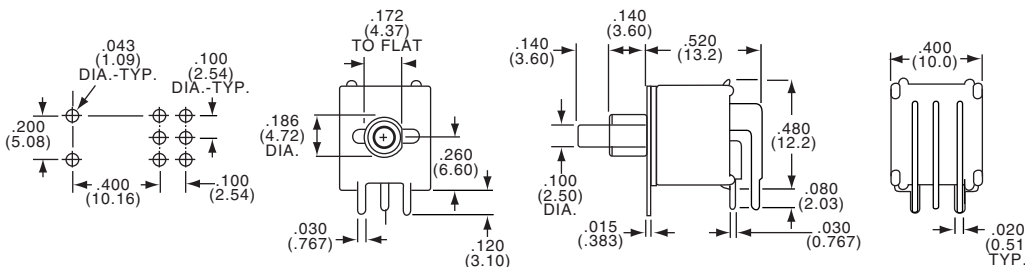


TPB11CGRAES

Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPB11CGRAES(*)	SPST	C		N.O. Momentary	.188	Gold
TPB11FGRAES(*)	SPDT	F		Momentary	.188	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

DPST/DPDT



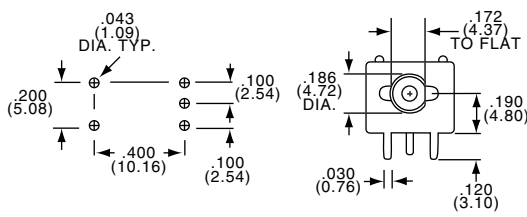
Model	Type	Act. Code	P. M6	Action	Bushing Dia.	Contact Type
TPB21MGRRAES(*)	DPST	M		N.O. Momentary	.188	Gold
TPB21RGRRAES(*)	DPDT	R		Momentary	.188	Gold

(\*) Specify button color by adding suffix number: (0) Black, (2) Red.  
Note: No center terminal on "M" action switch.

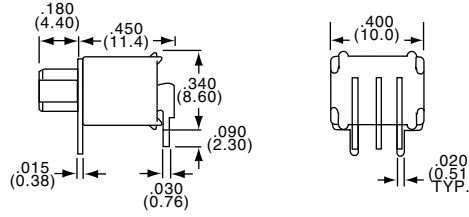


**Pushbutton Switches, Tiny, Process Sealed, Flush Actuator, Straight or Right Angle**

SEE PAGE D6 FOR PRODUCT SPECIFICATIONS



TPBF Series



SPST/SPDT

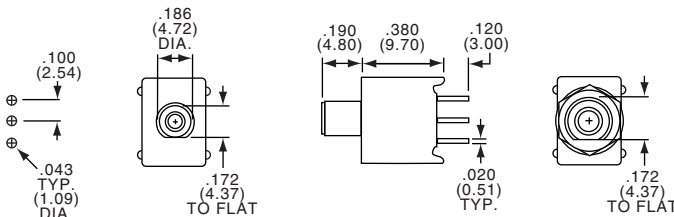


TPBF11CGRAES0

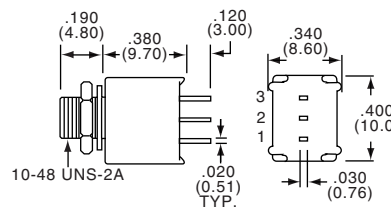
Model	Type	Act. Code P. M6	Action
TPBF11CGRAES(*)	SPST	C	N.O. Momentary
TPBF11FGRAES(*)	SPDT	F	Momentary

(\*) Specify button color by adding suffix numbers: (0) Black, (2) Red.

Note: No center terminal on "C" Action switches.



TPBF Series



TPCF Series

SPST/SPDT



TPBF11CGPCES

Model	Type	Act. Code P. M6	Action
TPBF11CGPCES(*)	SPST	C	N.O. Momentary
TPBF11FGPCES(*)	SPDT	F	Momentary
TPCF11FGPCES(*)	SPDT	F	Momentary

(\*) Specify button color by adding suffix numbers: (0) Black, (2) Red.  
Note: No center terminal on "C" action switch.

**D**  
TP-ES Series

**Pushbutton Switches, .120 Actuator, Straight**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold plate  
 Case Material .....Polyester  
 Actuator Material .....Polyester, black  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-40°F to +176°F (-40°C to +80°C)

**TYPICAL PERFORMANCE CHARACTERISTICS:**

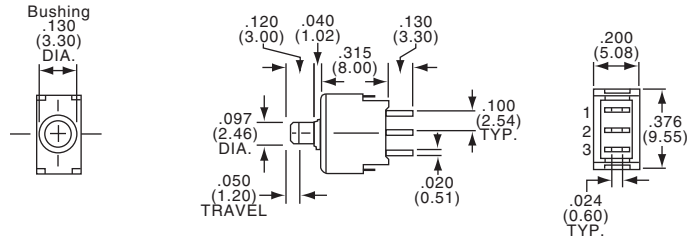
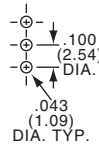
Contact Rating .....0.4 VA Max. @ 20 VDC or peak AC  
 Initial Contact Resistance .....50 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms @ 500 VDC min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuator Travel......050" (1.27)  
 Life Expectancy .....Up to 10,000 Cycles

FOR SEALED VERSIONS SEE PAGES D19 AND D20

**SPST/SPDT**



APA1BGPC



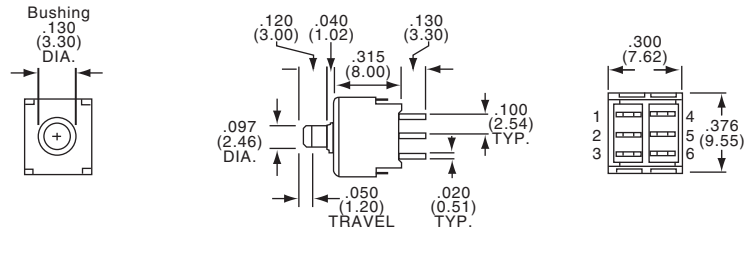
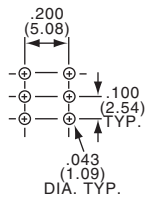
Part Number					
Tyco Electronics	Alcoswitch	Type	Action		
1437567-2	APA1BGPC	SPST	N.C. Momentary	1-3	(—)
1437567-3	APA1CGPC	SPST	N.O. Momentary	—	(1-3)
1437567-5	APA1FGPC	SPDT	Momentary	2-3	(2-1)

Note: No center terminals on "B" or "C" action switches.

**DPST/DPDT**



APA2MGPC

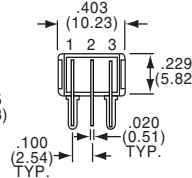
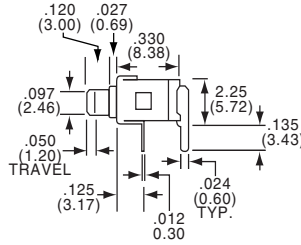
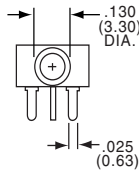
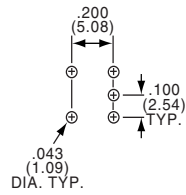


Part Number					
Tyco Electronics	Alcoswitch	Type	Action		
—	APA2LGPC	DPST	N.C. Momentary	1-3, 4-6	(—)
1437567-7	APA2MGPC	DPST	N.O. Momentary	—	(1-3, 4-6)
1437567-9	APA2RGPC	DPDT	Momentary	2-3, 5-6	(2-1, 5-4)

Note: No center terminals on "L" or "M" action switches.

**Pushbutton Switches, .120 Actuator, Right Angle**

SPST/SPDT



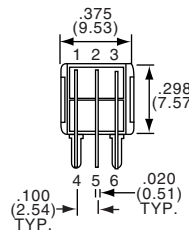
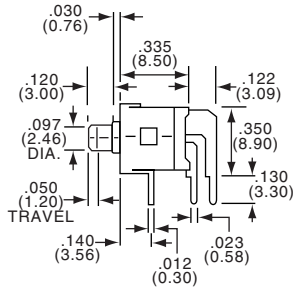
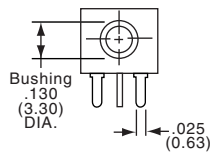
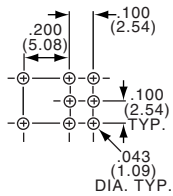
APA1FGRA

Part Number					
Tyco Electronics	Alcoswitch	Type	Action		
—	APA1BGRA	SPST	N.C. Momentary	1-3	(—)
1437567-4	APA1CGRA	SPST	N.O. Momentary	—	(1-3)
1437567-6	APA1FGRA	SPDT	Momentary	2-3	(2-1)

Note: No center terminals on "B" or "C" action switches.

**D**  
APA Series

DPST/DPDT



APA2RGRA

Part Number					
Tyco Electronics	Alcoswitch	Type	Action		
1437567-8	APA2MGRA	DPST	N.O. Momentary	—	(1-3, 4-6)
1-1437567-0	APA2RGRA	DPDT	Momentary	2-3, 5-6	(2-1, 5-4)

Note: No center terminals on "M" action switches.

**Pushbutton Switches, .157 Actuator, Vertical or Right Angle**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold plate  
 Case Material .....Polyester  
 Actuator Material .....Polyester, black  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-40°F to +176°F (-40°C to +80°C)

**TYPICAL PERFORMANCE CHARACTERISTICS:**

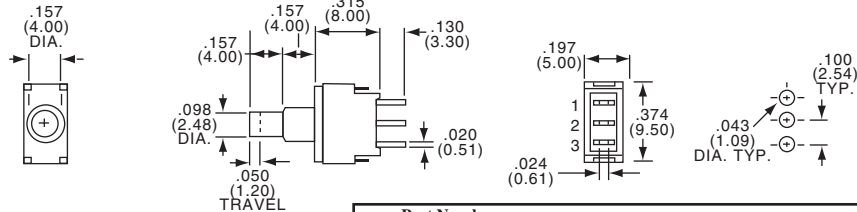
Contact Rating .....0.4 VA Max. @ 20 VDC or peak AC  
 Initial Contact Resistance .....50 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms @ 500 VDC min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuator Travel.....0.050" (1.27)  
 Life Expectancy .....Up to 10,000 Cycles

FOR SEALED VERSIONS SEE PAGES D19 AND D20

**SPST/SPDT**



APB1BGPC



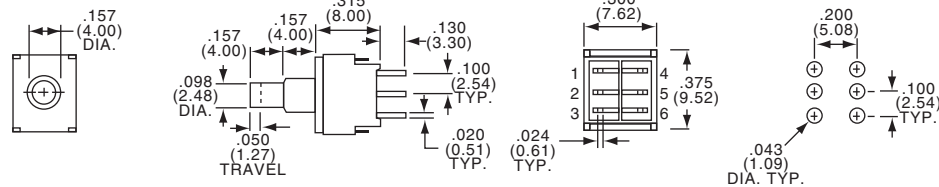
Part Number		Type	Action		
Tyco Electronics	Alcoswitch				
1-1437567-1	APB1BGPC	SPST	N.C. Momentary	1-3	(—)
1-1437567-2	APB1CGPC	SPST	N.O. Momentary	—	(1-3)
1-1437567-4	APB1FGPC	SPDT	Momentary	2-3	(2-1)

Note: No center terminal on "B" and "C" action switches.

**DPST/DPDT**



APB2RGPC



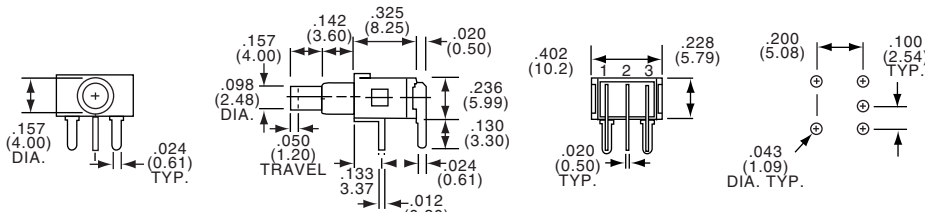
Part Number		Type	Action		
Tyco Electronics	Alcoswitch				
—	APB2LGPC	DPST	N.C. Momentary	1-3, 4-6	(—)
1-1437567-7	APB2RGPC	DPDT	Momentary	2-3, 5-6	(2-1, 5-4)

Note: No center terminal on "L" action switches.

**SPST/SPDT**



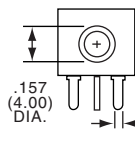
APB1FGRA



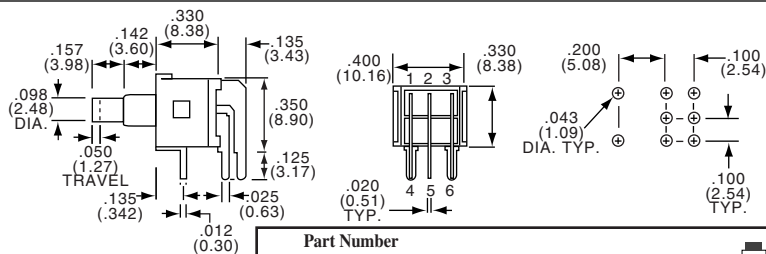
Part Number		Type	Action		
Tyco Electronics	Alcoswitch				
—	APB1BGRA	SPST	N.C. Momentary	1-3	(—)
1-1437567-3	APB1CGRA	SPST	N.O. Momentary	—	(1-3)
1-1437567-5	APB1FGRA	SPDT	Momentary	2-3	(2-1)

Note: No center terminal on "B" and "C" action switches.

**DPST/DPDT**



APB2MGRA



Part Number		Type	Action		
Tyco Electronics	Alcoswitch				
1-1437567-6	APB2MGRA	DPST	N.O. Momentary	—	(1-3, 4-6)
	APB2RGRA	DPDT	Momentary	2-3, 5-6	(2-1, 5-4)

Note: No center terminal on "M" action switches.

**Pushbutton Switches, Process Sealed, .157 Actuator, Straight, Retention Terminal**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold plated  
 Case Material .....Polyester  
 Actuator Material .....Polyester, black  
 Terminals/Fixed Contacts.....Copper alloy  
 Terminal Seal .....Epoxy

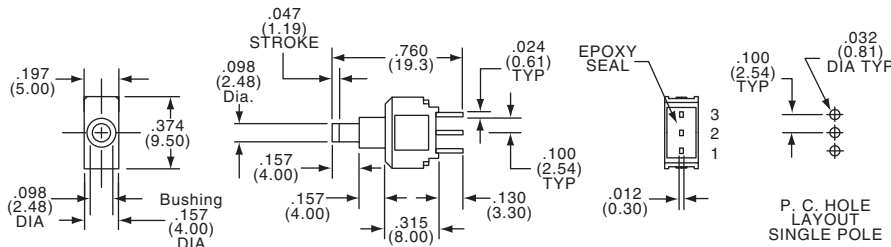
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA Max. @ 20 VDC or peak AC  
 Initial Contact Resistance .....50 Milliohms max.  
 Insulation Resistance .....500 Megohms @ 250 VDC min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuator Travel.....0.047" (1.19)  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-40°F to +176°F (-40°C to +80°C)

SPDT

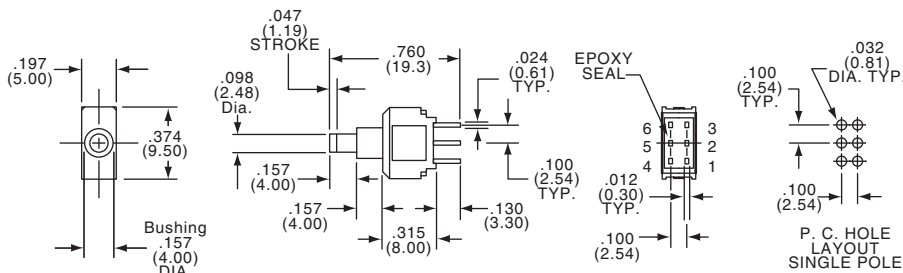


APBE1FGPC

Part Number					
Tyco Electronics	Alcoswitch	Type			Contact Type
1-1437567-8	APBE1FGPC	SPDT	On	(On)	Gold
Terminals Connected:			2-3	(2-1)	
(On) indicates momentary position.					

DPDT

Extra compact double pole saves PCB real estate.



APBE2RGPC

Part Number					
Tyco Electronics	Alcoswitch	Type			Contact Type
2-1437567-0	APBE2RGPC	DPDT	On	(On)	Gold
Terminals Connected:			2-3 & 5-6	(2-1 & 5-4)	
(On) indicates momentary position.					

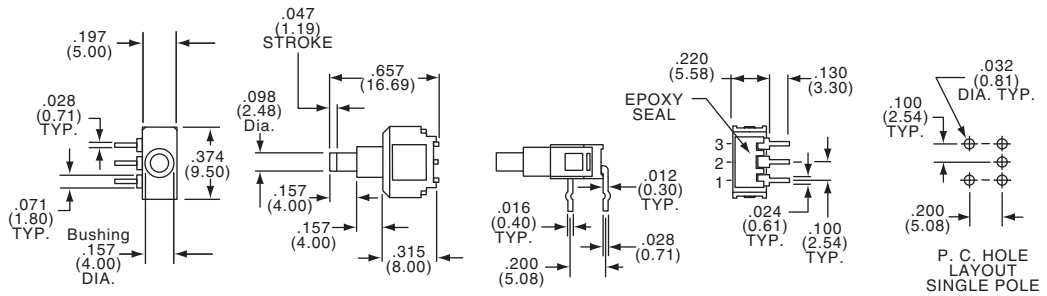
**Pushbutton Switches, Process Sealed, .157 Actuator, Retention Terminal, Right Angle**

SEE PAGE D19 FOR PRODUCT SPECIFICATIONS.

SPDT



APBE1FGRA



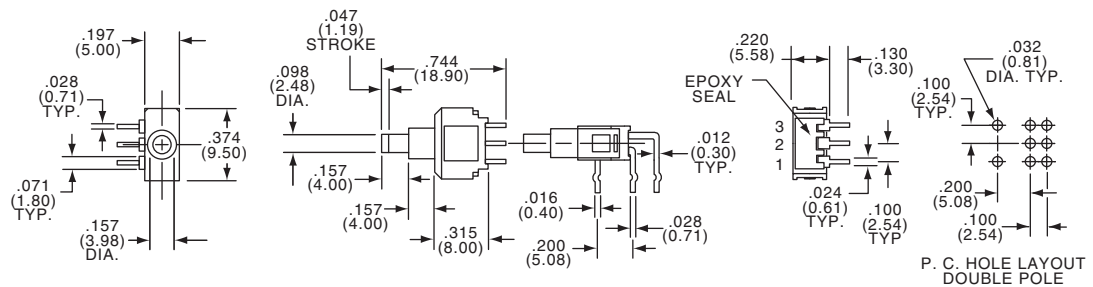
Part Number					
Tyco Electronics	Alcoswitch	Type			Contact Type
1-1437567-9	APBE1FGRA	SPDT	On	(On)	Gold
Terminals Connected:			2-3	(2-1)	
(On) indicates momentary position.					

DPDT

Extra compact double pole saves PCB real estate.



APBE2RGRA



Part Number					
Tyco Electronics	Alcoswitch	Type			Contact Type
2-1437567-1	APBE2RGRA	DPDT	On	(On)	Gold
Terminals Connected:			2-3 & 5-6	(2-1 & 5-4)	
(On) indicates momentary position.					

**Pushbutton Switches, Sub-Miniature, Panel Mount**

**MPA3 Series**

**MATERIAL SPECIFICATIONS:**

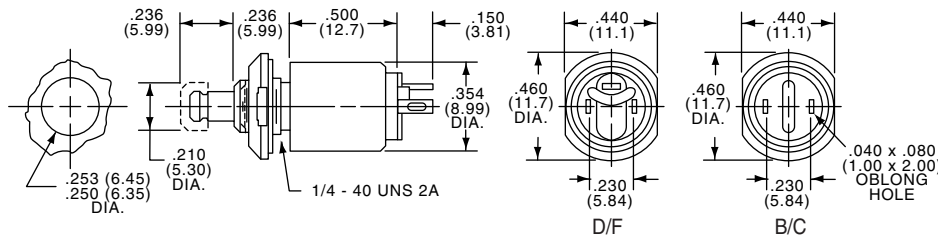
Contacts .....Silver clad  
 Case Material .....Thermoset  
 Actuator Material .....Polyamide  
 Terminals .....Silver plate

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +158°F (-20°C to +70°C)  
 Storage Temperature.....-40°F to +176°F (-40°C to +80°C)  
 Solder Heat Resistance .....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....3 A @ 125 VAC  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Actuation Force .....10 oz. SPST, 16 oz. SPDT average  
 Actuator Travel.....100" (2.54)  
 Life Expectancy .....Up to 10,000 Cycles  
 Note: Hardware included with switches



SPST/SPDT



MPA103C

Part Number					
Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	Action	Contact Rating
2-1437567-4	MPA103B	SPST	14	N. C. Momentary	3 Amps
2-1437567-5	MPA103C	SPST	13	N. O. Momentary	3 Amps
2-1437567-6	MPA103D	SPDT	16	Push on/push off- (tactile)	3 Amps
2-1437567-7	MPA103F	SPDT	15	Momentary - (tactile)	3 Amps

Black Cap supplied. Other colors available, order separately.  
 (See Cap C5 and C8 on Page D32.)

**MPB Series**

**Pushbutton Switches, Miniature, Over-Travel**

**MATERIAL SPECIFICATIONS:**

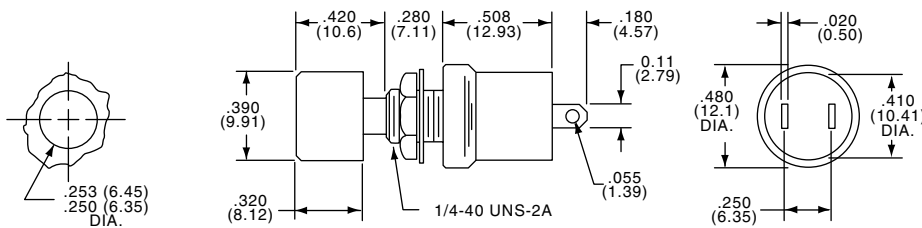
Contacts .....Silver plate  
 Case Material .....Thermoset  
 Actuator Material .....Polyamide  
 Terminals .....Silver plate

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....+14°F to +140°F (-10°C to +60°C)  
 Storage Temperature.....+5°F to +158°F (-15°C to +70°C)  
 Solder Heat Resistance .....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....3 A @ 125 VAC  
 Initial Contact Resistance .....20 Milliohms max.  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Actuator Travel.....100" (2.54) Overtravel .059" (1.5mm)  
 Life Expectancy .....20,000 Cycles  
 Note: Hardware included with switches



SPST



MPB103B

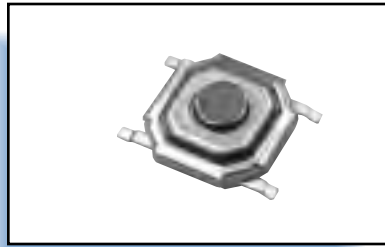
Part Number					
Tyco Electronics	Alcoswitch	Type	Act. Code P. M6	Action	Actuator Color
3-1437567-9	MPB103B	SPST	14	N.C. Momentary	Black
4-1437567-0	MPB103C	SPST	13	N.O. Momentary	Red

MPA3 and MPB Series

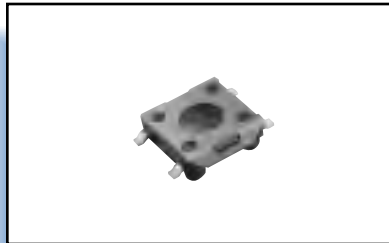




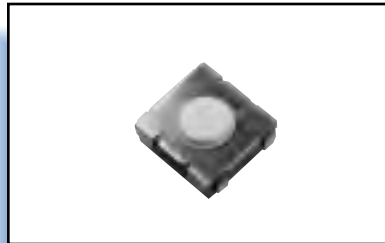
*FSM Series - Page E3*



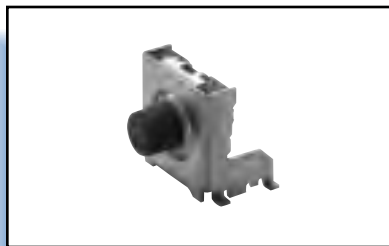
*4.9mm Series - Page E11*



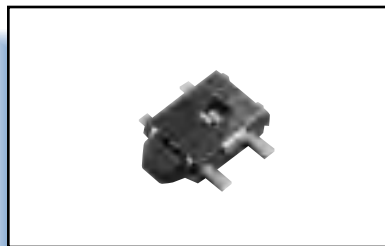
*Low Profile Series - Page E12*



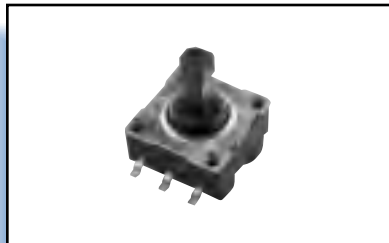
*High Life Tactile - Page E12*



*Sealed Series - Page E27*



*Side Actuated - Page E29*



*Multi-Directional Actuation - Page E30*

# Tactile

E

Tactile Switches

**Tactile Switches Part Number Index**

FSM .....E3  
 FSM100 .....E16  
 FSM100A .....E16  
 FSM101 .....E16  
 FSM102 .....E17  
 FSM102A .....E17  
 FSM103 .....E17  
 FSM104 .....E17  
 FSM10J .....E5  
 FSM10JA .....E5  
 FSM10JAA .....E5  
 FSM10JL .....E5  
 FSM11J .....E5  
 FSM11JA .....E5  
 FSM11JAA .....E5  
 FSM11JL .....E5  
 FSM12J .....E5  
 FSM12JA .....E5  
 FSM12JAA .....E5  
 FSM12JL .....E5  
 FSM13J .....E5  
 FSM13JA .....E5  
 FSM13JAA .....E5  
 FSM13JL .....E5  
 FSM14J .....E5  
 FSM14JA .....E5  
 FSM14JAA .....E5  
 FSM14JL .....E5  
 FSM14JRT .....E6  
 FSM15J .....E5  
 FSM15JA .....E5  
 FSM15JAA .....E5  
 FSM15JL .....E5  
 FSM16J .....E5  
 FSM16JA .....E5  
 FSM16JAA .....E5  
 FSM16JL .....E5  
 FSM17J .....E5  
 FSM17JA .....E5  
 FSM17JAA .....E5  
 FSM17JL .....E5  
 FSM18J .....E5  
 FSM18JA .....E5  
 FSM18JAA .....E5  
 FSM18JL .....E5  
 FSM1J .....E4,E5  
 FSM1JA .....E5  
 FSM1JAA .....E5  
 FSM1JL .....E5  
 FSM1LP .....E15  
 FSM1LPA .....E15  
 FSM1LPATR .....E15  
 FSM1LPTR .....E15  
 FSM201A .....E16  
 FSM2J .....E4,E5  
 FSM2JA .....E5  
 FSM2JAA .....E5  
 FSM2JART .....E6  
 FSM2JL .....E5  
 FSM2JRT .....E6  
 FSM2JSMA .....E10  
 FSM2JSMAA .....E10  
 FSM2JSMAATR .....E10  
 FSM2JSMATR .....E10  
 FSM3J .....E5  
 FSM3JA .....E5  
 FSM3JAA .....E5  
 FSM3JL .....E5  
 FSM4J .....E5

FSM4JA .....E5  
 FSM4JAA .....E5  
 FSM4JART .....E6  
 FSM4JL .....E5  
 FSM4JRT .....E6  
 FSM4JSMA .....E10  
 FSM4JSMAA .....E10  
 FSM4JSMAATR .....E10  
 FSM4JSMATR .....E10  
 FSM4LP .....E15  
 FSM4LPTR .....E15  
 FSM5J .....E5  
 FSM5JA .....E5  
 FSM5JAA .....E5  
 FSM5JL .....E5  
 FSM6J .....E5  
 FSM6JA .....E5  
 FSM6JAA .....E5  
 FSM6JART .....E6  
 FSM6JL .....E5  
 FSM6JRT .....E6  
 FSM6JSMA .....E10  
 FSM6JSMAA .....E10  
 FSM6JSMAATR .....E10  
 FSM6JSMATR .....E10  
 FSM7J .....E5  
 FSM7JA .....E5  
 FSM7JAA .....E5  
 FSM7JL .....E5  
 FSM8J .....E5  
 FSM8JA .....E5  
 FSM8JAA .....E5  
 FSM8JART .....E6  
 FSM8JL .....E5  
 FSM8JRT .....E6  
 FSM8JSMA .....E10  
 FSM8JSMATR .....E10  
 FSM9J .....E5  
 FSM9JA .....E5  
 FSM9JAA .....E5  
 FSM9JL .....E5  
 FSMC .....E3  
 FSMCD .....E8  
 FSMCDA .....E8  
 FSMCTATR .....E11  
 FSMCTTR .....E11  
 FSMJM3.5ATR .....E9  
 FSMJM4.3 .....E9  
 FSMJM4.3ATR .....E9  
 FSMJM4.3TR .....E9  
 FSMJM5.0ATR .....E9  
 FSMRA 1J .....E7  
 FSMRA 1JL .....E7  
 FSMRA 2J .....E7  
 FSMRA 2JA .....E7  
 FSMRA 2JH .....E7  
 FSMRA 2JL .....E7  
 FSMRA 3J .....E7  
 FSMRA 3JL .....E7  
 FSMRA 4J .....E7  
 FSMRA 4JA .....E7  
 FSMRA 4JL .....E7  
 FSMRA 5J .....E7  
 FSMRA 5JL .....E7  
 FSMRA 6J .....E7  
 FSMRA 6JL .....E7  
 FSMRA 7J .....E7  
 FSMRA 7JL .....E7  
 FSMRA 8J .....E7

FSMRA 8JL .....E7  
 FSMRACD .....E8  
 FSMRACDA .....E8  
 FSMMSM .....E9  
 FSMMSMTR .....E9  
 1571217 .....E18  
 1571218 .....E19  
 1571219 .....E20  
 1571220 .....E21  
 1571262 .....E29  
 1571294 .....E22  
 1571295 .....E24  
 1571296 .....E23  
 1571297 .....E26  
 1571298 .....E25  
 1571300 .....E27  
 1571407 .....E28  
 1571514 .....E30  
 1571515 .....E30  
 1571625 .....E12  
 1571626 .....E13  
 1571636 .....E14

**E**  
Tactile Switches

**Tactile Switches, .138 [3.5] x .236 [6], Through Hole**

**MATERIAL SPECIFICATIONS:**

Contacts .....Stainless/Silver clad plate  
 Case Material .....Nylon  
 Actuator Material .....PBT  
 Terminals/Fixed Contacts.....Copper alloy, Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 500 VDC  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Force .....130±50 Grams  
 Actuator Travel......010"(.254)  
 Life Expectancy .....Up to 20,000 Cycles

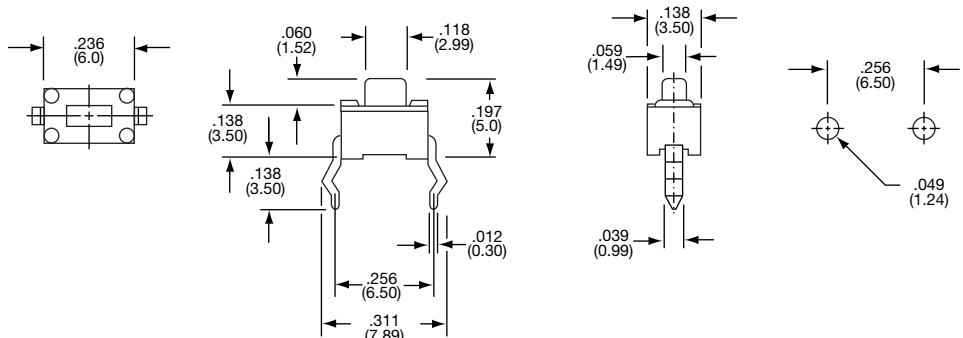
**ENVIRONMENTAL SPECIFICATIONS:**



Operating Temperature.....-40°F to +185°F (-40°C to + 85°C)  
 Storage Temperature.....-40°F to +185°F (-40°C to + 85°C)  
 Solder Heat Resistance .....See Page M3-4

3.5 x 6mm



FSM

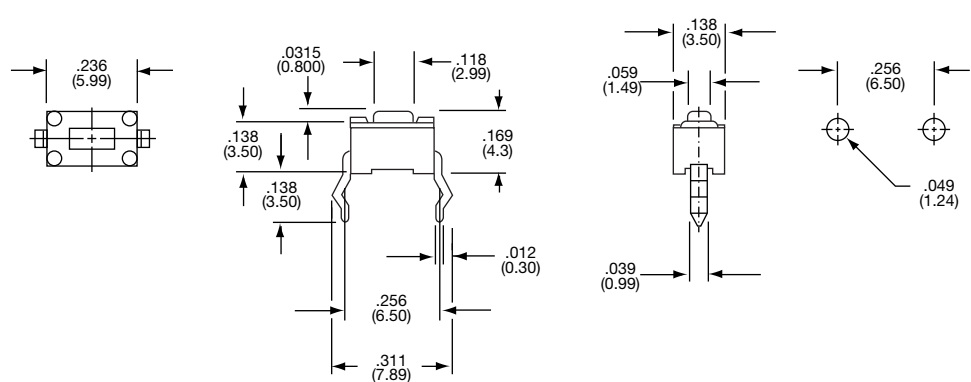




Tyco Electronics	Alcoswitch	Type		
1437565-1	FSM	SPST	Off	(On) (On) indicates momentary position.

3.5 x 6mm



FSMC



Tyco Electronics	Alcoswitch	Type		
7-1437565-6	FSMC	SPST	Off	(On) (On) indicates momentary position.

**Tactile Switches, .236 [6] x .236 [6], Through Hole**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper alloy, silver plate  
 Case.....Polyamide  
 Actuator Button .....Polyacetal Resin  
 Frame .....Steel, tin plate  
 Terminals .....Copper alloy, silver plate

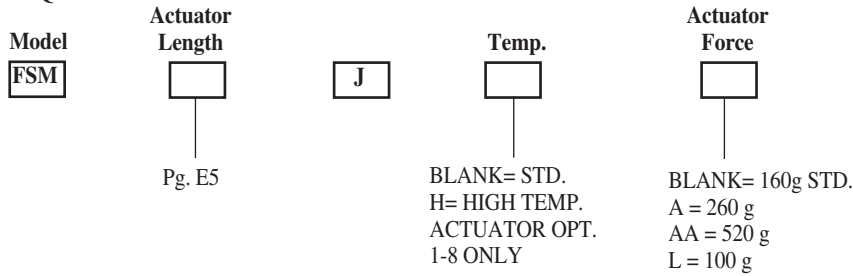
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC  
 Actuation Force .....See page E5  
 Actuator Travel......012" (0,3)  
 Electrostatic Discharge  
 w/ESD Ground Terminal .....5Kv w/no discharge  
 Life Expectancy .....Up to 100,000 Cycles

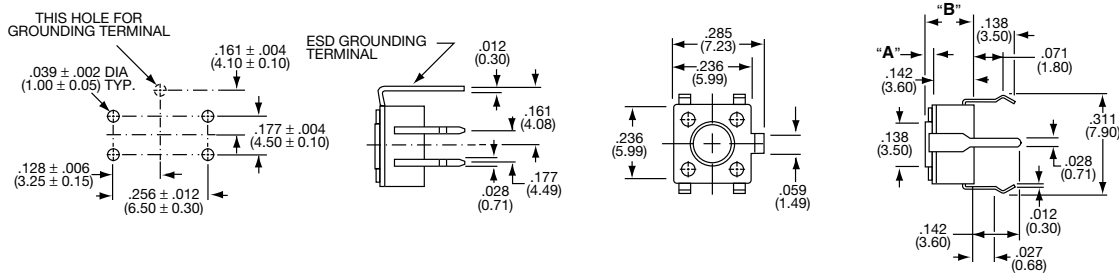
**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....-40°F to +221°F (-40°C to +105°C)  
 Storage Temperature.....-40°F to +221°F (-40°C to +105°C)  
 Solder Heat Resistance .....See Page M3-4

**PART NUMBERING SEQUENCE**



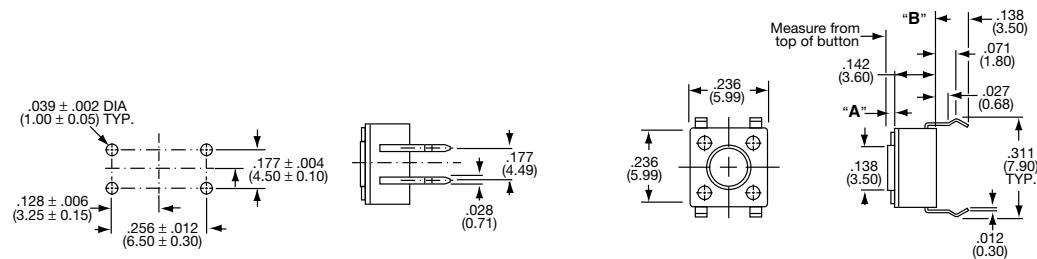
**E**  
FSMJ Series



6 x 6 mm



FSM1J WITH ESD TERMINAL



6 x 6 mm



FSM2J WITHOUT ESD TERMINAL

**Tactile Switches, .236 [6] x .236 [6], Through Hole (Continued)**

TYCO Electronics Part Number	ALCO Part Number	DIMENSIONS		Actuation Force	Actuator Material	Life Cycles
		A	B			
<b>With Ground Terminal</b>						
1-1437565-5	FSM1J	0.028 (0.70)	0.169 (4.30)	160±50gf	PBT	100,000
—	FSM1JAA	0.028 (0.70)	0.169 (4.30)	260±50gf	PBT	100,000
—	FSM1JAA	0.028 (0.70)	0.169 (4.30)	520±100gf	PBT	100,000
—	FSM1JL	0.028 (0.70)	0.169 (4.30)	100±50gf	PBT	100,000
3-1437565-3	FSM3J	0.055 (1.40)	0.196 (5.00)	160±50gf	PBT	100,000
—	FSM3JA	0.055 (1.40)	0.196 (5.00)	260±50gf	PBT	100,000
—	FSM3JAA	0.055 (1.40)	0.196 (5.00)	520±100gf	PBT	100,000
—	FSM3JL	0.055 (1.40)	0.196 (5.00)	100±50gf	PBT	100,000
4-1437565-4	FSM5J	0.134 (3.40)	0.276 (7.00)	160±50gf	ACETAL	100,000
—	FSM5JA	0.134 (3.40)	0.276 (7.00)	260±50gf	ACETAL	100,000
—	FSM5JAA	0.134 (3.40)	0.276 (7.00)	520±100gf	ACETAL	100,000
—	FSM5JL	0.134 (3.40)	0.276 (7.00)	100±50gf	ACETAL	100,000
5-1437565-1	FSM7J	0.232 (5.90)	0.374 (9.50)	160±50gf	PBT	100,000
—	FSM7JA	0.232 (5.90)	0.374 (9.50)	260±50gf	PBT	100,000
—	FSM7JAA	0.232 (5.90)	0.374 (9.50)	520±100gf	PBT	100,000
—	FSM7JL	0.232 (5.90)	0.374 (9.50)	100±50gf	PBT	100,000
7-1437565-5	FSM9J	0.146 (3.70)	0.287 (7.30)	160±50gf	ACETAL	100,000
—	FSM9JA	0.146 (3.70)	0.287 (7.30)	260±50gf	ACETAL	100,000
—	FSM9JAA	0.146 (3.70)	0.287 (7.30)	520±100gf	ACETAL	100,000
—	FSM9JL	0.146 (3.70)	0.287 (7.30)	100±50gf	ACETAL	100,000
1437565-8	FSM11J	0.173 (4.40)	0.315 (8.00)	160±50gf	ACETAL	100,000
—	FSM11JA	0.173 (4.40)	0.315 (8.00)	260±50gf	ACETAL	100,000
—	FSM11JAA	0.173 (4.40)	0.315 (8.00)	520±100gf	ACETAL	100,000
—	FSM11JL	0.173 (4.40)	0.315 (8.00)	100±50gf	ACETAL	100,000
1-1437565-0	FSM13J	0.370 (9.40)	0.512 (13.00)	160±50gf	ACETAL	100,000
1-1437565-1	FSM13JA	0.370 (9.40)	0.512 (13.00)	260±50gf	ACETAL	100,000
—	FSM13JAA	0.370 (9.40)	0.512 (13.00)	520±100gf	ACETAL	100,000
—	FSM13JL	0.370 (9.40)	0.512 (13.00)	100±50gf	ACETAL	100,000
—	FSM15J	0.527 (13.40)	0.669 (17.00)	160±50gf	ACETAL	100,000
147916-1	FSM15JA	0.527 (13.40)	0.669 (17.00)	260±50gf	ACETAL	100,000
—	FSM15JAA	0.527 (13.40)	0.669 (17.00)	520±100gf	ACETAL	100,000
—	FSM15JL	0.527 (13.40)	0.669 (17.00)	100±50gf	ACETAL	100,000
—	FSM17J	0.193 (4.90)	0.335 (8.51)	160±50gf	ACETAL	100,000
—	FSM17JA	0.193 (4.90)	0.335 (8.51)	260±50gf	ACETAL	100,000
—	FSM17JAA	0.193 (4.90)	0.335 (8.51)	520±100gf	ACETAL	100,000
—	FSM17JL	0.193 (4.90)	0.335 (8.51)	100±50gf	ACETAL	100,000
<b>Without Ground Terminal</b>						
2-1437565-0	FSM2J	0.028 (0.70)	0.169 (4.30)	160±50gf	PBT	100,000
2-1437565-1	FSM2JA	0.028 (0.70)	0.169 (4.30)	260±50gf	PBT	100,000
—	FSM2JAA	0.028 (0.70)	0.169 (4.30)	520±100gf	PBT	100,000
—	FSM2JL	0.028 (0.70)	0.169 (4.30)	100±50gf	PBT	100,000
2-1437565-4	FSM4J	0.055 (1.40)	0.196 (5.00)	160±50gf	PBT	100,000
3-1437565-6	FSM4JA	0.055 (1.40)	0.196 (5.00)	260±50gf	PBT	100,000
3-1437565-7	FSM4JAA	0.055 (1.40)	0.196 (5.00)	520±100gf	PBT	100,000
3-1437565-8	FSM4JL	0.055 (1.40)	0.196 (5.00)	100±50gf	PBT	100,000
4-1437565-5	FSM6J	0.134 (3.40)	0.276 (7.00)	160±50gf	ACETAL	100,000
4-1437565-6	FSM6JA	0.134 (3.40)	0.276 (7.00)	260±50gf	ACETAL	100,000
—	FSM6JAA	0.134 (3.40)	0.276 (7.00)	520±100gf	ACETAL	100,000
—	FSM6JL	0.134 (3.40)	0.276 (7.00)	100±50gf	ACETAL	100,000
5-1437565-2	FSM8J	0.232 (5.90)	0.374 (9.50)	160±50gf	PBT	100,000
5-1437565-3	FSM8JA	0.232 (5.90)	0.374 (9.50)	260±50gf	PBT	100,000
5-1437565-4	FSM8JAA	0.232 (5.90)	0.374 (9.50)	520±100gf	PBT	100,000
1571376-1	FSM8JL	0.232 (5.90)	0.374 (9.50)	100±50gf	PBT	100,000
1437565-7	FSM10J	0.146 (3.70)	0.287 (7.30)	160±50gf	ACETAL	100,000
—	FSM10JA	0.146 (3.70)	0.287 (7.30)	260±50gf	ACETAL	100,000
—	FSM10JAA	0.146 (3.70)	0.287 (7.30)	520±100gf	ACETAL	100,000
—	FSM10JL	0.146 (3.70)	0.287 (7.30)	100±50gf	ACETAL	100,000
1437565-9	FSM12J	0.173 (4.40)	0.315 (8.00)	160±50gf	ACETAL	100,000
—	FSM12JA	0.173 (4.40)	0.315 (8.00)	260±50gf	ACETAL	100,000
—	FSM12JAA	0.173 (4.40)	0.315 (8.00)	520±100gf	ACETAL	100,000
—	FSM12JL	0.173 (4.40)	0.315 (8.00)	100±50gf	ACETAL	100,000
1-1437565-2	FSM14J	0.370 (9.40)	0.512 (13.00)	160±50gf	ACETAL	100,000
—	FSM14JA	0.370 (9.40)	0.512 (13.00)	260±50gf	ACETAL	100,000
—	FSM14JAA	0.370 (9.40)	0.512 (13.00)	520±100gf	ACETAL	100,000
—	FSM14JL	0.370 (9.40)	0.512 (13.00)	100±50gf	ACETAL	100,000
1-1437565-3	FSM16J	0.527 (13.40)	0.669 (17.00)	160±50gf	ACETAL	100,000
—	FSM16JA	0.527 (13.40)	0.669 (17.00)	260±50gf	ACETAL	100,000
—	FSM16JAA	0.527 (13.40)	0.669 (17.00)	520±100gf	ACETAL	100,000
—	FSM16JL	0.527 (13.40)	0.669 (17.00)	100±50gf	ACETAL	100,000
1-1437565-4	FSM18J	0.193 (4.90)	0.335 (8.51)	160±50gf	ACETAL	100,000
—	FSM18JA	0.193 (4.90)	0.335 (8.51)	260±50gf	ACETAL	100,000
—	FSM18JAA	0.193 (4.90)	0.335 (8.51)	520±100gf	ACETAL	100,000
—	FSM18JL	0.193 (4.90)	0.335 (8.51)	100±50gf	ACETAL	100,000



**Tactile Switches, .236 [6] x .236 [6], Radial Tape**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper alloy, silver clad plate  
 Case.....Nylon  
 Actuator Button .....PBT  
 Cover.....Steel, tin plate  
 Terminals .....Copper alloy, silver clad plate

**TYPICAL PERFORMANCE CHARACTERISTICS:**

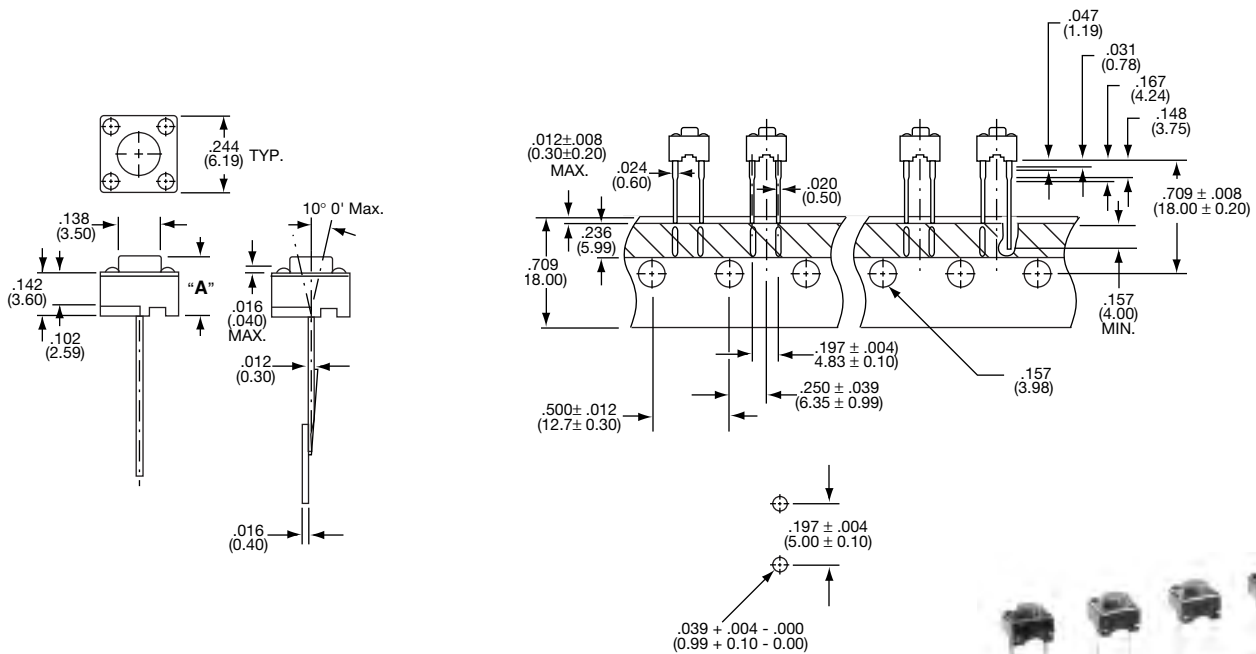
Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Force .....See Below  
 Actuator Travel......010" (.254)  
 Life Expectancy .....Up to 100,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature..... -40°F to +221°F (-40°C to +105°C)  
 Storage Temperature.....-40°F to +221°F (-40°C to +105°C)  
 Solder Heat Resistance .....See Page M3-4

E

FSMJRT Series



Tyco Electronics	Alcoswitch	Dimension A	Actuation Force
2-1437565-6	FSM2JRT	4.3 (.169)	160 +/-50 gm
2-1437565-2	FSM2JART	4.3 (.169)	260 +/-75 gm
4-1437565-0	FSM4JRT	5.0 (.197)	160 +/-50 gm
147997-1	FSM4JART	5.0 (.197)	260 +/-75 gm
4-1437565-8	FSM6JRT	7.0 (.276)	160 +/-50 gm
1571402-1	FSM6JART	7.0 (.276)	260 +/-75 gm
147694-1	FSM8JRT	9.5 (.374)	160 +/-50 gm
147871-1	FSM8JART	9.5 (.374)	260 +/-75 gm
1571010-1	FSM14JRT	13.0 (.512)	160 +/-50 gm

FSM4JRT

**Tactile Switches, .236 [6] x .236 [6], Right Angle**

**MATERIAL SPECIFICATIONS:**

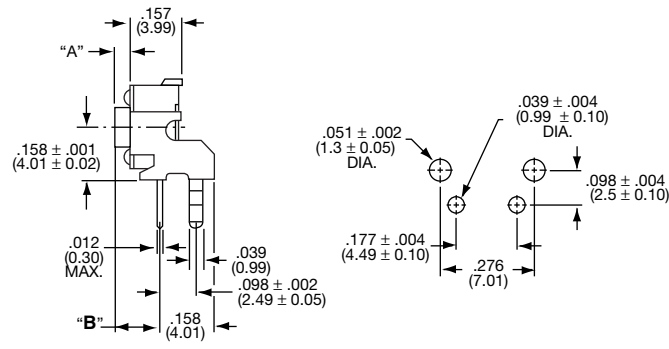
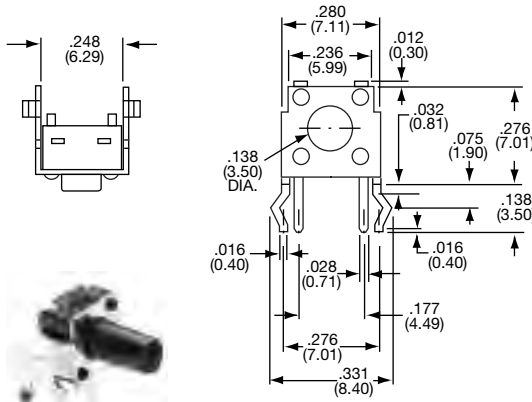
Contacts .....Copper alloy, silver clad plate  
 Case.....PBT  
 Actuator Button .....Nylon/acetal  
 Frame .....Steel, tin plate  
 Terminals .....Copper alloy, silver plate

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Force .....See Below  
 Actuator Travel......012" (0,3)  
 Life Expectancy .....Up to 100,000 Cycles  
 Up to 50,000 Cycles 520 GF (AA option)

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-22°F to +185°F (-30°C to +85°C)  
 Solder Heat Resistance .....See Page M3-4



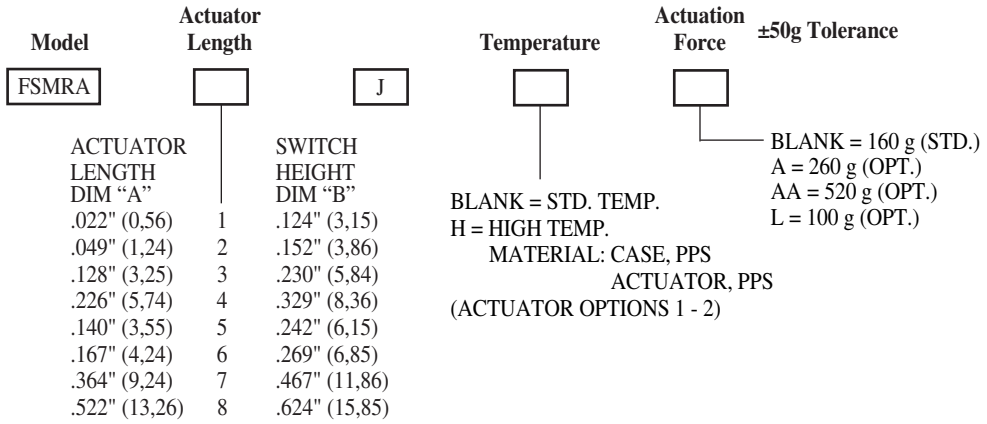
FSMRA7J

Type		
SPST	Off	(On)

(On) indicates momentary position.

Tyco Electronics	Alcoswitch	Dim. A	Dim B
8-1437565-4	FSMRA 1J	.022" (0,55)	.124" (3,15)
1571386-2	FSMRA 1JL	.022" (0,55)	.124" (3,15)
8-1437565-5	FSMRA 2J	.049" (1,25)	.152" (3,86)
1571386-1	FSMRA 2JL	.049" (1,25)	.152" (3,86)
8-1437565-8	FSMRA 2JA	.049" (1,25)	.152" (3,86)
8-1437565-9	FSMRA 2JH	.049" (1,25)	.152" (3,86)
9-1437565-0	FSMRA 3J	.128" (3,25)	.230" (5,84)
1571386-3	FSMRA 3JL	.128" (3,25)	.230" (5,84)
9-1437565-1	FSMRA 4J	.226" (5,74)	.329" (8,36)
1571819-1	FSMRA 4JA	.226" (5,74)	.329" (8,36)
1571386-4	FSMRA 4JL	.226" (5,74)	.329" (8,36)
9-1437565-2	FSMRA 5J	.140" (3,55)	.242" (6,15)
1571386-5	FSMRA 5JL	.140" (3,55)	.242" (6,15)
9-1437565-3	FSMRA 6J	.167" (4,25)	.269" (6,85)
1571386-6	FSMRA 6JL	.167" (4,25)	.269" (6,85)
9-1437565-5	FSMRA 7J	.364" (9,25)	.467" (11,86)
1571386-7	FSMRA 7JL	.364" (9,25)	.467" (11,86)
1571419-1	FSMRA 8J	.522" (13,26)	.624" (15,85)
1571386-8	FSMRA 8JL	.522" (13,26)	.624" (15,85)

**PART NUMBERING SEQUENCE**



CONSULT FACTORY FOR OTHER OPTIONS



**Tactile Switches, .236 [6] x .236 [6], Square Button, Straight or Right Angle**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper alloy, silver clad plate  
 Case.....Nylon  
 Actuator Button .....Polyacetal Resin  
 Cover.....Pet film  
 Terminals .....Copper alloy, silver plate  
 Frame (R/A) .....Steel, tin plate

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms Max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Force .....100 and 160 ±50 Grams  
 Actuator Travel......010"(.254)  
 Life Expectancy .....Up to 100,000 Cycles

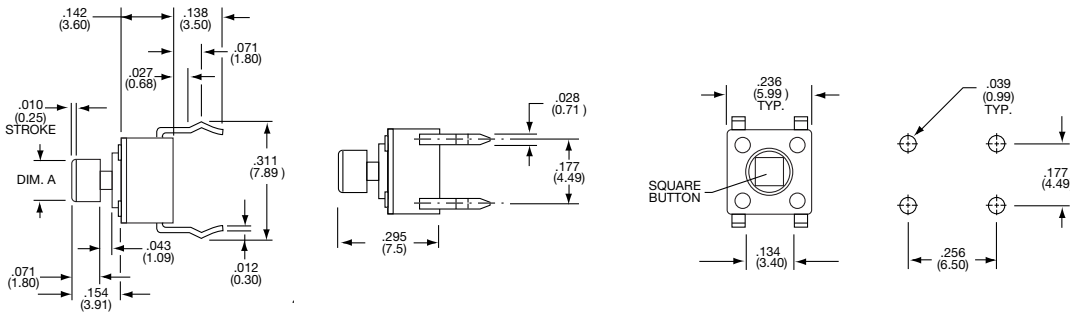
**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature..... -4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-22°F to +185°F (-30°C to +85°C)  
 Solder Heat Resistance .....See Page M3-4

6 x 6 mm



FSMCDA



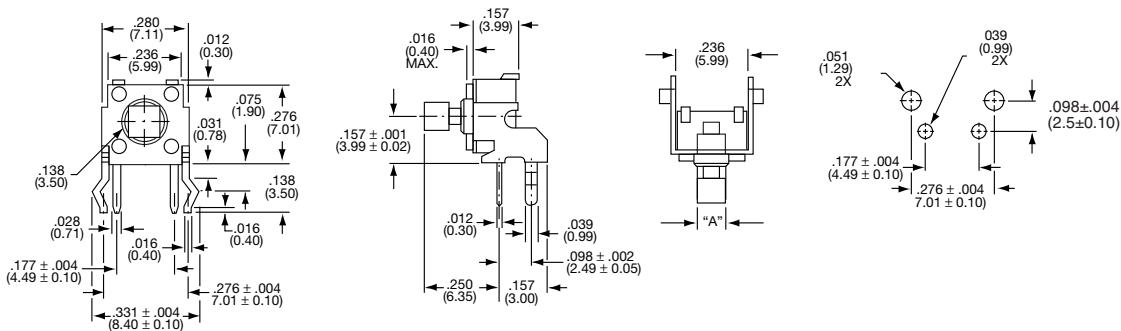
Tyco Electronics	Alcoswitch	Dim. A	Type			Force
7-1437565-8	FSMCD	.095 (2,42)	SPST	Off	(On)	100±50g
7-1437565-9	FSMCDA	.110 (2,80)	SPST	Off	(On)	160±50g

(On) indicates momentary position.

6 x 6 mm



FSMRACDA



Tyco Electronics	Alcoswitch	Dim. A	Force
9-1437565-9	FSMRACD	.095 (2,42)	100±50g
1437566-1	FSMRACDA	.110 (2,80)	160±50g

E  
FSMCD & FSMRACD Series

**Tactile Switches, .138 [3.5] x .236 [6], Surface Mount**

**MATERIAL SPECIFICATIONS:**

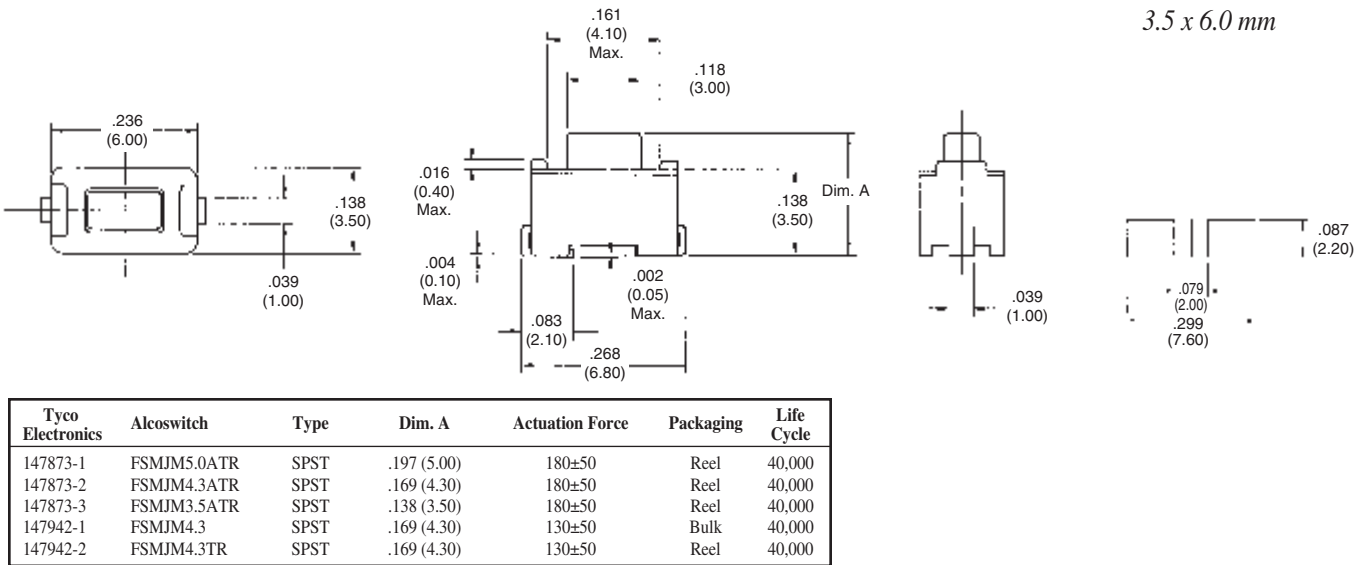
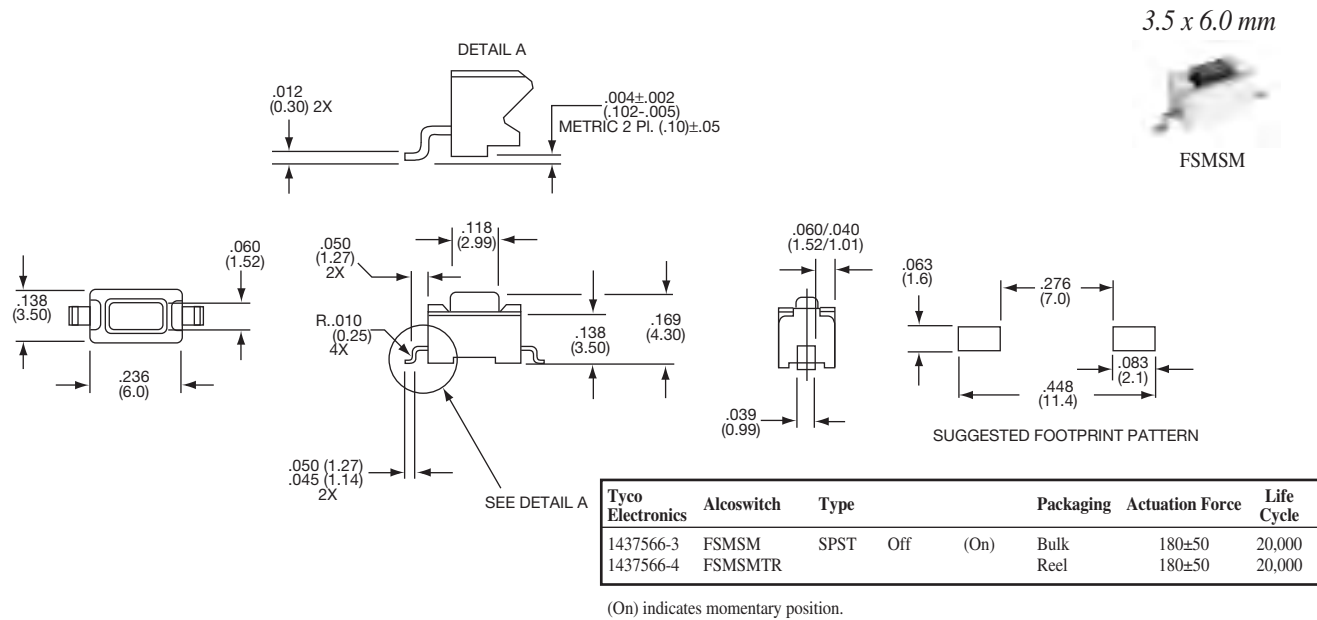
Contacts .....Stainless steel, silver clad plate  
 Case Material .....FSMSM: PPS  
 Actuator Material .....FSMSM: Nylon  
 FSMJM: PPS  
 Terminals .....Copper alloy, silver plate or tin plate  
 Cover.....Stainless steel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 500 VDC  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuator Travel......010"(.254)  
 Life Expectancy .....20,000-40,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-40°F to +185°F (-40°C to +85°C)  
 Storage Temperature.....-40°F to +185°F (-40°C to +85°C)  
 Solder Heat Resistance .....FSMSM IR Soldering EIA-364-56,  
 Procedure 5 Level 1, 215° C  
 FSMJM IR Soldering per EIA 364-56  
 Procedure 5, level 2, 464°F (240°C)



**Tactile Switches, .236 [6] x .236 [6], Surface Mount**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper alloy, silver plate  
 Case.....PPS  
 Actuator Button .....PPS  
 Cover.....Steel, tin plate  
 Terminals .....Copper alloy, silver plate

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Force .....See Below  
 Actuator Travel......010"(.254)  
 Life Expectancy .....Up to 100,000 Cycles

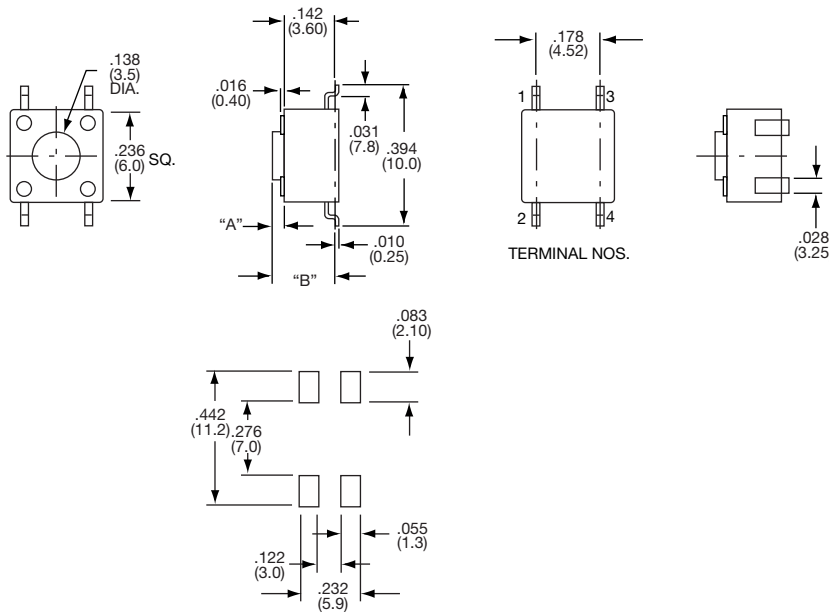
**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature..... -4°F to +185°F (-20°C to + 85°C)  
 Storage Temperature.....-22°F to +185°F (-30°C to +85°C)  
 Solder Heat Resistance .....IR Soldering EIA-364-56  
 Procedure 5 Level 3, 500°F (260°C)

6 x 6 mm



FSMJ SMA



Bulk Pack Part Number		Tape & Reel Part Number		Actuator Length	Switch Height	Actuation Force
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Dimension A	Dimension B	
2-1437565-7	FSM2JSMA	3-1437565-0	FSM2JSMATR	.028 (0.70)	.169 (4.30)	160 ± 50 grams
4-1437565-1	FSM4JSMA	4-1437565-2	FSM4JSMATR	.055 (1.40)	.196 (5.00)	160 ± 50 grams
4-1437565-9	FSM6JSMA	5-1437565-0	FSM6JSMATR	.134 (3.40)	.276 (7.00)	160 ± 50 grams
2-1437565-8	FSM2JSMAA	2-1437565-9	FSM2JSMAATR	.028 (0.70)	.169 (4.30)	260 ± 50 grams
1571563-1	FSM4JSML	1571563-2	FSM4JSMLTR	.055 (1.40)	.196 (5.00)	100 ± 50 grams
1571563-3	FSM4JSMAA	1571563-4	FSM4JSMAATR	.055 (1.40)	.196 (5.00)	260 ± 50 grams
—	FSM6JSMAA	—	FSM6JSMAATR	.134 (3.40)	.276 (7.00)	260 ± 50 grams
3-1437566-8	FSM8JSMA	—	FSM8JSMATR	.232 (5.90)	.374 (9.50)	260 ± 50 grams
1571527-1	FSM2JSML	1571527-2	FSM2JSMLTR	.028 (0.70)	.169 (4.30)	100 ± 50 grams

E  
FSMJ SMA Series

**Low Profile Series FSMCT Tactile Switches, .196 [5.0] x .196 [5.0],  
Surface Mount**

**MATERIAL SPECIFICATIONS:**

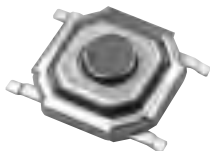
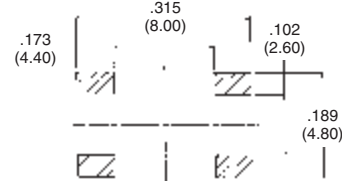
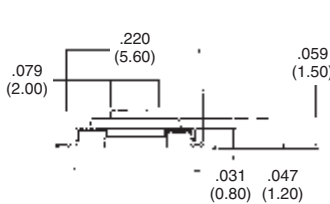
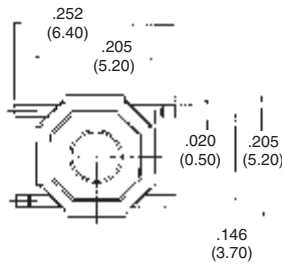
Cover .....Nickel Silver  
 Stem/Actuator .....Brass-"J" Lead  
                                     Brass nickel plate-gullwing  
 Contacts:  
     Moving .....Stainless Steel, Silver Clad-Plate  
     Fixed/Terminal .....Copper Alloy, Silver-Plate  
 Case .....Nylon, UL94V-0

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....20mA @ 15VDC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Travel .....0.25 +0.1/-0.2  
 Life Expectancy .....Up to 500,000 and 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-22 to +185°F (-30 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56A, Procedure 4 & 5,  
                                     Level 3  
 Solderability .....Per EIA-364-52, Class 2, Category 1,  
                                     Temp. 473°F (245°C) max., Time 2.5  
                                     seconds max., 95% minimum coverage.



Tyco Electronics	Alcoswitch	Type	Force	Life Cycle
8-1437565-0	FSMCTTR	SPST	160±50	1,000,000
8-1437565-1	FSMCTATR	SPST	260±50	500,000

"J" lead option in development. Contact factory for additional information.

**Low Profile, 6 x 6 SMT J-Lead, Extended Life**

**MATERIAL SPECIFICATIONS:**

Cover .....Stainless Steel  
 Stem/Actuator .....Nylon UL94V-0  
 Contacts:  
   Moving .....Stainless Steel, Silver Clad-Plate  
   Fixed/Terminal .....Copper Alloy, Silver-Plate  
 Case .....Thermoplastic, UL94V-0, Black  
 Tape .....Teflon

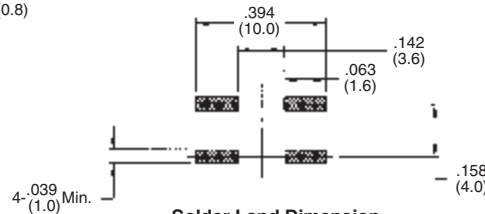
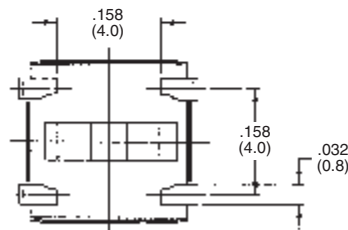
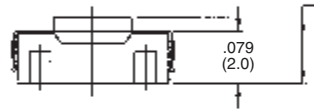
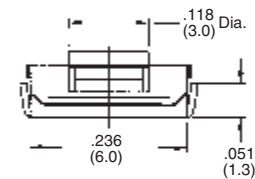
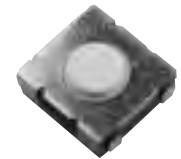
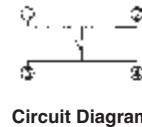
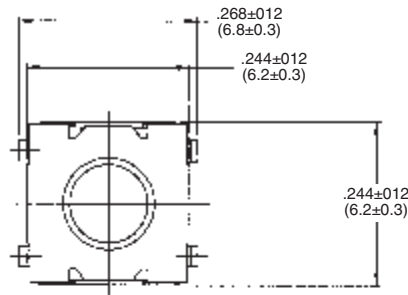
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Travel.....0.008 +/-0.004 (.2 +/- .10)

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-22 to +185°F (-30 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56A, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA-364-52, Class 2, Category 1, Temp 473°F (245°C), 95% minimum coverage.

**E**  
Extended Life Series



Tyco Electronics	Dim L	Force	Life	Packaging
1571625-1	.098 (2.5)	50gf	2,000,000	Bulk
1571625-2	.098 (2.5)	50gf	2,000,000	T&R
1571625-3	.098 (2.5)	100gf	1,000,000	Bulk
1571625-4	.098 (2.5)	100gf	1,000,000	T&R
1571625-5	.098 (2.5)	160gf	1,000,000	Bulk
1571625-6	.098 (2.5)	160gf	1,000,000	T&R
1571625-7	.098 (2.5)	260gf	100,000	Bulk
1571625-8	.098 (2.5)	260gf	100,000	T&R

**Low Profile, 6 x 6 SMT, Gull Wing, Extended Life**

**MATERIAL SPECIFICATIONS:**

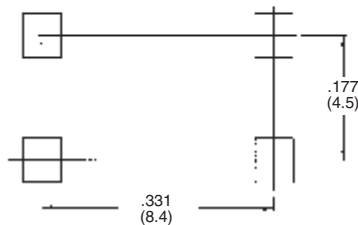
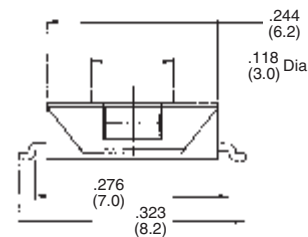
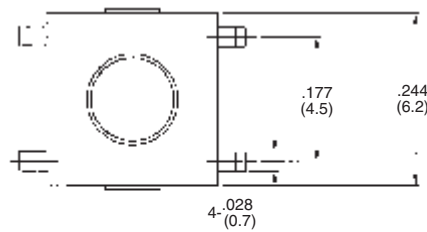
Cover .....Copper Alloy, Tin Lead Plate  
 Stem/Actuator .....Nylon UL94V-0  
 Contacts:  
     Moving .....Stainless Steel, Silver Clad-Plate  
     Fixed/Terminal .....Copper Alloy, Silver-Plate  
 Case .....Thermoplastic, UL94V-0, Black  
 Tape .....Teflon

**TYPICAL PERFORMANCE CHARACTERISTICS:**

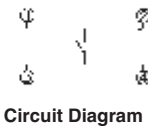
Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Travel.....0.010 +/-0.004 (.25 +/- .10)

**ENVIRONMENTAL SPECIFICATIONS:**

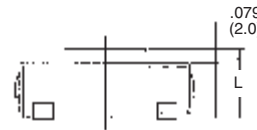
Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-22 to +185°F (-30 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56A, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA-364-52, Class 2, Category 1, Temp 473°F (245°C) max., time 2.5 seconds max., 95% minimum coverage.



**PCB Mounting Solder Land Dimension**



**Circuit Diagram**



Tyco Electronics	Dim L	Force	Life	Packaging
1571626-1	.098 (2.5)	50gf	1,000,000	Bulk
1571626-2	.098 (2.5)	50gf	1,000,000	T&R
1571626-3	.098 (2.5)	100gf	1,000,000	Bulk
1571626-4	.098 (2.5)	100gf	1,000,000	T&R
1571626-5	.098 (2.5)	160gf	1,000,000	Bulk
1571626-6	.098 (2.5)	160gf	1,000,000	T&R
1571626-7	.079 (2.0)	160gf	1,000,000	Bulk
1571626-8	.079 (2.0)	160gf	1,000,000	T&R
1571626-9	.098 (2.5)	260gf	100,000	Bulk
1-1571626-0	.098 (2.5)	260gf	100,000	T&R

**Low Profile, 6 x 6 SMT, Gull Wing w/ESD Terminal, Extended Life**

**MATERIAL SPECIFICATIONS:**

Cover .....Copper Alloy, Tin Lead Plate  
 Stem/Actuator .....Nylon UL94V-0  
 Contacts:  
     Moving .....Stainless Steel, Silver Clad-Plate  
     Fixed/Terminal .....Copper Alloy, Silver-Plate  
 Case .....Thermoplastic, UL94V-0, Black  
 Tape .....Teflon

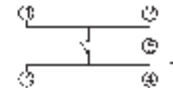
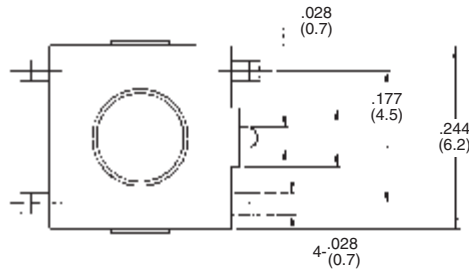
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100Milliohms Max  
 Insulation Resistance .....100Megaohms @ 100V DC Min.  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Travel.....0.010 +/- .004 (.25 +/- .10)

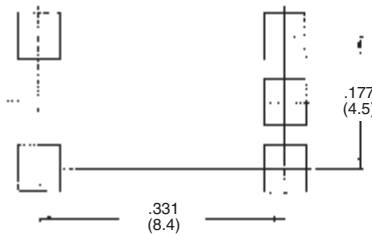
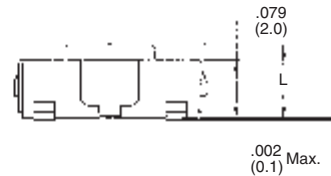
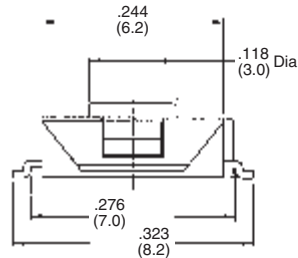
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-22 to +185°F (-30 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56A, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA-364-52, Class 2, Category 1, Temp 473°F (245°C) max., time 2.5 seconds max., 95% minimum coverage.

**E**  
Extended Life Series



**Circuit Diagram**



**PCB Mounting Solder Land Dimension**

Tyco Electronics	Dim L	Force	Life	Packaging
1571636-1	.098 (2.5)	50gf	1,000,000	Bulk
1571636-2	.098 (2.5)	50gf	1,000,000	T&R
1571636-3	.098 (2.5)	100gf	1,000,000	Bulk
1571636-4	.098 (2.5)	100gf	1,000,000	T&R
1571636-5	.098 (2.5)	160gf	1,000,000	Bulk
1571636-6	.098 (2.5)	160gf	1,000,000	T&R
1571636-7	.079 (2.0)	160gf	1,000,000	Bulk
1571636-8	.079 (2.0)	160gf	1,000,000	T&R
1571636-9	.098 (2.5)	260gf	100,000	Bulk
1-1571636-0	.098 (2.5)	260gf	100,000	T&R



**Tactile Switches, .236 [6] x .236 [6], Low Profile, Surface Mount**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper Alloy, silver clad plated  
 Case Material .....PPS  
 Stem .....PPS  
 Cover.....Steel, tin-plate  
 Terminals .....Copper alloy, silver plated

**TYPICAL PERFORMANCE CHARACTERISTICS:**

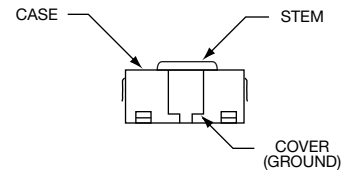
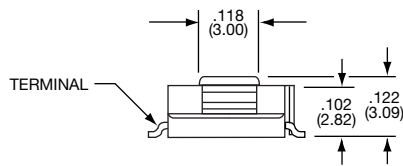
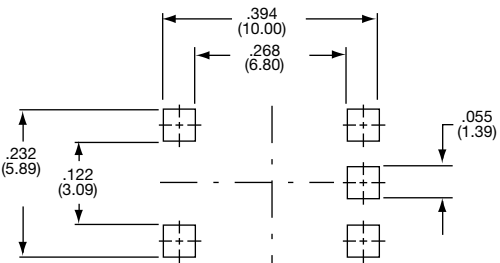
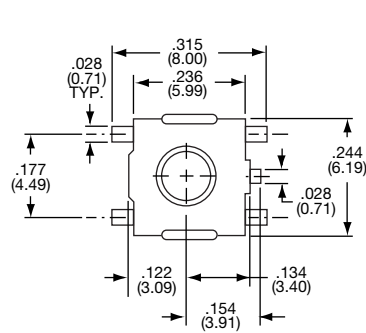
Contact Rating .....50mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @ 100 VDC  
 Dielectric Strength .....500 VAC, 1 minute  
 Actuation Force .....See Below.  
 Life Expectancy .....Up to 100,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

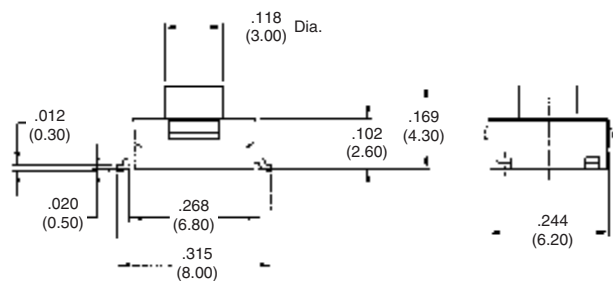
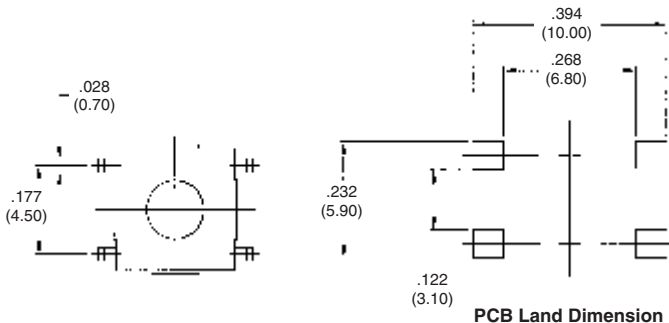
Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-22°F to +185°F (-30°C to +85°C)  
 Solder Heat Resistance .....IR Soldering EIA-364-56  
 Procedure 5 Level 2, 464°F (240°C)



FSM1LP



FSM4LP



Tyco Electronics	Alcoswitch	Force	Actuator Packaging
1-1437565-6	FSM1LP	160	Bulk
1-1437565-7	FSM1LPA	260	Bulk
1-1437565-9	FSM1LPTR	160	Tape & Reel
1-1437565-8	FSM1LPATR	260	Tape & Reel
1571621-1	FSM4LP	260	Bulk
4-1437565-3	FSM4LPTR	260	Tape & Reel

**E**  
FSM1LP Series

**Tactile Switches, .472 [12] x .472 [12], Flush or Extended Actuators**

**MATERIAL SPECIFICATIONS:**

Contacts .....Copper alloy, silver clad plate  
 Case.....PBT  
 Actuator Button .....Polyacetal Resin  
 Cover.....PET film  
 Terminals .....Copper alloy, silver plate  
 Frame (R/A) .....Nylon

**TYPICAL PERFORMANCE CHARACTERISTICS:**

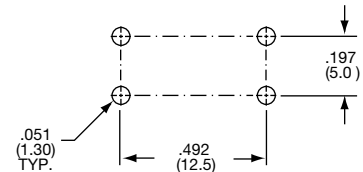
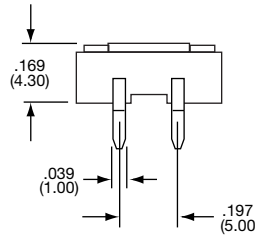
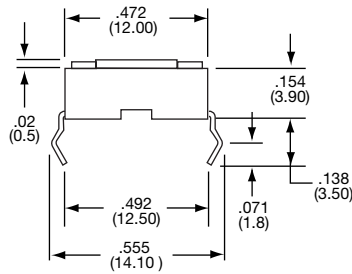
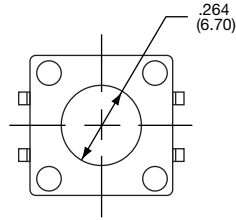
Contact Rating .....50 mA @ 12 VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohms min. @100 VDC  
 Dielectric Strength .....500 VAC for 1 minute  
 Actuation Force .....See below  
 Actuator Travel.....0.012"(0.3)  
 Life Expectancy .....Up to 100,000 cycles

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature.....4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-22°F to +185°F (-30°C to +85°C)  
 Solder Heat Resistance .....See Page M3-4



FSM100

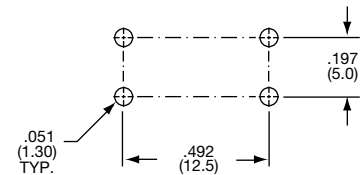
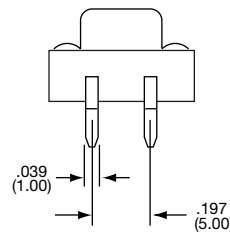
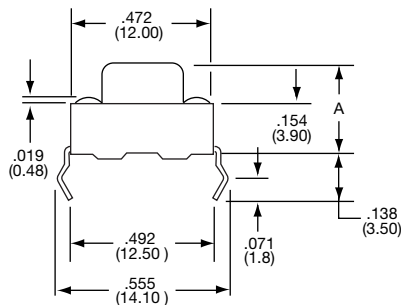
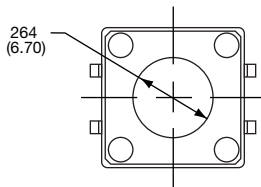


Tyco Electronics	Alcoswitch	Type			Force
1437565-2	FSM100	SPST	Off	(On)	160±50gf
1571139-1	FSM100A	SPST	Off	(On)	260±50gf

(On) indicates momentary position.



FSM101

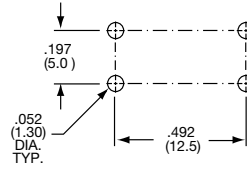
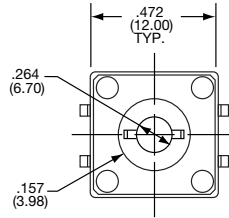
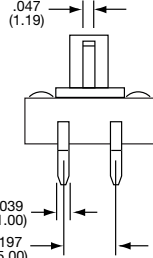
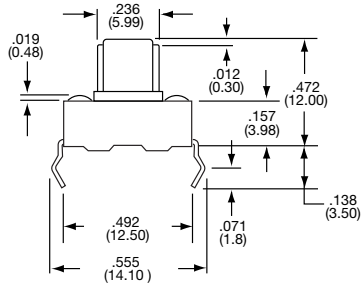


Tyco Electronics	Alcoswitch	Type			Force	Dim A
1437565-3	FSM101	SPST	Off	(On)	160±50gf	.295 [7.5mm]
1571140-1	FSM201A	SPST	Off	(On)	260±50gf	.335 [8.5mm]

(On) indicates momentary position.

E  
FSM100-104 Series

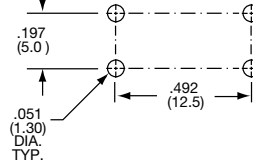
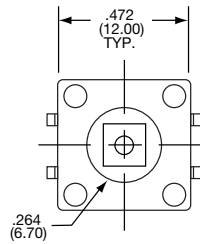
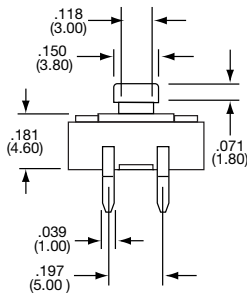
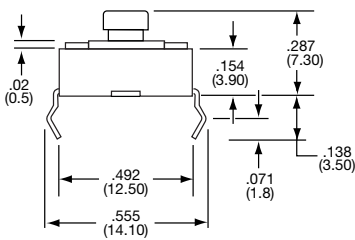
**Tactile Switches, .472 [12] x .472 [12], Vertical or Right Angle**



FSM102

Tyco Electronics	Alcoswitch	Type			Force
1437565-4	FSM102	SPST	Off	(On)	160±50gf
1571061-1	FSM102A	SPST	Off	(On)	260±50gf

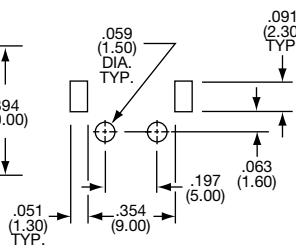
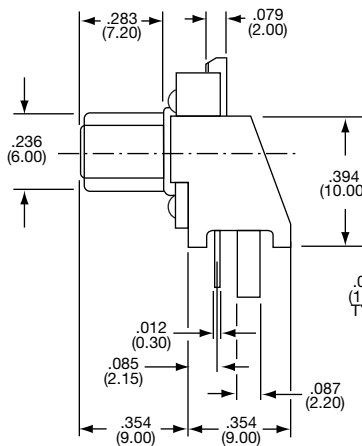
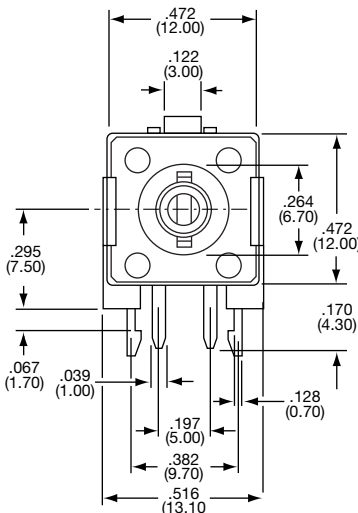
(On) indicates momentary position.



FSM103

Tyco Electronics	Alcoswitch	Type			Force
1437565-5	FSM103	SPST	Off	(On)	160±50gf

(On) indicates momentary position.



Tyco Electronics	Alcoswitch	Type			Force
1437565-6	FSM104	SPST	Off	(On)	160±50gf

(On) indicates momentary position.

**Tactile Switches, Sealed .472 [12] x .472 [12], Surface Mount, Projected Actuator**

**MATERIAL SPECIFICATIONS:**

Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

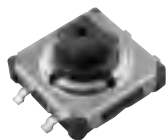
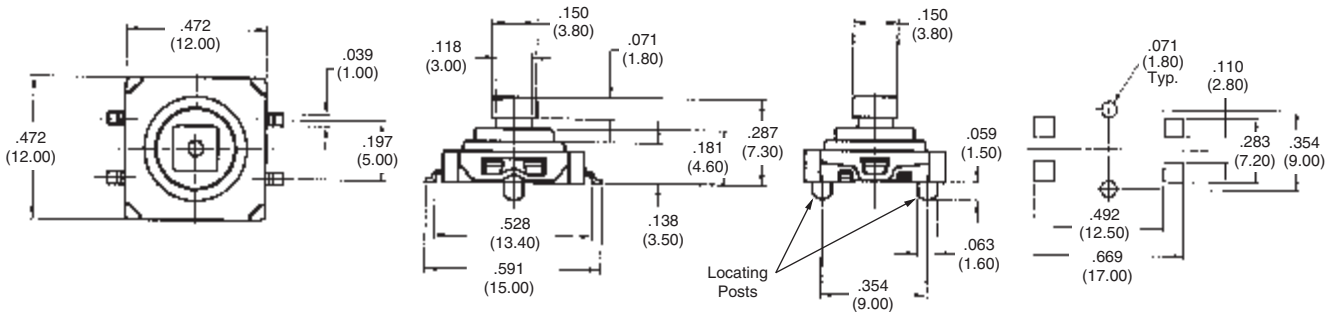
Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/- .008 (.35 +/- .20)  
 Life .....Up to 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +70°C)  
 Storage Temperature .....-4 to +185°F (-20 to +70°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67

**E**

Sealed Tactile Switches



Tyco Electronics	Locating Post	Packaging	Actuator Height	Force
1571217-1	No	Bulk	.287 (7.30)	160±70gf
1571217-2	Yes	Bulk	.287 (7.30)	160±70gf
1571217-3	No	T&R	.287 (7.30)	160±70gf
1571217-4	Yes	T&R	.287 (7.30)	160±70gf

**Tactile Switches, Sealed .472 [12] x .472 [12], Surface Mount, Flush, Actuator**

**MATERIAL SPECIFICATIONS:**

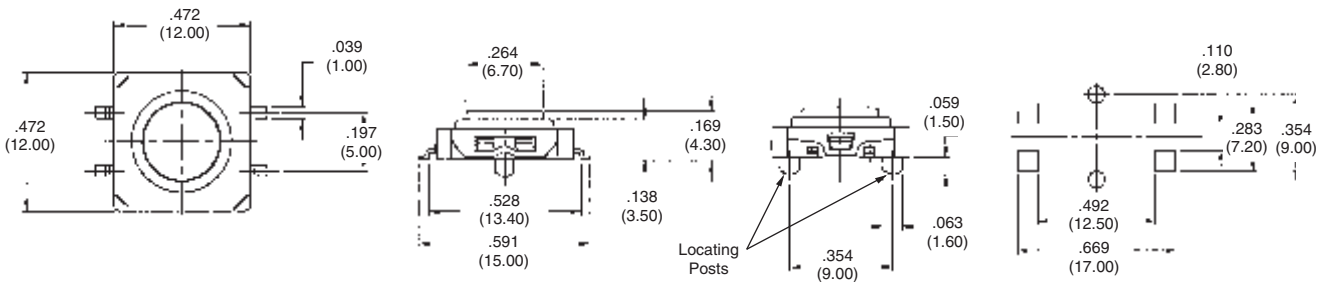
Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/-0.008 (.35 +/- .20)  
 Life .....Up to 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67



Tyco Electronics	Locating Post	Packaging	Actuator Height	Force
1571218-1	No	Bulk	.169 (4.30)	160±70gf
1571218-2	Yes	Bulk	.169 (4.30)	160±70gf
1571218-3	No	T&R	.169 (4.30)	160±70gf
1571218-4	Yes	T&R	.169 (4.30)	160±70gf

**Tactile Switches, Sealed .472 [12] x .472 [12], Thru-Hole, Projected Actuator**

**MATERIAL SPECIFICATIONS:**

Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

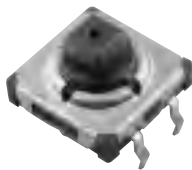
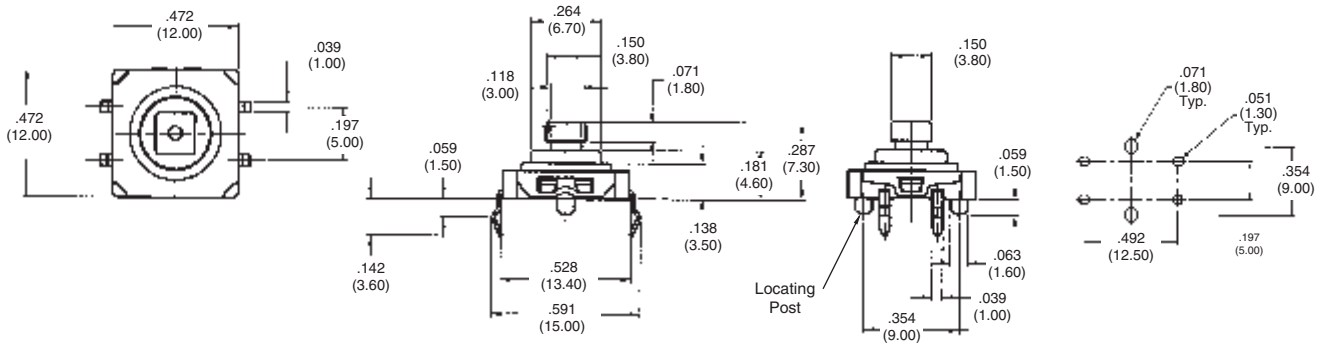
Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/-0.008 (.35 +/- .20)  
 Life .....1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 3, Test Cond. B  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67

E

Sealed Tactile Switches



Tyco Electronics	Locating Post	Packaging	Actuator Height	Force
1571219-1	No	Bulk	.287 (7.30)	160±70gf
1571219-2	Yes	Bulk	.287 (7.30)	160±70gf

**Tactile Switches, Sealed .472 [12] x .472 [12], Thru-Hole, Flush Actuator**

**MATERIAL SPECIFICATIONS:**

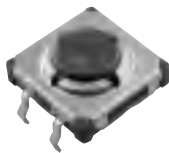
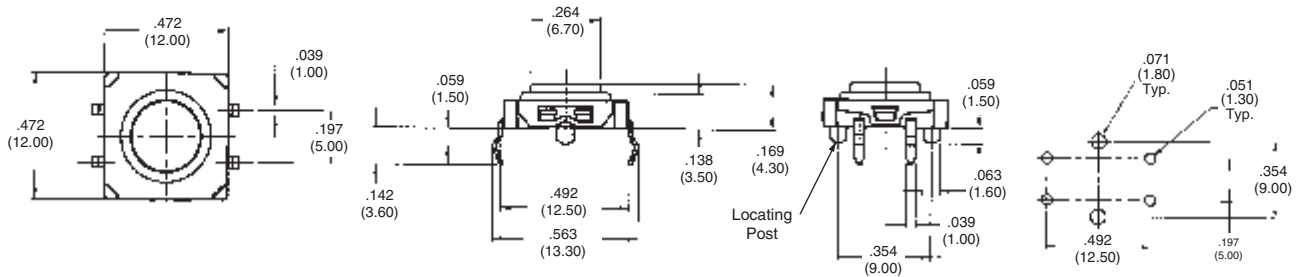
Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/-0.008 (.35 +/-0.20)  
 Life .....1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 3, Test Cond. B  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67



Tyco Electronics	Locating Post	Packaging	Actuator Height	Force
1571220-1	No	Bulk	.169 (4.30)	160±70gf
1571220-2	Yes	Bulk	.169 (4.30)	160±70gf

**E**  
Sealed Tactile Switches



**Tactile Switches, Sealed .299 [7.6] x .287 [7.3], Surface Mount, Extended Actuator**

**MATERIAL SPECIFICATIONS:**

Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver

**TYPICAL PERFORMANCE CHARACTERISTICS:**

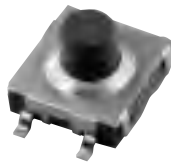
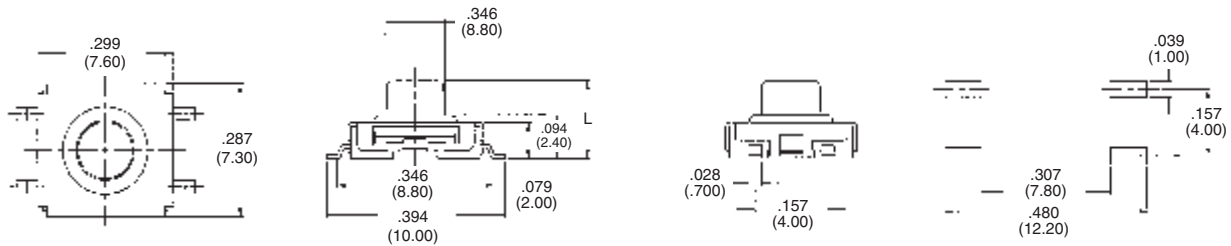
Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/- .008 (.35 +/- .20)  
 Life .....Up to 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67

E

Sealed Tactile Switches



Tyco Electronics	Packaging	L	Force
1571294-1	Bulk	.169 (4.30)	160±50gf
1571294-2	T&R	.169 (4.30)	160±50gf
1571294-3	Bulk	.197 (5.00)	160±50gf
1571294-4	T&R	.197 (5.00)	160±50gf

**Tactile Switches, Sealed .299 [7.6] x .287 [7.3], Surface Mount, Flush Actuator**

**MATERIAL SPECIFICATIONS:**

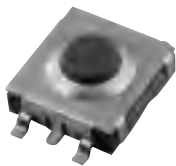
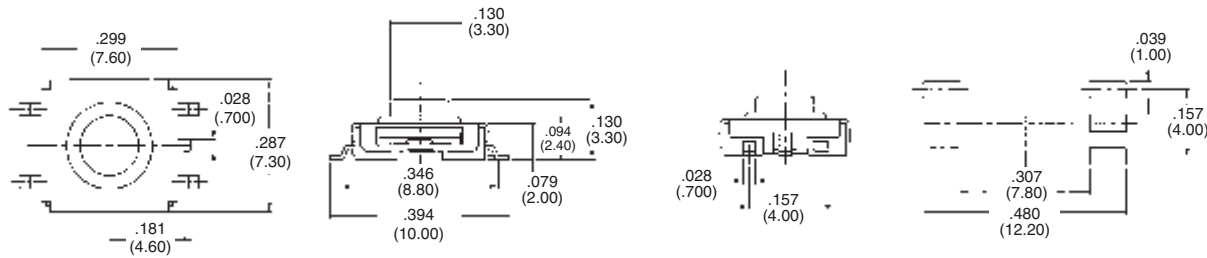
Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/- .008 (.35 +/- .20)  
 Life .....Up to 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67



Tyco Electronics	Packaging	Actuator Height	Force
1571296-1	Bulk	.130 (3.30)	160±50gf
1571296-2	T&R	.130 (3.30)	160±50gf

**E**  
Sealed Tactile Switches

**Tactile Switches, Sealed .299 [7.6] x .287 [7.3], Thru-Hole, Extended Actuator**

**MATERIAL SPECIFICATIONS:**

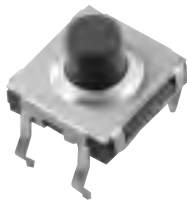
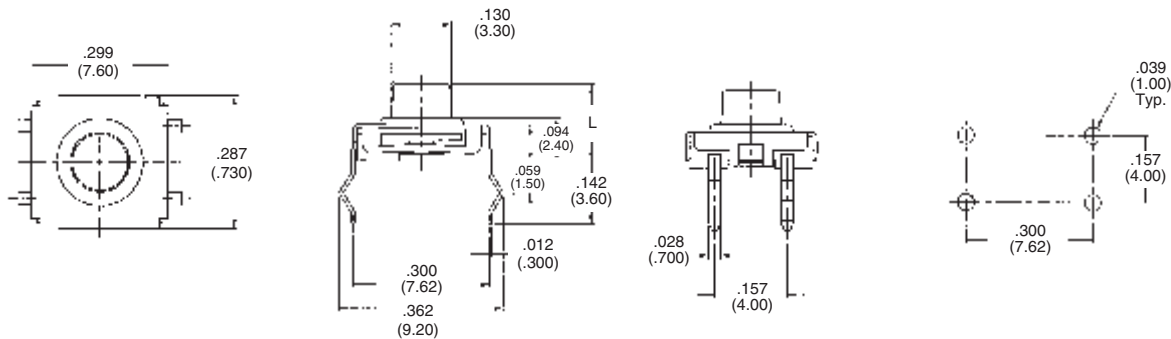
Case .....Thermoplastic, UL94V-0, Black  
 Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel .....0.014 +/-0.008 (.35 +/- .20)  
 Life .....Up to 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 3, Test Cond.B  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67



Tyco Electronics	Packaging	L	Force
1571295-1	Bulk	.169 (4.30)	160±50gf
1571295-2	Bulk	.197 (5.00)	160±50gf

E

Sealed Tactile Switches

**Tactile Switches, Sealed .185 [4.7] x .268 [6.8], Surface Mount**

**MATERIAL SPECIFICATIONS:**

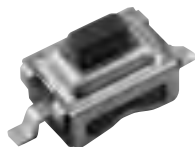
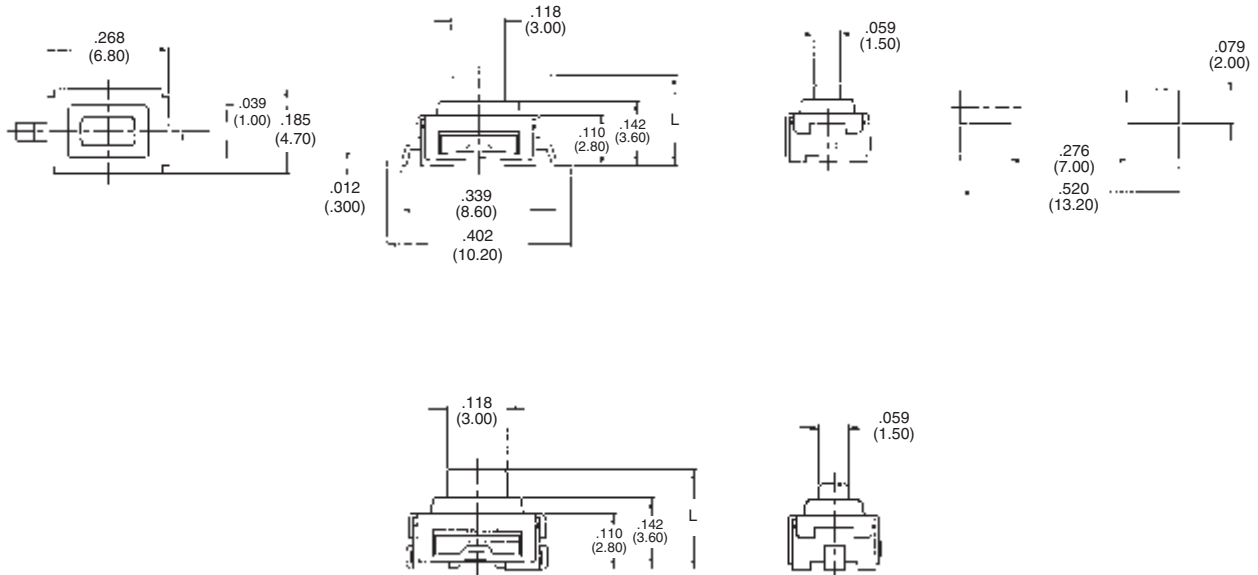
Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/-0.008 (.35 +/- .20)  
 Life .....Up to 50,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67



Tyco Electronics	Packaging	L	Operating Force	Lead Style
1571298-1	Bulk	.197 (5.00)	130 ± 50gf	Gull Wing
1571298-2	T&R	.197 (5.00)	130 ± 50gf	Gull Wing
1571299-1	Bulk	.169 (4.30)	130 ± 50gf	J Lead
1571299-2	T&R	.169 (4.30)	130 ± 50gf	J Lead
1571299-3	Bulk	.197 (5.00)	130 ± 50gf	J Lead
1571299-4	T&R	.197 (5.00)	130 ± 50gf	J Lead

**E**  
Sealed Tactile Switches

**Tactile Switches, Sealed .185 [4.7] x .268 [6.8], Thru-Hole**

**MATERIAL SPECIFICATIONS:**

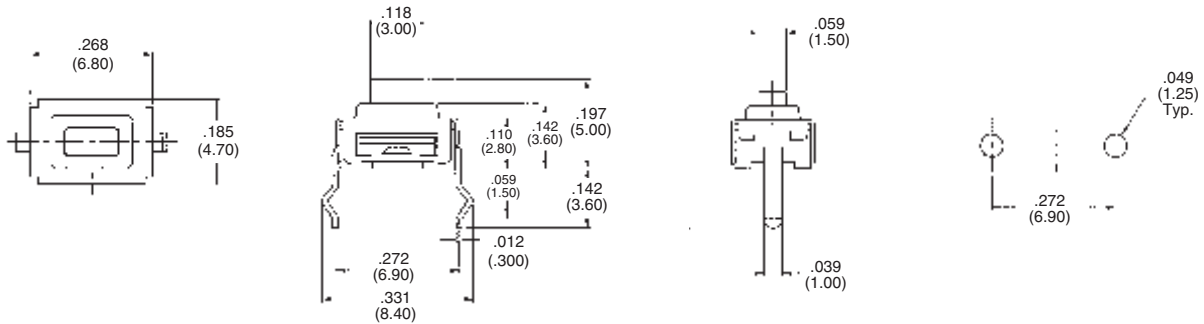
Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/- .008 (.35 +/- .20)  
 Life .....Up to 50,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4 to +185°F (-20 to +85°C)  
 Storage Temperature .....-4 to +185°F (-20 to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 3, Test Cond. B  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67



Tyco Electronics	Packaging	Actuator Height	Operating Force
1571297-1	Bulk	.197 (5.00)	130 ± 50gf

E

Sealed Tactile Switches

**Tactile Switches, Sealed Right Angle, Surface Mount**

**MATERIAL SPECIFICATIONS:**

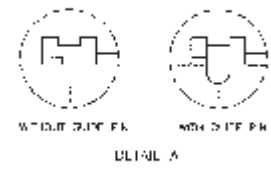
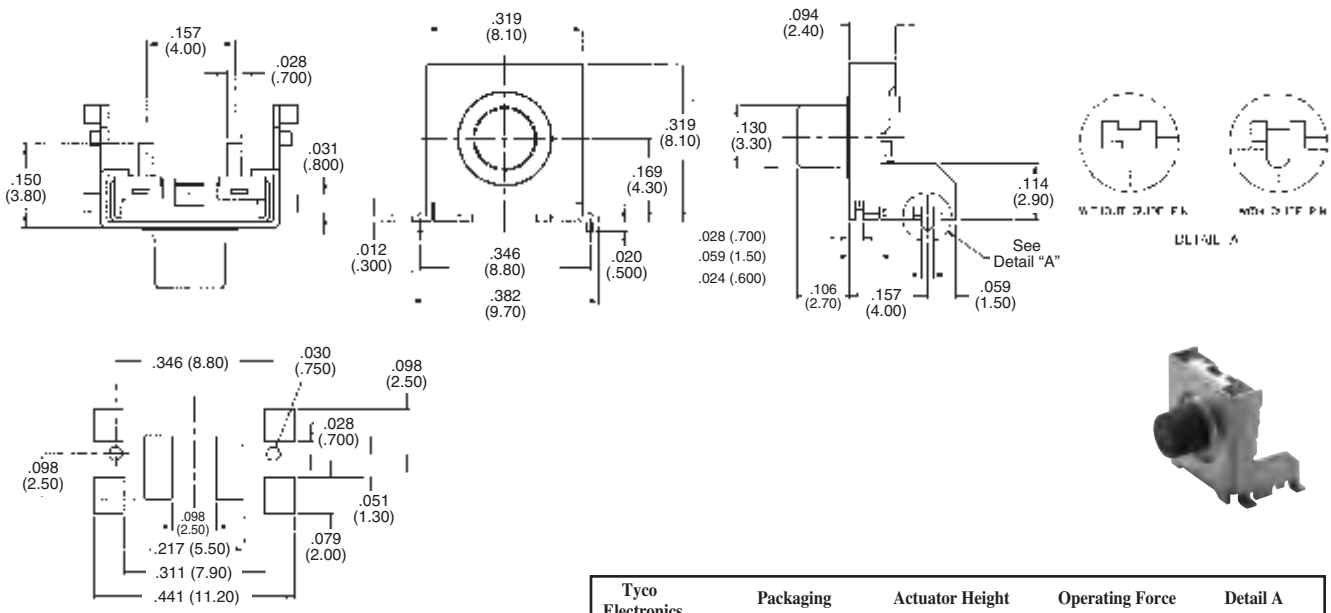
Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver/Nickel

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/- .008 (.35 +/- .20)  
 Life .....Up to 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4° to +185°F (-20°to +85°C)  
 Storage Temperature .....-4° to +185°F (-20°to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67



Tyco Electronics	Packaging	Actuator Height	Operating Force	Detail A
1571300-1	Bulk	.106 (2.70)	130 ± 50gf	Without Pin
1571300-2	Bulk	.106 (2.70)	130 ± 50gf	With Pin

**E**  
Sealed Tactile Switches

**Tactile Switches, Sealed Right Angle, Surface Mount**

**MATERIAL SPECIFICATIONS:**

Case .....Thermoplastic, UL94V-0, Black  
 Stem/Actuator .....Thermoplastic, UL94V-0, Black  
 Cover .....Stainless Steel  
 Seal .....Silicone Rubber, Black  
 Contact.....Stainless Steel, Plating—Silver  
 Terminal .....Copper Alloy, Plating—Silver

**TYPICAL PERFORMANCE CHARACTERISTICS:**

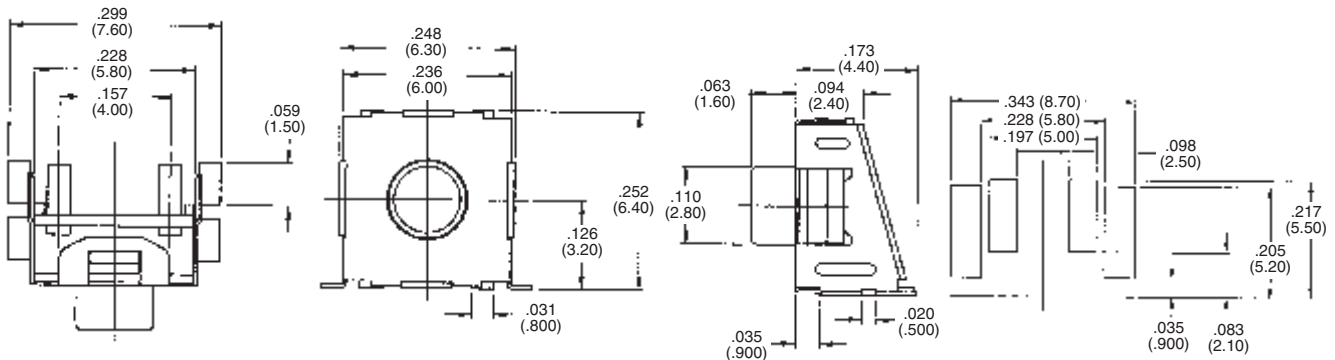
Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC  
 Actuation Travel.....0.014 +/- .008 (.35 +/- .20)  
 Life .....Up to 1,000,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4° to +185°F (-20°to +85°C)  
 Storage Temperature .....-4° to +185°F (-20°to +85°C)  
 Resistance to solder heat .....Per EIA-364-56, Procedure 4 & 5, Level 3  
 Solderability .....Per EIA RS-186-9E  
 Seal .....Per IP67

**E**

Sealed Tactile Switches



Tyco Electronics	Packaging	Actuator Height	Operating Force
1571407-1	Bulk	.063 (1.60)	260 ± 100gf
1571407-2	T&R	.063 (1.60)	260 ± 100gf



**Tactile Switches, Side Actuated, Surface Mount**

**MATERIAL SPECIFICATIONS:**

Case .....Nylon 4/6, UL94V-0, Black  
 Stem/Actuator .....Nylon 4/6, UL94V-0, Black  
 Cover .....Stainless Steel  
 Contact Plate .....Stainless Steel, Silver Clad Over Nickel Plate  
 Terminal .....Copper Alloy, Silver Over Nickel Plate  
 Masking Tape .....Teflon

**TYPICAL PERFORMANCE CHARACTERISTICS:**

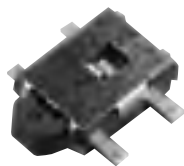
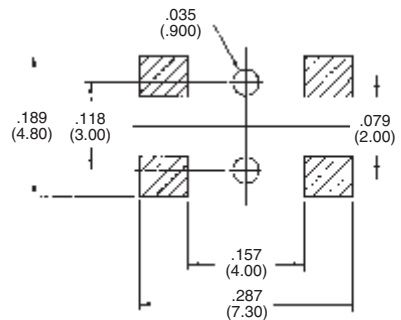
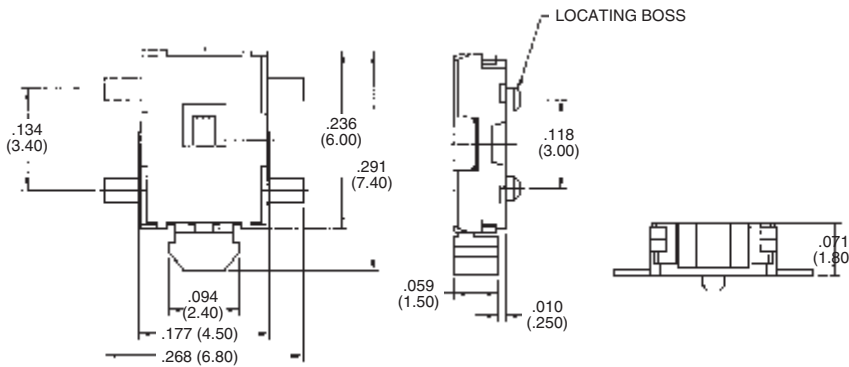
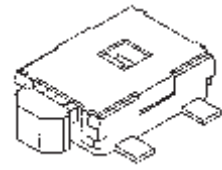
Contact Rating .....50mA @ 12 V DC  
 Initial Contact Resistance .....100MilliOhms Max  
 Insulation Resistance .....100Megaohms @ 100VDC Min.  
 Dielectric Strength .....500 VAC for 1 minute  
 Force .....160 (+70/-40gm)  
 Travel ......30 (+.1/-2mm)  
 Life .....Up to 100,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature .....-4° to +185°F (-20° to +85°C)  
 Storage Temperature .....-22° to +185°F (-30° to +85°C)  
 Resistance to Solder Heat .....Per EIA-364-56A, procedure 4 and 5, Level 3  
 Solderability .....Per EIA-364-52, Class 2, Category 1, Temp. 473°F (245°C) max., time 2.5 sec. max., 95% min. coverage.

**E**

Side Actuated Tactile Switches



Tyco Electronics	Feature	Packaging
1571262-1	W/O Boss	Bulk
1571262-2	W/O Boss	T&R
1571262-3	with Boss	Bulk
1571262-4	with Boss	T&R

**Multi-Directional Actuation**

**MATERIAL SPECIFICATIONS:**

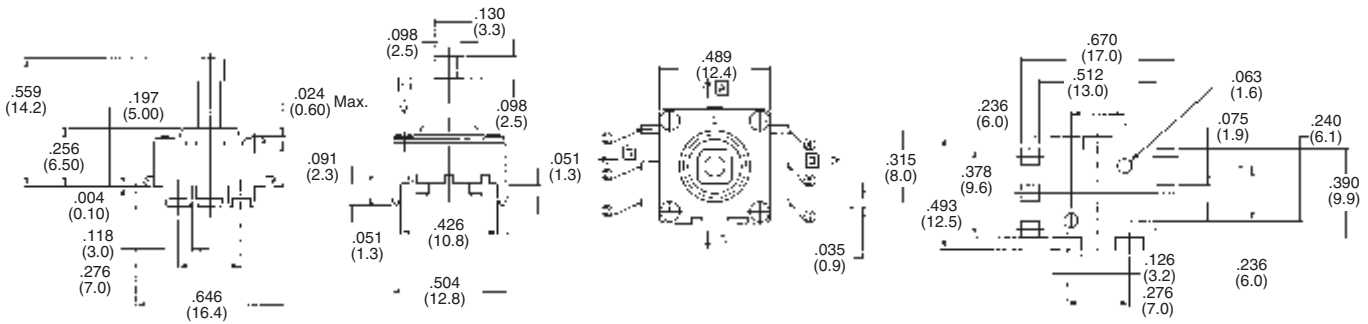
Contact .....Copper alloy - silver clad/nickel  
 Case Material .....Nylon - UL 94-HB, Black  
 Actuator Material .....Nylon - UL 94-HB, Black  
 Terminals/Fixed Contact .....Copper alloy - plate silver clad/nickel

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature .....-13° to 158°F (-25° to +70°C)  
 Storage Temperature .....-40° to 185°F (-40° to +85°C)  
 Solder Heat Resistance.....Per EIA-364-56A, Procedure 4 and 5, Level 3  
 Solderability .....Per EIA-364-52, Class 2 Cat. 1, temp. 255° max., time 5 seconds max. 95% min. coverage

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating .....20mA @15VDC  
 Initial Contact Resistance.....100 Milliohms max.  
 Insulation Resistance .....100 Megohm min.  
 Dielectric Strength .....100 VAC for 1 min.  
 Life Expectancy .....Up to 50,000 Cycles  
 Actuation Force .....500±150 gf (center push),  
 200±100 gf (4-directional)  
 Actuation Travel.....0.039 (1.0) ±.012 (.3) (4-directional),  
 0.315 (8.0) ±2° (4-directional)



Tyco Electronics	Dimension L
1571514-1	.559 (14.2)
1571514-2	.480 (12.2)
1571514-3	.413 (10.5)

**MATERIAL SPECIFICATIONS:**

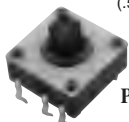
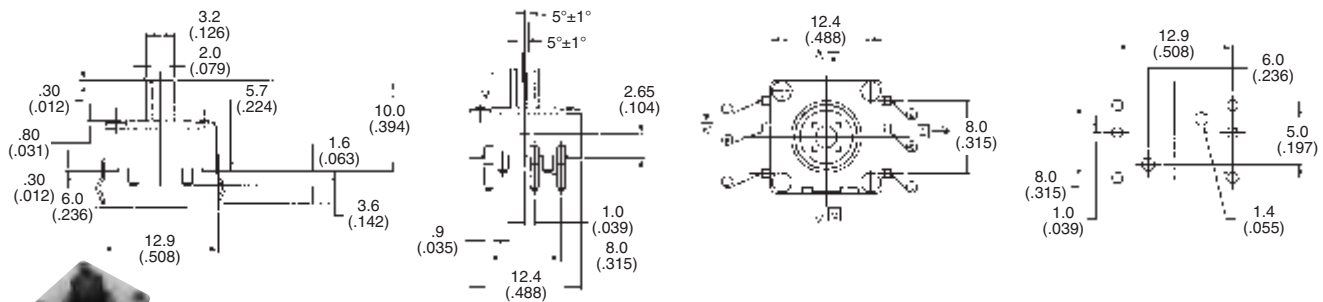
Contacts.....Stainless steel, plate silver clad/nickel  
 Case Material .....Nylon - UL 94-HB, Black  
 Actuator Material .....PBT, UL 94-HB  
 Terminals/Fixed Contacts .....Copper alloy - plate silver/nickel

**Environmental Specifications**

Operating Temperature .....-13° to 158°F (-25° to +70°C)  
 Storage Temperature.....-40° to 185°F (-40° to +85°C)  
 Solder Heat Resistance .....Per EIA-364-56A, Procedure 3, Condition B  
 Solderability .....Per EIA-364-52, Class 2 Cat. 1, temp. 255° max., time 5 seconds max. 95% min. coverage

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating .....20mA @15VDC  
 Initial Contact Resistance .....100 Milliohms max.  
 Insulation Resistance .....100 Megohm min.  
 Dielectric Strength .....100 VAC for 1 min.  
 Life Expectancy .....Up to 50,000 Cycles  
 Actuation Force .....350±100 gf (center push),  
 200±70/-50 gf (4-directional)  
 Actuation Travel.....0.010 (.25) ±.008 (.2) (center push),  
 0.197 (5.0) ±1° (4-directional)



Part Number 1571515-1

Multi-Directional Switches

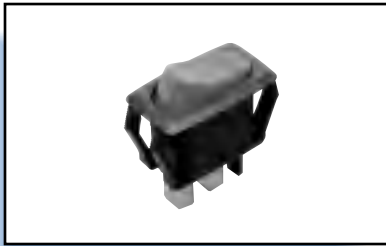
E



*TRD Series - Page F3*



*Gemini Series - Page F7*



*Power Rocker Switches - Page F21*

# Rocker/Paddle



Rocker/Paddle Switches

**Rocker/Paddle Switches Part Number Index**

A101J15ZQ0	F7
A101J16WQ00	F7
A101J16Z3G00UL	F7
A101J16Z3Q00UL	F7
A101J16ZB00	F7
A101J16ZQ00	F7
A101J1AB0	F7
A101J1AQ0	F14
A101J1AQ2	F7
A101J1AV2B0	F7
A101J1AV2Q0	F13
A101J1CG0	F7
A101J1CG0	F13
A101J1V3B0	F7
A101J1V3Q0	F7
A101J1ZB0	F7
A101J1ZQ0	F14
A101J2AQ0	F15
A101J2AV2Q0	F16
A101J2ZB9	F7
A101J2ZQ0	F15
A101J3V3Q2	F7
A101J3ZQ0UL	F7
A101J4ZQ0	F7
A101J50AV2Q0	F7
A101J50V3Q0	F7
A101J50V3Q2	F7
A101J50ZQ0	F7
A101J51CB00	F7
A101J51Z3G00UL	F7
A101J51Z3Q00	F7
A101J51Z3Q00UL	F7
A101J51ZB00	F7
A101J51ZQ00	F7
A101J51ZQ20	F7
A101J61ZQ00	F7
A103J16ZQ00	F7
A103J1AQ0	F7
A103J1AV2B0	F7
A103J1AV2Q0	F7
A103J1V3Q0	F7
A103J1ZQ0	F14
A103J2AQ0	F15
A103J2CB0	F7
A103J2ZQ0	F15
A103J3ZQ0	F7
A103J51ZQ00	F7
A103J61ZQ00	F7
A105J16C000	F7
A105J16ZQ00	F7
A105J1AQ0	F14
A105J1AV2Q0	F7,F13
A105J1CQ0	F13
A105J1V3B0	F7
A105J1ZQ0	F14
A105J2AQ0	F15
A105J2AV2Q0	F16
A105J2CQ0	F16
A105J2ZQ0	F15
A105J3CQ0	F7
A105J3CQ20	F7
A105J3ZQ0	F7
A105J4ZQ0	F7
A105J51ZQ00	F7
A105J52ZQ20	F7
A105J61ZG00	F7
A105J61ZQ00	F7
A107J51ZQ00	F7
A107J61ZQ00	F7
A108J1V3Q0	F7
A108J1ZQ0	F7
A108J51ZQ00	F7
A108J61ZQ00	F7
A201J16ZQ00	F7
A201J1AQ0	F14
A201J1AQ2	F7
A201J1AV2Q0	F7,F13
A201J1CQ0	F13
A201J1V3Q0	F7
A201J1ZQ0	F14
A201J2AQ0	F15
A201J2AV2Q0	F16
A201J2CQ0	F16
A201J2ZQ0	F15
A201J3V3Q0	F7
A201J3ZB0	F7
A201J3ZQ0	F7
A201J50AQ0	F7
A201J50AV2Q0	F7
A201J50ZQ0	F7
A201J51ZQ00	F7
A201J51ZQ00UL	F7
A201J51ZQ09	F7
A201J61ZQ00	F7
A203J1AQ0	F14
A203J1AV2Q0	F7
A203J1CQ0	F13
A203J1CQ2	F7
A203J1ZQ0	F14
A203J2AQ0	F7,F15
A203J2ZQ0	F15
A203J51ZQ00	F7
A203J61ZQ00	F7
A205J15ZQ00	F7
A205J1AQ0	F14
A205J1AV2Q0	F13
A205J1CQ0	F13
A205J1ZQ0	F7,F14
A205J2AQ0	F15
A205J2CQ0	F16
A205J2ZQ0	F15

A205J51ZQ00	F7
A205J61ZQ00	F7
A207J1ZQ0	F7
A207J3ZQ0	F7
A207J51ZQ00	F7
A207J61ZQ00	F7
A208J16C000UL	F7
A208J1V3Q0	F7
A208J51ZQ00	F7
A208J61ZQ00	F7
A211J51ZQ0	F7
A213J61ZQ00	F7
AE101J1AG0	F17
AE101J1AG0UL	F17
AE101J1AQ0	F17
AE101J1AQ4UL	F17
AE101J1AV2G0	F17
AE101J1AV2Q0	F17
AE101J1V3B0	F17
AE101J1V3Q0	F17
AE103J2CB0	F17
AE103J50V3B0	F17
AE103J60V3Q02	F17
AE105J1AQ0	F17
AE105J1V3B0	F17
AE105J1V3Q0	F17
AE105J1ZB0	F17
AE105J60V3B0	F17
AE107J1AQ0	F17
AE107J1ZQ0	F17
AE108J1CQ0	F17
AE108J1ZB0	F17
AE108J60V3B0	F17
AE201J1AQ0	F17
AE201J1AV2G0UL	F17
AE201J1AV2Q0	F17
AE201J1V3B0	F17
AE201J2AQ2	F17
AE203J1AQ0	F17
AE205J50V3B0	F17
AE205J60V3B0	F17
AE208J50V3B0	F17
PRADA1-07F-BB000	F22
PRADA1-07F-BB0BW	F22
PRADA1-07F-BB0CW	F22
PRADA1-07F-BR000	F22
PRADA1-07F-BR0BW	F22
PRADD1-07F-BB000	F22
PRADD1-07F-BB0DW	F22
PRADD1-07F-BB0EW	F22
PRADD2-07F-BB000	F22
PRADD2-07F-BB0DW	F22
PRADD2-07F-BB0EW	F22
PRADD3-07F-BB000	F22
PRADD3-07F-BB0FW	F22
PRADD3-07F-BB0GW	F22
PRADD4-07F-BB000	F22
PRADD4-07F-BB0FW	F22
PRADD4-07F-BB0GW	F22
PRASA1-16F-BB000	F22
PRASA1-16F-BB0BW	F22
PRASA1-16F-BB0CW	F22
PRASA1-16F-BB0HW	F22
PRASA1-16F-BR000	F22
PRASA1-16L-BB000	F22
PRASA1-16L-BB0BW	F22
PRASA1-16L-BB0CW	F22
PRASA1-16L-BR000	F22
PRASA2-16F-BBRBR	F22
PRASA3-16F-BB0JW	F22
PRASB1-16F-BR000	F22
PRASB2-16F-BR000	F22
PRASC1-16F-BBR00	F22
PRASD1-16F-BB000	F22
PRASD1-16F-BB0DW	F22
PRASD1-16F-BB0EW	F22
PRASD2-16F-BB000	F22
PRASD2-16F-BB0DW	F22
PRASD2-16F-BB0EW	F22
PRASD3-16F-BB000	F22
PRASD3-16F-BB0FW	F22
PRASD3-16F-BB0GW	F22
PRASD4-16F-BB000	F22
PRASD4-16F-BB0FW	F22
PRASD4-16F-BB0GW	F22
PRBSA1-16F-BB000	F23
PRBSA1-16F-BB0BW	F23
PRBSA1-16F-BB0CW	F23
PRBSA1-16F-BB0HW	F23
PRBSA1-16F-BR000	F23
PRBSA1-16F-BR0FW	F23
PRBSA1-16F-BW000	F23
PRBSA1-16F-BW0HB	F23
PRBSA1-16L-BB000	F23
PRBSA1-16L-BB0BW	F23
PRBSA1-16L-BB0CW	F23
PRBSA1-16L-BR000	F23
PRBSB1-16F-BA000	F23
PRBSB1-16F-BC000	F23
PRBSB1-16F-BR000	F23
PRBSB1-16F-BR0BW	F23
PRBSC1-16F-BBR00	F23
PRBSC1-16L-BBR00	F23
PRBSD1-16F-BB000	F23
PRBSD1-16F-BB0DW	F23
PRBSD1-16F-BB0EW	F23
PRBSD3-16F-BB000	F23
PRBSD3-16F-BB0FW	F23
PRBSD3-16F-BB0GW	F23

PRBSD3-16F-BW000	F23
PRDDA1-16F-BB000	F24
PRDDA1-16F-BB0BW	F24
PRDDA1-16F-BB0CW	F24
PRDDA1-16F-BB0HW	F24
PRDDA1-16F-BR000	F24
PRDDA1-16F-BR0BW	F24
PRDDA1-16F-BR0CW	F24
PRDDA1-16F-BR0EW	F24
PRDDD1-16F-BB000	F24
PRDDD1-16F-BB0DW	F24
PRDDD1-16F-BB0EW	F24
PRDDD3-16F-BB000	F24
PRDDD3-16F-BB0FW	F24
PRDDD3-16F-BB0GW	F24
PRDDD3-16F-BR000	F24
TRD1D1(*WL)	F6
TRD1D10PC	F3
TRD1D10PCLR25	F3
TRD1D10OC	F3
TRD1D10OCSLR5	F3
TRD1D10OCL2	F3
TRD1D10OCL5	F3
TRD1D10OCLR2	F3
TRD1D10WL	F6
TRD1D10WLLR	F6
TRD1D10WLLR5	F6
TRD1D12WL	F3
TRD1E1(*WL)	F6
TRD1E10WL	F6
TRD1E10WLLR	F6
TRD1E10WLLR25	F6
TRD1F1(*WL)	F3
TRD1F10OC	F3
TRD1F10OCL2	F3
TRD1F10OCLR2	F3
TRD1F10WL	F6
TRD1F10WLLR	F6
TRD1F20OC	F3
TRD1G10OC5	F3
TRD1G10WL	F3
TRD1G20OC	F3
TRD13D1(*WL)	F6
TRD13D10OC	F3
TRD13D10OCL5	F3
TRD13D10OCLR2	F3
TRD13D10OCLR25	F3
TRD13D10OCLR5	F3
TRD13D10WL	F6
TRD13D10WL5L2	F3
TRD13D10WLL2	F3
TRD13D10WLLR	F6
TRD13D10WLLR2	F6
TRD13D10WLLR25	F6
TRD13D10WLLR4	F3
TRD13D10WLLR5	F3
TRD13D10WLUL	F3
TRD13D12OC	F3
TRD13D12OC5	F3
TRD13D12OCLR25	F3
TRD13D12WL	F3
TRD13D12WL5LR2	F3
TRD13E1(*WL)	F6
TRD13E10OC	F3
TRD13E10WL	F6
TRD13E10WL5	F6
TRD13E10WLLR	F6
TRD13E10WLLR2	F6
TRD13F1(*WL)	F6
TRD13F10OC	F3
TRD13F10OCLR2	F3
TRD13F10WL	F6
TRD13F10WLLR	F6
TRD13F12OC	F3
TRD13F12WL	F3
TRD13G10OC	F3
TRD13G10WL	F3
TRD13G10WLLR2	F3
TRD13G20WL	F3
TRD2N1(*WL)	F6
TRD2N10OC	F3
TRD2N10WL	F6
TRD2N10WLL2	F3
TRD2N12OCL2	F3
TRD2N12WL	F3
TRD2N1P1(*WL)	F6
TRD2N1P10WL	F6
TRD2N1P10WLL25	F3
TRD2N1P12WL	F3
TRD23N1(*WL)	F6
TRD23N10OC	F6
TRD23N10WL	F6
TRD23N10WLL5	F3
TRD23N12OC	F3
TRD23N12OCL5	F3
TRD23N12WL	F3
TRD23N20OC	F3
TRD23N20WL	F3
TRD23N20WLL2	F3
TRD23N20WLL5	F3
TRD23N22WL	F3
TRD23P1(*WL)	F6
TRD23P10OC	F3
TRD23P10WL	F6
TRD23P12WL	F3
TRD23P20WL	F3

F

Rocker/Paddle Switches

**Rocker/Paddle Switches, TRD Series Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

Movable Contacts .....Copper alloy w/silver inlay contact or gold plate  
 Terminals/Fixed Contacts.....Copper alloy w/silver inlay contact or gold plate  
 Terminal Seal .....Epoxy  
 Housing/Beveled Frame .....Polyamide, black matte finish

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Silver: 3A max. @ 125 VAC, option 3  
 Gold: 0.4VA max. @ 20 VDC, option 1  
 Initial Contact Resistance .....20 Milliohms max.  
 Static Withstanding.....15KV, per IEC 801-2  
 Insulation Resistance .....1,000 Megohms min. @ 500 VDC  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Electrical Life .....2 Pos. 20K cycles @ full rated 3A load, 80K @ 0.4VA, 3 pos. 10K cycles @ full rated 3A load, 60K @ 0.4VA

**ENVIRONMENTAL SPECIFICATIONS:**

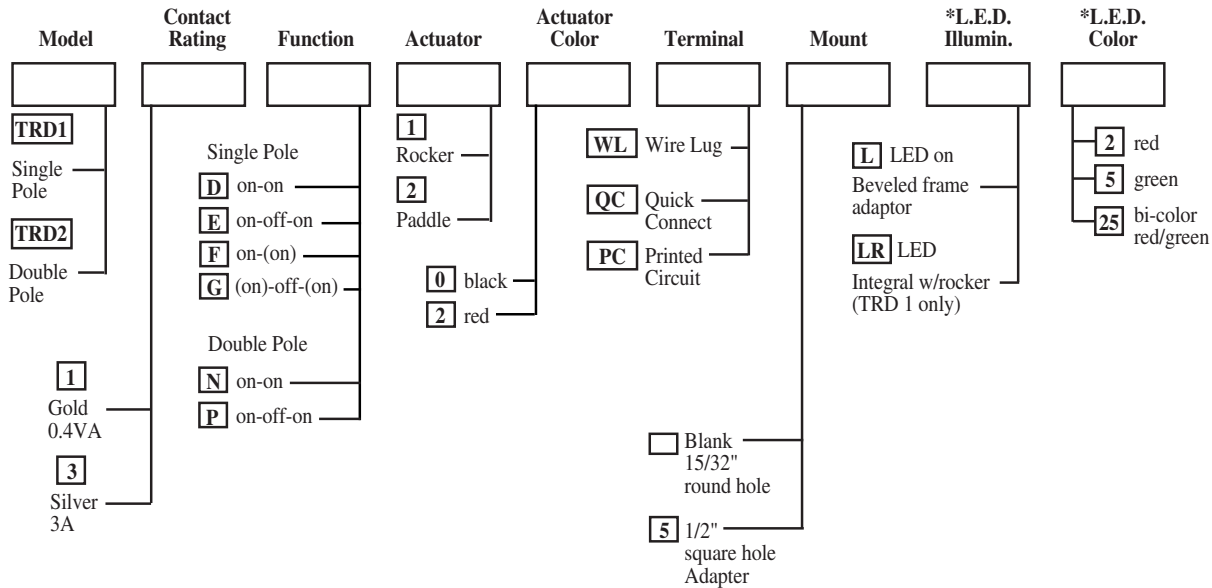
Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-49°F to +199°F (-45°C to +93°C)  
 Solder Heat Resistance .....Meets MIL-STD-202, method 210

**\*NOTICE: Caution should be used when hand-soldering. Solder heat Resistance -550°-600°F for less than 5 seconds. Solder with the switch in the closed position.**

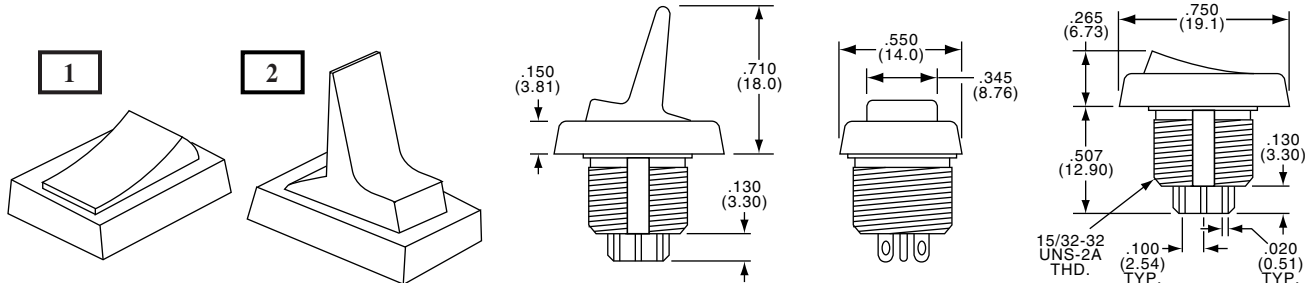
UL options available, consult Tyco Electronics Product Information Center

**HOW TO ORDER**

\* Leave blank if LED not required.



**ACTUATORS**

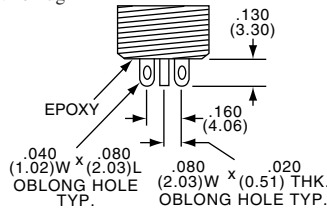


**Rocker/Paddle Switches, TRD Series Options**

**TERMINATIONS**  
(Epoxy seal standard)

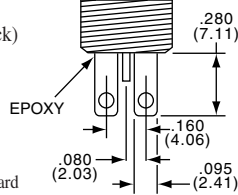
**WL**

Wire Lug



**QC**

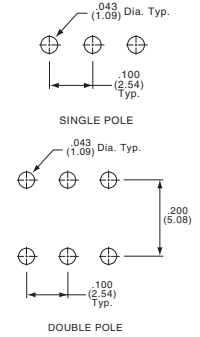
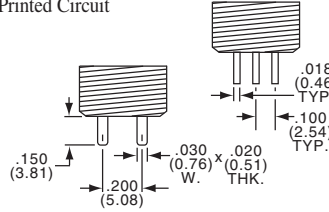
Quick Connect  
.110" (.020 thick)



Mates with standard  
.110" female connectors

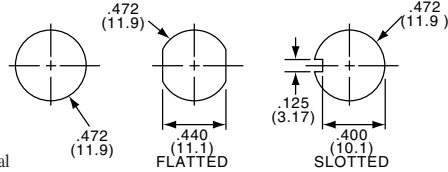
**PC**

Printed Circuit



**15/32" HOLE STANDARD**

Standard TRD bushing will mount in any hole shown below.

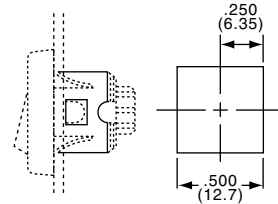


**Recommended panel thickness:**  
.030" to .250"  
One hex nut, one internal tooth lock-washer supplied.

**5 1/2" SQUARE CUTOUT SNAP-IN ADAPTOR**

**Recommended panel thickness:**  
.030" to .125"

**Material:** bright stainless steel  
To specify adaptor separately, use P/N **TRD10793**



**CONTACT/RATING/UL RECOGNITION**

**1**

0.4VA Max. @ 20 VDC

Movable Contact: Copper alloy, gold plate  
Fixed Contact/Terminal: Copper alloy, gold plate

**3**

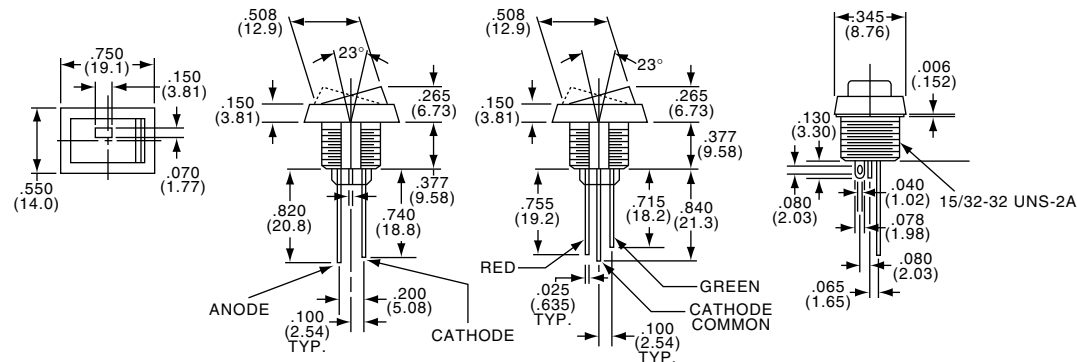
3A Max. @ 125 VAC

Movable Contact: Copper alloy, silver inlay  
Fixed Contact/Terminal: Copper alloy, silver inlay

**L.E.D. ILLUMINATION - SINGLE AND BI-COLOR**

**LR**

**L.E.D. Integral (Rocker Actuator)**  
All SPDT functions  
(TRD1 Model)

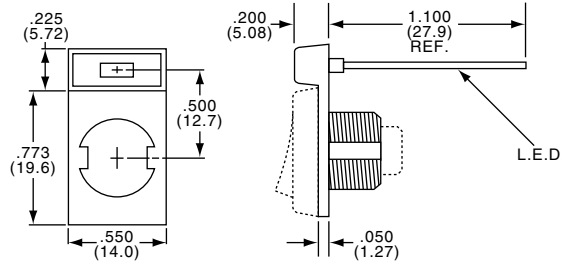


Standard mounting dimensions apply, L.E.D. supplied in **2** red, **5** green, or **25** red/green.  
**L.E.D. Specifications: Max Voltage:** 2.8 VDC  
**Max. Forward Current:** red-20mA, green-25 mA, red/green-40 mA.

**Rocker/Paddle Switches, TRD Series Options**

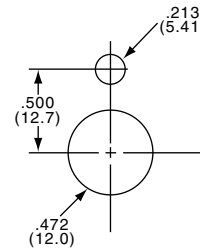
**L** L.E.D. BEVELED FRAME ADAPTOR  
(Accepts rectangular L.E.D.)

**MOUNTING**



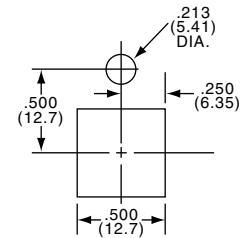
**Material:** Nylon 6/6  
**Color/Finish:** Black, matte

**15/32" HOLE STANDARD**






**Recommended Panel Thickness:** .030 to .220:

**1/2" SQUARE CUTOUT**



**Recommended Panel Thickness:** .030 to .095"

**FUNCTIONS**

					
	Single Pole	Double Pole	123 456	123 456	123 456
<input type="checkbox"/> D		<input type="checkbox"/> N	On	None	On
<input type="checkbox"/> E		<input type="checkbox"/> P	On	Off	On
<input type="checkbox"/> F			On	None	(On)
<input type="checkbox"/> G			(On)	Off	(On)
SPDT Terminals Connected			2-3	---	1-2
DPDT Terminals Connected			2-3 5-6	---	1-2 4-5

**None** No mechanical position

**Off** Mechanical position, no electrical connection

**(On)** Momentary mechanical position, and electrical connection



\* Refer to Pages F3-F5 for Other Options \*

**Rocker Switches, TRD Series Illuminated or Non-Illuminated, Wire Lug**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold over nickel or silver plate  
 Case Material .....Polyamide, black matte finish  
 Actuator Material .....Polyamide  
 Terminals/Fixed Contacts.....Copper alloy with gold or silver plate  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-49°F to +199°F (-45°C to +93°C)

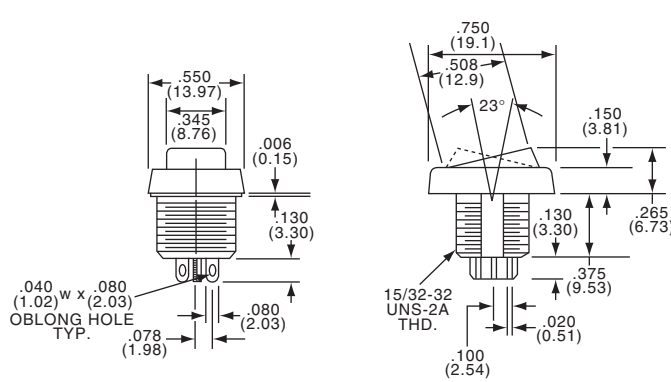
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA Max. @ 20 VDC or peak AC  
 3 A @ 125 VAC or 28 VDC (2 pos.) 2A  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuator Travel.....23°  
 Life Expectancy .....2 Pos. - Up to 100,000 actuations  
 3 Pos. - Up to 50,000 actuations

**NOTE: Part numbering matrix page F3**

**NOTE: When hand soldering, solder with switch in closed position. Solder temperature 550-600°F less than 5 seconds.**

**F**  
TRD Series

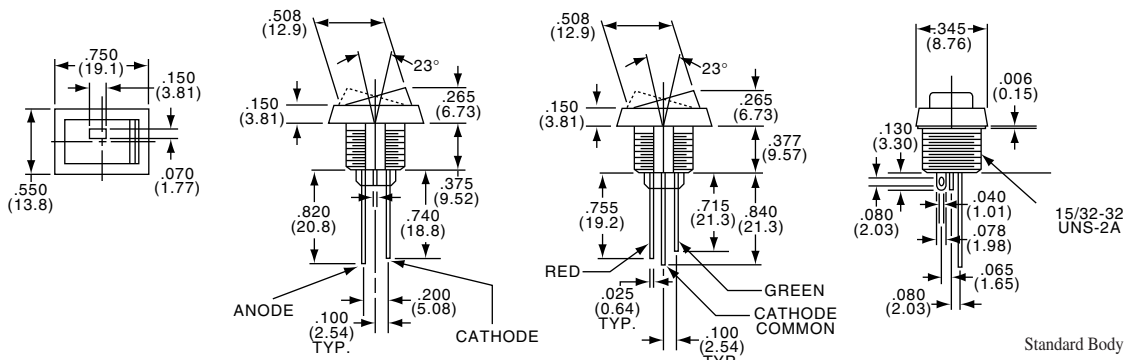


DPDT  
TRD21N10WL

Standard Body Color - (Black)

Model	Type	Function	Act. Code Pg. M5	Contact	Terminal	Model	Type	Function	Act. Code Pg. M5	Contact	Terminal
TRD11D1(*)WL	SPDT	On None On	1	Gold	Wire Lug	TRD13D1(*)WL	SPDT	On None On	1	Silver	Wire Lug
TRD11E1(*)WL	SPDT	On Off On	5	Gold	Wire Lug	TRD13E1(*)WL	SPDT	On Off On	5	Silver	Wire Lug
TRD11F1(*)WL	SPDT	On None (On)	1	Gold	Wire Lug	TRD13F1(*)WL	SPDT	On None (On)	1	Silver	Wire Lug
TRD21N1(*)WL	DPDT	On None On	2	Gold	Wire Lug	TRD23N1(*)WL	DPDT	On None On	2	Silver	Wire Lug
TRD21P1(*)WL	DPDT	On Off On	6	Gold	Wire Lug	TRD23P1(*)WL	DPDT	On Off On	6	Silver	Wire Lug

(\*) Specify rocker color by adding suffix number: (0) Black (2) Red, (On) indicates momentary position.



SPDT  
TRD11D10WLLR

Standard Body and Rocker Color - (Black)

**ILLUMINATED**

**ILLUMINATED**

Model	Type	Function	Act. Code Pg. M5	Contact	Terminal	Model	Type	Function	Act. Code Pg. M5	Contact	Terminal
TRD11D10WLLR(*)	SPDT	On None On	1	Gold	Wire Lug	TRD13D10WLLR(*)	SPDT	On None On	1	Silver	Wire Lug
TRD11E10WLLR(*)	SPDT	On Off On	5	Gold	Wire Lug	TRD13E10WLLR(*)	SPDT	On Off On	5	Silver	Wire Lug
TRD11F10WLLR(*)	SPDT	On None (On)	1	Gold	Wire Lug	TRD13F10WLLR(*)	SPDT	On None (On)	1	Silver	Wire Lug

(\*) Specify LED color by adding suffix number: (2) Red, (5) Green, (25) Red/Green - Bi-color (On) indicates momentary position.

**Rocker/Paddle Switches, A Series, Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

Contacts/Terminals.....Gold/gold flash  
 Silver/tin lead  
 Case Material .....Thermoset 94V-0  
 Actuator Material .....Polyamide  
 Terminal Seal .....Epoxy

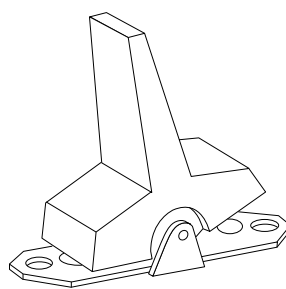
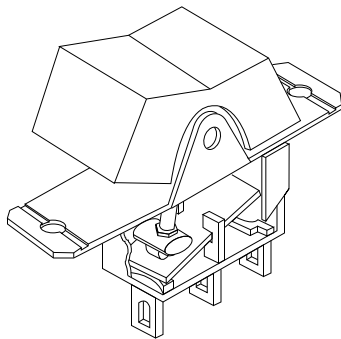
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-49°F to +212°F (-45°C to +100°C)

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA @ 20 AC/DC  
 Silver: 2 A @ 250 VAC: 5 A @ 125 VAC  
 Silver: 2 A @ 30 VDC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms @ 500 VDC  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Actuator Travel.....25°  
 Life Expectancy .....Up to 30,000 Cycles

**DESIGN**



**PART NUMBERING**

Model	Function	Actuator	Terminal	Contact	Actuator Color	Beveled Frame Color	Option
<b>A1</b>	Single Pole	<b>J1</b> Small	<b>Z</b> Wire Lug	<b>Q</b> Silver	<b>0</b> Black (Std.)	<b>0</b> Black (Std.)	UL (Q or G) contacts only
<b>A2</b>	Double Pole	<b>J3</b> Large	<b>A</b> Right Angle	<b>B</b> Gold	<b>2</b> Red		
<b>01</b>	On-On	<b>J15</b> Snap-in	<b>AV2</b> Vert. Right Angle	<b>G</b> Gold over Silver			
<b>03</b>	On-Off-On	<b>J16</b> Snap-in w/beveled frame	<b>C</b> Printed Circuit				
<b>05</b>	(On)-Off-(On)	<b>J50</b> Snap-in	<b>V5</b> Vertical Right Angle				
		<b>J51</b> Snap-in w/beveled frame	<b>V3</b> <b>V4</b> Vertical Support Bracket				
		<b>J52</b> Snap-in w/beveled frame LED	<b>W</b> Wire Wrap				
		<b>J2</b> Small	<b>Z3</b> Quick Connect				
		<b>J4</b> Large					
		<b>J5</b> Large					
		<b>J60</b> Snap-in					
		<b>J61</b> Snap-in w/beveled frame					
		<b>J62</b> Snap-in w/beveled frame & LED					

**OPTIONAL:**  
 UL recognized under the Component Program of Underwriters Laboratories Inc. File # E46765  
 CSA Certified File #LR65901

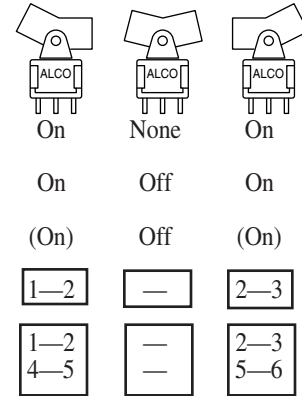


**Rocker/Paddle Switches, A Series, Options**

**FUNCTIONS**

The following functions available in SP or DP.

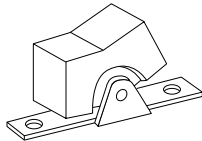
- 01** 2 Positions None indicates no mechanical position
  - 03** 3 Positions Off indicates a mechanical position with no electrical connection.
  - 05** 3 Positions (On) indicates momentary operation.
- SPDT, connect terminals:  
DPDT, connect terminals:



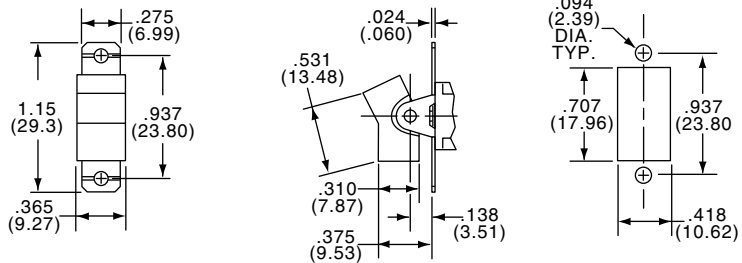
**ACTUATORS**

**J1** Rockers

Small

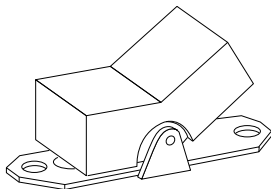


Mounting Type Standard with C or Z Terminal Type

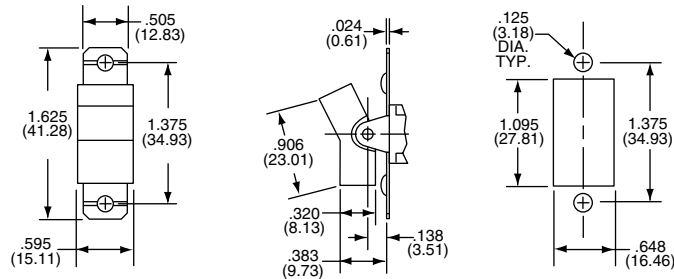


**J3**

Large



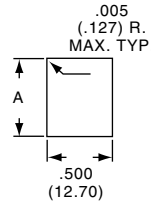
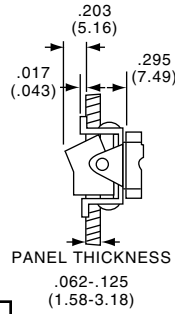
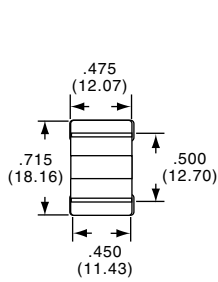
Mounting Type Standard with C or Z Terminal Type



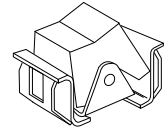
F

Gemini Series Rocker/Paddle Switches

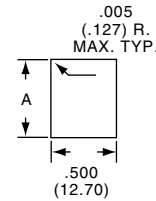
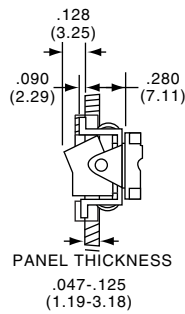
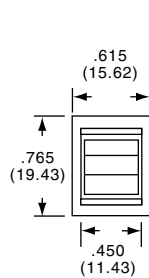
**Rocker/Paddle Switches, A Series, Options**



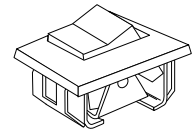
**ROCKER**



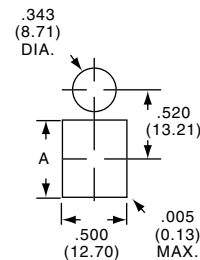
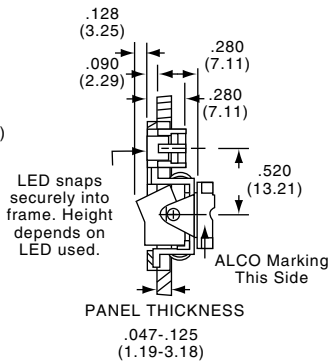
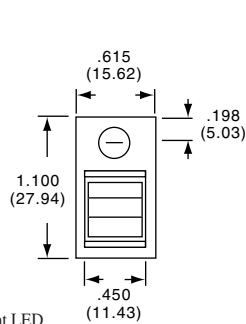
	Panel Opening		
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



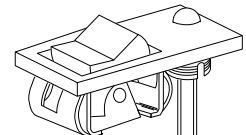
**Snap-in with beveled frame**



	Panel Opening		
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



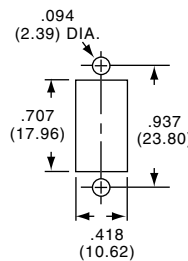
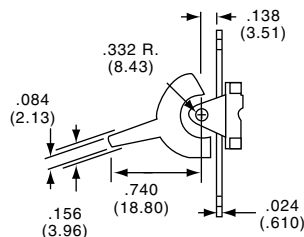
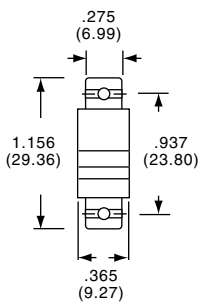
**Snap-in with beveled frame/L.E.D.**



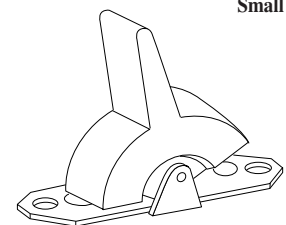
L.E.D. Not supplied.

Accepts BL-17 or equivalent LED

	Panel Opening		
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625

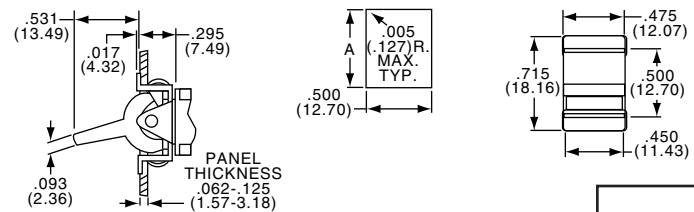
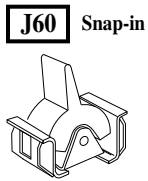
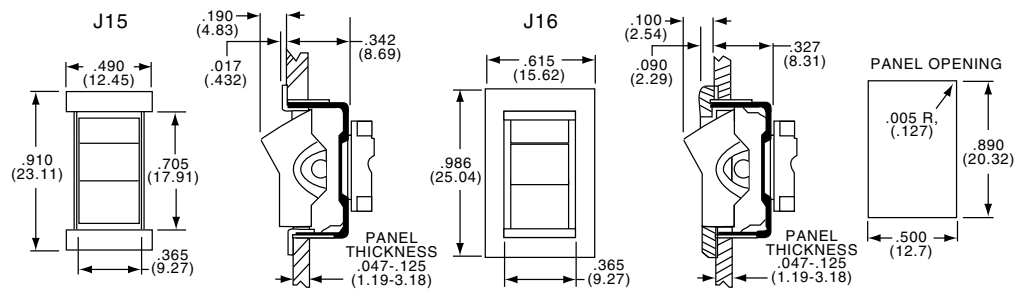
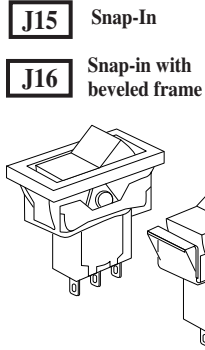
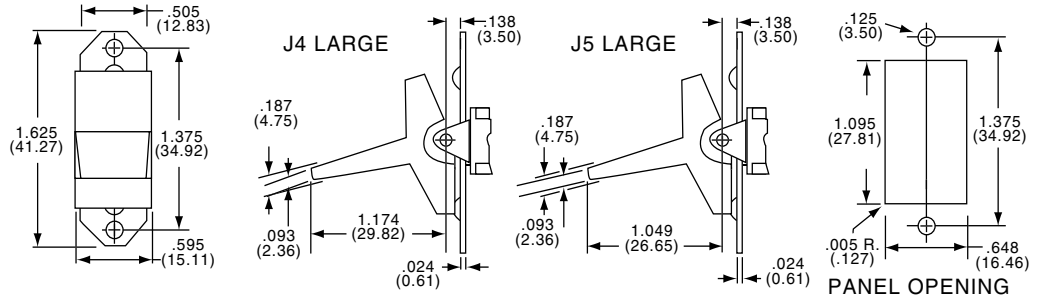
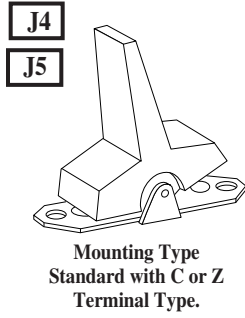


**PADDLE**

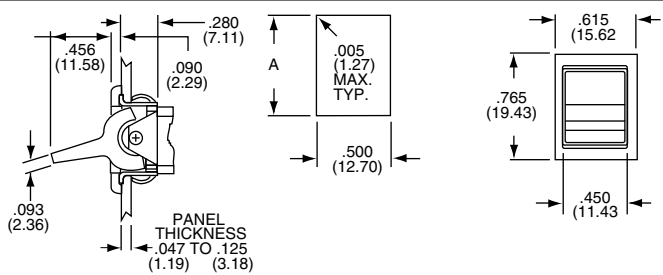
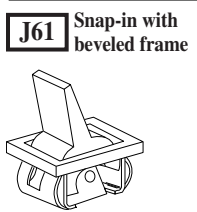


Mounting Type Standard with C or Z Terminal Type.

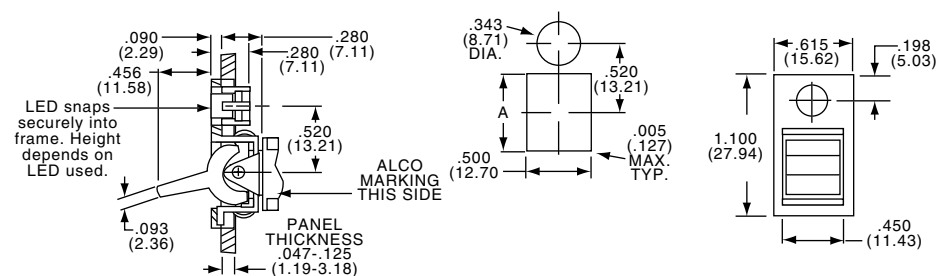
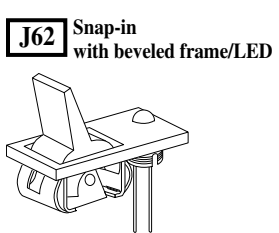
**Rocker/Paddle Switches, A Series, Options**



Panel Opening			
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



Panel Opening			
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



Panel Opening			
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625

Accepts BL-17 or equivalent LED  
L.E.D. not supplied

F

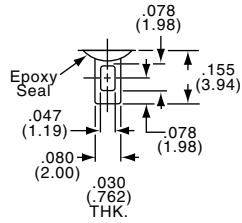
Gemini Series Rocker/Paddle Switches

**Rocker/Paddle Switches, A Series, Termination Options**

TERMINALS

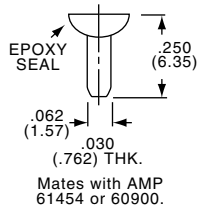
**Z**

Wire Lug Standard



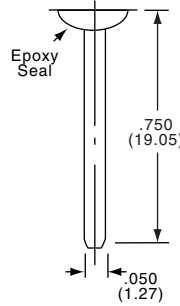
**Q**

Quick Connect



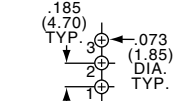
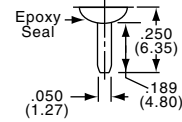
**W**

Wire Wrap

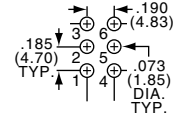


**C**

Printed Circuit



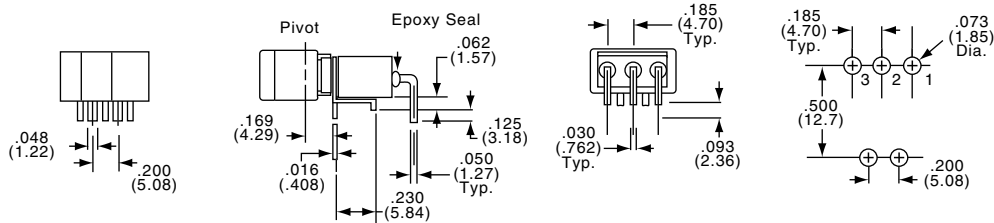
SINGLE POLE



DOUBLE POLE

**A**

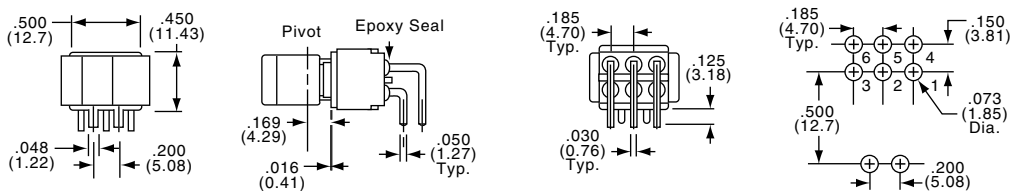
Right Angle Single Pole



NOTE: Terminal numbers viewed from top of P.C. board.

**A**

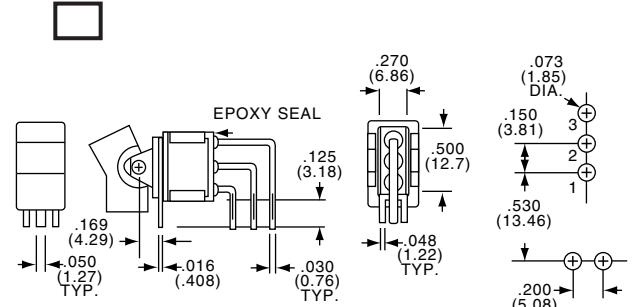
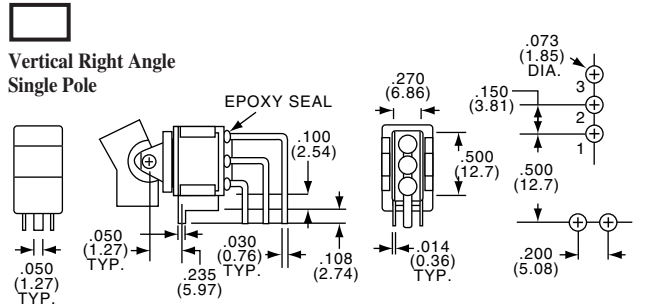
Right Angle Double Pole



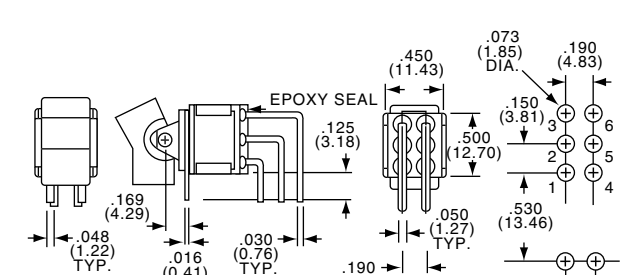
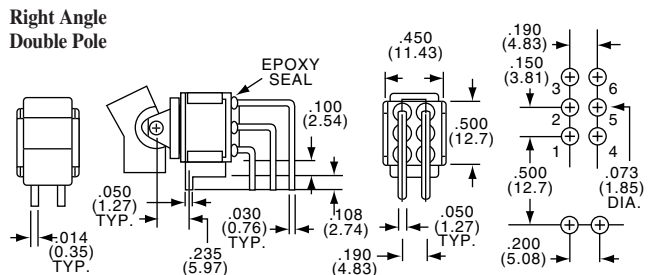
NOTE: Terminal numbers viewed from top of P.C. board.

**F**  
Gemini Series Rocker/Paddle Switches

**Rocker/Paddle Switches, A Series, Options**

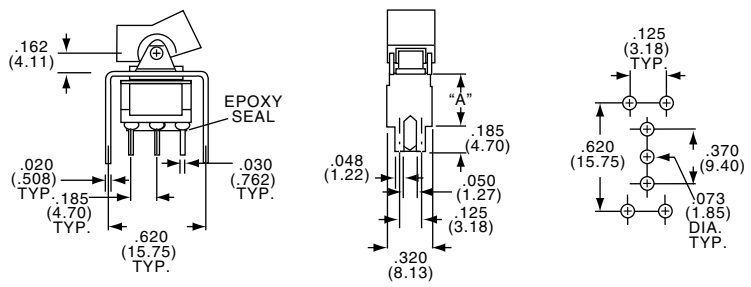


NOTE: Terminal numbers viewed from top of P.C. board.



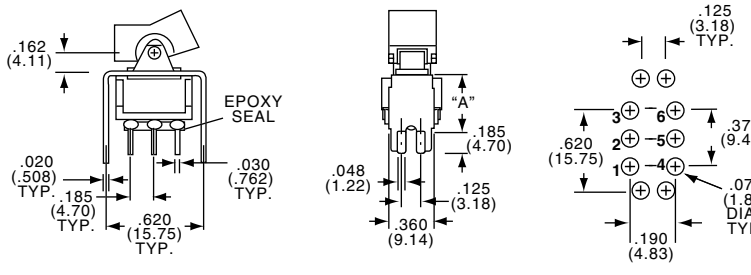
NOTE: Terminal numbers viewed from top of P.C. board.

**V3 V4**  
**Vertical Support Bracket Single Pole**



Option Code	Dim. "A"
V3	.460 (11.68)
V4	.630 (16.00)

**Vertical Support Bracket Double Pole**



Option Code	Dim. "A"
V3	.460 (11.68)
V4	.630 (16.00)

**CONTACTS**

**B** CONTACTS: Copper alloy with gold plate, welded button.

TERMINALS: Copper alloy with gold plate.

ELECTRICAL RATING: 0.4VA @ 20 VAC/DC.

**Q** CONTACTS: Copper alloy with silver, welded button.

TERMINALS: Copper alloy with tin/lead plate.

ELECTRICAL RATING: 5 A @ 125 VAC, 2 A @ 250 VAC, 2 A @ 30 VDC. UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

**G** CONTACTS: Copper alloy with gold plate over silver, welded button.

TERMINALS: Copper alloy with gold plate.

ELECTRICAL RATING: 0.4 VA @ 20 VAC/DC or 5 A @ 125 VAC, 2 A @ 250 VAC, 2 A @ 30 VDC.

Note: This contact option can be used for low-level or power switching. If level is above 0.4 VA @ 20 VAC/DC, the switch is rendered usable only for power switching due to arc-removal of gold plate.

UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

F

Gemini Series Rocker/Paddle Switches



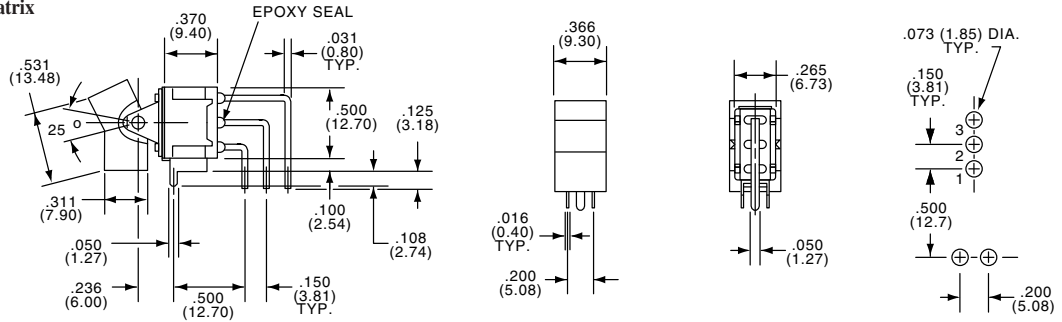
**Rocker Switches, A Series, PC Tail, Straight or Vertical Right Angle**

\* Refer to Pages F7 for Product Specifications and Part Matrix

SPDT



A101J1AV2Q0

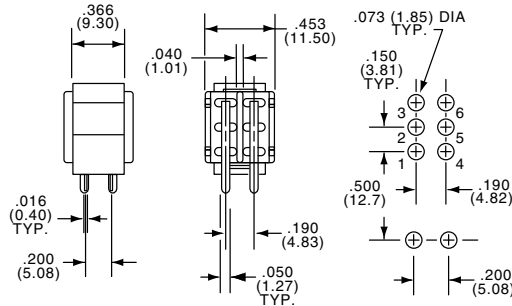


DPDT



A205J1AV2Q0

Standard Rocker Color - (Black)

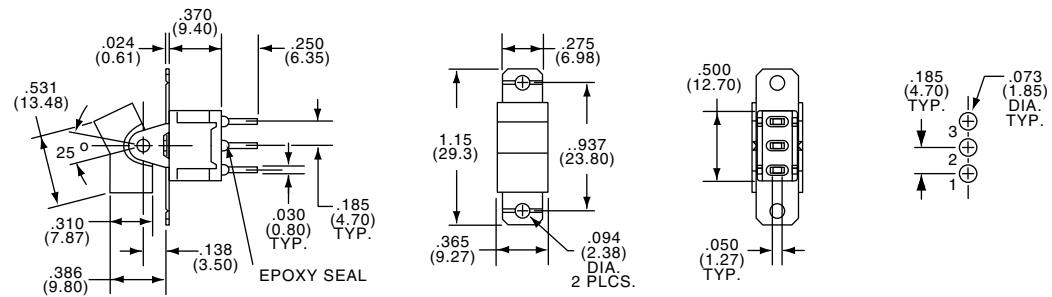


Silver Contacts							
Tyco Electronics	Alcoswitch	Type	Act. Code.	P. M5			
1-1437591-1	A101J1AV2Q0	SPDT	1		On	None	On
4-1437591-7	A105J1AV2Q0	SPDT	5		(On)	Off	(On)
7-1437591-1	A201J1AV2Q0	DPDT	2		On	None	On
9-1437591-6	A205J1AV2Q0	DPDT	6		(On)	Off	(On)

SPDT



A101J1CQ0

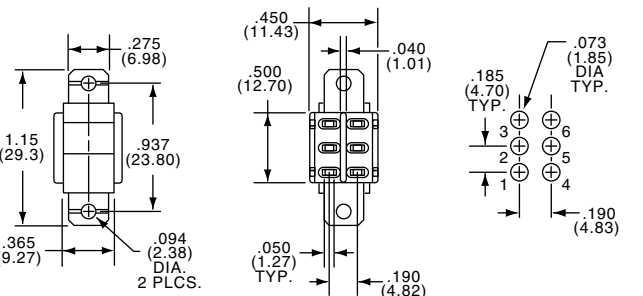


DPDT



A201J1CQ0

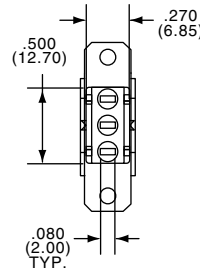
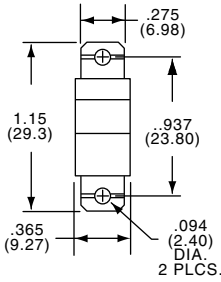
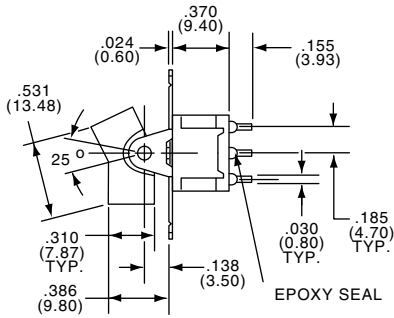
Standard Rocker Color - (Black)



Silver Contacts							
Tyco Electronics	Alcoswitch	Type	Act. Code.	P. M5			
1-1437591-3	A101J1CQ0	SPDT	1		On	None	On
4-1437591-8	A105J1CQ0	SPDT	5		(On)	Off	(On)
7-1437591-2	A201J1CQ0	DPDT	2		On	None	On
—	A203J1CQ0	DPDT	6		On	Off	On
—	A205J1CQ0	DPDT	6		(On)	Off	(On)

**Rocker Switches, A Series, Wire Lug or Right Angle**

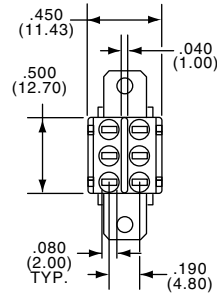
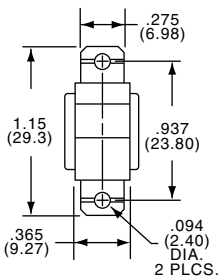
SEE PAGE F7 FOR PRODUCT SPECIFICATIONS AND PART MATRIX



SPDT



A101J1ZQ0



DPDT

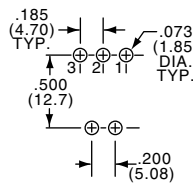
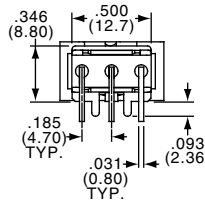
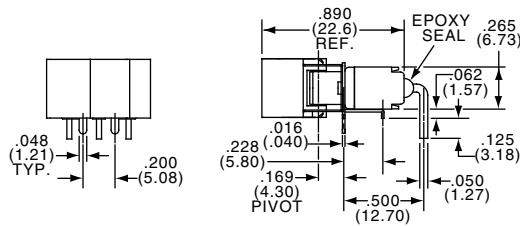


A201J1ZQ0

Standard Rocker Color - (Black)

Silver Contacts							Silver Contacts								
Tyco Electronics	Alcoswitch	Type	Act. Code.	P. M5				Tyco Electronics	Alcoswitch	Type	Act. Code.	P. M5			
1-1437591-7	A101J1ZQ0	SPDT	1		On	None	On	7-1437591-4	A201J1ZQ0	DPDT	2		On	None	On
3-1437591-8	A103J1ZQ0	SPDT	5		On	Off	On	9-1437591-1	A203J1ZQ0	DPDT	6		On	Off	On
5-1437591-0	A105J1ZQ0	SPDT	5		(On)	Off	(On)	9-1437591-7	A205J1ZQ0	DPDT	6		(On)	Off	(On)

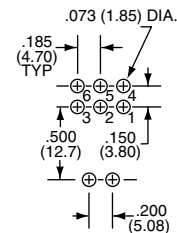
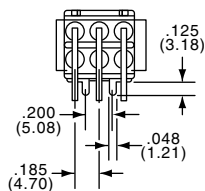
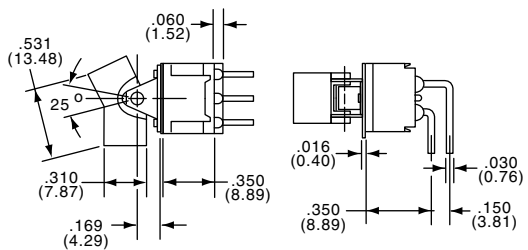
Gemini Series Rocker/Paddle Switches



SPDT



A101J1AQ0



DPDT



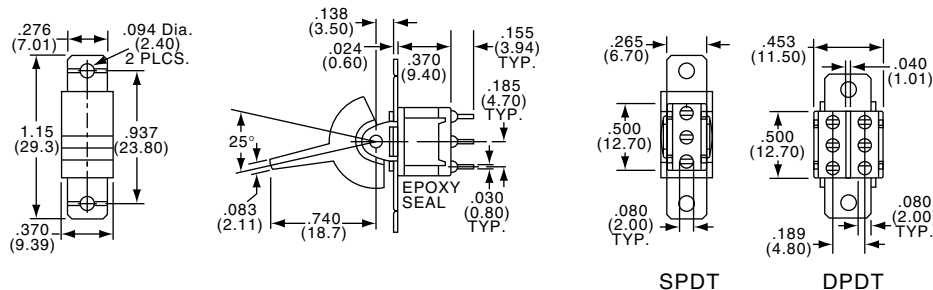
A201J1AQ0

Standard Rocker Color - (Black)

Silver Contacts							Silver Contacts								
Tyco Electronics	Alcoswitch	Type	Act. Code.	P. M5				Tyco Electronics	Alcoswitch	Type	Act. Code.	P. M5			
1-1437591-8	A101J1AQ0	SPDT	1		On	None	On	6-1437591-9	A201J1AQ0	DPDT	2		On	None	On
4-1437591-6	A105J1AQ0	SPDT	5		(On)	Off	(On)	8-1437591-7	A203J1AQ0	DPDT	6		On	Off	On
								—	A205J1AQ0	DPDT	6		(On)	Off	(On)

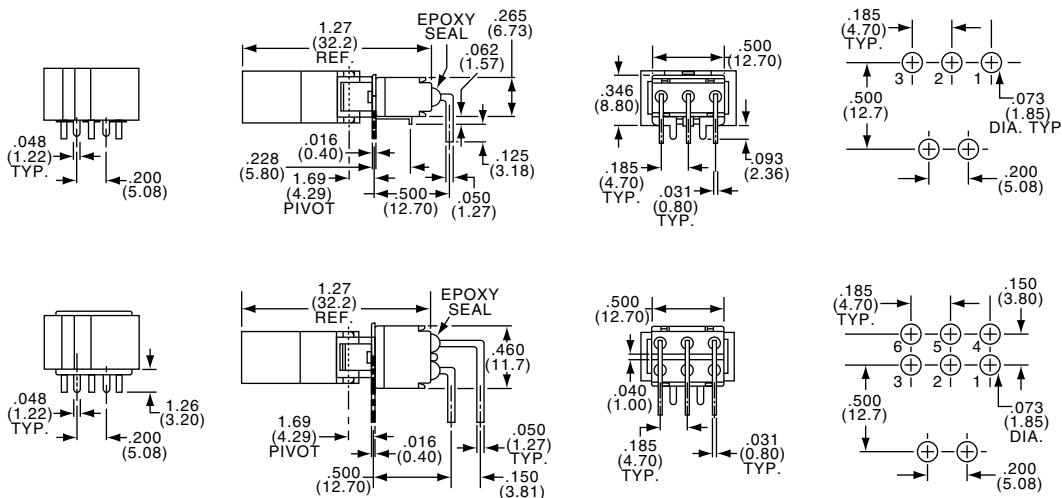
\* Refer to Pages F7 for Product Specifications and Part Matrix

**Paddle Switches, A Series, Wire Lug or Right Angle**



Standard Paddle Color - (Black)

Silver Contacts Tyco Electronics	Alcoswitch	Type	Act.	Code	P. M5	On	None	Off	Silver Contacts Tyco Electronics	Alcoswitch	Type	Act.	Code	P. M5	On	None	Off
1-1437591-9	A101J2ZQ0	SPDT	1			On	None	On	7-1437591-6	A201J2ZQ0	DPDT	2			On	None	On
4-1437591-0	A103J2ZQ0	SPDT	5			On	Off	On	—	A203J2ZQ0	DPDT	6			On	Off	On
5-1437591-3	A105J2ZQ0	SPDT	5			(On)	Off	(On)	9-1437591-9	A205J2ZQ0	DPDT	6			(On)	Off	(On)



Standard Paddle Color - (Black)

Silver Contacts Tyco Electronics	Alcoswitch	Type	Act.	Code	P. M5	On	None	Off	Silver Contacts Tyco Electronics	Alcoswitch	Type	Act.	Code	P. M5	On	None	Off
—	A101J2AQ0	SPDT	1			On	None	On	—	A201J2AQ0	DPDT	2			On	None	On
—	A103J2AQ0	SPDT	5			On	Off	On	—	A203J2AQ0	DPDT	6			On	Off	On
5-1437591-1	A105J2AQ0	SPDT	5			(On)	Off	(On)	—	A205J2AQ0	DPDT	6			(On)	Off	(On)

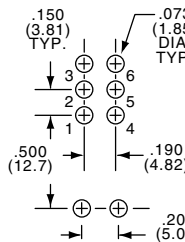
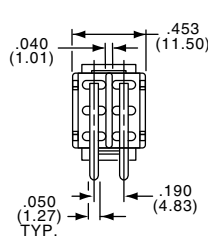
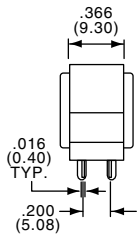
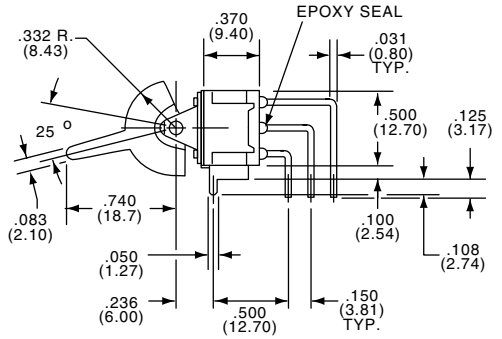
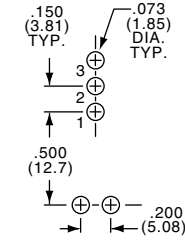
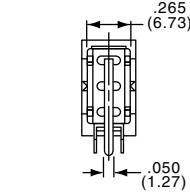
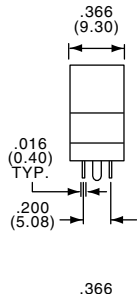
**Paddle Switches, A Series, PC Tail, Straight or Vertical Right Angle**

SEE PAGE F7 FOR PRODUCT SPECIFICATIONS AND PART MATRIX

SPDT / DPDT



A105J2AV2Q0



F

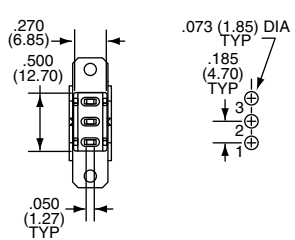
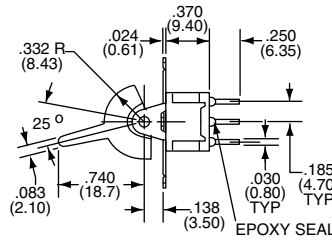
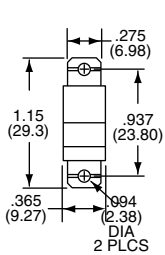
Standard Paddle Color - (Black)

Silver Contacts		Type	Act. Code	P. M5	Switch Configuration			Silver Contacts		Type	Act. Code	P. M5	Switch Configuration		
Tyco Electronics	Alcoswitch				On	None	On	Tyco Electronics	Alcoswitch				On	None	On
1-1437591-8	A101J2AV2Q0	SPDT	1	On	None	On	—	A201J2AV2Q0	DPDT	2	On	None	On		
5-1437591-2	A105J2AV2Q0	SPDT	5	(On)	Off	(On)									

SPDT



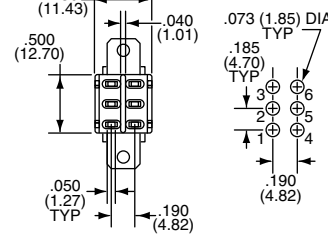
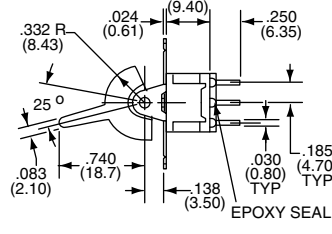
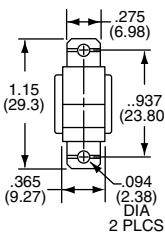
A105J2CQ0



DPDT



A205J2CQ0



Silver Contacts		Type	Act. Code	P. M5	Switch Configuration			Silver Contacts		Type	Act. Code	P. M5	Switch Configuration		
Tyco Electronics	Alcoswitch				On	None	On	Tyco Electronics	Alcoswitch				On	None	On
—	A103J2CQ0	SPDT	5	(On)	Off	(On)	7-1437591-5	A201J2CQ0	DPDT	2	On	None	On		
—	A105J2CQ0	SPDT	5	(On)	Off	(On)	9-1437591-8	A205J2CQ0	DPDT	6	(On)	Off	(On)		

**Rocker/Paddle Switches, AE Series, Process Sealed, Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

Terminal Seal .....Epoxy (standard)  
 Process Sealing .....Seals will withstand wave soldering and subsequent cleaning operations.  
 Contact/Terminals .....Gold/gold flash over tin/lead  
   Silver/tin lead  
 Case Material .....Thermoplastic  
 Actuator Material .....Polyamide

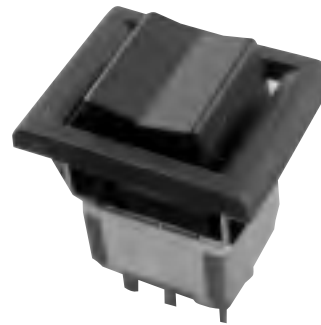
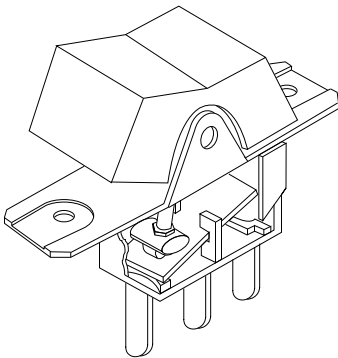
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-49°F to +212°F (-45°C to +100°C)  
 Meets MIL-STD-202, method 112C, Test Condition A & D 85°C.

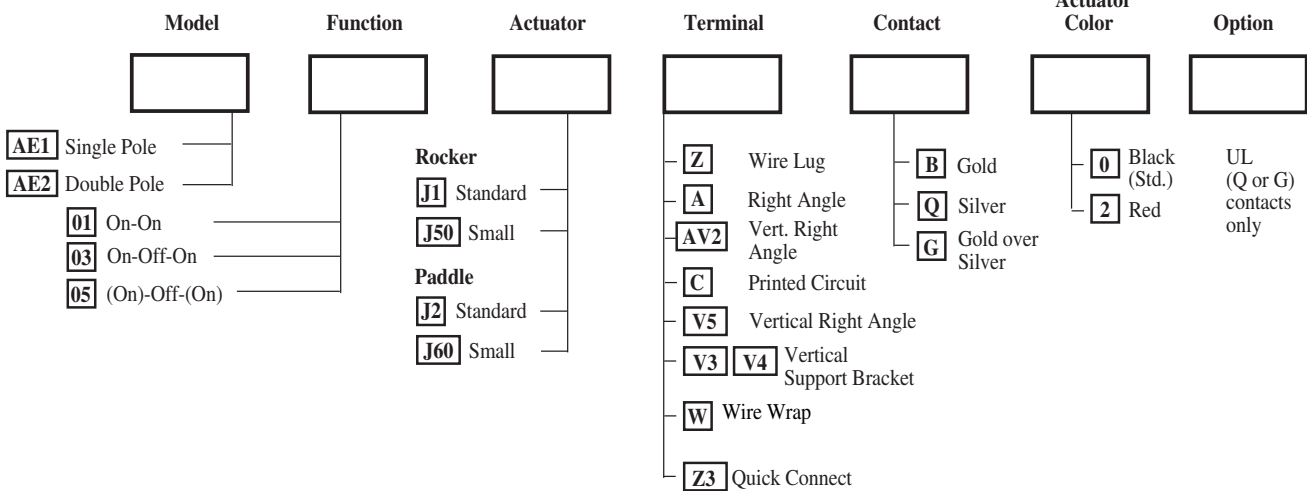
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Silver: 2 A @ 250 VAC, 5 A @ 125 VAC  
   Silver: 2 A @ 30 VDC  
   Gold: 0.4 VA @ 20 VDC max.  
 Contact Resistance .....30 Milliohms max. initial  
 Insulation Resistance .....1,000 Megohms min. @ 500 VDC.  
 Dielectric Strength .....1,000 Volts RMS @ sea level initial  
 Static Withstanding.....15KV Per IEC 801-2.  
 Electrical Life .....Up to 30,000 Cycles  
 Actuator Travel......25°  
 Contact Timing .....Break before make

**DESIGN**



**PART NUMBERING**



U.L. Available upon request

**OPTIONAL:**

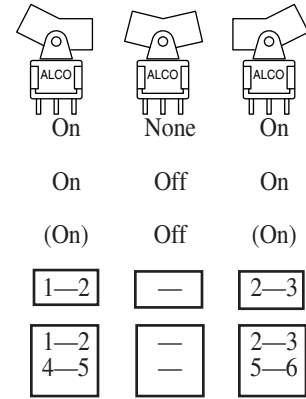
UL recognized under the Component Program Underwriters Laboratories Inc.  
 File #E46765  
 CSA Certified File #LR65901

**Rocker/Paddle Switches, AE Series, Process Sealed, Options**

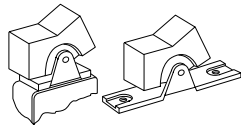
**FUNCTIONS**

The following functions available in SP or DP.

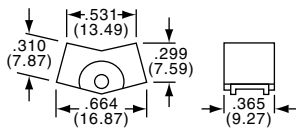
- 01** 2 Positions None indicates no mechanical position
  - 03** 3 Positions Off indicates a mechanical position with no electrical connection.
  - 05** 3 Positions (On) indicates momentary operation
- SPDT, connect terminals:  
 DPDT, connect terminals:



**J1**  
Rocker

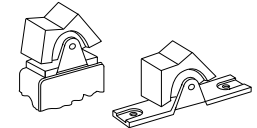


Mounting Provided with C or Z Terminal Type.

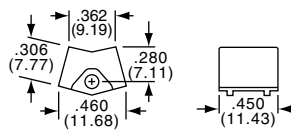


**ACTUATORS**

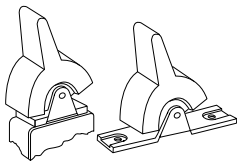
**J50**  
Rocker



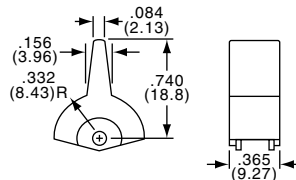
Mounting Provided with C or Z Terminal Type.



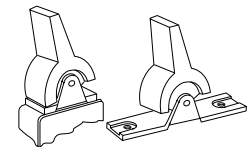
**J2**  
Paddle



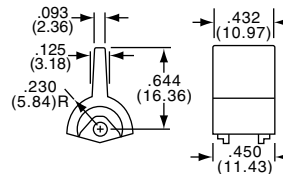
Mounting Provided with C or Z Terminal Type.



**J60**  
Paddle



Mounting Provided with C or Z Terminal Type.

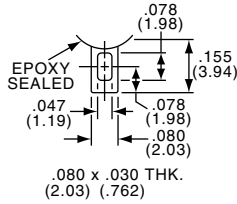


**Rocker/Paddle Switches, AE Series, Process Sealed, Termination Options**

TERMINALS

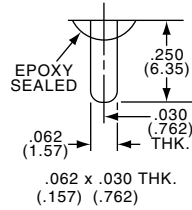
**Z**

Wire Lug



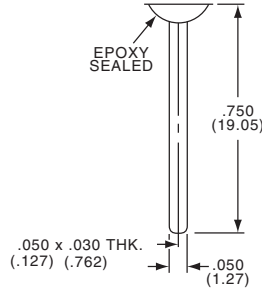
**Q**

Quick Connect



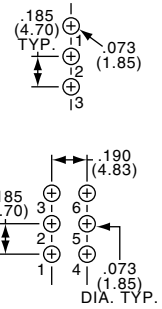
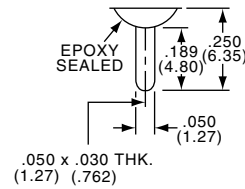
**W**

Wire Wrap



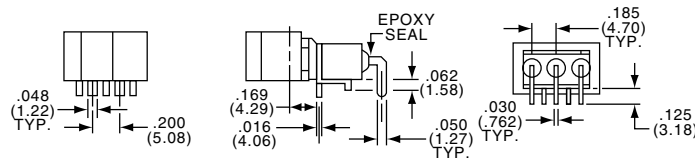
**C**

Printed Circuit

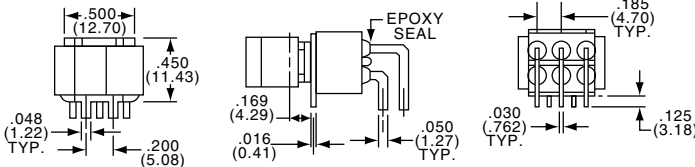


**A**

Right Angle Single Pole

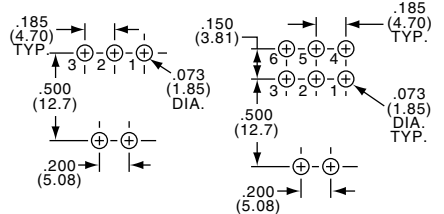


Right Angle Double Pole



SINGLE POLE

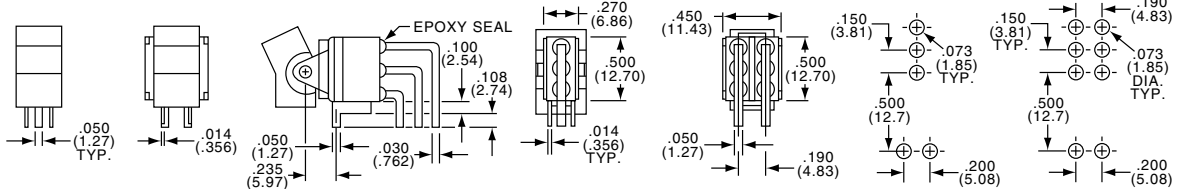
DOUBLE POLE



NOTE: Terminal numbers viewed from top of P.C. board.

**V**

Vertical Right Angle



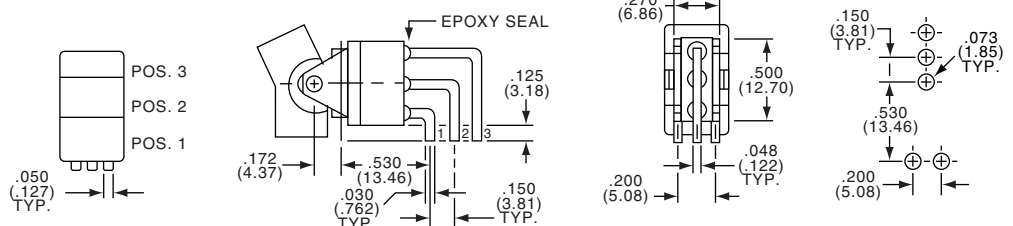
SINGLE POLE

DOUBLE POLE

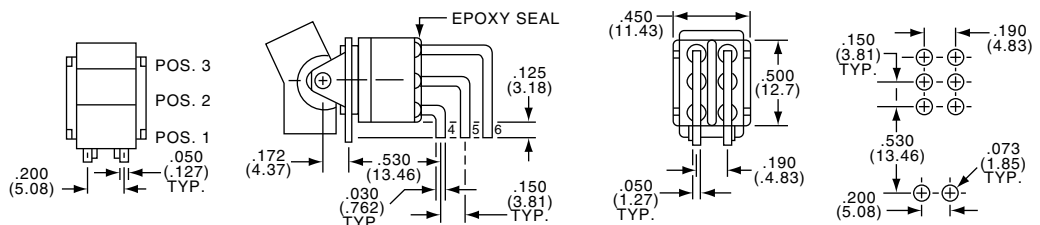
NOTE: Terminal numbers viewed from top of P.C. board.

**V**

Vertical Right Angle Single Pole



Vertical Right Angle Double Pole

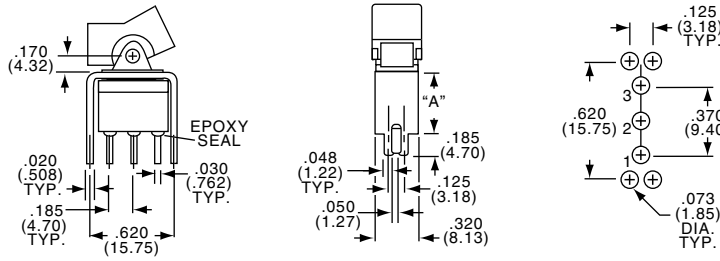




**Rocker/Paddle Switches, AE Series, Process Sealed, Options**

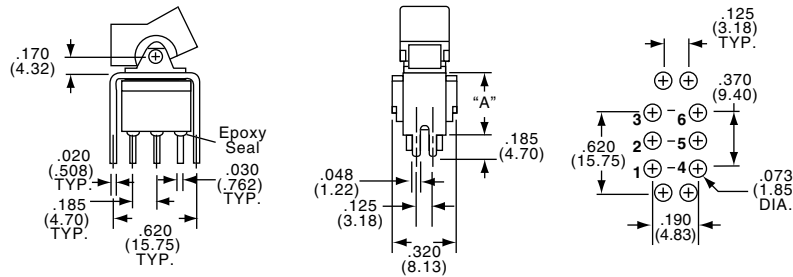


Vertical Support Bracket  
Single Pole



Option Code	Dim."A"
V3	.460 (11.68)
V4	.630 (16.00)

Vertical Support Bracket  
Double Pole



Option Code	Dim."A"
V3	.460 (11.68)
V4	.630 (16.00)

F

**CONTACTS**

**B** CONTACTS: Copper alloy with gold plate, welded button.  
TERMINALS: Copper alloy with gold plate.  
ELECTRICAL RATING: 0.4VA @ 20 VAC/DC.

**Q** CONTACTS: Copper alloy with silver, welded button.  
TERMINALS: Copper alloy with tin/lead plate.  
ELECTRICAL RATING: 5 amps @ 125 VAC, 2 amps @ 250 VAC, 2 amps @ 30 VDC.  
UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

**G** CONTACTS: Copper alloy with gold plate over silver, welded button.  
TERMINALS: Copper alloy with gold plate.  
ELECTRICAL RATING: 0.4 VA @ 20 VAC/DC or 5 amps @ 125 VAC, 2 amps @ 250 VAC, 2 amps @ 30 VDC.  
Note: This contact option can be used for low-level or power switching. If level is above 0.4 VA @ 20 VAC/DC, the switch is rendered usable only for power switching due to arc-removal of gold plate.  
UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

Gemini Series Rocker/Paddle Switches

**Series PRA, PRB and PRD**

**Product Facts**

- Full line of single or double-pole power rocker switches for three different industry compatible panel cut-out sizes
- Easy to install snap-in mounting
- Dust resistant
- Dual color rocker option
- Full-illuminated rocker option
- LED or neon window illuminated option
- Wide range of marking options and functions available
- Solder lugs or .187 & .250 FASTON Tab terminals
- Cost competitive



**Electrical Characteristics**

**Current:** 16A@125 VAC 1/3 HP  
10A@250 VAC 1/2 HP

**PRA Series Double Pole:**  
7A@125 VAC  
6A@250 VAC

**PRA Series Single Pole:**  
6 (3)A 250V ~ 10A 125V ~  
μ 25T85

**Inrush Current:** 50A/3msec  
(capacitive load)

**Contact Resistance (initial):** <50m Ohms

**Dielectric Strength (initial):** >1000 VAC, 1 min.

**Insulation Resistance (initial):** >100Mohms min.

**Electrical Life Endurance:**  
>6000 operations  
Voltage drop <100 mV

**Mechanical Characteristics**

**Operating Life Endurance:** up to >100,000 operations

**Actuating Force:**  
Series PRA 150g min., 650g max.  
Series PRB 300g min., 700g max.  
Series PRD 850g min., 1250g max.

**Materials and Finish**

**Housing:** Nylon 6/6 UL 94V-2

**Rocker:** Nylon 6/6 UL 94V-2 or Polycarbonate UL 94V-2

**Contact:** Silver-tin Oxide

**Terminals, Active Contactor:** Silver plated copper alloy

**Plunger:** Nickel plated copper alloy

**Spring:** Steel Wire

**Standards & Specs**

UL Approved - File No. E46765

ENEC/VDE approval - File No. 40006757 (PRA Single Pole Series only)

**.51 [13.0] x .76 [19.2] Panel Cutout**



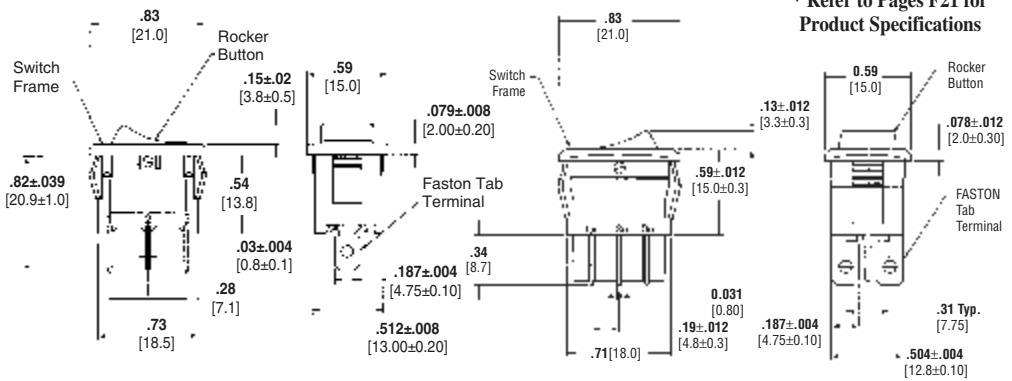
**Product Facts**

- Easy to install snap-in mounting
- Dust resistant
- Dual color rocker option
- Full-illuminated rocker option
- LED or neon window illuminated option
- Wide range of marking options and functions available
- Solder lugs or .187 FASTON Tab terminals
- Cost competitive

**Single-Pole, Lamp Illuminated or Non-Illuminated**

**Double-Pole, Non-Illuminated**

\* Refer to Pages F21 for Product Specifications



Non-Illuminated Version Shown

**Alcoswitch Part Number**

<p><b>Switch Type</b> PR Power Rockers</p> <p><b>Panel Cut-out Size</b> A .51 [13.0] x .76 [19.2]</p> <p><b>Number of Poles</b> S Single Pole D Double Pole</p> <p><b>Switch Functions</b> A1 ON-OFF; opaque, single-color rocker button A2 ON-OFF; opaque, dual-color rocker button A3 (ON)-OFF; opaque, single-color rocker button B1 ON-OFF; transparent, lamp-illuminated rocker button (100-125 V lamp voltage) B2 ON-OFF; opaque, with lamp window, lamp-illuminated rocker button (100-125 V lamp voltage) B3 ON-OFF; transparent, lamp-illuminated rocker button (200-250 V lamp voltage) B4 ON-OFF; opaque, with lamp window, lamp-illuminated rocker button (200-250 V lamp voltage) C1 ON-OFF; opaque, with LED window, LED-illuminated rocker button D1 ON-ON; opaque, single-color rocker button D2 ON-(ON); opaque, single-color rocker button D3 ON-OFF-ON; opaque, single-color rocker button D4 ON-OFF-(ON); opaque, single-color rocker button</p> <p><b>Power Rating</b> 07 7A @ 125 VAC; 6A @ 250 VAC (Double-pole only) 16 16A, 1/3 Hp @ 125 VAC (Single-pole only) 10A, 1/2 Hp @ 250 VAC 10A 125V- 6 (3)A 250V- μ 25T85</p>	<p>PR A X XX - XX X - X X X X X X</p> <p><b>Legend Text Color</b> 0 Not Applicable R Red B Black W White G Green</p> <p><b>Legend Text Pattern</b> 0 Not Applicable E     A Dot F -- o = B o - G   o    C o   H ON OFF D - = J o -</p> <p><b>Secondary Rocker Color, Window Color, or LED Color</b> 0 Not Applicable C Clear A Amber G Green B Black R Red W White</p> <p><b>Rocker Color</b> A Amber G Green B Black R Red C Clear W White</p> <p><b>Frame Color</b> B Black W White</p> <p><b>Terminal Type</b> F FASTON Tab L Solder Lug</p>
---	---

**Part No.**

Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch
1571076-9	PRASA1-16F-BB000	1571079-7	PRASD3-16F-BB000	1571084-5	PRADA1-07F-BR0BW
1-1571076-0	PRASA1-16F-BB0BW	1571079-8	PRASD3-16F-BB0FW	1571086-1	PRADD1-07F-BB000
1-1571076-1	PRASA1-16F-BB0CW	1571079-9	PRASD3-16F-BB0GW	1571086-2	PRADD1-07F-BB0DW
1-1571076-2	PRASA1-16L-BB000	1-1571079-0	PRASD2-16F-BB000	1571086-3	PRADD1-07F-BB0EW
1-1571076-3	PRASA1-16L-BB0BW	1-1571079-1	PRASD2-16F-BB0DW	1571086-4	PRADD3-07F-BB000
1-1571076-4	PRASA1-16L-BB0CW	1-1571079-2	PRASD2-16F-BB0EW	1571086-5	PRADD3-07F-BB0FW
1-1571076-5	PRASA1-16F-BR000	1-1571079-3	PRASD4-16F-BB000	1571086-6	PRADD3-07F-BB0GW
1-1571076-6	PRASA1-16L-BR000	1-1571079-4	PRASD4-16F-BB0FW	1571086-7	PRADD2-07F-BB000
1-1571076-7	PRASA2-16F-BBRBR	1-1571079-5	PRASD4-16F-BB0GW	1571086-8	PRADD2-07F-BB0DW
2-1571076-0	PRASA1-16F-BB0HW	1571083-2	PRASC1-16F-BBR00	1571086-9	PRADD2-07F-BB0EW
2-1571076-1	PRASA3-16F-BB0JW	1571084-1	PRADA1-07F-BB000	1-1571086-0	PRADD4-07F-BB000
1571078-2	PRASB1-16F-BR000	1571084-2	PRADA1-07F-BB0BW	1-1571086-1	PRADD4-07F-BB0FW
1571078-4	PRASB2-16F-BBR00	1571084-3	PRADA1-07F-BB0CW	1-1571086-2	PRADD4-07F-BB0GW
1571079-4	PRASD1-16F-BB000	1571084-4	PRADA1-07F-BR000		
1571079-5	PRASD1-16F-BB0DW				
1571079-6	PRASD1-16F-BB0EW				

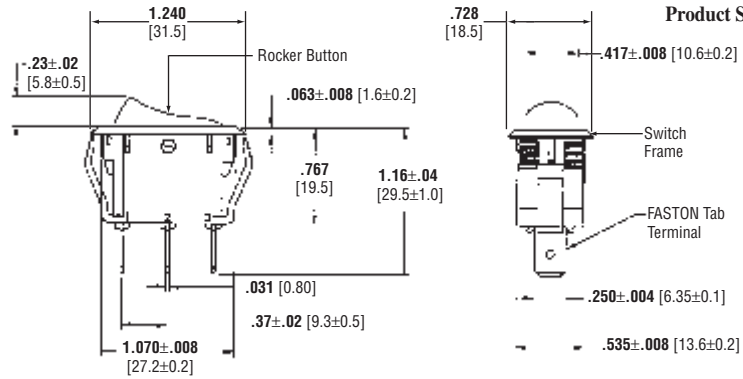
**PVC Waterproof Cover: 1571786-1**

**.54 [13.8] x 1.09 [27.6] Panel Cutout**



**Product Facts**

- Easy to install snap-in mounting
- Dual color rocker option
- Full-illuminated rocker option
- Lamp window illuminated option
- Wide range of marking options and functions available
- Solder lugs or .250 FASTON Tab terminals
- Cost competitive



\* Refer to Pages F21 for Product Specifications

**Alcoswitch Part Number**

PR B S XX - XX X - X X X X X X

**Switch Type**  
PR Power Rockers

**Panel Cut-out Size**  
B .54 [13.8] x 1.09 [27.6]

**Number of Poles**  
S Single Pole

**Switch Functions**  
A1 ON-OFF; opaque, single-color rocker button  
A2 ON-OFF; opaque, dual-color rocker button  
B1 ON-OFF; transparent, lamp-illuminated rocker button (100-125 V lamp voltage)  
B3 ON-OFF; transparent, lamp-illuminated rocker button (200-250 V lamp voltage)  
C1 ON-OFF; opaque, with LED window, LED-illuminated rocker button  
D1 ON-ON; opaque, single-color rocker button  
D3 ON-OFF-ON; opaque, single-color rocker button

**Power Rating**  
16 16A, 1/3 Hp @ 125 VAC  
10A, 1/2 Hp @ 250 VAC

**Terminal Type**  
F FASTON Tab  
L Solder Lug

**Legend Text Color**  
0 Not Applicable R Red  
B Black W White  
G Green

**Legend Text Pattern**  
0 Not Applicable E |||  
A Dot F -- o =  
B o -- G | o ||  
C o | H ON OFF  
D -- =

**Secondary Rocker Color, Window Color, or LED Color**  
0 Not Applicable C Clear  
A Amber G Green  
B Black R Red  
W White

**Rocker Color**  
A Amber G Green  
B Black R Red  
C Clear W White

**Frame Color**  
B Black  
W White

**Part No.**

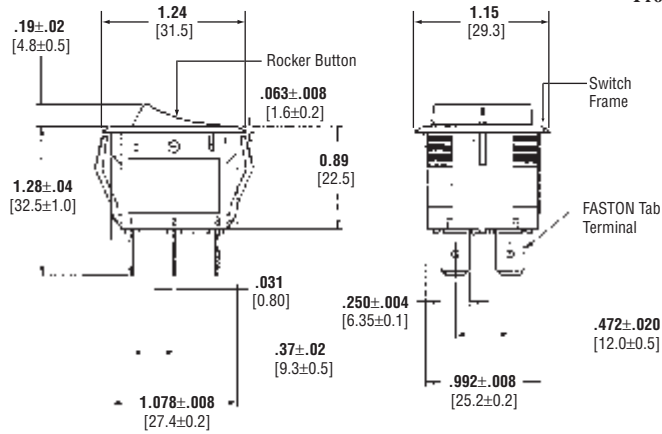
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch
1571087-1	PRBSC1-16F-BBR00	1571092-1	PRBSB1-16F-BR000
1571087-2	PRBSC1-16L-BBR00	1571092-2	PRBSB1-16F-BR0BW
1571091-1	PRBSA1-16F-BB000	1571092-3	PRBSB1-16F-BA000
1571091-2	PRBSA1-16F-BB0BW	1571092-4	PRBSB1-16F-BC000
1571091-3	PRBSA1-16F-BB0CW	1571094-1	PRBSD1-16F-BB000
1571091-4	PRBSA1-16L-BB000	1571094-2	PRBSD1-16F-BB0DW
1571091-5	PRBSA1-16L-BB0BW	1571094-3	PRBSD1-16F-BB0EW
1571091-6	PRBSA1-16L-BB0CW	1571094-4	PRBSD3-16F-BB000
1571091-7	PRBSA1-16F-BR000	1571094-5	PRBSD3-16F-BB0FW
1571091-8	PRBSA1-16L-BR000	1571094-6	PRBSD3-16F-BB0GW
1571091-9	PRBSA1-16F-BB0HW	1571094-7	PRBSD3-16F-BW000
1-1571091-0	PRBSA1-16F-BR0HW		
1-1571091-1	PRBSA1-16F-BW000		
1-1571091-2	PRBSA1-16F-BW0HB		

**1.00 [25.4] x 1.09 [27.6] Panel Cutout**



**Product Facts**

- Easy to install snap-in mounting
- Full illuminated rocker option
- Wide range of marking options and functions available
- FASTON .250 Tab terminals
- Cost competitive



\* Refer to Pages F21 for Product Specifications

**Alcoswitch Part Number**

<p><b>Switch Type</b> PR Power Rockers</p> <p><b>Panel Cut-out Size</b> B 1.00 [25.4] x 1.09 [27.6]</p> <p><b>Number of Poles</b> S Double Pole</p> <p><b>Switch Functions</b> A1 ON-OFF; opaque, single-color rocker button B1 ON-OFF; transparent, lamp-illuminated rocker button (100-125 V lamp voltage) B3 ON-OFF; transparent, lamp-illuminated rocker button (200-250 V lamp voltage) D1 ON-ON; opaque, single-color rocker button D3 ON-OFF-ON; opaque, single-color rocker button</p> <p><b>Power Rating</b> 16 16A, 1/3 Hp @ 125 VAC 10A, 1/2 Hp @ 250 VAC</p> <p><b>Terminal Type</b> F FASTON Tab</p>	<p>PR D D XX - XX X - X X X X X X</p>	<p><b>Legend Text Color</b> 0 Not Applicable R Red B Black W White G Green</p> <p><b>Legend Text Pattern</b> 0 Not Applicable E I ll A Dot F - o = B o -- G l o ll C o l H ON OFF D - =</p> <p><b>Secondary Rocker Color, Window Color, or LED Color</b> 0 Not Applicable</p> <p><b>Rocker Color</b> A Amber G Green B Black R Red C Clear W White</p> <p><b>Frame Color</b> B Black W White</p>
---	---------------------------------------	--

**Part No.**

Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch
1571103-1	PRDDA1-16F-BB000	1571112-1	PRddb1-16F-BR000
1571103-2	PRDDA1-16F-BB0BW	1571112-2	PRddb1-16F-BA000
1571103-3	PRDDA1-16F-BB0CW	1571113-1	PRddd1-16F-BB000
1571103-4	PRDDA1-16F-BR000	1571113-2	PRddd1-16F-BB0DW
1571103-5	PRDDA1-16F-BB0HW	1571113-3	PRddd1-16F-BB0EW
1571103-6	PRDDA1-16F-BR0HW	1571113-4	PRddd3-16F-BB000
1571113-7	PRddd3-16F-BR000	1571113-5	PRddd3-16F-BB0FW
		1571113-6	PRddd3-16F-BB0GW



*MRC Series - Page G3*



*MRJ Series - Page G4*



*MRJE Series - Page G4*



*MRJB Series - Page G4*



*6000 Series - Page G5*



*3100 Series - page G9*

# FORSTEN

## G

Rotary Switches

**Rotary Switches Part Number Index**

MRC110 .....	G3
MRC110S .....	G3
MRC25 .....	G3
MRC25S .....	G3
MRC33 .....	G3
MRC33S .....	G3
MRC42 .....	G3
MRC42S .....	G3
MRJ112.....	G4
MRJ26 .....	G4
MRJ34 .....	G4
MRJ43 .....	G4
MRJB112 .....	G4
MRJB26 .....	G4
MRJB34 .....	G4
MRJB43 .....	G4
MRJE112 .....	G4
MRJE26 .....	G4
MRJE34 .....	G4
MRJE43 .....	G4
435005 .....	G6
435123 .....	G6
435128 .....	G6
435167 .....	G7
435174 .....	G6
435697 .....	G7
435984 .....	G10
435986 .....	G10
435987 .....	G10
436022 .....	G10
436024 .....	G10
436028 .....	G10
436037 .....	G10
436287 .....	G11

**G**

Rotary Switches



**Rotary Switches, 500m Amp, Adjustable Stop, 36° Throw**

**MATERIAL SPECIFICATIONS:**

Contacts .....Silver  
 Case Material .....Aluminum  
 Actuator Material .....Brass  
 Terminals/Fixed Contacts.....Silver plated brass  
 Terminal Seal .....Insert molded, DAP bas

**ENVIRONMENTAL SPECIFICATIONS:**

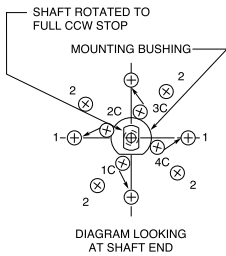
Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature .....-4°F to +212°F (-20°C to +100°C)  
 Solder Heat Resistance.....Manual: 270°C for 3 seconds  
 Wave: 245°C for 3 seconds

**TYPICAL PERFORMANCE CHARACTERISTICS:**

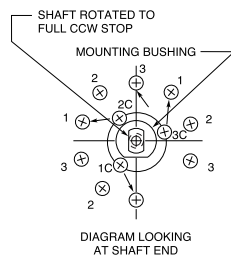
Contact Rating .....500 Milliamps @ 125 VAC or  
 28 VDC resistive  
 Initial Contact Resistance.....50 Milliohms max.  
 Contact Timing.....Non-shorting  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Rotation Torque .....14 Inch ounce max.  
 High Torque Bushing Shoulder ....Nickle plated brass  
 Plunger/Actuator Travel.....36°  
 Life Expectancy .....Up to 10,000 Cycles @ full contact  
 rating  
 Up to 25,000 Cycles @ 150 mA @  
 125 VAC or 250 mA @ 28 VDC

**NOTICE: Set stop positions by presetting external pin plate provided.**

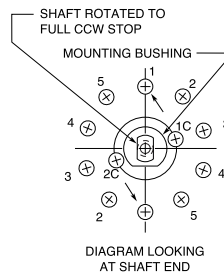
4 Pole, 2 Positions



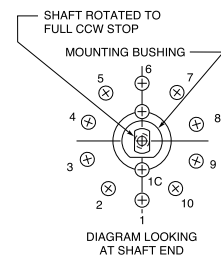
3 Pole, 2-3 Positions, Adjustable



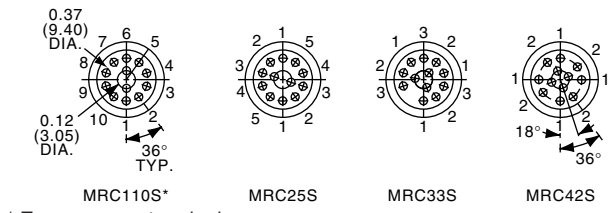
2 Pole, 2-5 Positions, Adjustable



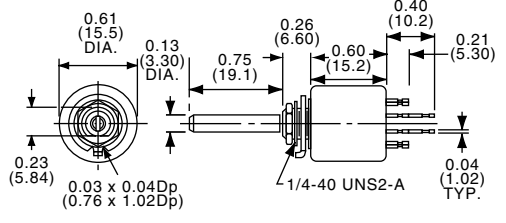
1 Pole, 2-10 Positions, Adjustable



**36° ANGLE OF THROW**

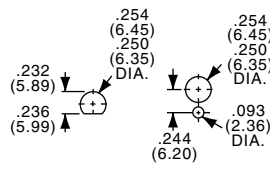


\* Two common terminals are internally shorted. Use either one.



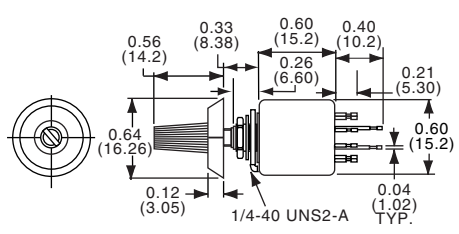
MRC33S

Part Number		No. Poles	Adjustable Positions
Tyco Electronics	Alcoswitch		
1437629-2	MRC110S	1 Pole	2 to 10 Positions
1437629-4	MRC25S	2 Poles	2 to 5 Positions
1437629-6	MRC33S	3 Poles	2 to 3 Positions
1437629-8	MRC42S	4 Poles	2 Positions (fixed)

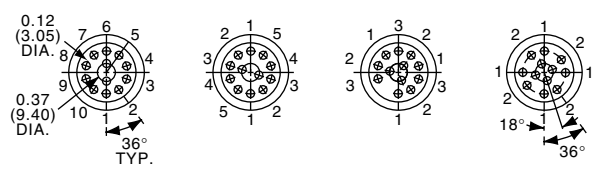


\* Two common terminals are internally shorted. Use either one.

**36° ANGLE OF THROW**



KNOB NOT SOLD SEPARATELY



MRC25

Part Number		No. Poles	Adjustable Positions
Tyco Electronics	Alcoswitch		
1437629-1	MRC110	1 Pole	2 to 10 Positions
1437629-3	MRC25	2 Poles	2 to 5 Positions
1437629-5	MRC33	3 Poles	2 to 3 Positions
1437629-7	MRC42	4 Poles	2 Positions (fixed)



MRC Series



**Rotary Switches, 6000 Series**

Alcoswitch 6000 Series Rotary Switches are used in programming electrical and mechanical circuits in machine tools, test equipment, and input data terminals. These manually operated switches are specifically designed to be mounted on a pc board and offer output capabilities which include: 8-position binary-coded octal (BC), 10-position binary-coded decimal (BCD), 16-position hexadecimal plus 10- and 16-position single pole decimal. All switches feature a small diameter and very low profile.

In addition to varied output capabilities, these versatile Alcoswitch switches can also be supplied in three different styles, allowing you to select the operation method best suited to your specific application. One version incorporates a slot which accepts a screwdriver, coin or other similar device. This particular style permits operation of the switch without sacrificing overall height. Its height of .220 [5.59] above the pc board is no greater than the usual board-mounted discrete components. The other two versions have either a bar-type knob or thumbwheel for their operation. All three styles can be rotated bidirectionally.

Rugged construction, positive detent action contacts plus large, readable characters are additional features of the Alcoswitch 6000 Series PC Board Rotary Switches. All these features, coupled with a fully enclosed design for better environmental protection, provide excellent electrical and mechanical performance.

**PERFORMANCE CHARACTERISTICS**

- Current/Voltage Rating**— Signal application only.
- Dielectric Breakdown Voltage**— 500 VDC min.
- Insulation Resistance**— 1 x 10<sup>8</sup> ohms
- Initial Contact Resistance**— 25 milliohms (at 50 millivolts, 100 milliamperes) closed circuit
- Circuit Capacitance**— 5 picofarads (at 100 KHz)
- Durability**— 1000 cycles
- Operating Torque**— 2 - 12 inch-ounces initial and after durability
- Temperature Rating**—
- Operating** — -18°C to +88°C
- Storage** — -45°C to +88°C
- Humidity**— Withstands an environment of +40°C and 95% RH for 96 hours

**MATERIALS**

- Contacts**— Phosphor bronze, gold over nickel plated
- Solder Tabs and Pins**—
- Coded Switches** — Beryllium copper, tin plated
- Single Pole Switches** — Brass, tin plated
- Structural Parts** — Thermoplastic

Technical Documents

- Product Specification**— 108-7514
- Instruction Sheet**— 408-07523
- Application Specification**— 114-7005

**Product Facts**

- n **Compact design** — small diameter, low profile switches are ideal for pc board mounting
- n **Wide choice of outputs:** 8-position binary-coded octal, 10-position binary-coded decimal, 16-position hexadecimal and 10- and 16-position single pole
- n **Versatile application** — styles include slotted, bar-type and thumbwheel versions for hand rotation
- n **Positive switching** — contacts have positive detent action
- n **All positions are easily identified** by large readable characters or dots
- n **Optimum reliability** — fully enclosed design protects contacts against contamination

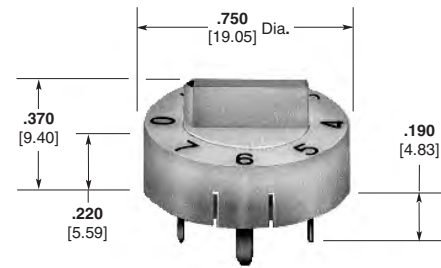
**Rotary Switches, PC Mount, 8 or 10 Positions**

Switch Position	Common to:		
	1	2	3
0			
1	•		
2		•	
3	•	•	
4			•
5	•		•
6		•	•
7	•	•	•

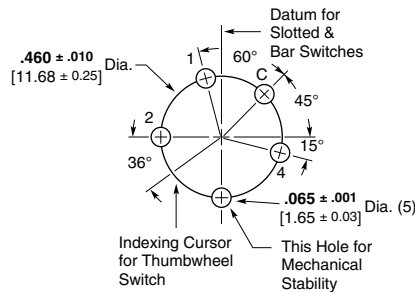


Screwdriver/Coin Actuated  
Part No. 435174-1

**8-POSITION  
BINARY CODED OCTAL (BCO)**

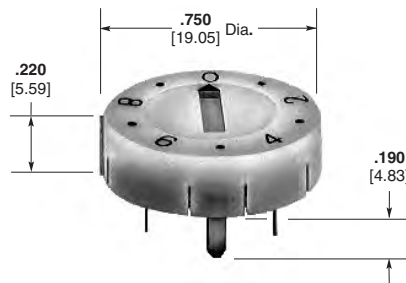


Bar-Type Knob  
Part No. 1- 435174-1 (Shown)



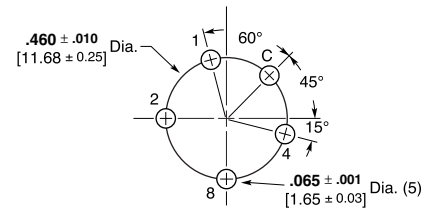
Recommended PC Board Hole Pattern  
(Switch Side)

Switch Position	Common to:			
	1	2	4	8
0				
1	•			
2		•		
3	•	•		
4			•	
5	•		•	
6		•	•	
7	•	•	•	
8				•
9	•			•

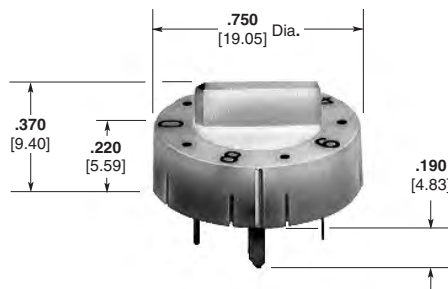


Screwdriver/Coin Actuated  
Part No. 435005-1

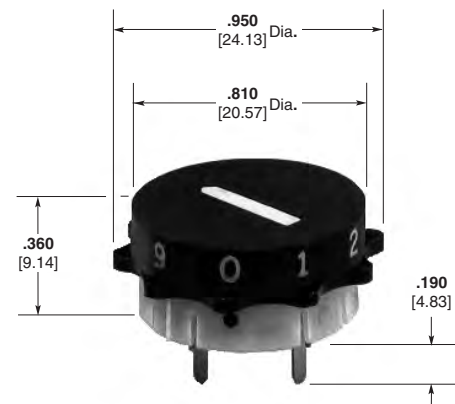
**10-POSITION  
BINARY CODED DECIMAL (BCD)**



Recommended PC Board Hole Pattern  
(Switch Side)



Bar-Type Knob  
Part No. 435123-1



Thumbwheel  
Part No. 435128-1

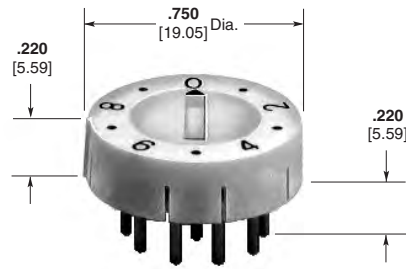
G

6000 Series

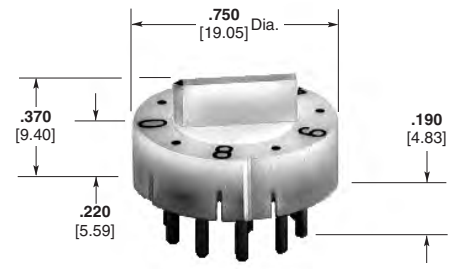
**Rotary Switches, PC Mount, 10 or 16 Position**

**10-POSITION SINGLE POLE**

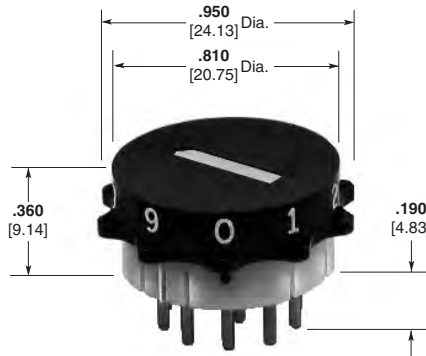
Switch Position	Common to:
	0 1 2 3 4 5 6 7 8 9
0	•
1	•
2	•
3	•
4	•
5	•
6	•
7	•
8	•
9	•



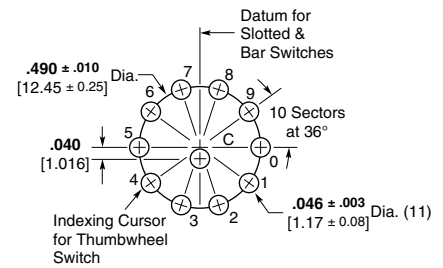
Screwdriver/Coin Actuated  
Part No. 1-435097-1



Bar-Type Knob  
Part No. 2-435097-1



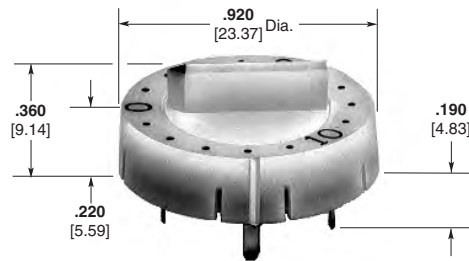
Thumbwheel  
Part No. 435097-1 (Shown)  
Part No. 435097-2 (With Numbers 1 - 10)



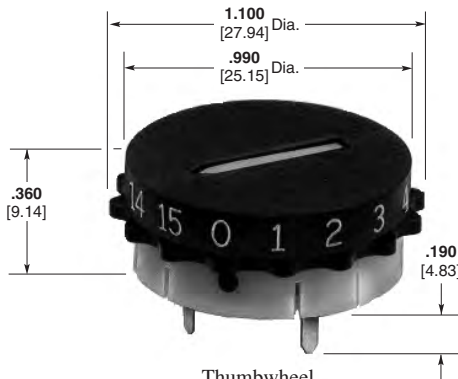
Recommended PC Board Hole Pattern  
(Switch Side)

**16-POSITION HEXADECIMAL**

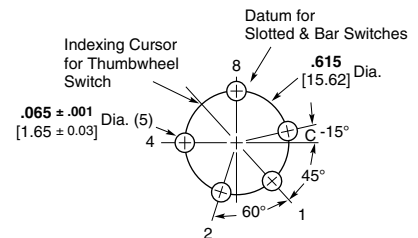
Switch Position	Common to:
	1 2 4 8
0	
1	•
2	•
3	•
4	•
5	•
6	•
7	•
8	•
9	•
10	•
11	•
12	•
13	•
14	•
15	•



Bar-Type Knob  
Part No. 1-435167-1



Thumbwheel  
Part No. 2-435167-1 (Shown)



Recommended PC Board Hole Pattern  
(Switch Side)

G

6000 Series



**3100 Series Rotary Switches**

Alcoswitch Rotary Switches provide a highly reliable means of manually programming various types of electronic equipment. They are specifically designed for logic level circuitry, but are capable of controlling electrical circuits that operate at current ratings of 2 amperes, 115 VAC (nonswitching) and up to 125 milliamperes, 115 VAC (switching).

Positive detent action, with a quick make/break operation, is provided by durable stainless steel balls and springs as well as the detents which form an integral part of the housing. All contact surfaces are fully enclosed within the housing, thus greatly reducing operational failures due to dirty contacts. The contacts are made of phosphor bronze with gold-over-nickel plating.

Alcoswitch Rotary Switches can be supplied with a variety of options to afford complete application versatility and adaptability. Output codes include decimal, BCD and BCD complement with 10, 12, 16, 24 and 32 switching positions.

Interconnection of switches may be achieved by the use of AMPMODU receptacles. Stops supplied with the switches may be customer installed when it is desired to limit rotation to less than 360°.

**PERFORMANCE CHARACTERISTICS**

- Circuit Current Rating—**
- Nonswitching** — 2.0 amperes at 115 VAC max.
- Switching (Resistive Load)** — 125 milliamperes at 115 VAC max.
- Dielectric Withstanding Voltage—**
- 500 VDC
- Insulation Resistance—**
- 1 x 10<sup>8</sup> ohms min. at 100 VDC
- Initial Contact Resistance—**
- 150 milliohms (input terminal to output terminal)
- Initial Operating Force—**
- 1/2 to 2 in.-lbs.
- Contact Life Expectancy—**
- 25,000 rotations at rated load
- Operating Temperature—**
- 18°C to +88°C

**MATERIALS**

- Housing—**
- Polyester, black
- Detent Ball and Spring—**
- Stainless steel
- Operating Shaft and Detent—**
- Thermoplastic, 94V-0 rated, black
- Printed Circuit Board—**
- Flame retardant, glass epoxy laminate, copper clad
- Contacts—**
- Phosphor bronze, gold-over-nickel plated
- Hardware—**
- Brass or corrosion resistant steel

**TECHNICAL DOCUMENTS**

- Product Specification—**
- 108-7518
- Instruction Sheet—**
- 408-07936

**Product Facts**

- **Code flexibility — switch output capabilities include decimal, BCD and BCD complement, and various other codes**
- **Positive switching — positive detent action of stainless steel detent balls and springs assures error-free operation**
- **Enclosed contacts — contact surfaces are better protected against dirt, dust and other environmental hazards**

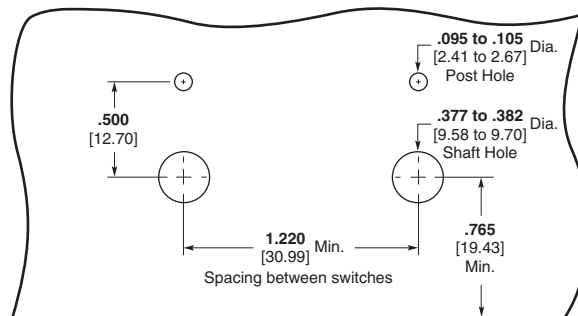
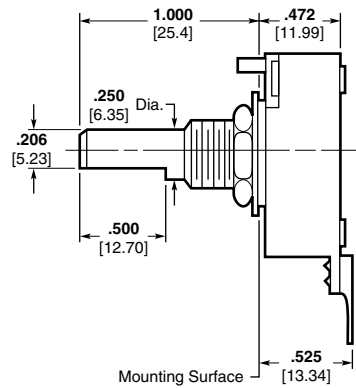
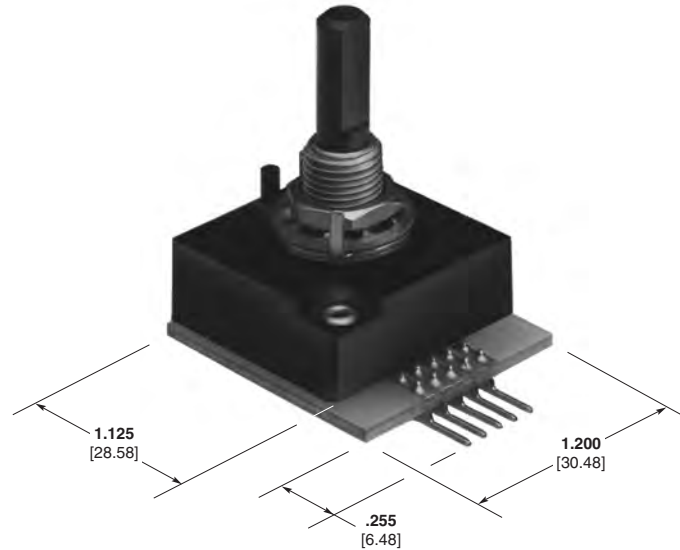


G

3100 Series

**Rotary Switches, PC Mount, 10, 12 or 16 Position**

10-, 12- AND 16-POSITION SWITCHES



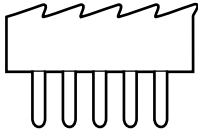
Panel Cutout

Note: See Section K for knob selection.



**Rotary Switches, PC Mount, 10, 12 or 16 Position**

**CODING**



Part No.

2	1	C	8	4	435984-1,7
8	2	4	1	C	436037-1
1	2	C	8	4	435986-1
2	C	1	8	4	436022-1
C	4	8	1	2	436024-1
8	2	4	C	1	435987-1

10-Position  
36° Throw  
BCD

Part No. 435984-1 (Shown)  
Part No. 435984-7 (Right Angle)

Switch Position	Common to:			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

12-Position  
30° Throw  
BCD

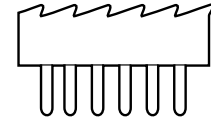
Part No. 436037-1

Switch Position	Common to:			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
10		●		●
11	●	●		●

16-Position  
22½° Throw  
Hexadecimal

Part No. 435986-1

Switch Position	Common to:			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
10		●		●
11	●	●		●
12			●	●
13	●	●	●	
14		●	●	●
15	●	●	●	●



C 16 2 4 1 8

10-Position  
36° Throw  
BCD Complement  
Part No. 436022-1

Switch Position	Common to:			
	1	2	4	8
0	●	●	●	●
1		●	●	●
2	●		●	●
3			●	●
4	●	●		●
5		●		●
6	●			●
7				●
8	●	●	●	
9		●	●	

12-Position  
30° Throw  
BCD Complement  
Part No. 436024-1

Switch Position	Common to:			
	1	2	4	8
0	●	●	●	●
1		●	●	●
2	●		●	●
3			●	●
4	●	●		●
5		●		●
6	●			●
7				●
8	●	●	●	
9		●	●	
10	●		●	
11				●

16-Position  
22½° Throw  
HEX Complement  
Part No. 435987-1

Switch Position	Common to:			
	1	2	4	8
0	●	●	●	●
1		●	●	●
2	●		●	●
3			●	●
4	●	●		●
5		●		●
6	●			●
7				●
8	●	●	●	
9		●	●	
10	●		●	
11				●
12	●	●		
13			●	
14	●			
15				

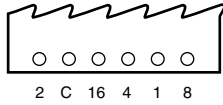
24-Position  
15° Throw BCD  
Part No. 436028-1

Switch Position	Common to:			
	1	2	4	8 16
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
10		●		●
11	●	●		●
12			●	●
13	●	●	●	
14		●	●	●
15	●	●	●	●
16				●
17	●			●
18		●		●
19	●	●		●
20			●	●
21	●	●	●	●
22		●	●	●
23	●	●	●	●

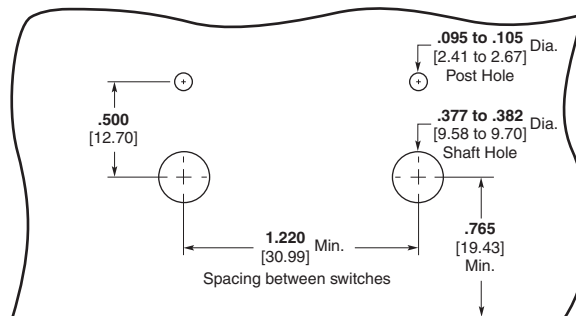
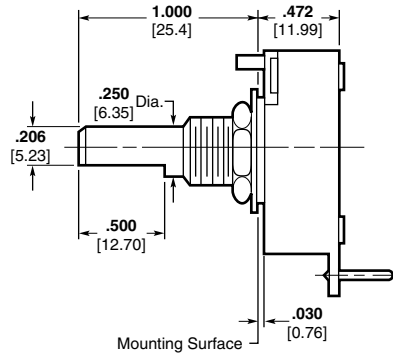
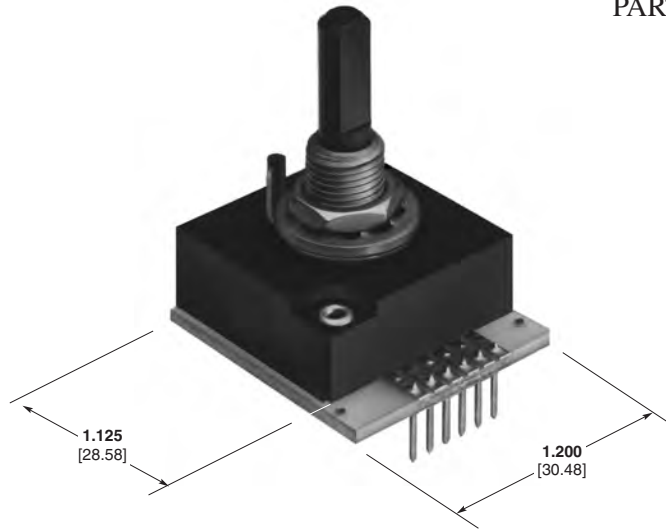
Note: See Section K for knob selection.

**Rotary Switches, PC Mount, 32 Position**

32-POSITION  
11¼° THROW BCD  
PART NO. 436287-1



Switch Position	Common to:				
	1	2	4	8	16
0					
1	•				
2		•			
3	•	•			
4			•		
5	•		•		
6		•	•		
7	•	•	•		
8				•	
9	•			•	
10		•		•	
11	•	•		•	
12			•	•	
13	•	•	•		
14		•	•	•	
15	•	•	•	•	
16					•
17	•				•
18		•			•
19	•	•			•
20			•		•
21	•		•		•
22		•	•		•
23	•	•	•		•
24				•	•
25	•			•	•
26		•		•	•
27	•	•	•		•
28			•	•	•
29	•		•	•	•
30		•	•	•	•
31	•	•	•	•	•



Note: See Section K for knob selection.

Panel Cutout

**Engineering Notes**



**G**

Engineering Notes



2SWK Series - Page H2



SKF Series - Page H4



SKT Series - Page H3



SWK Series - Page H5

# KEYLOCK

## Keylock Part Number Index

2SKF131AEL01 .....	H4	SKT132AEL01 .....	H3
2SKF132AEL01 .....	H4	SKT132GAEL01 .....	H3
2SKF133AEL01 .....	H4	SKT331AEL01 .....	H3
2SKF231AEL01 .....	H4	SKT331GAEL01 .....	H3
2SWK131AL101 .....	H2	SKT332AEL01 .....	H3
2SWK132AL101 .....	H2	SKT332GAEL01 .....	H3
2SWK231AL101 .....	H2	SWK12 .....	H5
SKF1323AEL01 .....	H4	SWK121F315 .....	H5
SKT13 .....	H3	SWK123F315 .....	H5
SKT131AEL01 .....	H3	SWK12F315 .....	H5
SKT131GAEL01 .....	H3	SWK12KF315 .....	H5
SKT1323AEL01 .....	H3	SWK1323AL101 .....	H2

**Key Switches, Medium Security**

**MATERIAL SPECIFICATIONS**

Contacts .....Silver  
 Cylinder Material.....Zinc alloy  
 Lock Body .....Zinc alloy  
 Key Material .....Brass  
 Terminals/Fixed Contacts ....Screw type  
 Beveled Frame Finish .....302 Stainless steel

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating .....1A at 120 VAC resistive  
 Initial Contact Resistance .....50 Milliohms max.  
 Contact Timing.....Non-shorting  
 Plunger/Actuator Travel .....90°  
 Key Changes .....25 Standard  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS**

Solder Heat Resistance .....See page M3-4

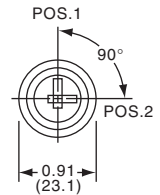
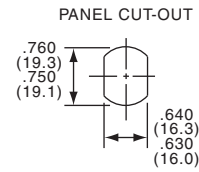
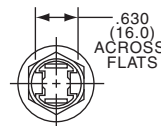
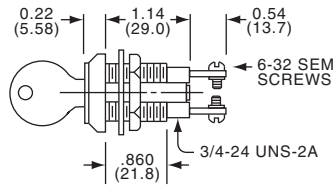
**NOTE: All Keylocks are supplied with 2 brass keys on a ring.**

**SPST**

**5 Disc Tumblers**



2SWK131



Part Number						Part Number					
Tyco Electronics	Alcoswitch	Type	Pos. 1	Pos. 2	Remove Key	Tyco Electronics	Alcoswitch	Type	Pos. 1	Pos. 2	Remove Key
1-1437597-7	2SWK131AL101	SPST	Off	On	Position 1	2-1437597-7	2SWK231AL101	SPST	Off	(On)	Position 1
2-1437597-3	2SWK132AL101	SPST	Off	On	Position 1 or 2	4-1437597-3	SWK1323AL101	Spare Key for SWK Series (On) indicates momentary position.			

H

2SWK 13/23 Series

**2 Position Key Switch**

**MATERIAL SPECIFICATIONS**

Contacts ..... Gold or silver plate  
 Cylinder Material ..... Zinc alloy  
 Lock Body ..... Zinc alloy  
 Key Material ..... Brass  
 Terminals/Fixed Contacts ..... Tin lead plate  
 Terminal Seal ..... SP epoxy

**ENVIRONMENTAL SPECIFICATIONS**

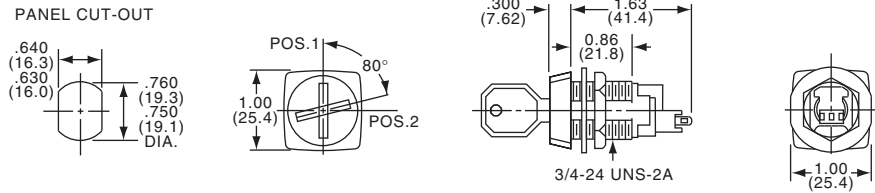
Operating Temperature ..... -30°C to +85°C (-22°F to +185°F)  
 Storage Temperature ..... -30°C to +85°C (-22°F to +185°F)  
 Solder Heat Resistance ..... See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating ..... Gold: 0.4 VA max. @ 20 VDC or peak AC  
 ..... Silver: 3A @ 125 VAC or 28 VDC resistive  
 Initial Contact Resistance ..... 20 Milliohms max.  
 Contact Timing ..... Non-shorting  
 Insulation Resistance ..... 1,000 Megohms @ 500 VDC min.  
 Dielectric Strength ..... 1,000 Volts @ sea level  
 Actuator Travel ..... 80°

**Note:** All keylocks are supplied with 2 brass keys on a ring.

SPDT/DPDT  
 4 Disc Tumblers



SKT131

Tyco Electronics	Alcoswitch	Type	⓪	Ⓛ	Remove Key	Contacts
1437598-4	SKT131AEL01	SPDT	On	On	1 Only	Silver
1437598-5	SKT131GAEL01	SPDT	On	On	1 Only	Gold
1437598-7	SKT132AEL01	SPDT	On	On	1 or 2	Silver
1437598-8	SKT132GAEL01	SPDT	On	On	1 or 2	Gold
1437598-9	SKT331AEL01	DPDT	On	On	1 Only	Silver
1-1437598-0	SKT331GAEL01	DPDT	On	On	1 Only	Gold
1-1437598-1	SKT332AEL01	DPDT	On	On	1 or 2	Silver
1-1437598-3	SKT332GAEL01	DPDT	On	On	1 or 2	Gold
3-1437598-4	SK1323AEL01	Spare key for SKT13 Series				

**Medium Security Key Switch**

**MATERIAL SPECIFICATIONS**

Contacts .....Silver  
 Cylinder Material .....Zinc alloy  
 Lock Body .....Zinc alloy  
 Key Material .....Brass  
 Terminals/Fixed Contacts ...Screw type  
 Beveled Frame Finish .....Brushed chrome

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating .....1 A @ 120 VAC resistive  
 Initial Contact Resistance ...50 Milliohms max.  
 Contact Timing .....Non-shorting  
 Actuator Travel .....90°  
 Key Changes .....10 Standard  
 Life Expectancy .....Up to 10,000 Cycles

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature .....-22°F + 185° F (-30°C to +85°C)  
 Storage Temperature .....-22°F + 185° F (-30°C to +85°C)  
 Solder Heat Resistance .....See page M3-4

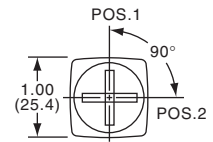
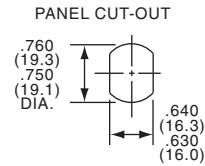
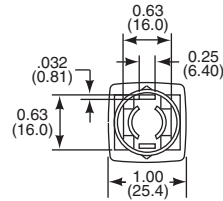
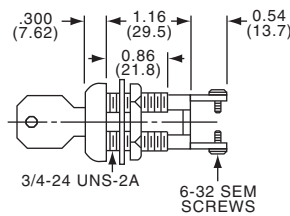
**NOTE: All Keylocks are supplied with 2 brass keys on a ring.**

**SPST**

**4 Disc Tumblers**



SKF131



Tyco Electronics	Alcoswitch	Type	Pos. 1	Pos. 2	Remove Key	Tyco Electronics	Alcoswitch	Type	Pos. 1	Pos. 2	Remove Key
1437597-1	2SKF131AEL01	SPST	Off	On	Position 1	1-1437597-1	2SKF231AEL01	SPST	Off	(On)	Position 1
1437597-7	2SKF132AEL01	SPST	Off	On	Position 1 or 2	3-1437597-4	SK1323AEL01	Spare key for SK Series			
1-1437597-0	2SKF133AEL01	SPST	On	Off	Position 1			(On) indicates momentary position.			

H

SKF Series



**High Security Key Switch**

**MATERIAL SPECIFICATIONS**

Contacts .....Silver  
 Cylinder Material .....Zinc alloy  
 Lock Body .....Zinc alloy  
 Actuator Material .....Brass key  
 Terminals/Fixed Contacts.....Screw type  
 Beveled Frame Finish .....Polished chrome

**ENVIRONMENTAL SPECIFICATIONS**

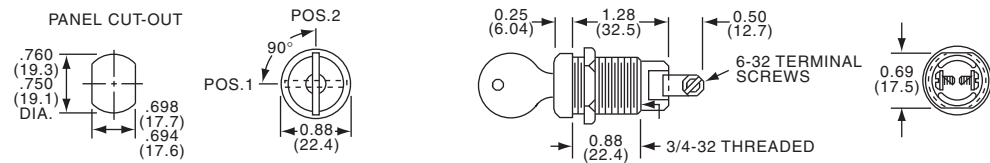
Operating Temperature.....-22°F to +185° (-30°C to +85°C)  
 Storage Temperature .....-22°F to +185° (-30°C to +85°C)  
 Solder Heat Resistance.....See page M3-4

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating .....5A @ 115 VAC, 15A @ 24 VDC  
 ..... resistive  
 Initial Contact Resistance ...50 Milliohms max.  
 Contact Timing .....Non-shorting  
 Dielectric Strength .....1,000 VAC @ sea level  
 Actuator Travel .....90°  
 Key Changes .....25 Standard  
 Life Expectancy .....Up to 20,000 Cycles

**NOTE: All Keylocks are supplied with 2 brass keys on a ring.**

**SPST**  
**8 Disc Tumblers**



SWK12

Tyco Electronics	Alcoswitch	Type	Pos. 1	Pos. 2	Remove Key
4-1437597-0	SWK12F315	SPST	On	Off	Position 1 or 2
3-1437597-6	SWK121F315	SPST	On	Off	Position 2
3-1437597-8	SWK123F315	SPST	On	Off	Position 1
4-1437597-2	SWK12KF315	Spare key for SWK12 Series			

**H**

**SWK 12 Series**

**Engineering Notes**



H

Engineering Notes

H6

Catalog 1308390  
Issued 9-04

[www.tycoelectronics.com](http://www.tycoelectronics.com)

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752  
Canada: 1-905-470-4425  
Mexico: 01-800-733-8926  
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514  
Hong Kong: 852-2735-1628  
Japan: 81-44-844-8013  
UK: 44-141-810-8967



*RT Series - Page I3  
22mm Mounting*



*QT Series - Page I4  
22mm Mounting*



*RM Series - Page I5  
22mm Mounting*



*Block Assemblies - Page I8*



*6000 Series - Page I11  
30mm Mounting*



*164/165 Command Series - Page I16  
16mm Mounting*

# Industrial Controls

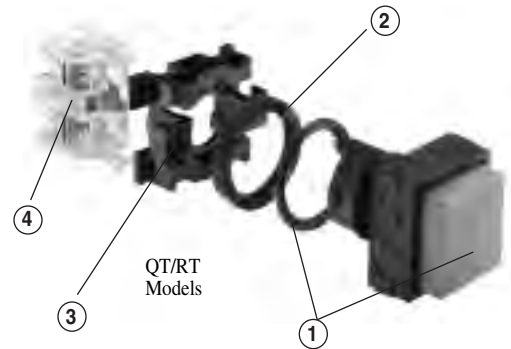
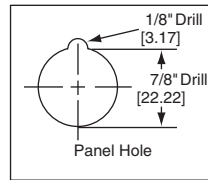
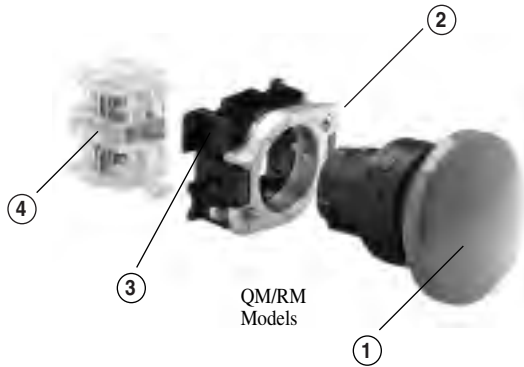
**Industrial Controls Part Number Index**

385 .....I20	165J3C33 .....I17	M6653(*)406 .....I14	V50 .....I8,I9,I14
387 .....I20	165J3E22.....I17	M6655 .....I15	VA0 .....I8,I9,I14
570 .....I6,I7,I15	165J3E33.....I17	QM010 .....I5	VR0 .....I8,I9,I14
616 .....I19	165J7A22 .....I17	QM020 .....I5	
668 .....I19	165P2B11 .....I17	QM120 .....I7,I15	
669 .....I19	165P2B22 .....I17	QM122 .....I7,I15	
755 .....I15	165P2B33 .....I17	QM600 .....I6,I15	
757 .....I15	165P3B22 .....I17	QT010 .....I5	
7333 .....I20	165P3B33 .....I17	QT01201 .....I4	
164EL11 .....I16	165SL11 .....I16	QT012STSTH .....I4	
164EL22 .....I16	165SL22 .....I16	QT020 .....I5	
164EL33 .....I16	165SL33 .....I16	RM010 .....I3	
164EL511 .....I16	165SL511 .....I16	RM015 .....I3	
164EL522 .....I16	165SL522 .....I16	RM020 .....I3	
164EL533 .....I16	165SL533 .....I16	RM030 .....I4	
164EZ .....I18	165SZ .....I18	RM0450 .....I4	
164J0A11 .....I17	165TL11 .....I16	RM0452 .....I4	
164J0A22 .....I17	165TL22 .....I16	RM0500 .....I4	
164J0A33 .....I17	165TL33 .....I16	RM0502 .....I4	
164J2A11 .....I17	165TL511 .....I16	RM0532 .....I4	
164J2A22 .....I17	165TL522 .....I16	RM0552 .....I4	
164J2A33 .....I17	165TL533 .....I16	RM0652 .....I4	
164J2B11 .....I17	165TZ .....I18	RM120 .....I6	
164J2B22 .....I17	327-AG .....I20	RM122 .....I6	
164J2B33 .....I17	381-AG .....I20	RM130 .....I6	
164J3A22 .....I17	382-AG .....I20	RM145 .....I6	
164J3A33 .....I17	5B0 .....I6,I7,I15	RM150 .....I6	
164J3C22 .....I17	601-AG .....I19	RM1652 .....I6	
164J3C33 .....I17	618-AG .....I19	RM200 .....I5	
164J3E22.....I17	64E .....I18	RM201 .....I5	
164J3E33.....I17	64S .....I18	RM204 .....I5	
164J7A22 .....I17	64T .....I18	RM205 .....I5	
164KA .....I17	671-AG .....I19	RM210 .....I6	
164P0B22 .....I17	697-PL .....I20	RM220 .....I6	
164P0B33 .....I17	815-AG .....I20	RM222 .....I6	
164P2B11 .....I17	E1 .....I5,I6	RM230 .....I6	
164P2B22 .....I17	F40 .....I8,I9,I14	RM232 .....I6	
164P2B33 .....I17	F50 .....I8,I9,I14	RM233 .....I6	
164P3B22 .....I17	FA0 .....I8,I9,I14	RM240 .....I6	
164P3B33 .....I17	FR0 .....I8,I9,I14	RM243 .....I6	
164SL11 .....I16	G001 .....I13	RM250 .....I5	
164SL22 .....I16	M25310 .....I10	RM270 .....I6	
164SL33 .....I16	M25500 .....I10	RM272 .....I6,I9	
164SL511 .....I16	M25510 .....I10	RM273 .....I6	
164SL522 .....I16	M6010 .....I11	RM280 .....I6	
164SL533 .....I16	M6020 .....I11	RM3040 .....I5	
164SZ .....I18	M60532 .....I11	RM3100 .....I5	
164TL11 .....I16	M6057 .....I11	RM3120 .....I5	
164TL22 .....I16	M60582 .....I11	RM3130 .....I5	
164TL33 .....I16	M60652 .....I11	RM3700 .....I5	
164TL511 .....I16	M6080 .....I11	RM3800 .....I5	
164TL522 .....I16	M6120(*)406 .....I13	RM3830 .....I5	
164TL533 .....I16	M6150(*)406 .....I13	RM4040 .....I5	
164TZ .....I18	M6153(*)406 .....I13	RM4100 .....I5	
165EL11 .....I16	M6200 .....I13	RM4120 .....I5	
165EL22 .....I16	M6201 .....I13	RM4130 .....I5	
165EL33 .....I16	M6210 .....I13	RM4700 .....I5	
165EL511 .....I16	M6250 .....I13	RM4800 .....I5	
165EL522 .....I16	M6270 .....I13	RM600 .....I6,I15	
165EL533 .....I16	M6280 .....I13	RM650 .....I6	
165EZ .....I18	M6402 .....I12	RM653 .....I6	
165J2A11 .....I17	M6410 .....I12	RT010 .....I3	
165J2A22 .....I17	M6412 .....I12	RT020 .....I3	
165J2A33 .....I17	M6470 .....I12	RT050 .....I4	
165J2B11 .....I17	M6480 .....I12	RT0500 .....I4	
165J2B22 .....I17	M65310 .....I12	RT0502 .....I4	
165J2B33 .....I17	M65500 .....I12	RT120 .....I7	
165J3A22 .....I17	M65510 .....I12	SR601 .....I6	
165J3A33 .....I17	M65810 .....I12	T6632 .....I15	
165J3C22 .....I17	M6650 .....I14	V40 .....I8,I9,I14	

**Pushbutton Switches, 22mm, Oil-Tight, Round**

**FEATURES**

- Fits 7/8" (22mm) diameter holes
- Full size buttons
- Meets NEMA 1, 12 and 13
- Rugged heavy-duty metal bushing, or thermoplastic bushings for full installation
- Matte black beveled frame finish
- IP65 protection level
- Snap-block contacts
- 6A @ 600VAC, 6A @ 125VDC V40, V50, F40, F50  
6A @ 600VAC, 4A @ 125VDC VAO, VRO, FAO, FRO
- Easy "no tool" mounting
- Choice of screw terminals or dual .110/.250 quick connects
- Double-break silver contacts standard, gold plated optional
- Stackable



**INSTALLATION & ASSEMBLY**

- Engage the operator (1) into the 22.5mm dia. mounting hole.
- Engage metal ring (2) with operator (bayonet lock). Tighten set screws against back of panel.
- Snap the contact blocks (4) on the support(3).
- Snap the support (3) complete with contact blocks (4) on the metal ring (2).

- Engage the operator and seal (1) into the 22.5mm dia. mounting hole.
- Mount back-up nut (2) on bushing and then tighten against panel.
- Snap the contact blocks (4) on the support (3).
- Snap the support (3) complete the contact blocks (4) onto operator (1).

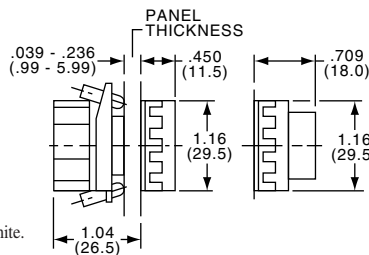
**MOMENTARY**

**Metal Bushings**

Contact blocks not supplied, order separately.  
(See page I8.)

Model	Type
RM010(*)	Flush Button
RM020(*)	Extended Button
RM015(*)	Extended Guard

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (8) Grey, (9) White.  
**Note: Front beveled frame is black.**

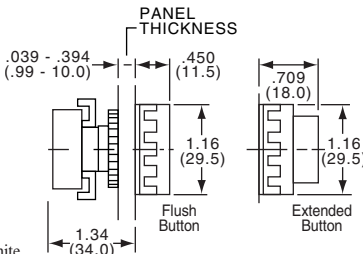


**Thermoplastic Bushings (Threaded)**

Contact blocks not supplied, order separately.  
(See page I8.)

Model	Type
RT010(*)	Flush Button
RT020(*)	Extended Button

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (8) Grey, (9) White.  
**Note: Front beveled frame is black.**

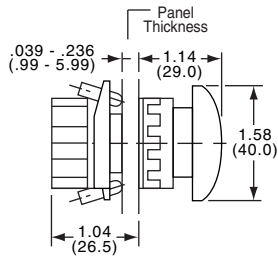


Reliant'22 Series

**Pushbutton Switches, 22mm, Oil-Tight, Round or Mushroom or Dual Button**



RM0502



**MOMENTARY**

**Mushroom**

Contact blocks not supplied, order separately. (See page I8.)

Tyco Electronics	Alcoswitch	Type	Bushing
3-1437614-7	RM0502	Mushroom, Red	Metal, Bayonet
1437615-2	RT0502	Mushroom, Red	Thermoplastic, Threaded Bushing
3-1437614-6	RM0500	Mushroom, Black	Metal, Bayonet
1437615-1	RT0500	Mushroom, Black	Thermoplastic, Threaded Bushing
3-1437614-9	RM0552	Mushroom, Red	Metal, Bayonet (Wobble)
	RT050(*)	Mushroom	

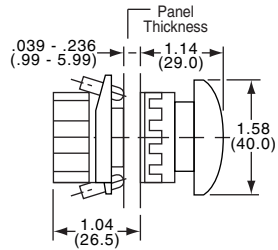
(\*) Specify color by adding suffix number:

(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue.

**Note: Front beveled frame is black.**



RM0652



**PUSH-TO-LOCK, TWIST-RELEASE**

**Metal Bushings**

Contact blocks not supplied, order separately. (See page I8.)

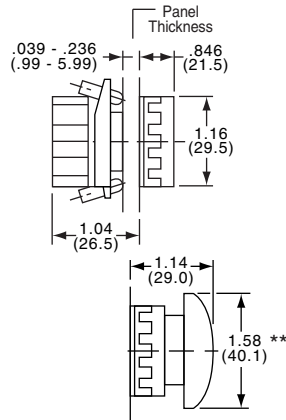
Note: Use F40/V40 for N.C. contacts, and FAO/VAO for N.O. contacts.

Tyco Electronics	Alcoswitch	Type	Arrow
4-1437614-0	RM0652	Mushroom, Red	White

**Note: Front beveled frame is black.**



RM030(\*)



**MAINTAINED**

Contact blocks not supplied, order separately. (See page I8.)

Note: Use F40/V40 for N.C. contacts and FAO/VAO for N.O. contacts.

Tyco Electronics	Alcoswitch	Type
—	RM030(*)	Flush Button
3-1437614-4	RM0450	Mushroom, Black
3-1437614-5	RM0452	Mushroom, Red
3-1437614-8	RM0532	Push-Pull, Mushroom, Red

(\*) Specify color by adding suffix number:

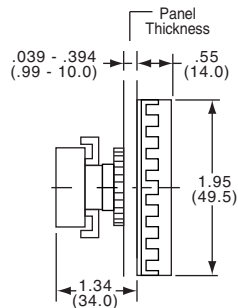
(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (8) Grey, (9) White.

**Note: Front beveled frame is black.**

**\*\* Note: RM0532 mushroom 35mm Dia. (1.38)**



QT01201



**MOMENTARY DUAL OPERATOR\***

**Threaded Thermoplastic bushing**

Contact blocks not supplied, order separately. (See page I8.)

Black buttons available.

Tyco Electronics	Alcoswitch	Color	Legend
1437614-9	QT01201	Green, Red	As Shown
—	QT012STSTH	Green, Red	Start & Stop Horizontal

\*Not oil tight construction, not sealed; meets NEMA 1 only.

**Note: Front beveled frame is black.**

**Pushbutton or Keylock or Selector Switches, 22mm, Oil-Tight**

**MOMENTARY**

**Metal Bushings**

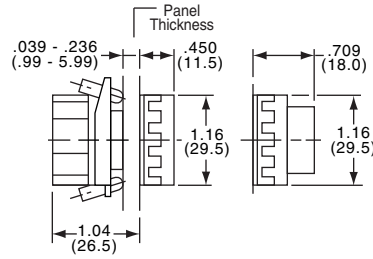
Contact blocks not supplied, order separately. (See page I8.)

Model	Type
QM010(*)	Flush Button
QM020(*)	Extended Button

(\*) Specify color by adding suffix number:

(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (8) Grey, (9) White.

**Note: Front beveled frame is black.**



QM010(\*)

**Thermoplastic Bushings (Threaded)**

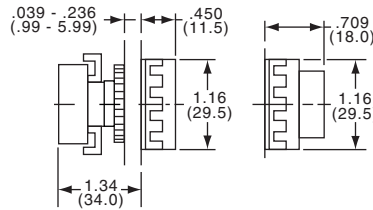
Contact blocks not supplied, order separately. (See page I8.)

Model	Type
QT010(*)	Flush Button
QT020(*)	Extended Button

(\*) Specify color by adding suffix number:

(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (8) Grey, (9) White.

**Note: Front beveled frame is black.**



QT010(\*)

**2 POSITION SELECTORS/KEYLOCK MAINTAINED**

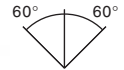
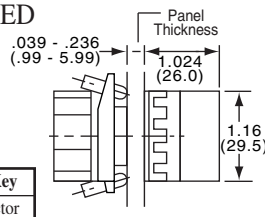
**Metal Bushings**

Contact blocks not supplied, order separately.

(See page I8.)

Tyco Electronics	Alcoswitch	Action	Throw	CAM	Remove Key
7-1437614-7	RM4040	Maintained, Black	120°	1	Long Selector
7-1437614-0	RM3040	Maintained, Black	120°	1	Selector
5-1437614-4	RM200	Maintained	60°	1	⊕
5-1437614-5	RM201	Maintained	60°	1	⊗
6-1437614-5	RM250	Momentary, Right	60°	1	⊕
5-1437614-6	RM204	Maintained	120°	1	⊗
5-1437614-7	RM205	Maintained	120°	1	⊗
1437614-1	E1	Spare Key			⊗

**Note: Front beveled frame is black.**



RM3040

RM200/201 with/2 keys

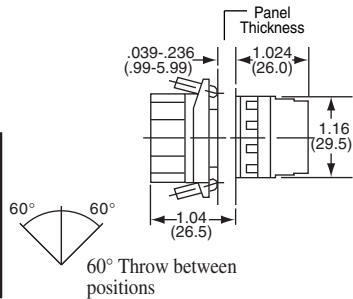
**3 POSITION SELECTORS**

**Short Handle, Metal Bushings**

Contact blocks not supplied, order separately. (See page I8.)

Tyco Electronics	Alcoswitch	Action	CAM	Tyco Electronics	Alcoswitch	Action	CAM
7-1437614-1	RM3100	Maintained, Black	2	7-1437614-4	RM3700	Momentary, Right Side, Black	2
7-1437614-2	RM3120	Maintained, Black	3	7-1437614-5	RM3800	Double Momentary, Black	2
7-1437614-3	RM3130	Maintained, Black	4	7-1437614-6	RM3830	Double Momentary, Black	4

**Note: Front beveled frame is black.**



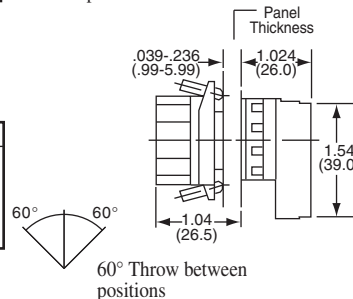
RM3100

**Long Handle, Metal Bushings**

Contact blocks not supplied, order separately. (See page I8.)

Tyco Electronics	Alcoswitch	Action	CAM	Tyco Electronics	Alcoswitch	Action	CAM
7-1437614-8	RM4100	Maintained	2	—	RM4700	Momentary, Right Side	2
—	RM4120	Maintained	3	7-1437614-9	RM4800	Double Momentary	2
—	RM4130	Maintained	4				

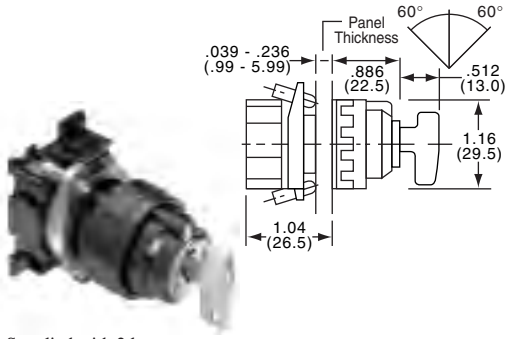
**Note: Front beveled frame is black.**



RM4100



**Keylock or Pushbutton Switches, 22mm, Oil-Tight or Pilot Lights**



Supplied with 2 keys

**3 POSITION KEYLOCK SELECTOR  
MAINTAINED OR MOMENTARY**

**Metal Bushings**

Contact blocks not supplied, order separately. (See page I8.)

Tyco Electronics	Alcoswitch	Action	CAM	Remove Key	Tyco Electronics	Alcoswitch	Action	CAM	Remove Key
5-1437614-8	RM210	Maintained	2	⊙	6-1437614-4	RM243	Maintained	4	⊙
5-1437614-9	RM220	Maintained	2	⊗	6-1437614-6	RM270	Mom. Right Side	2	⊗
6-1437614-0	RM222	Maintained	3	⊗	6-1437614-7	RM272	Mom. Right Side	3	⊗
6-1437614-1	RM230	Maintained	2	⊗	6-1437614-8	RM273	Mom. Right Side	4	⊗
6-1437614-2	RM232	Maintained	3	⊗	6-1437614-9	RM280	Mom. Both Sides	2	⊙
6-1437614-3	RM233	Maintained	4	⊗	1437614-1	E1	Spare Key		
—	RM240	Maintained	2	⊗					

Note: Front beveled frame is black.

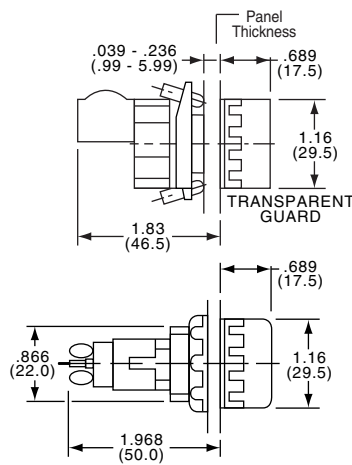


QM600 (RM600)

Metal Bushing



SR601 Threaded Thermoplastic Bushing Front lampable



**PILOT LIGHTS (FULL VOLTAGE TYPE)**

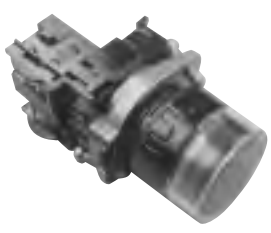
Lamps: order separately, miniature bayonet base. (See page I15.)

Lamps: use G3 1/2 on QM600(\*), use T3 1/4 on SR601(\*), RM600(\*). Custom legends available.

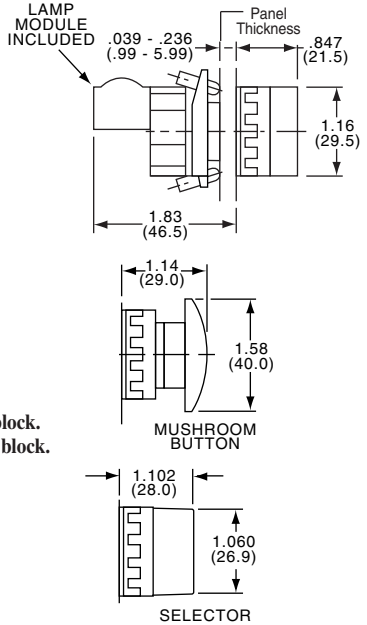
Model	Type
QM600(*)	Square pilot light, metal bushing
SR601(*)	Round pilot light, plastic bushing screw turn
RM600(*)	Round pilot light, metal bushing

(\*) Specify color by adding suffix number: (2) Red, (3) Orange, (4) Yellow, (5) Green, (6) Blue, (9) White.

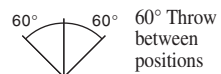
Reliant'22



RM120(\*)



**Application Note:**  
+V40/F40 used for N.C contact block.  
+VA0/FA0 used for N.O. contact block.



**ILLUMINATED/ROUND MOMENTARY/MAINTAINED**

**Metal Bushing**

Contact blocks not supplied, order separately. (See page I8.)

Lamp circuit isolated. Order lamp separately. (See page I15.)

Lamps: Use T-3 1/4 or G3 1/2 incandescent or neon lamps.

Tyco Electronics	Alcoswitch	Action	Type	Cam Type
—	RM120(*)	Momentary	Extended Button	
—	RM122(*)	Momentary	Guarded Button	
—	+RM130(*)	Maintained	Flush Button	} Push-On - Push-Off See Application Note
—	+RM145(*)	Maintained	Mushroom	
—	RM150(*)	Momentary	Mushroom	
5-1437614-3	RM1652	Twist Release	Mushroom, Red	
<b>Illuminated Selectors</b>				
—	RM650(*)	Maintained	2-Pos. Selector**1	
—	RM653(*)	Maintained	3-Pos. Selector**2	

When operating from line voltage use step down transformers 5B0 or 570. (See page I15.)  
(\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (6) Blue, (9) White.

Note: RM145 and RM150 available only in red, yellow, green.

\*\*Use G3 1/2 lamps only.

Note: Front beveled frame is black.

**Pushbutton Switches, 22mm, Oil-Tight, Round or Square Buttons**

**SQUARE, MOMENTARY ILLUMINATED**

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

Lamp circuit isolated. Order lamps separately.

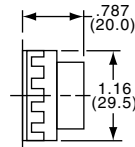
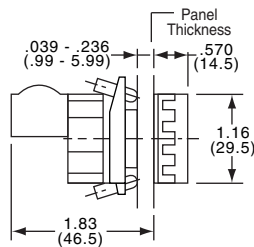
Lamps: Use G3 1/2. (See page I15.)

Custom legends available.

Model	Type
QM122(*)	Flush Button
QM120(*)	Extended Button

When operating from line voltage use step down transformers 5B0 or 570. (See page I15.)  
 (\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (6) Blue, (9) White.

Note: Front beveled frame is black.



QM122(\*)



QM120(\*)

**ROUND, MOMENTARY ILLUMINATED**

Thermoplastic

Contact blocks not supplied, order separately. (See page I8.)

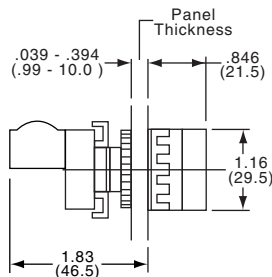
Lamp circuit isolated. Order lamps separately. (See page I15.)

Lamps: use T-3 1/4 or G3 1/2 incandescent or neon lamps.

Model	Action	Type
RT120(*)	Momentary	Extended Button

When operating from line voltage use step down transformers 5B0 or 570. (See page I15.)  
 (\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (6) Blue, (9) White.

Note: Front beveled frame is black.



RT120(\*)

Reliant'22

**Standard Contact Blocks**

An almost unlimited number of circuit control options are possible using various combinations of contact blocks. 8 different "V" or "F" family modular blocks may be used with any operator in the Reliant 22, 2200 or 6000 series, depending on circuit requirements and operator design. The exclusive SNAP-BLOC design permits assembly without the use of tools – no screws or hardware to get lost. Choose either screw terminals or dual

male .110"/.250" quick connect terminals. Plunger color indicates closure mode. The double break silver contacts are enclosed in a tough transparent polycarbonate housing, permitting visual inspection of contacts. Designed-in rocking action for long, reliable life; over several million operations in normal use. Operating temperature range: -25°C to +60°C. Storage temp. -40°C to +80°C.

**Application Notes**

1. A total of 4 (2 upper and 2 lower) contact blocks may be stacked and snap-mounted in either the upper and/or lower position on the back on any Reliant 22, Series 4000 or 6000 operator.
2. In order to maintain optimum insulating distances when contact blocks are stacked, wiring connections should be in same polarity for operation above 300VAC.
3. Blocks may be prewired and snapped into place for easier assembly.
4. Remove blocks by simply prying tabs. Small screwdriver is all that is necessary.

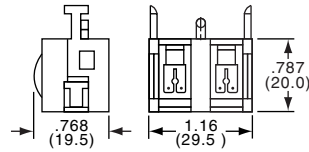
F&V Contact blocks are UL recognized. File Number E-60363  
CSA LR-20785-19 CE MARK

**ELECTRICAL CONTACT RATINGS**

Condition	Function	Standard Series (600 VAC Max.)		
		120V	300V	600V
AC Operation				
Inductive Loads	Make	30A	12A	6A
	Continuous	6A	6A	6A
	Break	.350 P.F. min.	3A	1.2A
Resistive Loads	Make, Continuous	6A	6A	6A
	Carry & Break	.750 P.F. min.		
DC Operation				
Inductive & Resistive Loads	Make	1.1A		
	Continuous Carry	6A	6A	6A
	Break	1.1A		



F Series



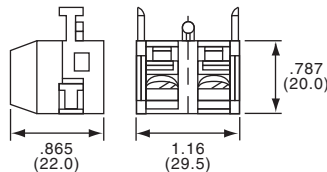
**QUICK CONNECT**

Tyco Electronics	Alcoswitch	Contacts	Plunger Color
1437612-9	F40	Normally Closed	Red
1-1437612-0	F50	Normally Open	Green
1-1437612-1	FA0	N.O. Early Make	Yellow
1-1437612-2	FR0	N.C. Late Break	Black

Note: FA0 and FR0 contacts "overlap."



V Series



**SCREW TERMINAL**

Tyco Electronics	Alcoswitch	Contacts	Plunger Color
1-1437612-3	V40	Normally Closed	Red
1-1437612-5	V50	Normally Open	Green
1-1437612-8	VA0	N.O. Early Make	Yellow
1-1437612-9	VR0	N.C. Late Break	Black

Note: "V" Series is available with gold plated contacts; order V40G, V50G, VA0G, VR0G. Note: VAO and VRO contacts "overlap."

**Series 6000 and Reliant'22 Contact Selection**

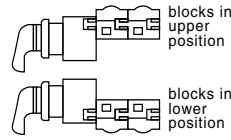
- Determine how many contacts are required for the application, and what contact closure sequence is needed for each contact.
  - 2-Position Operators: There are only two practical possibilities for contact closure sequence. Using "O" to indicate an open and "X" to indicate a closed contact, the options are shown in the table to the right. All Reliant 22 and Series 6000 2-position selection selector and keylock operators provide these options.
  - 3-Position Operators: There are six practical possibilities for contact closure sequence. Using "O" to indicate an open contact, and "X" to indicate a closed contact, the options are shown in the table to the right. Four different cam types are available to provide various combinations of contact closure sequence. Cam Type 2 (see table below) provides the most popular closure sequence, and Cam Type 3 provides all six possibilities, depending on the contact block models chosen. Note that each operator has an upper and lower contact block location, and that the cam profiles are different for upper and lower locations, except for Cam Type 2.
- Make a truth table similar to that shown in the example at the bottom of the page, in which each contact required by the circuit of the application is represented. Up to 12 contacts may be used for each operator, depending on the sequences required and the types of contact blocks chosen.
- Refer to the contact sequence table (below). Find the cam type that will provide all of the required contact closure sequences, and note which contact block model will be needed for each circuit contact.
- Now refer to the tables on pages I5-I6 for 22mm and pages I12-I13 for 30mm to find the operator model that has the cam type needed in the application and that provides the desired features with respect to action (maintained or momentary) type of actuator (lever or key), etc.

0	1
left	right
O	X
X	O

2	0	1
left	center	right
O	O	X
X	O	O
O	X	X
X	X	O
O	X	O
X	O	X

**SELECTOR & KEYLOCK OPERATORS**

ALCOSWITCH selector and keylock operators, in combination with the contact blocks listed on page I8, are designed to fulfill the circuit requirements of almost any 2- or 3-position control application. Each operator has two locations (upper and lower) into which contact blocks may be snap-mounted. Up to four contact blocks may be stacked in each location, the maximum number depending on the contact block models chosen and the contact closure sequences required. (Note: only one logic level block may be used in each location.)



**CONTACT CLOSURE SEQUENCE CHART**

Contact Blocks	2-Position Operators		3-Position Operators								
	CAM Type 1		CAM Type 2		CAM Type 3		CAM Type 4				
	upper & lower locations		upper location	lower location	upper location	lower location	upper location	lower location			
	0	1	2	0	1	2	0	1	2	0	1
V40 or F40 Red	X	0	X	0	0	X	0	0	0	X	0
V50 or F50 Green	0	X	0	0	X	0	0	X	0	0	X
VA0 or FA0 Yellow	0	X*	0	X	X	0	X	X	X	0	X
VR0 or FR0 Black	X	0*	X	X	0	X	X	0	X	X	0

X = Closed    0 = Open    \*VA0 and FA0 contacts overlap with VR0 and FR0 contacts between position of 2 position operators providing "Make Before Break" action.

Example: An "Off-On-Reset" circuit control requires a 3-position keylock switch. The key is to be removable in the "OFF" and "ON" position and the "Reset" position must be momentary (spring return from right to center). All contacts are open in the "Off" position, and two contacts are closed in the "On" position. In the "Reset" position a third contact must close and one of the contacts

in the "on" position must open. This contact closure sequence is shown by the following truth table:

Contact Number	Off (2)	On (0)	Reset (1)
1	O	X	X
2	O	X	O
3	O	O	X

Referring to the Contact Closure Sequence Table, it is seen that cam Type 3 provides these sequences. In addition, the contact block models that should be used are given; model VA0 (or FA0) for contact No. 1, to be installed in the upper contact block location; model V40 (or F40) for contact No. 2, to be installed in the lower

contact block location; and model V50 (or F50) for contact No. 3, which may be used in either the upper or lower contact block location, behind one of the other two blocks. Reference to the operator model listings shows that model RM272 provides cam Type 3 and has desired momentary action and key removability.

**Joystick, 22mm**



M25310

**5 POSITION JOYSTICK (4 Action + Center-Off)**

**Metal Bushing**

Maintained or momentary models, inherent design requires use of N.O. and N.C. contact blocks. Supplied with legend plate, and black knob. Contact blocks not supplied, order separately. (See page I8.)

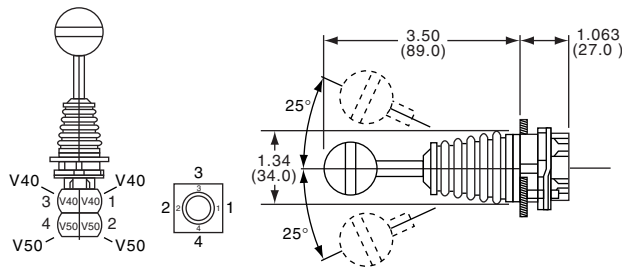
Tyco Electronics	Alcoswitch	Description					
1437609-2	M25310	Momentary, 3 Position	—	(ON)	OFF	(ON)	—
1437609-3	M25500	Maintained, 5 Position	ON	ON	OFF	ON	ON
1437609-4	M25510	Momentary, 5 Position	(ON)	(ON)	OFF	(ON)	(ON)

(ON) indicates momentary position

**Note:** All positions are mutually exclusive and action must pass through neutral for all changes of operator level.

**CONTACT ARRANGEMENT**

Contact blocks should be placed as shown. All contacts are held open in neutral position. Each numbered contact closed when activated. M25310 operators require one N.O. and one N.C. contact block, and M25500 and M25510 require two N.O. and two N.C. blocks.



**Pushbutton Switches, 30mm, Round or Mushroom Buttons**

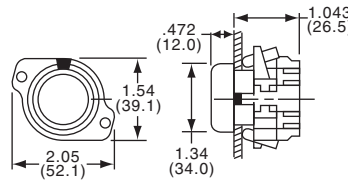
**FLUSH GUARD MOMENTARY**

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

Model	Special Details
M6010(*)	Momentary

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (9) White.



M6010(\*)

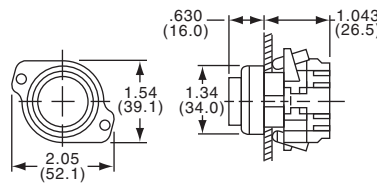
**EXTENDED BUTTON MOMENTARY**

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

Model	Special Details
M6020(*)	Momentary

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (9) White.



M6020(\*)

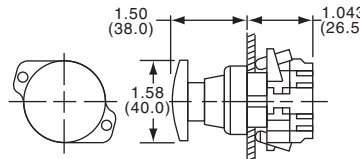
**MUSHROOM HEAD MOMENTARY PUSH MAINTAINED**

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

Tyco Electronics	Alcoswitch	Special Details	Color
—	M6057(*)	Momentary	(*)
1437610-6	M60532	Push-Pull	Red
1-1437610-3	M60652	Push-Lock/Twist To Release	Red

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (3) Orange, (4) Yellow, (5) Green, (6) Blue, (9) White.



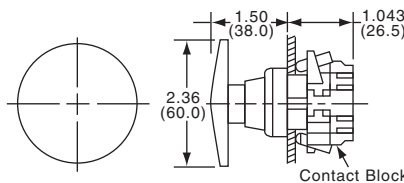
M6057(\*)

**LARGE MUSHROOM HEAD MOMENTARY PUSH**

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

Tyco Electronics	Alcoswitch	Special Details	Color
1-1437610-2	M60582	Momentary	Red



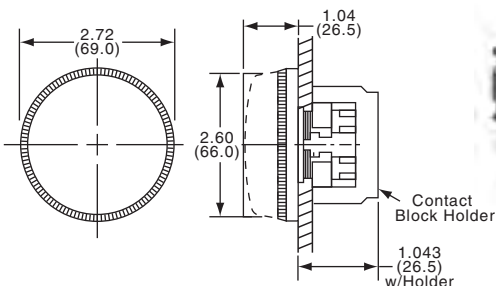
M60582

**LARGE GUARDED MUSHROOM HEAD MOMENTARY PUSH**

Metal Bushing. Heavy duty metal bushing and guard.  
Contact blocks not supplied, order separately. (See page I8.)

Model	Special Details
M6080(*)	Momentary

(\*) Specify color by adding suffix number: (0) Black, (2) Red, (5) Green.



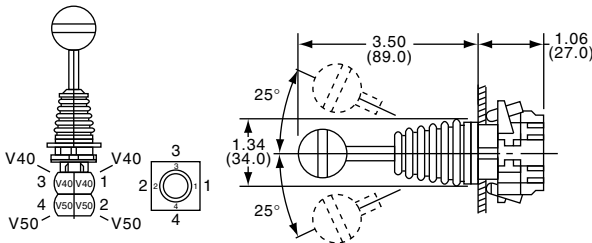
M6080(\*)



**Selector Switches or Joysticks, 30mm**



M65510



**5-POSITION JOYSTICK (4 Active & Center-Off)**

**Metal Bushing**

Maintained or momentary model with or without mechanical latch. Inherent design requires use of N.O. and N.C. Contact blocks not supplied, order separately. (See page I8.) Supplied with legend plate (1-2-3-4), black knob.

**CONTACT ARRANGEMENT**

Contact blocks should be placed as shown. All contacts are held open in neutral position. Each number contact closed when activated. Model M65310 has only two active positions, requires one N.O. and one N.C. contact block.

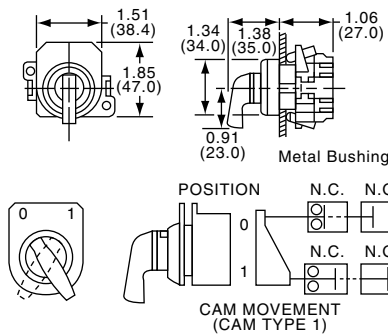
Note: All positions are mutually exclusive and action must pass through neutral for all changes of operator level.

Tyco Electronics	Alcoswitch	Action					
3-1437610-5	M65310	Momentary, No Latch	(On)	Off	(On)		
—	M65500	Maintained, No Latch	On	On	Off	On	On
3-1437610-6	M65510	Momentary, No Latch	(On)	(On)	Off	(On)	(On)
3-1437610-7	M65810	Momentary w/Latch	(On)	(On)	Off	(On)	(On)

(On) indicates momentary position.



M6402(\*)



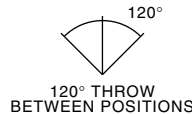
**2-POSITION SELECTOR MAINTAINED**

**Metal Bushing**

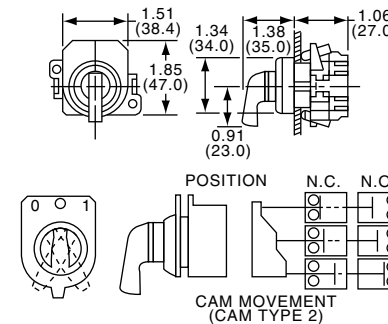
Contact blocks not supplied, order separately. (See page I8.) Legend plant included.

Model	Action	Lever	Position Number
M6402(*)	Maintained	Long	0 1

(\*) Specify color by adding suffix number: (0) Black, (2) Red.



M6412(\*)



**3-POSITION SELECTOR MAINTAINED OR MOMENTARY**

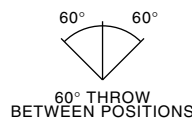
**Metal Bushing**

Contact blocks not supplied, order separately. (See page I8.) Legend plate included.

Model	Action	Lever	Cam	Position Number
M6410(*)	Maintained	Long	2	2 0 1
M6412(*)	Maintained	Long	3	2 0 1
M6470(*)	Mom. 1 Side	Long	2	2 0 ← 1
M6480(*)	Mom. 2 Sides	Long	2	2 → 0 ← 1

Indicates momentary return position

(\*) Specify color by adding suffix number: (0) Black, (2) Red.





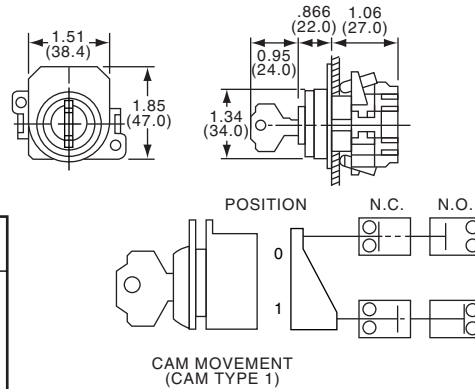
**Keylock or Pushbutton Switches, 30mm**

**2 POSITION KEY SELECTOR  
MAINTAINED OR MOMENTARY**

Metal Bushing  
Supplied with two keys and legend plate.  
Contact blocks not supplied, order separately.  
(See page I8)

Tyco Electronics	Alcoswitch	Action	Cam	Position Number	Throw	Remove Key	
2-1437610-2	M6200	Maintained	1	0 1	60°	⊙	
2-1437610-3	M6201	Maintained	1	0 1	60°	⊗	
2-1437610-6	M6250	Momentary	1	0 ← 1	60°	⊙	
1437617-1	G001	Additional Keys					

← Indicates momentary return position

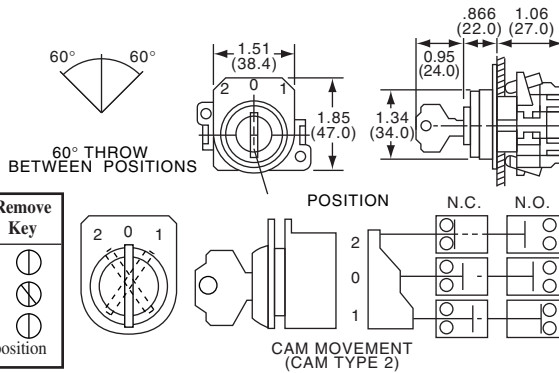


**3 POSITION KEY SELECTOR  
MAINTAINED OR MOMENTARY**

Metal Bushing  
Supplied with two keys and legend plate.  
Contact blocks not supplied, order separately.  
(See page I8.)

Tyco Electronics	Alcoswitch	Action	Cam	Position Number	Remove Key	
2-1437610-5	M6210	Maintained	2	2 0 1	⊙	
2-1437610-7	M6270	Mom. 1 Side	2	2 0 ← 1	⊗	
2-1437610-8	M6280	Mom. 2 Sides	2	2 → 0 ← 1	⊙	
1437617-1	G001	Additional Keys				

← Indicates momentary return position

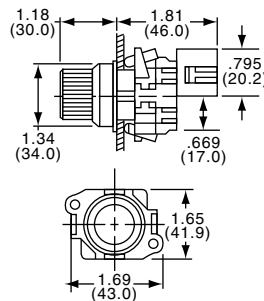


**ILLUMINATED EXTENDED BUTTON MOMENTARY**

Metal Bushing  
Lamp not supplied, order separately. (See page I15.) Uses T31/4 miniature bayonet base lamps. Lamp circuit is isolated. Contact blocks not supplied, order separately. (See page I8)

Model	Special Details
M6120(*)406	Momentary

(\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (9) White.

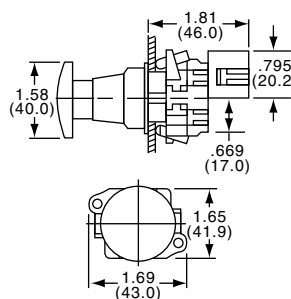


**ILLUMINATED MUSHROOM  
MAINTAINED OR MOMENTARY**

Metal Bushing  
Lamp not supplied, order separately. (See page I15.)  
Uses miniature bayonet base lamps. Lamp circuit is isolated.  
Contact block not supplied, order separately. (See page I8.)

Model	Special Details
M6150(*)406	Momentary
M6153(*)406	Maintained, Push-Pull

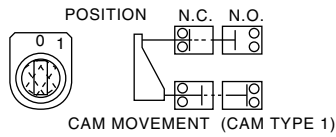
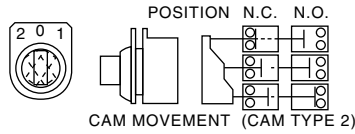
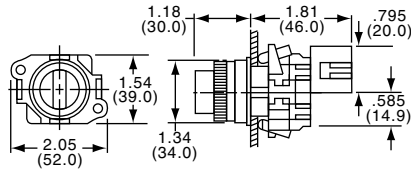
(\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (9) White.



**Selector Switches, 30mm, Illuminated**



M6650(\*)06



**ILLUMINATED MAINTAINED  
SELECTOR**

Metal Bushing

Lamp not supplied, order separately. (See page I15.)

G31/2 lamps. Lamp circuit is isolated. Contact blocks not supplied, order separately. (See page I8.)

Model	Number Position	Action	Position Number
M6653(*)406	3	Maintained	2 0 1
M6650(*)406	2	Maintained	0 1

(\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green.

Model	Action	2-Position Operator		3-Position Operator		
V40 or F40	N.C.	O	1	1	O	2
V50 or F50	N.O.	X	O	X	O	O
VA0 or FA0	N.O. Early	O	X	O	X	X
VR0 or FR0	N.C. Make Break	X	O	X	X	0

O=Open  
X = Closed

**KEY TO SELECTION OF CONTACT BLOCKS**  
Contact closure variations depend on the contact block models chosen. For these operators listed use this table for guidance in selecting blocks.

**Lamps/Transformers**

**LAMPS**

The lamps with G31/2 bulbs fit all Reliant 22, Series 6000 illuminated operators and pilot lights. Lamps with T31/4 Bayonet Base fit all Reliant 22 and Series 6000 illuminated models (except QM120, QM122, and M6650, and M6655).

Tyco Electronics	Alcoswitch	Bulb	Rated Volts	Design Amps	MSCP	Average Rated Hours
1-1437620-5	755	T31/4	6.3	.15	.33	20,000
1-1437620-6	757	T31/4	28	.08	.62	7,500

\*Not recommended for use with green or blue lenses.



NE51HR

755

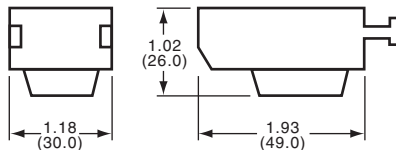
Application Note: For additional specifications, see page K10

**STEP-DOWN TRANSFORMERS**

**AC LINE TO 6V/6.3V**

Snap mount on lighted operators and QM600, T6632 and RM600 pilot lights. Spade tipped leads connect to lamp terminals on operator. Screw terminals on primary. Use 6-6.3V lamps. 0-9 to 1.35 watts. Secondary winding is energy-limited.

Tyco Electronics	Alcoswitch	Primary Voltage
1437612-8	5B0	110-120 VAC
1437612-7	570	220-240 VAC



U.L. Recognized

5B0

**Panel Layouts**

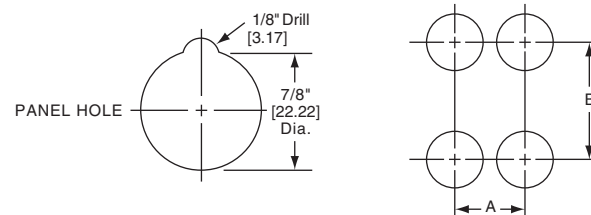
**RELIANT'22 MINIATURE MODELS**

Recommended hole mounting dimensions\*

Minimum Center-To-Center Spacing  
Inches/(mm)

Operator Type	A	B
Pushbuttons, Pilots	1.19/30.2	1.66/42.2
Mushroom, Selector	1.50/37.8	1.66/42.2
Others	1.94/49.3	1.94/49.3

\*Check dimensions for layouts using legend plates.



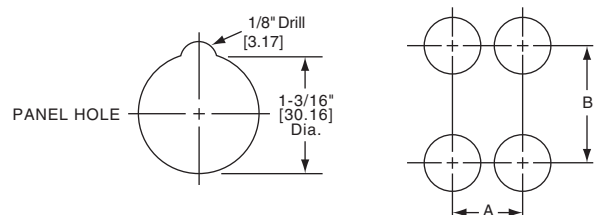
**SERIES 6000 STANDARD MODELS**

Recommended hole mounting dimensions\*

Minimum Center-To-Center Spacing  
Inches/(mm)

Operator Type	A	B
Pushbuttons, Pilots	1.88/47.8	1.97/50.0
Mushroom, Selector	2.25/57.2	2.25/57.2
Large Mushroom	3.00/76.2	3.00/76.2

\*Check dimensions for layouts using legend plates.



**Pushbutton Switches, 16mm, Illuminated**

**FEATURES:**

Command Series Illuminated Pushbuttons are instrument-grade switches having snap-acting double break contacts, silver clad and gold plated to satisfy the requirements of logic level and power switching. **Contacts are electrically independent of one another and are isolated from the lamp circuit.** Tactile feel is excellent and maintained models have latching feature for visible indication of status. Uses T1-3/4 midget flanged base lamp, relampable from front of panel. Legends may be provided using printed transparent tape affixed to inner button. UL Recognized, File E-51302, CSA LR-20479

Note: Recommended panel thickness 4mm max.

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold plate over silver clad

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC or Peak AC  
 5 A @ 250 VAC or 24 VDC (Resistive)  
 Initial Contact Resistance .....20 Milliohms max.  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....1,500 VAC  
 Life Expectancy .....100,000 Operations @ rated current

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +122°F (-20°C to +50°C)  
 Oiltight .....IP65, NEMA 1, 12 & 13  
 Non-oiltight.....IP40

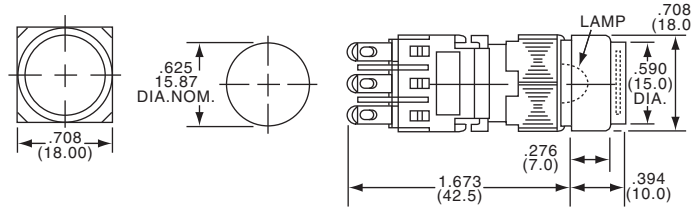
**ROUND**

Lens set and lamps not supplied.



164EL11

Application Note: For lens sets, accessories and lamps, see page I18 to I20



Non-Oiltight		Oiltight		Contact	Action
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch		
1437569-2	164EL11	4-1437569-2	165EL11	1 N.O. & N.C.	Momentary
1437569-3	164EL22	4-1437569-3	165EL22	2 N.O. & N.C.	Momentary
—	164EL33	—	165EL33	3 N.O. & N.C.	Momentary
1437569-5	164EL511	4-1437569-4	165EL511	1 N.O. & N.C.	Push on/Push off
1437569-6	164EL522	4-1437569-5	165EL522	2 N.O. & N.C.	Push on/Push off
1437569-7	164EL533	—	165EL533	3 N.O. & N.C.	Push on/Push off

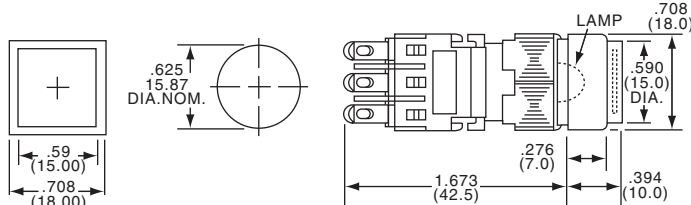
**SQUARE**

Lens set and lamps not supplied.



164SL11

Application Note: For lens sets, accessories and lamps, see page I18 to I20



Non-Oiltight		Oiltight		Contact	Action
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch		
2-1437569-5	164SL11	4-1437569-9	165SL11	1 N.O. & N.C.	Momentary
2-1437569-6	164SL22	5-1437569-0	165SL22	2 N.O. & N.C.	Momentary
2-1437569-7	164SL33	—	165SL33	3 N.O. & N.C.	Momentary
2-1437569-9	164SL511	5-1437569-1	165SL511	1 N.O. & N.C.	Push on/Push off
3-1437569-0	164SL522	5-1437569-2	165SL522	2 N.O. & N.C.	Push on/Push off
3-1437569-1	164SL533	—	165SL533	3 N.O. & N.C.	Push on/Push off

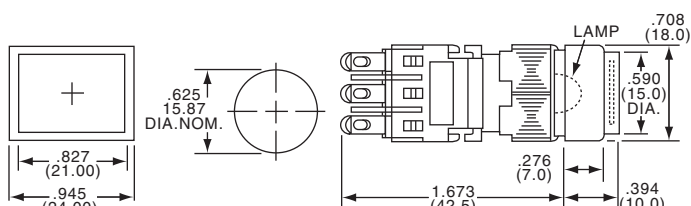
**RECTANGULAR**

Lens set and lamps not supplied.



164TL11

Application Note: For lens sets, accessories and lamps, see page I18 to I20



Non-Oiltight		Oiltight		Contact	Action
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch		
3-1437569-4	164TL11	5-1437569-4	165TL11	1 N.O. & N.C.	Momentary
3-1437569-5	164TL22	5-1437569-5	165TL22	2 N.O. & N.C.	Momentary
3-1437569-6	164TL33	—	165TL33	3 N.O. & N.C.	Momentary
3-1437569-8	164TL511	5-1437569-6	165TL511	1 N.O. & N.C.	Push on/Push off
3-1437569-9	164TL522	5-1437569-7	165TL522	2 N.O. & N.C.	Push on/Push off
4-1437569-0	164TL533	5-1437569-8	165TL533	3 N.O. & N.C.	Push on/Push off

**Selector or Keylock Switches, 16mm**

**FEATURES:**

Command Series Selector & Keylock Switches are 2 & 3-position rotary types with snap-acting double break contacts. All models have 90° throw. Contacts are silver-clad and gold-plated to provide reliable operation at logic levels as well as for power switching applications. Contacts are electrically isolated from one another. Keylock types are supplied with two keys. Oiltight models meet NEMA 1, 12 & 13 requirements.

UL Recognized File E-51302

CSA LR-20479

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold plate over silver clad

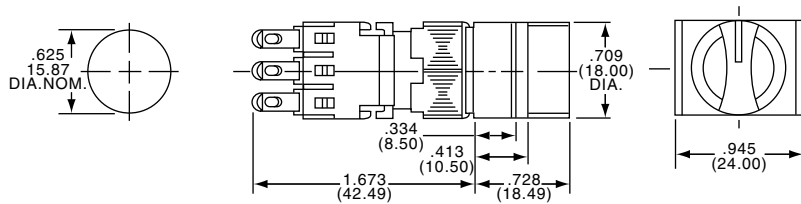
**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC or Peak AC  
 5 A @ 250 VAC or 24 VDC (Resistive)  
 Initial Contact Resistance .....20 Milliohms max.  
 Insulation Resistance .....100 Megohms min.  
 Dielectric Strength .....1,500 VAC  
 Life Expectancy .....100,000 Operations at rated current

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +158°F (-20°C to +70°C)

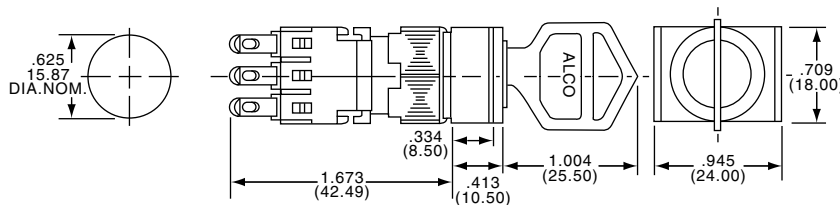
**SELECTORS**



164P2B11

Non-Oiltight		Oiltight		Contact	Action
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch		
2-1437569-0	164P2B11	4-1437569-8	165P2B11	1N.O. & N.C.	2 Pos. Maintained
2-1437569-1	164P2B22	—	165P2B22	2N.O. & N.C.	2 Pos. Maintained
—	164P2B33	—	165P2B33	3N.O. & N.C.	2 Pos. Maintained
1-1437569-9	164P0B22	—	—	2N.O. & N.C.	2 Pos. Momentary Right
—	164P0B33	—	—	3N.O. & N.C.	2 Pos. Momentary Right
2-1437569-2	164P3B22	—	165P3B22	2N.O. & N.C.	3 Pos. Center Off/Maintained
2-1437569-3	164P3B33	—	165P3B33	3N.O. & N.C.	3 Pos. Center Off

**KEYLOCKS**



164J2A11

2 Position Keylocks						3 Position Keylocks					
Non-Oiltight		Oiltight		Contact	Action	Non-Oiltight		Oiltight		Contact	Action
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch			Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch		
1-1437569-1	164J2A11	4-1437569-7	165J2A11	1N.O. & N.C.	Maintained, key pull left	—	164J3A22	—	165J3A22	2N.O. & N.C.	Maintained, key pull left
1-1437569-2	164J2A22	—	165J2A22	2N.O. & N.C.	Maintained, key pull left	1-1437569-5	164J3A33	—	165J3A33	3N.O. & N.C.	Maintained, key pull left
—	164J2A33	—	165J2A33	3N.O. & N.C.	Maintained, key pull left	—	164J3E22	—	165J3E22	2N.O. & N.C.	Maintained, key pull center
1-1437569-3	164J2B11	—	165J2B11	1N.O. & N.C.	Maintained, key pull both	—	164J3E33	—	165J3E33	3N.O. & N.C.	Maintained, key pull center
1-1437569-4	164J2B22	—	165J2B22	2N.O. & N.C.	Maintained, key pull both	1-1437569-6	164J3C22	—	165J3C22	2N.O. & N.C.	Maintained, key pull all
—	164J2B33	—	165J2B33	3N.O. & N.C.	Maintained, key pull both	—	164J3C33	—	165J3C33	3N.O. & N.C.	Maintained, key pull all
1437569-9	164J0A11	—	—	1N.O. & N.C.	Momentary right, key pull left	—	164J7A22	—	165J7A22	2N.O. & N.C.	Momentary right, key pull left
1-1437569-0	164J0A22	—	—	2N.O. & N.C.	Momentary right, key pull left	1-1437569-8	164KA	—	—	—	Spare Keys
—	164J0A33	—	—	3N.O. & N.C.	Momentary right, key pull left	—	—	—	—	—	—

**Pilot Light Indicators or Lens Sets, 16mm**

**FEATURES**

Command Series Pilot Light Indicators match the appearance of both lighted and unlighted Command Series pushbuttons. The same lens buttons are snapped into place and legends may be easily inserted. Illumination is from T - 1 3/4 midget flange based lamps, which are installed from the front panel. Lenses and lamps are ordered separately. Oiltight models meet NEMA 1, 12 & 13 requirements. UL File No. E-51302  
CSA LR-20479

**TYPICAL PERFORMANCE CHARACTERISTICS:**

LAMP DISSIPATION 1.2W MAX.  
Insulation Resistance .....100 Megohms min.  
Dielectric Strength .....1,500 VAC

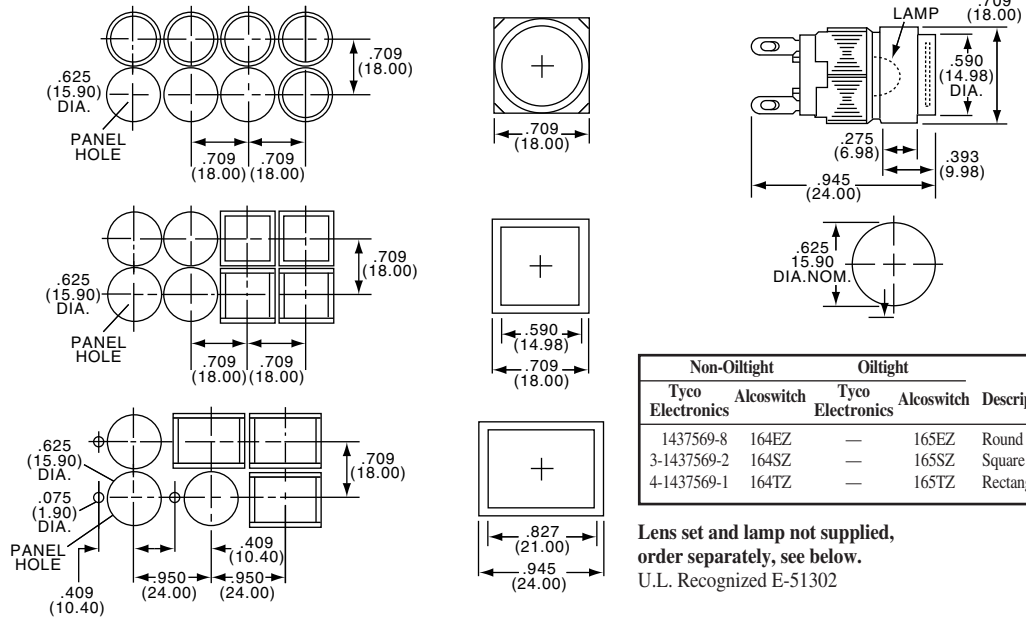
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +122°F (-20°C to +50°C)

**PILOT LIGHT INDICATORS**



164EZ



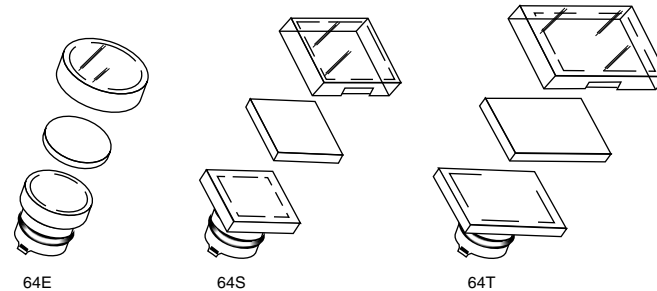
Non-Oiltight		Oiltight		Description
Tyco Electronics	Alcoswitch	Tyco Electronics	Alcoswitch	
1437569-8	164EZ	—	165EZ	Round
3-1437569-2	164SZ	—	165SZ	Square
4-1437569-1	164TZ	—	165TZ	Rectangular

Lens set and lamp not supplied, order separately, see below.  
U.L. Recognized E-51302

**LENS SET**



64E



Model	Description
64E(*)	Round lens set
64S(*)	Square lens set
64T(*)	Rectangular lens set

All fit oiltight and non-oiltight indicators.  
(\*) Specify color by adding suffix number: (2) Red, (3) Orange, (4) Yellow, (5) Green, (6) Blue, (9) White/Clear.

**Application Note:**  
Lens sets include, button, diffuser and cap.



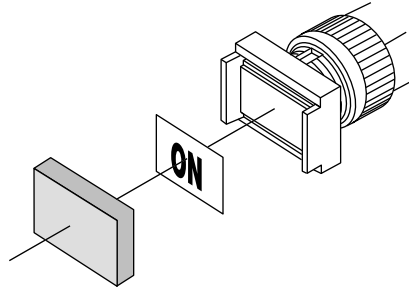
**Accessories and Tools, 16mm**

**FEATURES:**

Standard Legends on Transparent Adhesive Tape are available for Illuminated Command Series switches and pilot lights. Legends are easily affixed to the translucent white button and are protected by the lens cap. The black lettering is back-lit by the lamp and the inscription is visible through the lens cap. This method of providing legends is also suitable in some applications using non-illuminated white (clear), yellow or orange lens caps.

Standard legends, listed below, are intended to be used with round, square or rectangular pushbuttons and pilot lights. Sold only in sheets of 10 identical legends.

**LEGEND MODEL NUMBERS**



Tyco Electronics	Alcoswitch	
6-1437569-3	616	On
6-1437569-2	616	Off

Note: Model numbers must include complete legend nomenclature.



Legend (film)

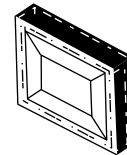
**Accessories**

**MOUNTING WRENCH**

Sturdy tubular brass wrench fits mounting nuts on all Command Series switches.



Tyco Electronics    Alcoswitch  
6-1437569-0        601-AG

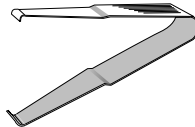


**SPLASH PROOF SEAL**  
Flexible clear seal fits all rectangular pushbuttons and pilot lights.

Tyco Electronics    Alcoswitch  
9-1437569-2        668

**LENS REMOVER**

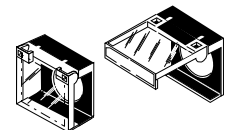
Dual purpose metal tool facilitates removal of lenses, buttons.



Tyco Electronics    Alcoswitch  
6-1437569-9        618-AG

**FLIP COVER SWITCH GUARD**

669 used with rectangular series pushbutton switches.  
671 used with square and round series pushbutton switches.



Tyco Electronics    Alcoswitch  
9-1437569-4        669 Rectangular  
9-1437569-3        671-AG        Square and Round

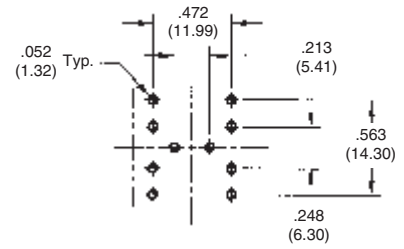
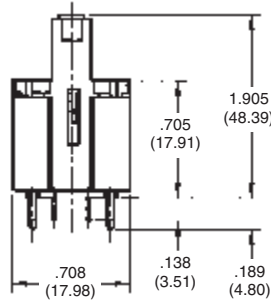


**Socket for 16mm Command Series Switches**

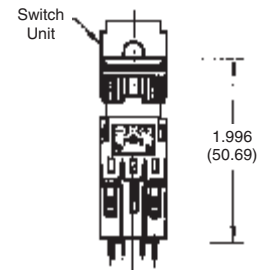
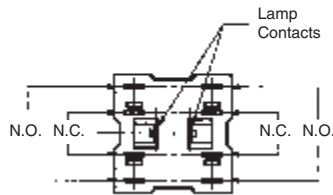
697-PL



9-1437569-5



**Recommended PCB Footprint**



**T1 3/4 Series Midget Incandescent Lamps**

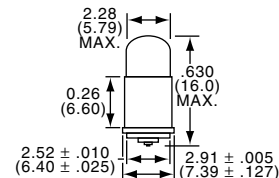
Average Life ratings indicate the lamp life obtained in controlled laboratory conditions while operating lamps at the design voltage (AC) (DC will shorten life by 50%). The life of a subminiature lamp is inversely proportional to the 12th power of the applied voltage.

ALCOSWITCH subminiature lamps are a "T" class, meaning that the envelopes are made of glass tubing, the "T" number indicating the diameter of the tubing in eighths of an inch.

Command Series

Tyco Electronics	Alcoswitch	Rated Volts	Design Amps	Rated MSCP	Average Rated Hours
9-1437620-6	7333	5.0	.060	.05	40,000
1-1437620-8	815-AG	—	.115	.147	40,000
1437620-7	381-AG	6.3	.20	.40	50,000
1437620-8	382-AG	14.0	.08	.30	50,000
1437620-9	385	28.0	.04	.20	50,000
1-1437620-1	387	28.0	.04	.30	25,000
1437620-5	327-AG	28.0	.04	.34	7,000

FLANGE BASE- T1 3/4





*SH6 Series - Page J3*



*PICOD Series - Page J4*

# Pushwheel



Pushwheel Switches

**Pushwheel Switches Part Number Index**

B11LS .....J9,J10	SMCADP .....J9
B12L .....J11	SMCD .....J4,J6,J8
B12LS .....J11	SMCD111AK .....J9
B5L .....J7	SMCD131AK .....J9
B5LS .....J7,J8	SMCD131AKLS .....J9
B9L .....J9,J10	SMCD131ALD .....J9
B9LS .....J9,J10	SMCD137AK .....J9
B9LS5PIN .....J9	SMCD301AK .....J9
DPS .....J6	SMCL .....J9
DPS10 .....J5,J11	SMCPK .....J9
DPS10111AK .....J11	SP1.2 .....J9, J10
DPS10131AK .....J11	SP1.5 .....J11
DPS10131ALD .....J11	
DPS10137AK .....J11	
DPS10141AK .....J11	
DPS10301AK .....J11	
DPS10L .....J11	
DPS8 .....J5,J10	
DPS8111AK .....J10	
DPS8131AK .....J10	
DPS8131AKLS .....J10	
DPS8131AKULS .....J10	
DPS8131ALD .....J10	
DPS8137AK .....J10	
DPS8137AKLS .....J10	
DPS8137AKU .....J10	
DPS8137AKULS .....J10	
DPS8301AK .....J10	
DPS8301AKULS .....J10	
DPS8A .....J10	
DPS8L .....J10	
DPS8P .....J10	
DPS8PW .....J10	
DPS9 .....J5,J11	
DPS910A .....J11	
DPS910P .....J11	
DPS9111AK .....J11	
DPS9131AK .....J11	
DPS9131AL .....J11	
DPS9131ALD .....J11	
DPS9137AK .....J11	
DPS9301AK .....J11	
DPS9307AK .....J11	
DPS9L .....J11	
PICOA .....J7	
PICOADP .....J7	
PICOBG .....J7	
PICOD .....J4,J6,J8	
PICOD111AL .....J7	
PICOD131AK .....J7	
PICOD131ALD .....J7	
PICOD131ALULS .....J7,J8	
PICOD137AK .....J7	
PICOD137ALULS .....J7,J8	
PICOD301AK .....J7	
PICOD301ALD .....J7	
PICOD301ALULS .....J7,J8	
PICOP .....J7	
SH131AK .....J6	
SH6 .....J4,J6	
SH6131AK .....J6	
SH6131AKK2 .....J6	
SMCA .....J9	



Pushwheel Switches

**Order Description and Code Tables (Wiring Diagram)**

**DPS10 - 131 - AK**

Series/types	Codes	Connections
SH6	111 = Decimal	AK = pcb short
PICOD	131 = BCD	AL = pcb long
SMCD	137 = BCD Complement	LS = solder pin
DPS8	141 = BCD + Complement	AL/D = pcb long, interrupted
DPS9	301 = Hexadecimal	AKU = pcb long downward
DPS10	307 = Hexa. Complement	ALU = pcb long downward
	400 = Switch-over	

**FACTORY ASSEMBLED GROUP**

Special type numbers will be assigned for customers requiring delivery of assembled groups of code switches. These will be pre-tested, identified and individually packaged. Consult factory for details.

**CUSTOM SWITCHES**

Contact factory for information concerning the feasibility, pricing and delivery of special switches, including non-standard codes, limit stopping, special markings, PC terminals and optional colors.

**Code tables (wiring diagram)**

**Code 131**

BCD					
	C	1	2	4	8
0	•				
1	•	•			
2	•		•		
3	•	•	•		
4	•			•	
5	•	•		•	
6	•		•	•	
7	•	•	•	•	
8	•				•
9	•				•

**Code 137**

BCD Complement					
	C	1	2	4	8
0	•	•	•	•	•
1	•	•	•	•	•
2	•	•	•	•	•
3	•			•	•
4	•	•	•	•	•
5	•	•	•	•	•
6	•	•	•	•	•
7	•			•	•
8	•	•	•	•	•
9	•	•	•	•	•

**Code 141**

BCD + Compl.									
	C	1	2	4	8	1	2	4	8
0	•					•	•	•	•
1	•	•				•	•	•	•
2	•		•			•	•	•	•
3	•	•	•			•	•	•	•
4	•			•		•	•	•	•
5	•	•	•	•		•	•	•	•
6	•	•	•	•	•	•	•	•	•
7	•	•	•	•	•	•	•	•	•
8	•				•	•	•	•	•
9	•				•	•	•	•	•

**Code 400**

change-over switch			
	C	A+	A-
+	•	•	
1	•	•	•
2	•	•	
+	•	•	
-	•		•
4	•	•	
+	•	•	
-	•		•
7	•	•	•
+	•	•	
-	•		•

**Code 301**

Hexadecimal					
	1	2	4	8	C
0					•
1	•				•
2	•	•			•
3	•	•			•
4	•		•		•
5	•	•	•		•
6	•	•	•	•	•
7	•	•	•	•	•
8	•			•	•
9	•			•	•
A	•	•	•	•	•
B	•	•	•	•	•
C	•	•	•	•	•
D	•	•	•	•	•
E	•	•	•	•	•
F	•	•	•	•	•

**Code 307**

Hexadecimal Compl.					
	C	1	2	4	8
0	•	•	•	•	•
1	•	•	•	•	•
2	•	•	•	•	•
3	•			•	•
4	•	•	•	•	•
5	•	•	•	•	•
6	•	•	•	•	•
7	•			•	•
8	•	•	•	•	•
9	•	•	•	•	•
A	•	•	•	•	•
B	•			•	•
C	•	•	•	•	•
D	•	•	•	•	•
E	•	•	•	•	•
F	•	•	•	•	•

**Code 111**

Decimal											
	C	0	1	2	3	4	5	6	7	8	9
0	•	•									
1	•		•								
2	•			•							
3	•				•						
4	•					•					
5	•						•				
6	•							•			
7	•								•		
8	•									•	
9	•										•



**Specifications**

Series/Types Catalog Page	SH6 J6	PICOD J7-8	SMC-D J9
<b>Dimensions/type of mounting</b>			
panel / height x width	15x6 mm	15x7.62 mm	24x7.62mm
installed depth width PCB, short/long	23.5/30.8 mm	24/34.5 mm	32/42mm
insertion from the front	x	x	x
insertion from the rear	x		
<b>Codes</b>			
Code	switching position	printing	
111 decimal	10	0-9	x
131 BCD	10	0-9	x
137 BCD complement	10	0-9	x
141 BCD + complement	10	0-9	x
301 hexadecimal	16	0-9-A-F (0-15)	x
307 hexadecimal compl.	16	0-9-A-F (0-15)	
400 change-over switch	10	+, -, +-, etc.	x
<b>Electrical data</b>			
operating voltage max.	40V	40V	40V
contact load, static max.	0.5A	0.5A	1A
contact load, dynamic (resistive) max.	100mA	100mA	100mA
contact resistance type AK (measured from the supply line to the output)	< 100 mOhm	< 100 mOhm	< 100 mOhm
<b>Technical data</b>			
permissible ambient temperature	-20...+80°C	-20...+60°C	-20...+80°C
expected life (switching cycles)	> 10 <sup>5</sup>	> 10 <sup>5</sup>	> 10 <sup>6</sup>
actuating force approx.	4 N	3 N	4 N
weight approx.	1.5 g	2 g	4 g
digit height 10-/16-digit	3.1mm	3.1/2.4mm	4.9/3.4mm
click action (working point)	x	x	x
vibration DIN EN 60068-2-6	x	x	x
shock DIN EN 60068-2-27	x	x	x
<b>Material</b>			
housing: PPO UL94V-0	x	x	x
pc board: base material FR 4 respectively CEM3 DIN IEC 249-2, contact surface Au over Ni on Cu	x	x	x
<b>Connections</b>			
AK: short	x	x	x
AL: long	x	x	x
LS: solder point	x	x	x
AL/D: long/interrupted		x	
ALU: long downward		x	x

J

Specifications

**Specifications**

Series/Types Catalog Page			DPS8 J10	DPS9 J11	DPS10 J11
<b>Dimensions/type of mounting</b>					
panel / height x width			18x8mm	33x8mm	33x10mm
installed depth width PCB, short/long			32/41mm	39/50mm	39/50mm
insertion from the front			x	x	
insertion from the rear				x	
<b>Codes</b>					
Code	switching position	printing			
111 decimal	10	0-9	x	x	x
131 BCD	10	0-9	x	x	x
137 BCD complement	10	0-9	x	x	x
141 BCD + complement	10	0-9	x		
301 hexadecimal	16	0-9-A-F (0-15)	x	x	x
307 hexadecimal compl.	16	0-9-A-F (0-15)			
400 change-over switch	10	+, -, +-, etc.			
<b>Electrical data</b>					
operating voltage max.			40V	40V	40V
contact load, static max.			1A	1A	1A
contact load, dynamic (resistive) max.			100mA	100mA	100mA
contact resistance type AK (measured from the supply line to the output)			< 100 mOhm	< 100 mOhm	< 100 mOhm
<b>Technical data</b>					
permissible ambient temperature			-20...+80°C	-20...+80°C	-20...+80°C
expected life (switching cycles)			> 10 <sup>6</sup>	> 10 <sup>6</sup>	> 10 <sup>6</sup>
actuating force approx.			4 N	4 N	4 N
weight approx.			4 g	6.5 g	7.5 g
digit height 10-/16-digit			4.9/3.4mm	6.8/4.3mm	7.0/4.3mm
click action (working point)			x	x	x
vibration DIN EN 60068-2-6			x	x	x
shock DIN EN 60068-2-27			x	x	x
<b>Material</b>					
housing: PPO UL94V-0			x	x	x
pc board: base material FR 4 respectively CEM3 DIN IEC 249-2, contact surface Au over Ni on Cu			x	x	x
<b>Connections</b>					
AK: short			x	x	x
AL: long			x	x	x
LS: solder point			x	x	x
AKU: short downward					x
ALU: long downward			x		

**Pushwheel Switches, Subminiature, Panel Mount, Dual Button**

SH6 Series pushwheel switches are the smallest panel mounted dual pushbutton code switches available. They have a snap-action detent with an audible click. The dual-purpose finger terminals may be used for direct mounting on printed circuit boards, or wire may be soldered directly to the gold-plated conductors. The SH6 is designed for several means of panel mounting: groups of any number of switches may be snapped into panel holes of proper size and retained by the integral clips (front mounting), or groups may be held in place in a panel hole by being supported from rear when the switches are PC mounted. These reliable switches are made to the same exacting requirements as the SMCD, PICOD and DPS Series.

**MATERIAL SPECIFICATIONS**

Moving Contacts .....Gold-clad Ni over copper alloy  
 Fixed Contacts .....AU over Ni  
 PC Board .....FR4 Glass Epoxy  
 Molded Parts .....Noryl-SE1, black matte finish  
 Window .....Thermoplastic resin

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating .....0.4 VA @ 20 VDC (max.)  
 Contact Circuit Resistance .....0.12 ohm max.

**PERFORMANCE CHARACTERISTICS**

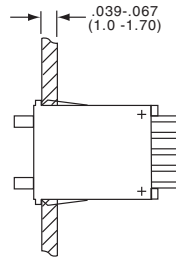
Operating Force .....Approx. 11 oz.  
 PC Terminal Spacing .....0.100"  
 Character Height/Color.....0.118" White  
 Life Expectancy .....More than 10<sup>5</sup> operations  
 Operating Temperature .....-20°C to +80°C

**SH6 SERIES**

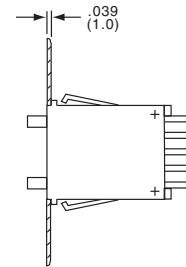


SH6131AK

**FRONT MOUNTING**  
(See note below)



**REAR MOUNTING**



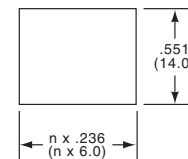
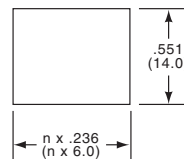
**SH6 - 131 - AK**

**Codes**

131 = BCD  
 137 = BCD Complement

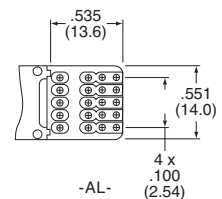
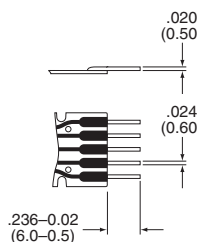
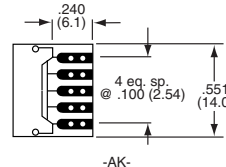
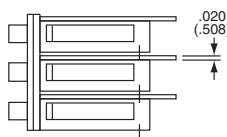
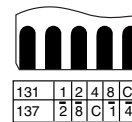
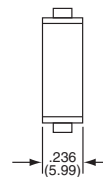
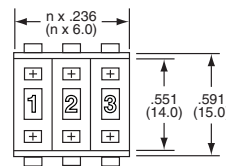
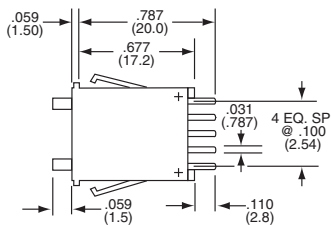
**Connections**

AK = pcb short  
 AL = pcb long  
 LS = solder pin



See Code Tables on Page J3

n = Number of switches



Note: Remove locating lugs from side of last switch to enable mounting from the front panel.

Note: Use Card Edge Connector B5LS or B5L with AK type.



**Pushwheel Switches, Subminiature, Panel Mount, Dual Button**

The PICOD family offers small panel-mounted pushwheel code switches, ideally suited for high density applications. They are used for the controlling and programming of frequency synthesizers, counters and timers, data comparators, security encoders, weighing machines, etc. The dependable pushbutton action allows narrow 0.3 inch width on panel. Changes to higher or lower settings are accomplished rapidly by successive operation of the appropriate buttons. The featherweight PICOD is less than 0.6 inch high, yet rugged enough for hand-held and portable instruments that may be subjected to field abuse. Heavy gold plating on wiping contacts affords low contact resistance for reliable operation over long periods of service. Easy-to-read characters are viewed through dust-sealed window. Installation costs are minimized by snap-together design – no inconvenient hardware.

**MATERIAL SPECIFICATIONS:**

Fixed Contacts .....1 microns AU over Ni over Cu  
 Moving Contacts .....Gold-clad Ni over copper alloy  
 PC Board .....FR4 Glass epoxy  
 Molded Parts .....Noryl-SE1, Black matte finish  
 Window .....Thermoplastic resin

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC max.  
 Contact Circuit Resistance .....0.15 Ohm max.  
 Operating Force .....Approx. 11 oz.  
 PC Terminal Spacing .....0.100"  
 Character Height/Color .....122" White (.094" for hex codes)  
 Life Expectancy .....More than 10<sup>5</sup> operations  
 Operating temperature .....-10° C to + 60° C

**PICOD - 131 - AK**

Codes	Connections
111 = Decimal	AK = pcb short
131 = BCD	AL = pcb long
137 = BCD Complement	LS = solder pin
301 = Hexadecimal	AL/D = pcb long, interrupted
307 = Hexa. Complement	ALU = pcb long downward
400 = Switch-over	

See Code Tables on Page J3



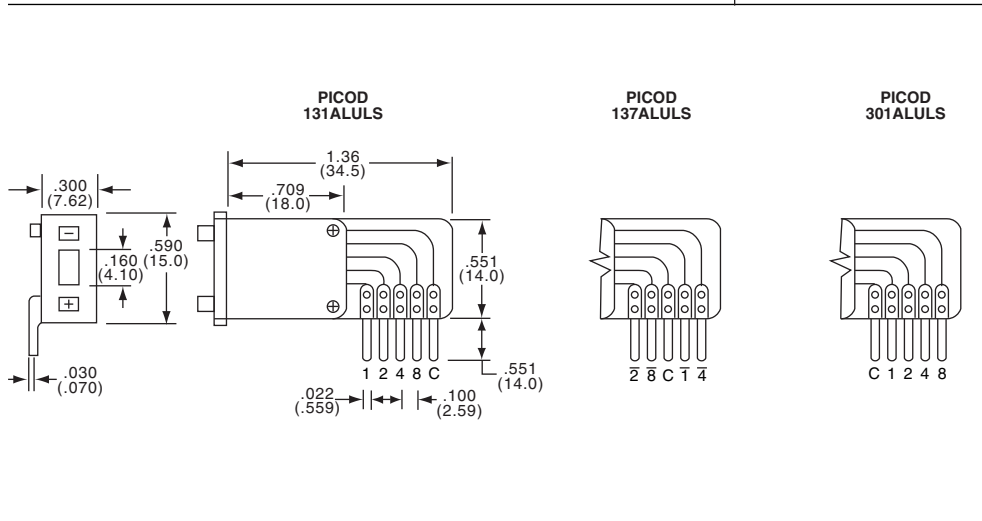
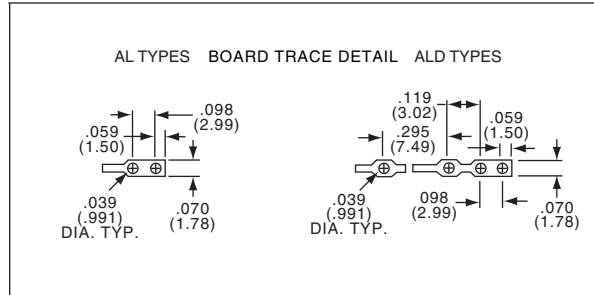
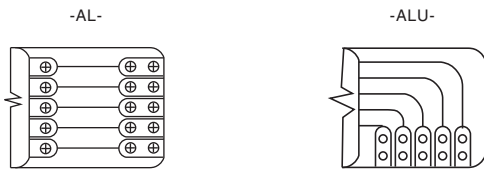
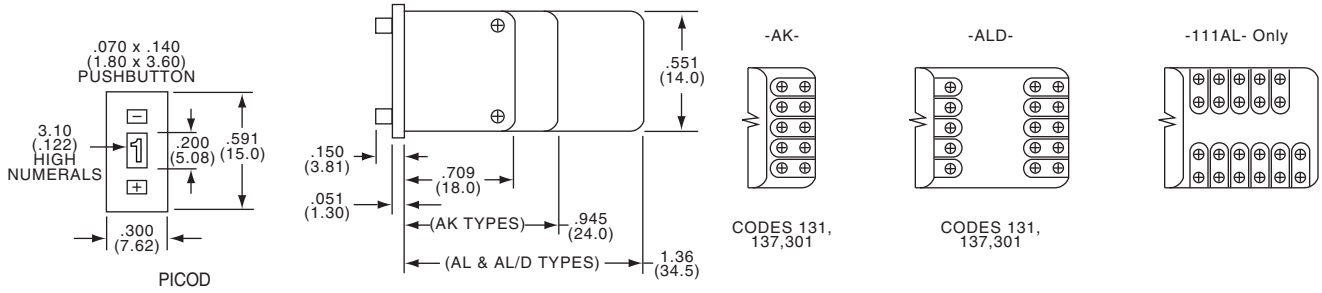
PICOD111AL

**ACCESSORIES**

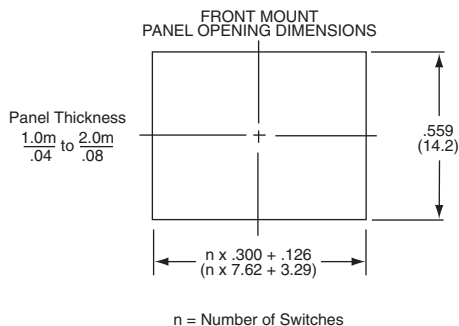
Front Mount Snap Detent	Description	Wheel Marks
PICOA	Spacer, 0.1" wide	
PICOADP	Spacer, 0.1" wide, with decimal point	
PICOBG	Spacer, 0.3" wide (same size as switch)	
PICOP	End-plate pair	
B5LS	5 pin connector with PC pins for AK types	
B5L	5 pin connector with wire lug termination for AK types	

**Pushwheel Switches, Options**

PICOD



PICOD



J  
PICOD Series

**Pushwheel Switches, Mini, Front Mount**

SMCD Series have large visible readout characters despite it's small size. This popular family is used in measurement and test instrumentation for range setting, data programming and count controlling; and in communications equipment for digital tuning. The simple, reliable bi-direction pushbutton mechanism permits rapid changes to either higher or lower numerical settings. Instrument-grade performance and long service life are enhanced by the heavy gold wiping contacts. Large readout characters are protected by dust-sealed windows. Snap-together grouping and snap-in panel mounting minimize installation time and cost. SMCD models have snap detent with slight audible click.

SMCD bi-directional code switches may be easily assembled into groups of any number. The tabs or pins of one decade section press fit into the holes in the adjacent section. Spacers and end mounting plates may be included in the same manner as desired.

Groups of SMCD switches with end plates snap into panel holes of the recommended size and are retained by plastic clips. Again, tools and additional hardware items are not required.

**MATERIAL SPECIFICATIONS:**

PC Board .....Glass epoxy type, FR4  
 PC Terminals .....Gold over Ni on Cu  
 Character Height/Color.....White on black background  
     SMC .197/.134; SMCD .193/.134  
     Except 301 & SG558: .140 and  
     SG557 .120  
 Molded parts .....Noryl-SE1, Black matte finish  
 Housing .....Black matte finish

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC or Peak AC  
 Contact Circuit Resistance .....0.12 Ohm max. (Total internal ckt. res.)  
 Mechanical Life .....More than 10<sup>6</sup> operations  
 Operational Force .....Approx. 14 oz.

**ENVIRONMENTAL SPECIFICATIONS**

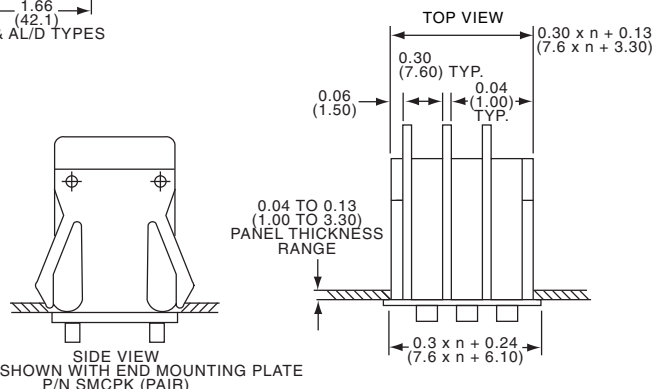
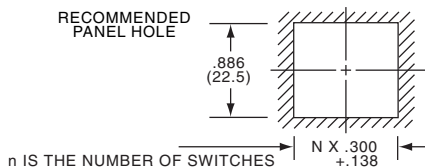
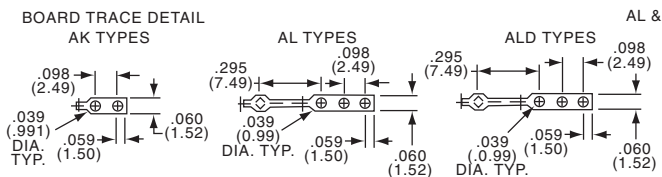
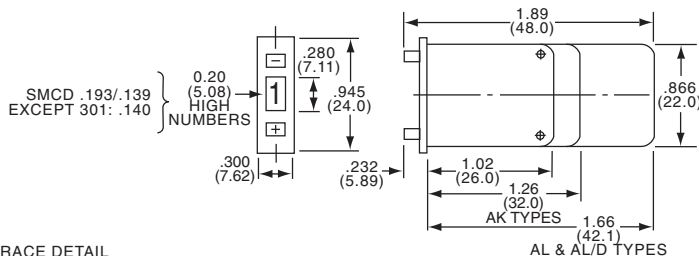
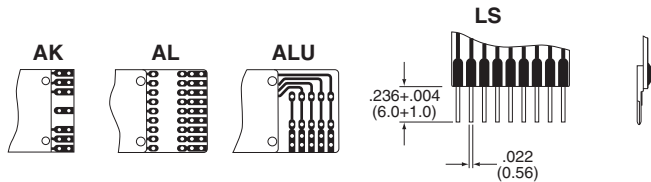
Operating Temperature.....(-20°C to +80°C)

Model	Description
SMCPK	End mounting plates (pair)
SMCL	300" spacer section
SMCA	.100" spacer (with mounting clips)
SMCADP	.100" spacer, decimal point (with mounting clips)
B9L	Connector, 9 contacts, solder lug terminals
B9LS	Connector, 9 contacts, PC pins
B9LS5PIN	Connector, 5 contacts, PC pins
B11LS	Connectors, 11 contacts, PC pins (for 111)
SP1.2	Limit stop pin for SMD 10 position only

**SMCD - 131 - AK**

Codes	Connections
111 = Decimal	AK = pcb short
131 = BCD	AL = pcb long
137 = BCD Complement	LS = solder pin
141 = BCD + Complement	ALU = pcb long downward
301 = Hexadecimal	

See Code Tables on Page J3



**Pushwheel Switches, Mini, Rear Mount**

The DPS8 Series is a compact, lower cost family of instrument grade, pushbutton code switches for numerical input applications. DPS8 models are similar in size to those of the SMCD Series and also feature a fast-snap-together assembly with conventional behind-the-panel mounting. A simple reliable bidirectional pushbutton mechanism allows rapid changes to either higher or lower numerical setting. Reliable performance in logic level circuits and long service life are provided by gold clad wiping contacts. A dust-sealed window protects the readout characters, which are larger than those of comparable thumbwheel switches. DPS8 switches have snap-action detent.

**MATERIAL SPECIFICATIONS**

PC Board .....Glass epoxy type, FR4  
 PC Terminal Spacing .....DSP811: .079", 131,137, 141: .100"  
 Character Height/Color .....0.193" White on black background  
 Housing .....Noryl-SE1, Black, matte finish  
 Operating Force .....Approx. 14 oz.

**TYPICAL PERFORMANCE CHARACTERISTICS**

Contact Rating .....0.4 VA @ 20 VDC or Peak AC  
 Contact Circuit Resistance ...0.15 ohms max.  
 Mechanical Life .....More than 10<sup>6</sup> operations

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature .....(-20°C to +80°C)

**MODULE ASSEMBLY METHOD**

DPS bi-directional code switches may be easily assembled into groups of any number. Each switch, spacer or end-plate pair has appropriate snap-together assembly. No tools are required, little time consumed.

Groups of DPS8 switches, with end-plates mount into panel holes of the recommended size using four screws plus nuts and washers.

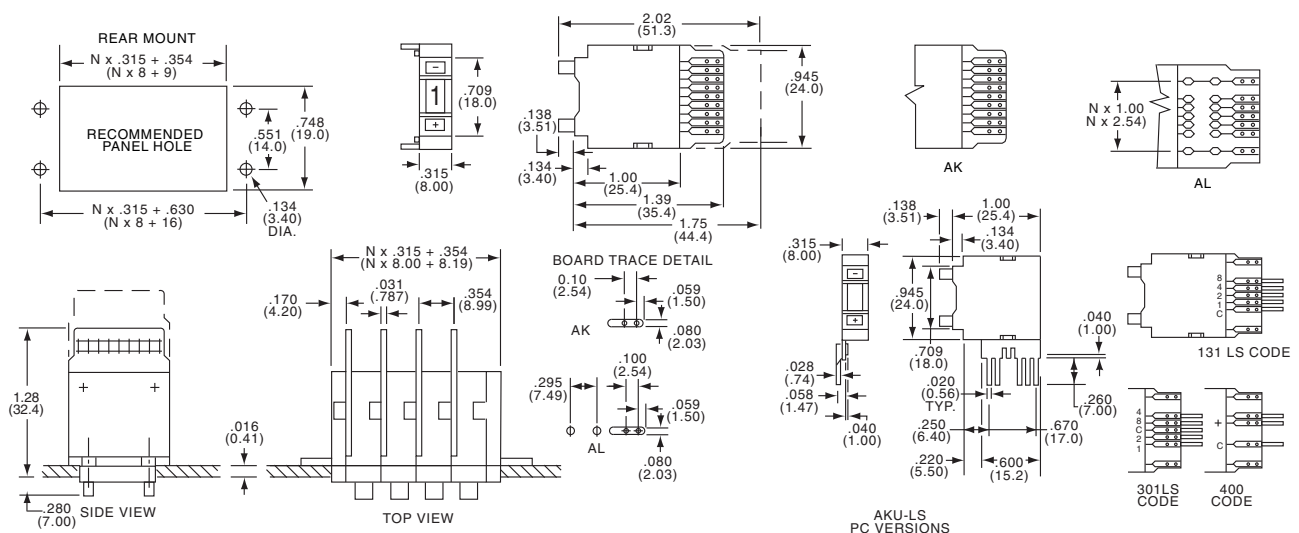
**ACCESSORIES**

Model	Description
DPS8A	Spacer .157" (4mm)
DPS8L	.315" spacer section
DPS8P	End mounting plates, decorative only (pair)
DPS8PW	End mounting plates, flanged with mounting holes (pair)
B9L	Connector, 9 contacts, solder lug terminals
B9LS	Connector, 9 contacts, pc terminals
B11LS	Connector, 11 contacts, PC terminals (for Code III Switch)
SP1.2	Limit stop pin for 10 position only.

**DPS8 - 131 - AK**

Codes	Connections
111 = Decimal	AK = pcb short
131 = BCD	AL = pcb long
137 = BCD Complement	LS = solder pin
141 = BCD + Complement	AKU = pcb short downward
301 = Hexadecimal	ALU = pcb long downward

See Code Tables on Page J3



DPS8 Series

**Pushwheel Switches, Front Mount**

DPS9 and DPS10 dual pushbutton code switches have identical heights but differ in width. These switches provide silent, reliable state-of-the-art bi-directional operation and can directly retrofit common thumbwheel switches. The readout characters are up to 60% larger than those of comparable thumbwheels. DPS9 models have the popular .315" per section width, and DPS10 types are .395" wide.

A simple reliable dual pushbutton mechanism permits rapid change to a higher or a lower numerical setting. Gold clad wiping contacts provide dependable low-level operation and extended life expectancy. Snap-together modular design enables fast assembly hardware. Wheel markings are protected by a dust-sealed window.

**MATERIAL SPECIFICATIONS:**

PC Board .....Glass epoxy type, FR4  
 PC Terminal Spacing .....100" Centers on integral multiples  
 Character Height/Color .....See below  
 Housing .....Noryl-SE1, Black, matte finish

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC or Peak AC  
 Contact Circuit Resistance ...0.20 Ohm max.  
 Mechanical Life .....More than 10<sup>6</sup> operations  
 Operating Force .....Approx. 16 oz.

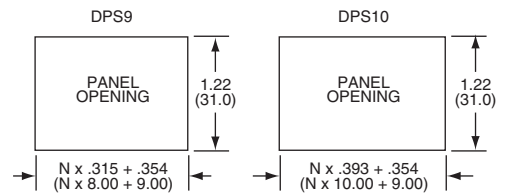
**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature .....(-20°C to +80°C)

**ACCESSORIES**

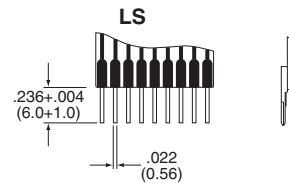
DPS9 Model	DPS10 Model	Description
DPS910A	DPS910A	Spacer, 0.1 inch
	DPS10	*Dummy switch (no electrical function)
DPS9L	DPS10L	Spacer, same width as switch
**DPS910P	**DPS910P	End mounting plate pair
B12L	B12L	Connector, 12 contacts, solder lugs
B12LS	B12LS	Connector, 12 contacts, PC terminals
SP1.5	SP1.5	Limit stop pin for 10 position switch

\* Indicates switch mechanically operable, optionally available with wheel in fixed position.; \*\* Indicates sold in pairs only.

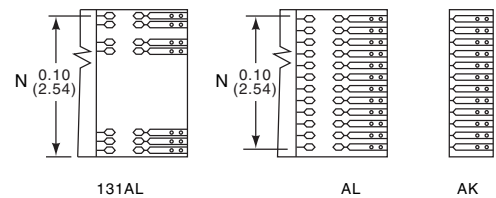
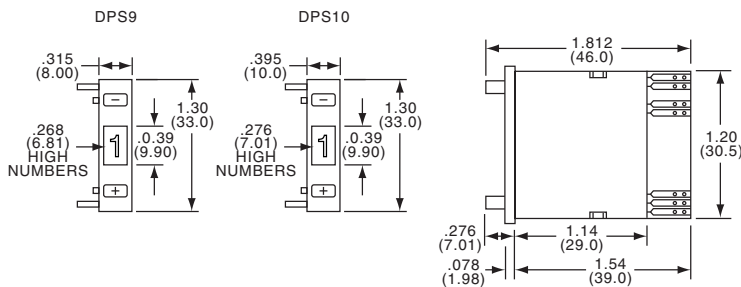


**DPS9 - 131 - AK**

Series/types	Codes	Connections
DPS9	111 = Decimal	AK = pcb short
DPS10	131 = BCD	AL = pcb long
	137 = BCD Complement	LS = solder pin
	301 = Hexadecimal	



See Code Tables on Page J3



Character height . . .	Model DPS9	10 digit .268
		16 digit .169
	Model DPS10	10 digit .276
		16 digit .169

**Engineering Notes**



Engineering Notes



*K Series - Page K4*



*KCB Series - Page K5*



*KE Series - Page K6*



*KLNS Series - Page K8*



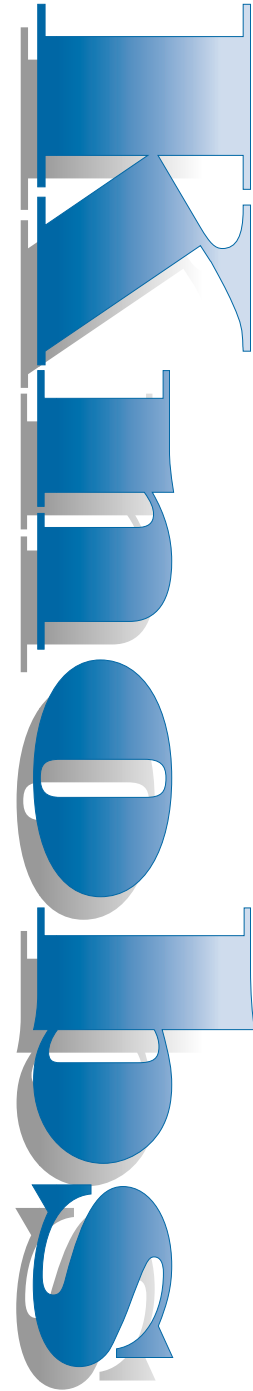
*KN Series - Page K8*



*PK Series - Page K13*



*PKD Series - Page K14*





**Alcoknob Part Number Index**

K1250A1/4 .....K4  
 K1250B1/4 .....K4  
 K1251B1/4 .....K4  
 K1255AS1/4 .....K4  
 K1255BS1/4 .....K4  
 K500A1/4 .....K4  
 K500A1/8 .....K4  
 K500B1/4 .....K4  
 K500B1/8 .....K4  
 K700A1/4 .....K4  
 K700B1/4 .....K4  
 K900A1/4 .....K4  
 K900B1/4 .....K4  
 KA1250A1/4 .....K4  
 KA1250B1/4 .....K4  
 KA500A1/4 .....K4  
 KA500A1/8 .....K4  
 KA500B1/4 .....K4  
 KA500B1/8 .....K4  
 KA700A1/4 .....K4  
 KA700B1/4 .....K4  
 KA900A1/4 .....K4  
 KA900B1/4 .....K4  
 KAS500A1/4 .....K4  
 KAS500A1/8 .....K4  
 KAS500B1/4 .....K4  
 KAS500B1/8 .....K4  
 KAS700A1/4 .....K4  
 KAS700B1/4 .....K4  
 KAS900A1/4 .....K4  
 KAS900B1/4 .....K4  
 KB500A1/4 .....K5  
 KB500B1/4 .....K5  
 KB500B1/8 .....K5  
 KB700A1/4 .....K5  
 KB700B1/4 .....K5  
 KB900A1/4 .....K5  
 KB900B1/4 .....K5  
 KBS500A1/8 .....K5  
 KBS500A101/4 .....K5  
 KBS500A101/8 .....K5  
 KBS500B1/4 .....K5  
 KBS500B1/8 .....K5  
 KBS500B101/4 .....K5  
 KBS500B101/8 .....K5  
 KCB500A1/4 .....K5  
 KCB500A1/8 .....K5  
 KCB500B1/4 .....K5  
 KCB500B1/8 .....K5  
 KCB600A1/4 .....K5  
 KCB600A1/8 .....K5  
 KCB600B1/4 .....K5  
 KCB600B1/8 .....K5  
 KCB700A1/4 .....K5  
 KCB700B1/4 .....K5  
 KCB900A1/4 .....K5  
 KCB900B1/4 .....K5  
 KD1250A1/4 .....K6  
 KD1250B1/4 .....K6  
 KD500A1/4 .....K6  
 KD500A1/8 .....K6  
 KD500B1/4 .....K6  
 KD500B1/8 .....K6  
 KD700A1/4 .....K6  
 KD700B1/4 .....K6  
 KD900A1/4 .....K6  
 KD900B1/4 .....K6  
 KE1250AB1/4 .....K6  
 KE500AB1/4 .....K6  
 KE500AB1/8 .....K6  
 KE700AB1/4 .....K6  
 KE900AB1/4 .....K6

KES500AB1/4 .....K6  
 KES500AB1/8 .....K6  
 KES700AB1/4 .....K6  
 KES900AB1/4 .....K6  
 KFS400B1/8 .....K7  
 KFS500B1/4 .....K7  
 KFS500B1/8 .....K7  
 KFS600B1/4 .....K7  
 KHF1250A1/4 .....K7  
 KHF500A1/4 .....K7  
 KHF700A1/4 .....K7  
 KHF900A1/4 .....K7  
 KLN1250A1/4 .....K7  
 KLN1250B1/4 .....K7  
 KLN500A1/4 .....K7  
 KLN500A1/8 .....K7  
 KLN500B1/4 .....K7  
 KLN500B1/8 .....K7  
 KLN500S1/4 .....K7  
 KLN700A1/4 .....K7  
 KLN700B1/4 .....K7  
 KLN700B1/8 .....K7  
 KLN700S1/4 .....K7  
 KLN900A1/4 .....K7  
 KLN900B1/4 .....K7  
 KLN900S1/4 .....K7  
 KLN5500A1/4 .....K8  
 KLN5500A1/8 .....K8  
 KLN5500B1/4 .....K8  
 KLN5500B1/8 .....K8  
 KLN5700A1/4 .....K8  
 KLN5700B1/4 .....K8  
 KLN5900A1/4 .....K8  
 KLN5900B1/4 .....K8  
 KN1250A1/4 .....K9  
 KN1250AB1/4 .....K9  
 KN1250B1/4 .....K9  
 KN1250BA1/4 .....K9  
 KN1251A1/4 .....K9  
 KN1251B1/4 .....K9  
 KN1750A1/4 .....K8  
 KN1750B1/4 .....K8  
 KN1751A1/4 .....K8  
 KN1751AB1/4 .....K8  
 KN1751AS1/4 .....K8  
 KN1751B1/4 .....K8  
 KN1751BA1/4 .....K8  
 KN1751BS1/4 .....K8  
 KN1755ABS1/4 .....K9  
 KN1755AS1/4 .....K9  
 KN1755BAS1/4 .....K9  
 KN1755BS1/4 .....K9  
 KN500A1/4 .....K9  
 KN500A1/8 .....K9  
 KN500AB1/4 .....K9  
 KN500AB1/8 .....K9  
 KN500B1/4 .....K9  
 KN500B1/8 .....K9  
 KN500BA1/4 .....K9  
 KN500BA1/8 .....K9  
 KN501A1/4 .....K8  
 KN501A1/8 .....K8  
 KN501B1/4 .....K8  
 KN501B1/8 .....K8  
 KN501BA1/4 .....K8  
 KN501BA1/8 .....K8  
 KN5700A1/4 .....K9  
 KN5700B1/4 .....K9  
 KN700A1/4 .....K9  
 KN700AB1/4 .....K9  
 KN700B1/4 .....K9  
 KN700BA1/4 .....K9  
 KN701A1/4 .....K8  
 KN701B1/4 .....K8

KN701BA1/4 .....K8  
 KN701BA1/8 .....K8  
 KN900A1/4 .....K9  
 KN900AB1/4 .....K9  
 KN900B1/4 .....K9  
 KN900BA1/4 .....K9  
 KNS501A1/4 .....K10  
 KNS501A1/8 .....K10  
 KNS501B1/4 .....K10  
 KNS501B1/8 .....K10  
 KNS501BA1/4 .....K10  
 KNS501BA1/8 .....K10  
 KNS701A1/4 .....K10  
 KNS701B1/4 .....K10  
 KNS701BA1/4 .....K10  
 KNS701BA1/8 .....K10  
 KPN500A1/4 .....K10  
 KPN500A1/8 .....K10  
 KPN500B1/4 .....K10  
 KPN500B1/8 .....K10  
 KPN700A1/4 .....K10  
 KPN700B1/4 .....K10  
 KPN900A1/4 .....K10  
 KPN900B1/4 .....K10  
 KR1 .....K21  
 KR2 .....K21  
 KR3 .....K21  
 KS500A1/4 .....K10  
 KS500A1/8 .....K10  
 KS500B1/4 .....K10  
 KS500B1/8 .....K10  
 KS700A1/4 .....K10  
 KS700B1/4 .....K10  
 KS900A1/4 .....K10  
 KS900B1/4 .....K10  
 KT500A1/4 .....K11  
 KT500B1/4 .....K11  
 KT500B1/8 .....K11  
 KT700A1/4 .....K11  
 KT700B1/4 .....K11  
 KT900A1/4 .....K11  
 KT900B1/4 .....K11  
 KU401B1/8 .....K11  
 KU402B1/8 .....K11  
 KU500B1/4 .....K11  
 KU500B1/8 .....K11  
 KU700B1/4 .....K11  
 KUS402B1/8 .....K11  
 KUS500B1/4 .....K11  
 KUS500B1/8 .....K11  
 KUS700B1/4 .....K11  
 PH15181/4 .....K12  
 PK1100B1/8 .....K12  
 PK50B1/4 .....K12  
 PK50B1/8 .....K12  
 PK70B1/4 .....K12  
 PK90B1/4 .....K12  
 PKA50B1/4 .....K13  
 PKA50B1/8 .....K13  
 PKA55B1/4 .....K13  
 PKA55B1/8 .....K13  
 PKA70B1/4 .....K13  
 PKA90B1/4 .....K13  
 PKAP50B1/4 .....K13  
 PKAP50B1/8 .....K13  
 PKAP70B1/4 .....K13  
 PKB70B1/4 .....K14  
 PKB90B1/4 .....K14  
 PKD100B1/4 .....K14  
 PKD100B101/4 .....K14  
 PKD60B1/4 .....K14  
 PKD60B1/8 .....K14  
 PKD60B101/4 .....K14  
 PKD60B101/8 .....K14

PKD70B1/4 .....K14  
 PKD70B101/4 .....K14  
 PKDT100B1/4 .....K15  
 PKDT100B101/4 .....K15  
 PKDT60B101/8 .....K15  
 PKDT70B1/4 .....K15  
 PKDT70B101/4 .....K15  
 PKE60B1/4 .....K15  
 PKE60B1/8 .....K15  
 PKE90B1/4 .....K15  
 PKES120B1/4 .....K15  
 PKES140B1/4 .....K15  
 PKES150B1/4 .....K15  
 PKES60B1/4 .....K15  
 PKES60B1/8 .....K15  
 PKES70B1/4 .....K15  
 PKES90B1/4 .....K15  
 PKF50B1/8 .....K16  
 PKG100B1/4 .....K17  
 PKG1255B1/4 .....K17  
 PKG40B1/8 .....K16  
 PKG50B1/4 .....K16  
 PKG50B1/8 .....K16  
 PKG60B1/4 .....K17  
 PKG60B1/8 .....K17  
 PKG70B1/4 .....K17  
 PKG70B1/8 .....K17  
 PKG90B1/4 .....K17  
 PKG90B1/8 .....K17  
 PKGP100B1/4 .....K17  
 PKGP70B1/4 .....K17  
 PKGP90B1/4 .....K17  
 PKJ50B1/4 .....K17  
 PKJ50B1/8 .....K17  
 PKJ60B1/4 .....K17  
 PKJ70B1/4 .....K17  
 PKJT50B1/4 .....K18  
 PKJT50B1/8 .....K18  
 PKJT60B1/4 .....K18  
 PKJT70B1/4 .....K18  
 PKN60B1/4 .....K18  
 PKN60B1/8 .....K18  
 PKN70B1/4 .....K18  
 PKN90B1/4 .....K18  
 PKNT60B1/4 .....K18  
 PKNT70B1/4 .....K18  
 PKNT90B1/4 .....K18  
 PKS1103B101/4 .....K18  
 PKS1104B1/4 .....K19  
 PKS1105B101/4 .....K19  
 PKS1106B1/4 .....K19  
 PKS1132B1/4 .....K19  
 PKS1132B101/4 .....K19  
 PKS1132B51/4 .....K19  
 PKS1132B91/4 .....K19  
 PKS90B1/4 .....K20  
 PKS90B101/4 .....K20  
 PKX100B1/4 .....K20  
 PKX110B1/4 .....K20  
 PKX130B1/4 .....K20  
 PKX50B1/4 .....K20  
 PKX50B1/8 .....K20  
 PKX60B1/4 .....K20  
 PKX60B1/8 .....K20

**K**  
Alcoknob

---

**General Knob Information**

---

**SPECIFICATIONS****A. STANDARD KNOB TYPES**

1. **INSPECTION CRITERIA** - Normal inspection is performed without magnification while holding knob at a distance of 12 to 14 inches for a period of 5 seconds, under normal light. The following imperfections are not acceptable:
  - Finish: visible marks or scratches, runs, or non-uniform coverage.
  - Artwork: voids, specks, bleeding or other inconsistencies
2. **MATERIALS** -
  - K Series: Machined aluminum alloy stock  
Finish: gloss anodize  
Setscrews: Stainless steel, type 303, hex head, cup point
  - P Series: General purpose phenolic (thermoset) (Max. Temp. 120-125°C continuous)  
Finish: Gloss (except PKX, matte)  
Insert: Brass  
Setscrews: Stainless steel, hex head, cup point  
Inlays: Skirts: Aluminum alloy, spun finish

---

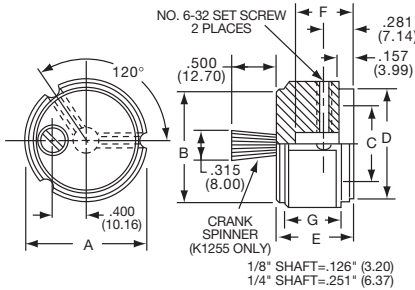
**B. CUSTOM TYPES**

1. **ALUMINUM**
  - Configuration - most semi-standard or custom designs can be machined. A drawing is required to provide a quotation. Non-standard shaft hole diameters are available also.
  - Finish - Anodizing or paint of various colors can be provided. A color chip is required to ensure proper color shade.
  - Artwork - alpha-numeric lettering, indicator lines, markings, etc. can be provided. Silkscreening and other processes are available.
2. **PHENOLIC**
  - Configuration - most custom styles can be molded.
  - Colors - various custom colored standard knobs can be provided. Color chip is required.
  - Artwork - lettering, markings, etc. can be provided.

**Knobs, Machined Aluminum**

**K SERIES**

K700B1/4



Tyco 3 Flute Design with and without Indicator Line									
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
1437621-7	K500A1/8	Natural	.500(12.7)	.430(10.9)	.374(9.50)	.430(10.9)	.625(15.9)	.429(10.9)	.512(13.0)
1437621-6	K500A1/4	Natural	.500(12.7)	.430(10.9)	.374(9.50)	.430(10.9)	.625(15.9)	.429(10.9)	.512(13.0)
1437621-9	K500B1/8	Black	.500(12.7)	.430(10.9)	.374(9.50)	.430(10.9)	.625(15.9)	.429(10.9)	.512(13.0)
1437621-8	K500B1/4	Black	.500(12.7)	.430(10.9)	.374(9.50)	.430(10.9)	.625(15.9)	.429(10.9)	.512(13.0)
1-1437621-0	K700A1/4	Natural	.740(18.8)	.655(16.6)	.591(15.0)	.655(16.6)	.625(15.9)	.429(10.9)	.512(13.0)
1-1437621-1	K700B1/4	Black	.740(18.8)	.655(16.6)	.591(15.0)	.655(16.6)	.625(15.9)	.429(10.9)	.512(13.0)
1-1437621-3	K900A1/4	Natural	.937(23.8)	.817(20.8)	.709(18.0)	.817(20.8)	.625(15.9)	.429(10.9)	.512(13.0)
1-1437621-4	K900B1/4	Black	.937(23.8)	.817(20.8)	.709(18.0)	.817(20.8)	.625(15.9)	.429(10.9)	.512(13.0)
1437621-2	K1250A1/4	Natural	1.25(31.8)	1.11(28.2)	.984(25.0)	1.11(28.2)	.750(19.1)	.554(14.1)	.630(16.00)
1437621-3	K1250B1/4	Black	1.25(31.8)	1.11(28.2)	.984(25.0)	1.11(28.2)	.750(19.1)	.554(14.1)	.630(16.00)
Less Indicator									
1437621-4	K1251B1/4	Black	1.25(31.8)	1.11(28.2)	.984(25.0)	1.11(28.2)	.750(19.1)	.554(14.1)	.630(16.00)
With Crank Spinner + Less Indicator									
	K1255A1/4	Natural	1.25(21.8)	1.11(28.2)	.984(25.0)	1.11(28.2)	.750(19.1)	.554(14.1)	.630(16.00)
1437621-5	K1255B1/4	Black	1.25(31.8)	1.11(28.2)	.984(25.0)	1.11(28.2)	.750(19.1)	.554(14.1)	.630(16.00)

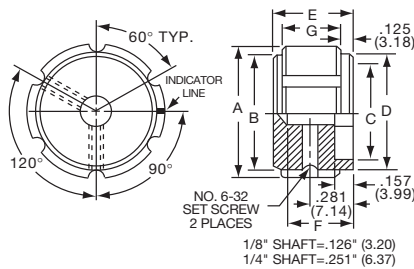
**KA SERIES**



KA500A1/4

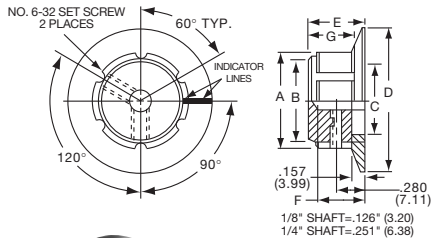


KA700B1/4



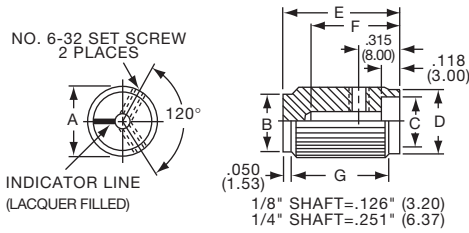
Tyco 6 Flute Design with Indicator Line									
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
2-1437621-0	KA500A1/8	Natural	.500(12.7)	.430(10.9)	.375(9.53)	.430(10.9)	.625(15.9)	.512(13.0)	.430(10.9)
1-1437621-9	KA500A1/4	Natural	.500(12.7)	.430(10.9)	.375(9.53)	.430(10.9)	.625(15.9)	.512(13.0)	.430(10.9)
2-1437621-2	KA500B1/8	Black	.500(12.7)	.430(10.9)	.375(9.53)	.430(10.9)	.625(15.9)	.512(13.0)	.430(10.9)
2-1437621-1	KA500B1/4	Black	.500(12.7)	.430(10.9)	.375(9.53)	.430(10.9)	.625(15.9)	.512(13.0)	.430(10.9)
2-1437621-3	KA700A1/4	Natural	.750(19.1)	.655(16.6)	.590(15.0)	.655(16.6)	.625(15.9)	.512(13.0)	.430(10.9)
2-1437621-4	KA700B1/4	Black	.750(19.1)	.655(16.6)	.590(15.0)	.655(16.6)	.625(15.9)	.512(13.0)	.430(10.9)
2-1437621-5	KA900A1/4	Natural	.937(23.8)	.817(20.8)	.700(17.8)	.817(20.8)	.625(15.9)	.512(13.0)	.430(10.9)
2-1437621-6	KA900B1/4	Black	.937(23.8)	.817(20.8)	.700(17.8)	.817(20.8)	.625(15.9)	.512(13.0)	.430(10.9)
	KA1250A1/4	Natural	1.25(31.8)	1.11(28.2)	.985(25.0)	1.11(28.2)	.750(19.1)	.630(16.0)	.554(14.1)
1-1437621-8	KA1250B1/4	Black	1.25(31.8)	1.11(28.2)	.985(25.0)	1.11(28.2)	.750(19.1)	.630(16.0)	.554(14.1)

**KAS SERIES**



Tyco 6 Flute Design with Aluminum Skirt and Indicator Lines									
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
2-1437621-8	KAS500A1/8	Natural	.500(12.7)	.430(10.9)	.380(9.65)	.740(18.8)	.630(16.0)	.510(13.0)	.430(10.9)
2-1437621-7	KAS500A1/4	Natural	.500(12.7)	.430(10.9)	.380(9.65)	.740(18.8)	.630(16.0)	.510(13.0)	.430(10.9)
3-1437621-0	KAS500B1/8	Black	.500(12.7)	.430(10.9)	.380(9.65)	.740(18.8)	.630(16.0)	.510(13.0)	.430(10.9)
2-1437621-9	KAS500B1/4	Black	.500(12.7)	.430(10.9)	.380(9.65)	.740(18.8)	.630(16.0)	.510(13.0)	.430(10.9)
3-1437621-1	KAS700A1/4	Natural	.750(19.1)	.650(16.5)	.590(15.0)	1.14(29.0)	.630(16.0)	.510(13.0)	.430(10.9)
3-1437621-2	KAS700B1/4	Black	.750(19.1)	.650(16.5)	.590(15.0)	1.14(29.0)	.630(16.0)	.510(13.0)	.430(10.9)
3-1437621-3	KAS900A1/4	Natural	.940(23.9)	.820(20.8)	.710(18.0)	1.40(35.6)	.630(16.0)	.510(13.0)	.430(10.9)
3-1437621-4	KAS900B1/4	Black	.940(23.9)	.820(20.8)	.710(18.0)	1.40(35.6)	.630(16.0)	.510(13.0)	.430(10.9)

**Knobs, Machined Aluminum**



**KB SERIES**

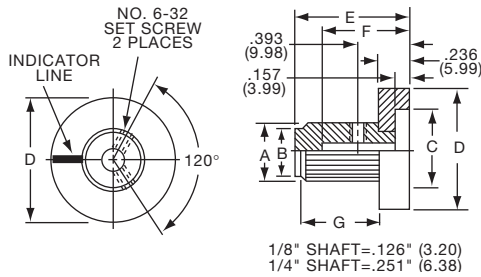


KB500A1/4



KB900B1/4

Tyco		Control Knob with Straight Knurl and Top Line Indicator							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
3-1437621-6	KB500A1/8	Natural	.500(12.7)	.433(11.0)	.394(10.0)	.472(12.0)	.787(20.0)	.630(16.0)	.610(15.5)
3-1437621-5	KB500A1/4	Natural	.500(12.7)	.433(11.0)	.394(10.0)	.472(12.0)	.787(20.0)	.630(16.0)	.610(15.5)
3-1437621-9	KB500B1/8	Black	.500(12.7)	.433(11.0)	.394(10.0)	.472(12.0)	.787(20.0)	.630(16.0)	.610(15.5)
3-1437621-8	KB500B1/4	Black	.500(12.7)	.433(11.0)	.394(10.0)	.472(12.0)	.787(20.0)	.630(16.0)	.610(15.5)
4-1437621-0	KB700A1/4	Natural	.750(19.0)	.673(17.1)	.581(15.0)	.705(17.9)	.787(20.0)	.630(16.0)	.610(15.5)
4-1437621-2	KB700B1/4	Black	.750(19.0)	.673(17.1)	.581(15.0)	.705(17.9)	.787(20.0)	.630(16.0)	.610(15.5)
4-1437621-4	KB900A1/4	Natural	.930(23.6)	.866(22.0)	.710(18.0)	.902(22.9)	.787(20.0)	.630(16.0)	.610(15.5)
4-1437621-5	KB900B1/4	Black	.930(23.6)	.866(22.0)	.710(18.0)	.902(22.9)	.787(20.0)	.630(16.0)	.610(15.5)

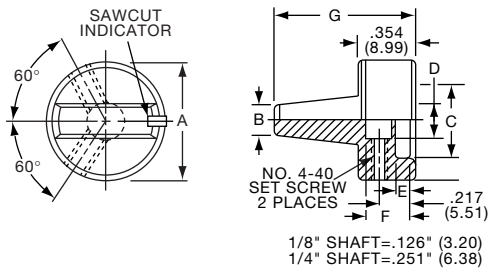


**KBS SERIES**



KBS500A101/4

Tyco		Control Knob with Straight Knurl and Skirt							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
<b>With 0-9 Numerals (36°)</b>									
4-1437621-9	KBS500A101/8	Natural	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)
	KBS500A101/4	Natural	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)
5-1437621-3	KBS500B101/8	Black	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)
5-1437621-2	KBS500B101/4	Black	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)
<b>With Indicator Line</b>									
4-1437621-8	KBS500A1/8	Natural	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)
4-1437621-7	KBS500A1/4	Natural	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)
5-1437621-1	KBS500B1/8	Black	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)
5-1437621-0	KBS500B1/4	Black	.500(12.7)	.433(11.0)	.708(18.0)	1.00(25.4)	.950(24.1)	.826(21.0)	.655(16.7)



**KCB SERIES**



KCB500A1/4



KCB700B1/4

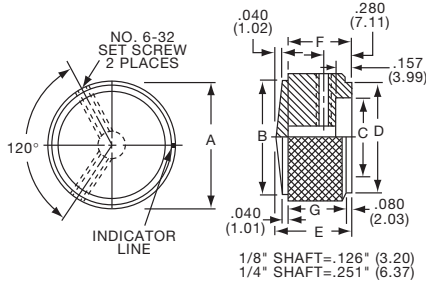
Tyco		Control Knob with Sawcut Indicator							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
5-1437621-7	KCB500A1/8	Natural	.500(12.7)	.197(5.08)	.374(9.50)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
5-1437621-6	KCB500A1/4	Natural	.500(12.7)	.197(5.08)	.374(9.50)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
5-1437621-9	KCB500B1/8	Black	.500(12.7)	.197(5.08)	.374(9.50)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
5-1437621-8	KCB500B1/4	Black	.500(12.7)	.197(5.08)	.374(9.50)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
6-1437621-0	KCB600A1/8	Natural	.618(15.7)	.197(5.08)	.394(10.0)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
	KCB600A1/4	Natural	.618(15.7)	.197(5.08)	.394(10.0)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
6-1437621-2	KCB600B1/8	Black	.618(15.7)	.197(5.08)	.394(10.0)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
6-1437621-1	KCB600B1/4	Black	.618(15.7)	.197(5.08)	.394(10.0)	.126(3.20)	.118(3.00)	.335(8.51)	.750(19.1)
6-1437621-3	KCB700A1/4	Natural	.746(18.8)	.197(5.08)	.512(13.0)	.250(6.35)	.118(3.00)	.335(8.51)	.898(22.8)
6-1437621-4	KCB700B1/4	Black	.746(18.8)	.197(5.08)	.512(13.0)	.250(6.35)	.118(3.00)	.335(8.51)	.898(22.8)
6-1437621-5	KCB900A1/4	Natural	.937(23.8)	.197(5.08)	.709(18.0)	.250(6.35)	.118(3.00)	.335(8.51)	.898(22.8)
6-1437621-7	KCB900B1/4	Black	.937(23.8)	.197(5.08)	.709(18.0)	.250(6.35)	.118(3.00)	.335(8.51)	.898(22.8)

**Knobs, Machined Aluminum**

**KD SERIES**



KD1250B1/4

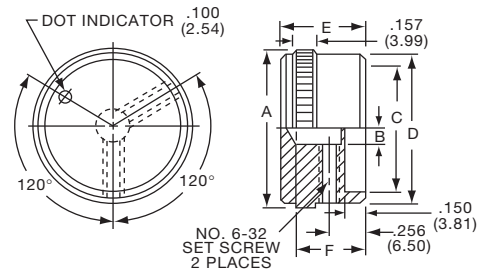


		Diamond Knurl with Indicator Line							
Tyco	Alcoswitch	Color	A	B	C	D	E	F	G
7-1437621-1	KD500A1/8	Natural	.500(12.7)	.430(10.9)	.380(9.65)	.430(10.9)	.630(16.0)	.510(13.0)	.470(11.9)
7-1437621-0	KD500A1/4	Natural	.500(12.7)	.430(10.9)	.380(9.65)	.430(10.9)	.630(16.0)	.510(13.0)	.470(11.9)
7-1437621-3	KD500B1/8	Black	.500(12.7)	.430(10.9)	.380(9.65)	.430(10.9)	.630(16.0)	.510(13.0)	.470(11.9)
7-1437621-2	KD500B1/4	Black	.500(12.7)	.430(10.9)	.380(9.65)	.430(10.9)	.630(16.0)	.510(13.0)	.470(11.9)
7-1437621-4	KD700A1/4	Natural	.750(19.1)	.660(16.8)	.590(15.0)	.660(16.8)	.630(16.0)	.510(13.0)	.470(11.9)
7-1437621-5	KD700B1/4	Black	.750(19.1)	.660(16.8)	.590(15.0)	.660(16.8)	.630(16.0)	.510(13.0)	.470(11.9)
7-1437621-6	KD900A1/4	Natural	.940(23.9)	.820(20.8)	.710(18.0)	.820(20.8)	.630(16.0)	.510(13.0)	.470(11.9)
7-1437621-7	KD900B1/4	Black	.940(23.9)	.820(20.8)	.710(18.0)	.820(20.8)	.630(16.0)	.510(13.0)	.470(11.9)
6-1437621-8	KD1250A1/4	Natural	1.25(31.8)	1.11(28.2)	.980(24.9)	1.11(28.2)	.750(19.1)	.630(16.0)	.590(15.0)
6-1437621-9	KD1250B1/4	Black	1.25(31.8)	1.11(28.2)	.980(24.9)	1.11(28.2)	.750(19.1)	.630(16.0)	.590(15.0)

**KE SERIES**



KE900AB1/4



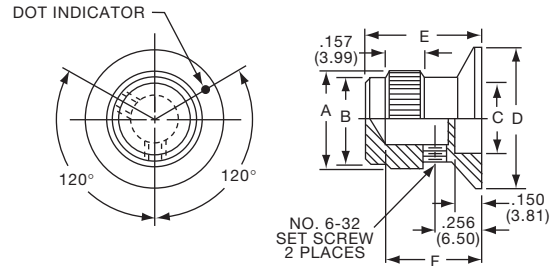
KE500AB1/4

		Knurl Grip with Top Dot Indicator						
Tyco	Alcoswitch	Color	A	B	C	D	E	F
8-1437621-0	KE500AB1/8	Ntl. - Blk.	.500(12.7)	.126(3.20)	.382(9.70)	.460(11.7)	.625(15.9)	.512(13.0)
7-1437621-9	KE500AB1/4	Ntl. - Blk.	.500(12.7)	.126(3.20)	.382(9.70)	.460(11.7)	.625(15.9)	.512(13.0)
8-1437621-1	KE700AB1/4	Ntl. - Blk.	.740(18.8)	.251(6.38)	.630(16.0)	.708(18.0)	.625(15.9)	.512(13.0)
8-1437621-2	KE900AB1/4	Ntl. - Blk.	.93(23.8)	.251(6.38)	.787(20.0)	.900(22.9)	.625(15.9)	.512(13.0)
7-1437621-8	KE1250AB1/4	Ntl. - Blk.	1.25(31.8)	.251(6.38)	1.06(26.9)	1.17(29.7)	.625(15.9)	.512(13.0)

**KES SERIES**



KES500AB1/4



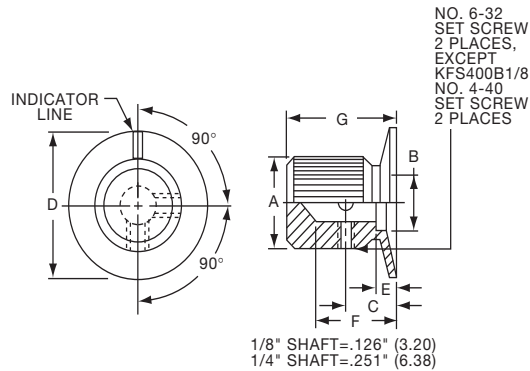
		Knurl Grip with Dot Indicator on Skirt						
Tyco	Alcoswitch	Color	A	B	C	D	E	F
8-1437621-4	KES500AB1/8	Ntl. - Blk.	.500(12.7)	.460(11.7)	.382(9.70)	.750(19.1)	.625(15.9)	.512(13.0)
8-1437621-3	KES500AB1/4	Ntl. - Blk.	.500(12.7)	.460(11.7)	.382(9.70)	.750(19.1)	.625(15.9)	.512(13.0)
8-1437621-5	KES700AB1/4	Ntl. - Blk.	.750(19.1)	.710(18.1)	.630(16.0)	1.13(28.7)	.625(15.9)	.512(13.0)
	KES900AB1/4	Ntl. - Blk.	.937(23.8)	.897(22.8)	.787(20.0)	1.44(36.6)	.625(15.9)	.512(13.0)

**K**

**K Series**

**Knobs, Machined Aluminum**

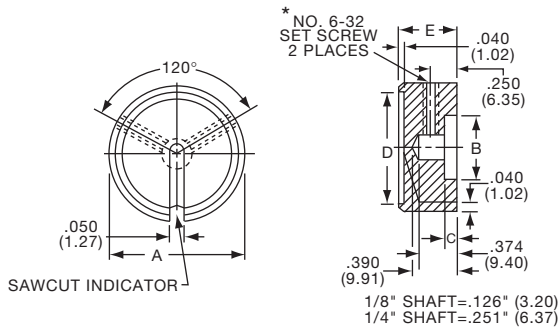
**KFS SERIES**



KFS400B1/8

Tyco			Straight Knurl with Indicator on Skirt						
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
8-1437621-6	KFS400B1/8	Black Matte	.380(9.65)	.382(9.70)	.256(6.50)	.500(12.7)	.098(2.49)	.469(11.9)	.591(15.0)
8-1437621-8	KFS500B1/8	Black Matte	.500(12.7)	.382(9.70)	.252(6.48)	.630(16.0)	.161(4.09)	.469(11.9)	.630(16.0)
8-1437621-7	KFS500B1/4	Black Matte	.618(15.7)	.280(7.11)	.382(9.70)	1.00(25.4)	.161(4.09)	.630(16.0)	0.811(20.6)
8-1437621-9	KFS600B1/4	Black Matte	.618(15.7)	.280(7.11)	.382(9.70)	1.00(25.4)	.161(4.09)	.630(16.0)	0.811(20.6)

**KHF SERIES**



KHF500A1/4

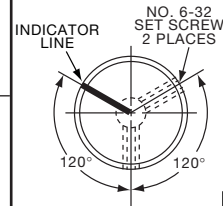


KHF900A1/4

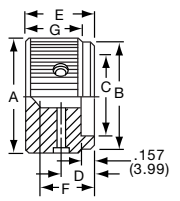
Tyco			Plain Body with Top and Side Sawcut Indicator				
Electronics	Alcoswitch	Color	A	B	C	D	E
9-1437621-1	KHF500A1/4	Natural	.500(12.7)	.374(9.50)	.118(3.00)	.342(8.69)	.563(14.3)
9-1437621-2	KHF700A1/4	Natural	.740(18.8)	.590(15.0)	.118(3.00)	.592(15.0)	.563(14.3)
9-1437621-3	KHF900A1/4	Natural	.937(23.8)	.708(18.0)	.118(3.00)	.779(19.8)	.563(14.3)
*9-1437621-0	KHF1250A1/4	Natural	1.23(31.8)	.984(25.0)	.118(3.00)	1.08(27.5)	.563(14.3)

**KLN SERIES**

Tyco			Straight Knurl with Top and Side Indicator						
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
9-1437621-7	KLN500A1/8	Natural	.500(12.7)	0.445(11.3)	.374(9.50)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
9-1437621-6	KLN500A1/4	Natural	.500(12.7)	0.445(11.3)	.374(9.50)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
9-1437621-9	KLN500B1/8	Black	.500(12.7)	0.445(11.3)	.374(9.50)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
9-1437621-8	KLN500B1/4	Black	.500(12.7)	0.445(11.3)	.374(9.50)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-1	KLN500S1/4	Smoke	.500(12.7)	0.445(11.3)	.374(9.50)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-2	KLN700A1/4	Natural	.740(18.8)	.685(17.4)	.591(15.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-3	KLN700B1/4	Black	.740(18.8)	.685(17.4)	.591(15.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-4	KLN700B1/8	Black	.740(18.8)	.685(17.4)	.591(15.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-5	KLN700S1/4	Smoke	.740(18.8)	.685(17.4)	.591(15.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-6	KLN900A1/4	Natural	.937(23.8)	.882(22.4)	0.709(18.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-7	KLN900B1/4	Black	.937(23.8)	.882(22.4)	0.709(18.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
1437622-8	KLN900S1/4	Smoke	.937(23.8)	.882(22.4)	0.709(18.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
9-1437621-4	KLN1250A1/4	Natural	1.252(31.80)	1.195(30.35)	.984(25.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)
9-1437621-5	KLN1250B1/4	Black	1.252(31.80)	1.195(30.35)	.984(25.0)	.281(7.14)	.625(15.9)	.512(13.0)	.527(13.4)



KLN500A1/4





**Knobs, Machined Aluminum**

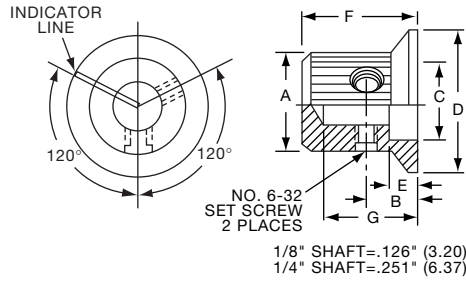
**KLNS SERIES**



KLNS500B1/8



KLNS900B1/4

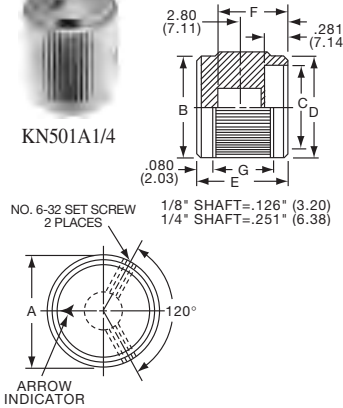


Tyco Electronics Alcoswitch Color									
			A	B	C	D	E	F	G
1-1437622-6	KLNS500A1/8	Natural	.500(12.7)	.280(7.11)	.380(9.65)	.750(19.0)	.160(4.07)	.630(16.0)	.510(13.0)
1-1437622-5	KLNS500A1/4	Natural	.500(12.7)	.280(7.11)	.380(9.65)	.750(19.0)	.160(4.07)	.630(16.0)	.510(13.0)
1-1437622-8	KLNS500B1/8	Black	.500(12.7)	.280(7.11)	.380(9.65)	.750(19.0)	.160(4.07)	.630(16.0)	.510(13.0)
1-1437622-7	KLNS500B1/4	Black	.500(12.7)	.280(7.11)	.380(9.65)	.750(19.0)	.160(4.07)	.630(16.0)	.510(13.0)
2-1437622-0	KLNS700A1/4	Natural	.750(19.0)	.280(7.11)	.590(14.9)	1.13(28.7)	.160(4.07)	.630(16.0)	.510(13.0)
2-1437622-1	KLNS700B1/4	Black	.750(19.0)	.280(7.11)	.590(14.9)	1.13(28.7)	.160(4.07)	.630(16.0)	.510(13.0)
2-1437622-2	KLNS900A1/4	Natural	.940(23.9)	.280(7.11)	.710(18.0)	1.40(35.5)	.160(4.07)	.630(16.0)	.510(13.0)
2-1437622-3	KLNS900B1/4	Black	.940(23.9)	.280(7.11)	.710(18.0)	1.40(35.5)	.160(4.07)	.630(16.0)	.510(13.0)

**KN SERIES**



KN501A1/4



Tyco Electronics Alcoswitch Color										
			A	B	C	D	E	F	G	
5-1437622-1	KN501A1/8	Natural	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.3)	.625(15.9)	.512(13.0)	.456(11.58)	
5-1437622-0	KN501A1/4	Natural	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.3)	.625(15.9)	.512(13.0)	.456(11.58)	
5-1437622-3	KN501B1/8	Black	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.3)	.625(15.9)	.512(13.0)	.456(11.58)	
5-1437622-2	KN501B1/4	Black	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.3)	.625(15.9)	.512(13.0)	.456(11.58)	
6-1437622-2	KN701A1/4	Natural	.750(19.1)	.695(17.7)	.590(15.0)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.58)	
6-1437622-3	KN701B1/4	Black	.750(19.1)	.695(17.7)	.590(15.0)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.58)	
<b>Two Toned</b>			<b>Body-Top</b>							
5-1437622-5	KN501BA1/8	Blk. - Ntl.	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.3)	.625(15.9)	.512(13.0)	.456(11.58)	
5-1437622-4	KN501BA1/4	Blk. - Ntl.	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.3)	.625(15.9)	.512(13.0)	.456(11.58)	
6-1437622-5	KN701BA1/8	Blk. - Ntl.	.750(19.1)	.695(17.7)	.590(15.0)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.58)	
6-1437622-4	KN701BA1/4	Blk. - Ntl.	.750(19.1)	.695(17.7)	.590(15.0)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.58)	

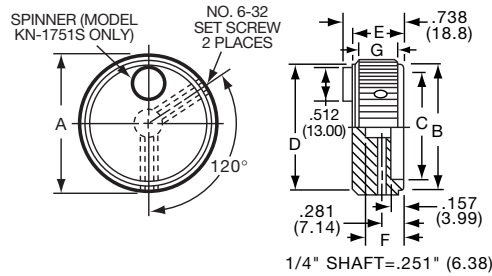
**KN SERIES**



KN1751AS1/4



KN1751B1/4



Tyco Electronics Alcoswitch Color										
			A	B	C	D	E	F	G	
<b>Less Indicator</b>										
3-1437622-2	KN1751A1/4	Natural	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.0)	.508(12.9)	.480(12.2)	
3-1437622-6	KN1751B1/4	Black	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.8)	.508(12.9)	.480(12.2)	
<b>Two Toned</b>			<b>Body - Top</b>							
3-1437622-3	KN1751AB1/4	Ntl. - Blk.	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.8)	.508(12.9)	.480(12.2)	
3-1437622-7	KN1751BA1/4	Blk. - Natural	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.8)	.508(12.9)	.480(12.2)	
<b>With Indicator</b>										
3-1437622-5	KN1750A1/4	Natural	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.8)	.508(12.9)	.480(12.2)	
3-1437622-1	KN1750B1/4	Black	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.8)	.508(12.9)	.480(12.2)	
<b>With Spinner/Less Indicator</b>										
3-1437622-5	KN1751AS1/4	Natural	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.8)	.508(12.9)	.480(12.2)	
3-1437622-8	KN1751BS1/4	Black	1.75(44.5)	1.55(39.4)	1.38(35.1)	1.65(41.9)	.620(15.8)	.508(12.9)	.480(12.2)	

K

K Series

K8



**Knobs, Machined Aluminum**



KN SERIES



KN5700B1/4

Concentric Set with Straight Knurl with Indicator Lines									
Tyco Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
5-1437622-6	KN5700A1/4	Natural	.750(19.1)	.500(12.7)	.590(15.0)	.700(17.8)	.625(15.9)	1.16(29.5)	.281(7.14)
5-1437622-7	KN5700B1/4	Black	.750(19.1)	.500(12.7)	.590(15.0)	.700(17.8)	.625(15.9)	1.16(29.5)	.281(7.14)

Straight Knurl with & without Indicator Line Diameter Dimensions									
Tyco Electronics	Alcoswitch	Color Body-Top	A	B	C	D	E	F	G
4-1437622-3	KN500A1/8	Natural	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
4-1437622-2	KN500A1/4	Natural	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
4-1437622-7	KN500B1/8	Black	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
4-1437622-6	KN500B1/4	Black	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
5-1437622-8	KN700A1/4	Natural	.750(19.1)	.695(17.7)	.590(15.0)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.6)
6-1437622-0	KN700B1/4	Black	.750(19.1)	.695(17.7)	.590(15.0)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.6)
6-1437622-6	KN900A1/4	Natural	.949(24.1)	.894(22.7)	.696(17.7)	.894(22.7)	.625(15.9)	.512(13.0)	.456(11.6)
6-1437622-8	KN900B1/4	Black	.949(24.1)	.894(22.7)	.696(17.7)	.894(22.7)	.625(15.9)	.512(13.0)	.456(11.7)
2-1437622-5	KN1250A1/4	Natural	1.25(31.8)	1.20(30.5)	.984(25.0)	1.20(30.5)	.625(15.9)	.512(13.0)	.456(11.6)
2-1437622-7	KN1250B1/4	Black	1.25(31.8)	1.20(30.5)	.984(25.0)	1.20(30.5)	.625(15.9)	.512(13.0)	.456(11.6)
<b>Two-Toned</b>									
4-1437622-5	KN500AB1/8	Ntl - Blk.	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
4-1437622-4	KN500AB1/4	Ntl - Blk.	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
4-1437622-9	KN500BA1/8	Blk - Ntl.	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
4-1437622-8	KN500BA1/4	Blk - Ntl.	.500(12.7)	.445(11.3)	.374(9.50)	.445(11.5)	.625(15.9)	.512(13.0)	.456(11.6)
5-1437622-9	KN700AB1/4	Ntl - Blk.	.750(19.1)	.695(17.7)	.445(11.5)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.6)
6-1437622-1	KN700BA1/4	Blk - Ntl.	.750(19.1)	.695(17.7)	.445(11.5)	.695(17.7)	.625(15.9)	.512(13.0)	.456(11.6)
6-1437622-7	KN900AB1/4	Ntl - Blk.	.949(24.1)	.894(22.7)	.695(17.7)	.894(22.7)	.625(15.9)	.512(13.0)	.456(11.6)
6-1437622-9	KN900BA1/4	Blk - Ntl.	.949(24.1)	.894(22.7)	.695(17.7)	.894(22.7)	.625(15.9)	.512(13.0)	.456(11.7)
2-1437622-6	KN1250AB1/4	Ntl - Blk.	1.25(31.8)	1.20(30.5)	.984(25.0)	1.20(30.5)	.625(15.9)	.512(13.0)	.456(11.6)
2-1437622-8	KN1250BA1/4	Blk - Ntl.	1.25(31.8)	1.20(30.5)	.984(25.0)	1.20(30.5)	.625(15.9)	.512(13.0)	.456(11.6)
<b>Less Indicator</b>									
2-1437622-9	KN1251A1/4	Natural	1.25(31.8)	1.20(30.5)	.984(25.0)	1.25(31.7)	.625(15.9)	.512(13.0)	.456(11.7)
3-1437622-0	KN1251B1/4	Black	1.25(31.8)	1.20(30.5)	.984(25.0)	1.25(31.7)	.625(15.9)	.512(13.0)	.456(11.7)

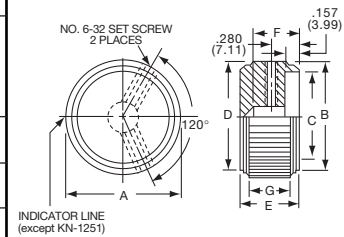
KN SERIES



KN500A1/4



KN900BA1/4



KN SERIES



KN1755BS1/4



Straight Knurl with "Crank" Spinner									
Tyco Electronics	Alcoswitch	Color Body-Top/Spin	A	B	C	D	E	F	G
4-1437622-1	KN1755AS1/4	Natural	1.76(44.7)	1.56(39.5)	.138(35.0)	1.65(41.8)	.630(16.0)	.512(13.0)	.492(12.5)
	KN1755BS1/4	Black	1.76(44.7)	1.56(39.5)	.138(35.0)	1.65(41.8)	.630(16.0)	.512(13.0)	.492(12.5)
3-1437622-9	KN1755ABS1/4	Ntl.-Blk./Blk.	1.76(44.7)	1.56(39.5)	1.38(35.0)	1.65(41.8)	.630(16.0)	.512(13.0)	.492(12.5)
4-1437622-0	KN1755BAS1/4	Blk.-Ntl. Blk.	1.76(44.7)	1.56(39.5)	1.38(35.0)	1.65(41.8)	.630(16.0)	.512(13.0)	.492(12.5)

**Knobs, Machined Aluminum**

**KNS SERIES**



KNS501A1/4



KNS701B1/4

KNS701BA1/4

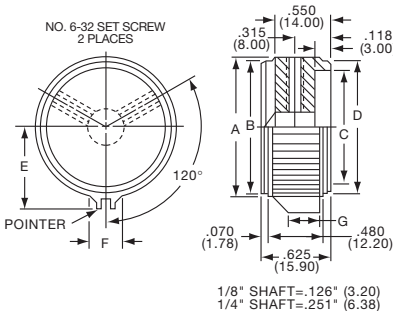


Tyco		Straight Knurl with Arrowhead Indicator on Skirt							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
7-1437622-3	KNS501A1/8	Natural	.500(12.7)	.445(11.3)	.370(9.40)	.750(19.1)	.625(15.9)	.512(13.0)	.428(10.9)
7-1437622-2	KNS501A1/4	Natural	.500(12.7)	.445(11.3)	.370(9.40)	.750(19.1)	.625(15.9)	.512(13.0)	.428(10.9)
7-1437622-5	KNS501B1/8	Black	.500(12.7)	.445(11.3)	.370(9.40)	.750(19.1)	.625(15.9)	.512(13.0)	.428(10.9)
7-1437622-4	KNS501B1/4	Black	.500(12.7)	.445(11.3)	.370(9.40)	.750(19.1)	.625(15.9)	.512(13.0)	.428(10.9)
7-1437622-8	KNS701A1/4	Natural	.750(19.1)	.695(17.7)	.590(15.0)	1.12(28.5)	.625(15.9)	.512(13.0)	.428(10.9)
7-1437622-9	KNS701B1/4	Black	.750(19.1)	.695(17.7)	.590(15.0)	1.12(28.5)	.625(15.9)	.512(13.0)	.428(10.9)
<b>Two-Toned Body-Top/Skirt</b>									
7-1437622-7	KNS501BA1/8	Blk.- Ntl.	.500(12.7)	.695(17.7)	.370(9.40)	.750(19.1)	.625(15.9)	.512(13.0)	.428(10.9)
7-1437622-6	KNS501BA1/4	Blk.- Ntl.	.500(12.7)	.695(17.7)	.370(9.40)	.750(19.1)	.625(15.9)	.512(13.0)	.428(10.9)
8-1437622-1	KNS701BA1/8	Blk.- Ntl.	.750(19.1)	.695(17.7)	.590(15.0)	1.12(28.5)	.625(15.9)	.512(13.0)	.428(10.9)
8-1437622-0	KNS701BA1/4	Blk.- Ntl.	.750(19.1)	.695(17.7)	.590(15.0)	1.12(28.5)	.625(15.9)	.512(13.0)	.428(10.9)

**KPN SERIES**



KPN500B1/8

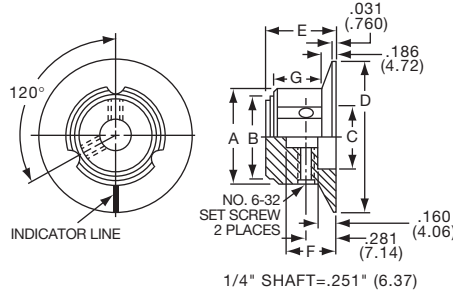


Tyco		Straight Knurl with Pointer and Indicator Line							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
9-1437622-1	KPN500A1/8	Natural	.500(12.7)	.445(11.3)	.372(9.45)	.445(11.3)	.368(9.35)	.195(4.95)	.354(8.99)
9-1437622-0	KPN500A1/4	Natural	.500(12.7)	.445(11.3)	.372(9.45)	.445(11.3)	.368(9.35)	.195(4.95)	.354(8.99)
9-1437622-3	KPN500B1/8	Black	.500(12.7)	.445(11.3)	.372(9.45)	.445(11.3)	.368(9.35)	.195(4.95)	.354(8.99)
9-1437622-2	KPN500B1/4	Black	.500(12.7)	.445(11.3)	.372(9.45)	.445(11.3)	.368(9.35)	.195(4.95)	.354(8.99)
9-1437622-5	KPN700A1/4	Natural	.750(19.1)	.695(17.65)	.590(15.0)	.695(17.7)	.515(13.1)	.234(5.94)	.394(10.0)
9-1437622-6	KPN700B1/4	Black	.750(19.1)	.695(17.65)	.590(15.0)	.695(17.7)	.515(13.1)	.234(5.94)	.394(10.0)
9-1437622-7	KPN900A1/4	Natural	.937(23.8)	.882(22.40)	.692(17.6)	.882(22.4)	.630(16.0)	.276(7.01)	.350(8.90)
9-1437622-9	KPN900B1/4	Black	.937(23.8)	.882(22.40)	.692(17.6)	.882(22.4)	.630(16.0)	.276(7.01)	.350(8.90)

**KS SERIES**



KS500A1/4



Tyco		3 Flute Design with Aluminum Skirt and Indicator Line							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
1437623-3	KS500A1/8	Natural	.500(12.7)	.430(10.9)	.360(9.14)	.750(19.1)	.620(15.8)	.510(13.0)	.430(10.9)
1437623-2	KS500A1/4	Natural	.500(12.7)	.430(10.9)	.360(9.14)	.750(19.1)	.620(15.8)	.510(13.0)	.430(10.9)
1437623-5	KS500B1/8	Black	.500(12.7)	.430(10.9)	.360(9.14)	.750(19.1)	.620(15.8)	.510(13.0)	.430(10.9)
1437623-4	KS500B1/4	Black	.500(12.7)	.430(10.9)	.360(9.14)	.750(19.1)	.620(15.8)	.510(13.0)	.430(10.9)
1437623-6	KS700A1/4	Natural	.750(19.0)	.650(16.5)	.590(14.9)	1.12(28.4)	.620(15.8)	.510(13.0)	.430(10.9)
1437623-7	KS700B1/4	Black	.750(19.0)	.650(16.5)	.590(14.9)	1.12(28.4)	.620(15.8)	.510(13.0)	.430(10.9)
1437623-8	KS900A1/4	Natural	.940(23.9)	.820(20.8)	.710(18.0)	1.40(35.6)	.620(15.8)	.510(13.0)	.430(10.9)
1437623-9	KS900B1/4	Black	.940(23.9)	.820(20.8)	.710(18.0)	1.40(35.6)	.620(15.8)	.510(13.0)	.430(10.9)



KS900B1/4

**K**

**K Series**

K10

**Knobs, Machined Aluminum**



**KT SERIES**



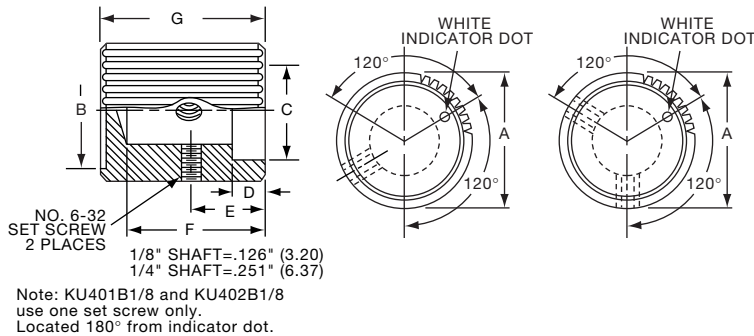
KT500A1/4



KT700A1/4

Tyco		Square Serration with Indicator Line							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
1-1437623-2	KT500A1/4	Natural	.500(12.7)	.430(10.9)	.375(9.53)	.430(10.9)	.280(7.11)	.510(13.0)	.630(16.0)
1-1437623-4	KT500B1/8	Black	.500(12.7)	.430(10.9)	.375(9.53)	.430(10.9)	.280(7.11)	.510(13.0)	.630(16.0)
1-1437623-3	KT500B1/4	Black	.500(12.7)	.430(10.9)	.375(9.53)	.430(10.9)	.280(7.11)	.510(13.0)	.630(16.0)
1-1437623-6	KT700A1/4	Natural	.740(18.8)	.650(16.5)	.590(15.0)	.650(16.5)	.280(7.11)	.510(13.0)	.630(16.0)
1-1437623-7	KT700B1/4	Black	.740(18.8)	.650(16.5)	.590(15.0)	.650(16.5)	.280(7.11)	.510(13.0)	.630(16.0)
1-1437623-8	KT900A1/4	Natural	.940(23.9)	.816(20.7)	.710(18.0)	.816(20.7)	.280(7.11)	.510(13.0)	.630(16.0)
1-1437623-9	KT900B1/4	Black	.940(23.9)	.816(20.7)	.710(18.0)	.816(20.7)	.280(7.11)	.510(13.0)	.630(16.0)

**KU SERIES**



KU402B1/8

Tyco		Serrated Diamond Trim Cut with Dot Indicator							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
2-1437623-1	KU401B1/8	Black	.374(9.50)	.283(7.19)	.276(7.01)	.098(2.49)	.177(4.50)	.236(5.99)	.299(7.60)
2-1437623-2	KU402B1/8	Black	.374(9.50)	.283(7.19)	.276(7.01)	.098(2.49)	.197(5.00)	.354(8.99)	.449(11.40)
2-1437623-3	KU500B1/8	Black	.500(12.7)	.409(10.4)	.374(9.50)	.118(3.00)	.276(7.01)	.512(13.0)	.598(15.2)
	KU500B1/4	Black	.500(12.7)	.409(10.4)	.374(9.50)	.118(3.00)	.276(7.01)	.512(13.0)	.598(15.2)
2-1437623-4	KU700B1/4	Black	.740(18.8)	.650(16.5)	.591(15.0)	.118(3.00)	.276(7.01)	.512(13.0)	.598(15.2)



**KUS SERIES**



KUS402B1/8

Tyco		Serrated Diamond Trim Cut with Dot Indicator							
Electronics	Alcoswitch	Color	A	B	C	D	E	F	G
2-1437623-9	KUS402B1/8	Black	.374(9.50)	.197(5.00)	.276(7.01)	.520(13.2)	.098(2.49)	.450(11.4)	.354(8.99)
3-1437623-0	KUS500B1/8	Black	.500(12.7)	.276(7.01)	.374(9.50)	.700(17.8)	.118(3.00)	.600(15.2)	.512(13.0)
	KUS500B1/4	Black	.500(12.7)	.276(7.01)	.374(9.50)	.700(17.8)	.118(3.00)	.600(15.2)	.512(13.0)
3-1437623-1	KUS700B1/4	Black	.740(18.8)	.276(7.01)	.591(15.0)	1.03(26.2)	.118(3.00)	.600(15.2)	.512(13.0)



KUS700B1/4

Note: KUS402B1/8 has #4.40 setscrew

**Knobs, Molded Phenolic**

**PH SERIES**



PH15181/4



Tyco		Straight Knurl Less Indicator Line					
Electronics	Alcoswitch	A	B	C	D	E	F
1437624-2	PH15181/4	.996(25.3)	.972(24.7)	.799(20.3)	.472(12.0)	.669(17.0)	.157(3.99)

**PK SERIES**



PK50B1/8



PK701/4

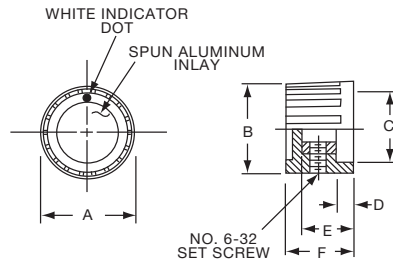


Tyco		Straight Knurl with Dot Indicator on Skirt					
Electronics	Alcoswitch	A	B	C	D	E	F
1437624-7	PK50B1/8	.748(19.0)	.570(14.5)	.500(12.70)	.055(1.40)	.460(11.7)	.550(13.97)
1437624-6	PK50B1/4	.748(19.0)	.570(14.5)	.500(12.70)	.055(1.40)	.460(11.7)	.550(13.97)
1437624-8	PK70B1/4	.984(25.0)	.728(18.5)	.710(18.03)	.079(2.01)	.500(12.7)	.590(14.99)
1437624-9	PK90B1/4	1.25(31.8)	.985(25.0)	.870(22.01)	.098(2.49)	.470(11.9)	.595(15.10)

**PK SERIES**



PK1100B1/4



Tyco		Serrated with Dot Indicator on Top					
Electronics	Alcoswitch	A	B	C	D	E	F
1437624-4	PK1100B1/8	.700(17.8)	.643(16.3)	.565(14.35)	.125(3.18)	.453(11.51)	.530(13.5)

**K**

**P Series**

**Knobs, Molded Phenolic**



**PKA SERIES**



PKA50B1/4



PKA90B1/4

Tyco		Ribbed with Line Indicator on Skirt					
Electronics	Alcoswitch	A	B	C	D	E	F
1-1437624-1	PKA50B1/8	.795(20.2)	.580(14.7)	.540(13.7)	.080(2.03)	.450(11.4)	.590(15.0)
1-1437624-0	PKA50B1/4	.795(20.2)	.580(14.7)	.540(13.7)	.080(2.03)	.450(11.4)	.590(15.0)
1-1437624-4	PKA55B1/8	.780(19.8)	.580(14.7)	.475(12.1)	.135(3.43)	.585(14.9)	.675(17.2)
1-1437624-3	PKA55B1/4	.780(19.8)	.580(14.7)	.475(12.1)	.135(3.43)	.585(14.9)	.675(17.2)
1-1437624-5	PKA70B1/4	.980(24.9)	.740(18.8)	.680(17.3)	.118(3.00)	.650(16.5)	.750(19.1)
1-1437624-7	PKA90B1/4	1.375(34.9)	.970(24.6)	.670(17.0)	.195(4.95)	.750(19.1)	.840(21.3)



**PKAP SERIES**



PKAP50B1/8



PKAP90B1/4

Tyco		Ribbed with Skirt and Pointer with Indicator Line					
Electronics	Alcoswitch	A	B	C	D	E	F
1-1437624-8	PKAP50B1/4	.787(20.0)	.693(17.6)	.508(12.9)	.082(2.08)	.579(14.7)	.689(17.5)
1-1437624-9	PKAP50B1/8	.787(20.0)	.693(17.6)	.508(12.9)	.082(2.08)	.579(14.7)	.689(17.5)
2-1437624-0	PKAP70B1/4	.976(24.8)	.874(22.1)	.668(17.0)	.158(4.01)	.634(16.1)	.737(18.72)

**Knobs, Molded Phenolic**

**PKB SERIES**



PKB90B1/4



		Fluted with Indicator Line On Skirt					
Tyco Electronics	Alcoswitch	A	B	C	D	E	F
2-1437624-3	PKB70B1/4	1.12(28.3)	.750(19.1)	.670(17.0)	.118(3.0)	.490(12.5)	.600(15.2)
2-1437624-4	PKB90B1/4	1.50(38.1)	1.02(25.8)	.800(20.3)	.118(3.0)	.705(17.9)	.820(20.8)

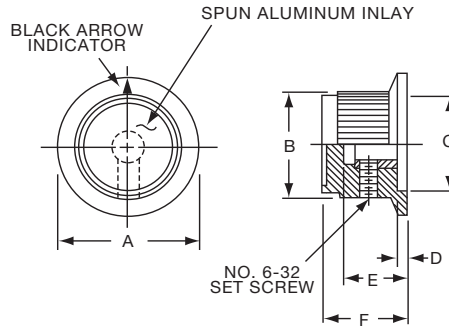
**PKD SERIES**



PKD60B1/4



PKD100B1/4



		Straight Knurl Aluminum Skirt w/Arrow Indicator					
Tyco Electronics	Alcoswitch	A	B	C	D	E	F
2-1437624-8	PKD60B1/8	.780(19.8)	.566(14.4)	.487(12.4)	.059(1.5)	.492(12.5)	.563(14.3)
2-1437624-7	PKD60B1/4	.780(19.8)	.566(14.4)	.487(12.4)	.059(1.5)	.492(12.5)	.563(14.3)
3-1437624-1	PKD70B1/4	1.02(25.9)	.750(19.1)	.700(17.8)	.080(2.0)	.490(12.5)	.610(15.5)
2-1437624-5	PKD100B1/4	1.29(32.8)	1.00(25.4)	.865(22.0)	.050(1.3)	.500(12.7)	.590(15.0)

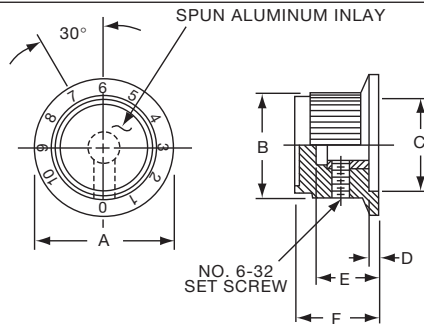
**PKD SERIES**



PKD60B101/8



PKD100B101/4



		Straight Knurl Skirt w/0-10 Numerals					
Tyco Electronics	Alcoswitch	A	B	C	D	E	F
3-1437624-0	PKD60B101/8	.780(19.8)	.566(14.4)	.487(12.4)	.059(1.5)	.492(12.5)	.563(14.3)
2-1437624-9	PKD60B101/4	.780(19.8)	.566(14.4)	.487(12.4)	.059(1.5)	.492(12.5)	.563(14.3)
3-1437624-2	PKD70B101/4	1.02(25.9)	.750(19.1)	.700(17.8)	.080(2.0)	.490(12.5)	.610(15.5)
2-1437624-6	PKD100B101/4	1.29(32.8)	1.00(25.4)	.865(22.0)	.050(1.3)	.500(12.7)	.590(15.0)

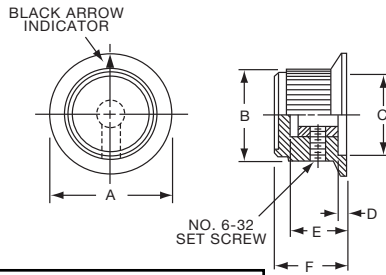
**K**

**P Series**

K14



**Knobs, Molded Phenolic**



**PKDT SERIES**



PKDT100B1/4

Tyco Black Spin Cap with "Diamond Cut" and Arrow Indicator							
Electronics	Alcoswitch	A	B	C	D	E	F
3-1437624-9	PKDT70B1/4	1.03(26.0)	.738(18.8)	.720(18.3)	.098(2.49)	.500(12.7)	.635(16.1)
3-1437624-3	PKDT100B1/4	1.29(32.8)	1.02(25.9)	.860(21.8)	.042(1.07)	.500(12.7)	.638(16.2)

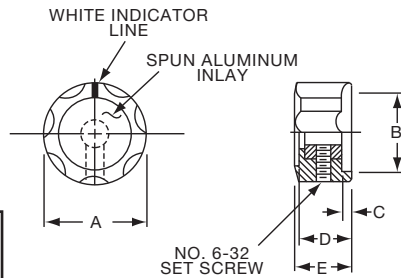


**PKDT SERIES**



PKDT100B101/4

Tyco Black Spin Cap with "Diamond Cut" & 0-10 Numerals							
Electronics	Alcoswitch	A	B	C	D	E	F
3-1437624-8	PKDT60B101/8	.778(19.8)	.605(15.4)	.560(12.5)	.060(1.53)	.392(9.96)	.562(14.3)
4-1437624-0	PKDT70B101/4	1.03(26.0)	.738(18.8)	.720(18.3)	.098(2.49)	.500(12.7)	.635(16.1)
3-1437624-4	PKDT100B101/4	1.29(32.8)	1.02(25.9)	.860(21.8)	.042(1.07)	.500(12.7)	.638(16.2)



**PKE SERIES**



PKE90B1/4

Tyco Fluted with Indicator Line					
Electronics	Alcoswitch	A	B	C	E
4-1437624-4	PKE60B1/8	.626(15.9)	.472(12.0)	.091(2.31)	.394(10.0)
4-1437624-3	PKE60B1/4	.626(15.9)	.472(12.0)	.091(2.31)	.394(10.0)
4-1437624-5	PKE90B1/4	.890(22.6)	.724(18.4)	.098(2.49)	.480(12.2)



**PKES SERIES**



PKES60B1/4

PKES70B1/4

Tyco Fluted with Skirt and Indicator Line							
Electronics	Alcoswitch	A	B	C	D	E	F
5-1437624-1	PKES60B1/8	.748(19.0)	.618(15.7)	.460(11.7)	.090(2.29)	.370(9.40)	.470(11.9)
5-1437624-0	PKES60B1/4	.748(19.0)	.618(15.7)	.460(11.7)	.090(2.29)	.370(9.40)	.470(11.9)
5-1437624-2	PKES70B1/4	.855(21.7)	.744(18.9)	.705(17.9)	.080(2.03)	.421(10.7)	.526(13.4)
5-1437624-3	PKES90B1/4	1.01(25.7)	.889(22.6)	.846(21.5)	.079(2.01)	.421(10.7)	.570(14.5)
4-1437624-6	PKES120B1/4	1.30(32.9)	1.16(29.5)	1.02(25.9)	.118(3.00)	.500(12.7)	.628(16.0)
4-1437624-7	PKES140B1/4	1.50(38.1)	1.37(34.9)	1.22(30.9)	.118(3.00)	.540(13.7)	.693(17.6)
4-1437624-8	PKES150B1/4	1.77(44.9)	1.55(39.4)	1.41(35.9)	.118(3.00)	.733(18.6)	.831(21.1)

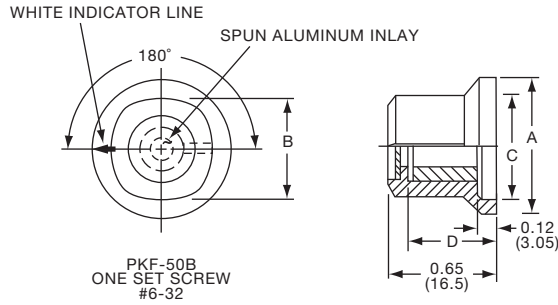


**Knobs, Molded Phenolic**

**PKF SERIES**



PKF50B1/8

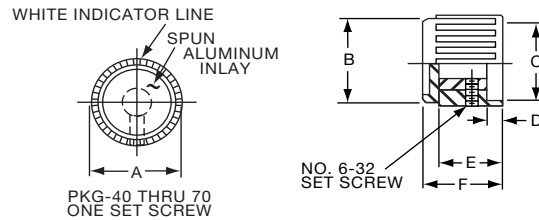


Tyco Plain Quadrate with Indicator Line & Arrow						
Electronics	Alcoswitch	A	B	C	D	
5-1437624-5	PKF50B1/8	.670(17.0)	.454(11.53)	.570(14.48)	.520(13.2)	

**PKG SERIES**



PKG40B1/8

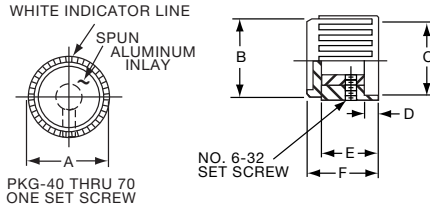


Tyco Ribbed with Indicator Line							
Electronics	Alcoswitch	A	B	C	D	E	F
5-1437624-9	*PKG40B1/8	.437(11.1)	.410(10.4)	.304(7.72)	.079(2.00)	.385(9.78)	.472(12.0)
6-1437624-1	PKG50B1/8	.551(14.0)	.500(12.7)	.442(10.7)	.056(1.42)	.395(10.03)	.512(13.0)
6-1437624-0	PKG50B1/4	.551(14.0)	.500(12.7)	.442(10.7)	.056(1.42)	.395(10.03)	.512(13.0)

\*Note: Knob uses #4-40 set screw

**Knobs, Molded Phenolic**

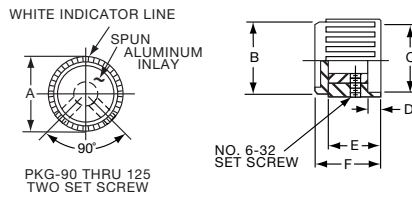
**PKG SERIES**



PKG70B1/8

Tyco		Ribbed with Indicator Line					
Electronics	Alcoswitch	A	B	C	D	E	F
6-1437624-6	PKG60B1/8	.660(16.8)	.615(15.6)	.551(14.0)	.080(2.03)	.430(10.9)	.551(14.0)
6-1437624-5	PKG60B1/4	.660(16.8)	.615(15.6)	.551(14.0)	.080(2.03)	.430(10.9)	.551(14.0)
6-1437624-8	PKG70B1/8	.740(18.8)	.698(17.7)	.591(15.0)	.080(2.03)	.453(11.5)	.559(14.2)
6-1437624-7	PKG70B1/4	.740(18.8)	.698(17.7)	.591(15.0)	.080(2.03)	.453(11.5)	.559(14.2)

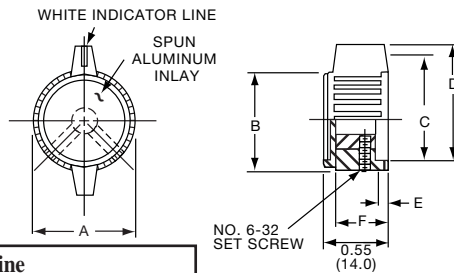
**PKG SERIES**



PKG90B1/4

Tyco		Ribbed with Indicator Line					
Electronics	Alcoswitch	A	B	C	D	E	F
7-1437624-0	PKG90B1/8	.862(21.9)	.811(20.6)	.710(18.0)	.080(2.03)	.450(11.4)	.550(13.97)
6-1437624-9	PKG90B1/4	.862(21.9)	.811(20.6)	.710(18.0)	.080(2.03)	.450(11.4)	.550(13.97)
5-1437624-7	PKG100B1/4	1.055(26.80)	1.01(25.5)	.920(23.4)	.080(2.03)	.430(10.9)	.555(14.1)
5-1437624-8	PKG125B1/4	1.248(31.70)	1.20(30.4)	.690(17.5)	.080(2.03)	.430(10.9)	.565(14.4)

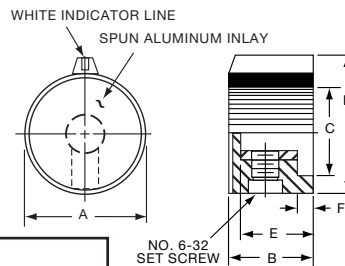
**PKGP SERIES**



PKGP70B1/4

Tyco		Ribbed with Bar Pointers and Indicator Line					
Electronics	Alcoswitch	A	B	C	D	E	F
7-1437624-2	PKGP70B1/4	.740(18.8)	.700(17.8)	.590(15.0)	.990(25.2)	.080(2.03)	.460(11.7)
7-1437624-3	PKGP90B1/4	.860(21.8)	.810(20.6)	.700(17.8)	1.28(32.5)	.080(2.03)	.460(11.7)
7-1437624-1	PKGP100B1/4	1.05(26.2)	1.00(25.4)	.900(22.9)	1.62(41.2)	.080(2.03)	.480(12.2)

**PKJ SERIES**



PKJ50B1/8

Tyco		Straight Knurl with Bar Pointers and Indicator Line					
Electronics	Alcoswitch	A	B	C	D	E	F
7-1437624-5	PKJ50B1/8	.500(12.7)	.512(13.0)	.420(10.7)	.577(14.7)	.429(10.9)	.113(2.9)
7-1437624-4	*PKJ50B1/4	.500(12.7)	.512(13.0)	.420(10.7)	.577(14.7)	.429(10.9)	.113(2.9)
7-1437624-6	PKJ60B1/4	.630(16.0)	.530(13.5)	.468(11.9)	.758(19.3)	.440(11.2)	.110(2.8)
7-1437624-7	PKJ70B1/4	.760(19.3)	.555(14.1)	.545(13.8)	.915(23.2)	.450(11.4)	.118(3.0)

\*Note: Knob uses #4-40 set screw



PKJ70B1/4

**Knobs, Molded Phenolic**

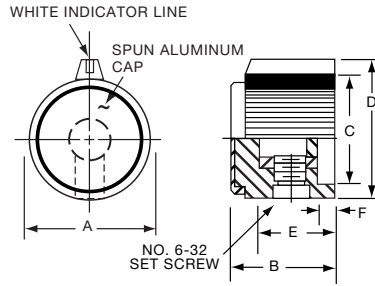
**PKJT SERIES**



PKJT50B1/4



PKJT70B1/4



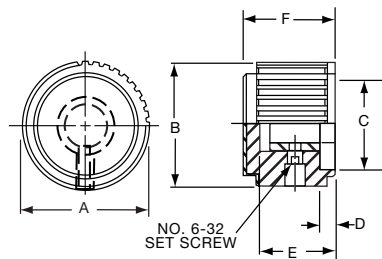
Straight Knurl with Bar Pointer & Indicator Line and Aluminum Spin Cap							
Tyco							
Electronics	Alcoswitch	A	B	C	D	E	F
7-1437624-9	PKJT50B1/8	.515(13.1)	.585(14.9)	.350(8.89)	.595(15.1)	.414(10.5)	.130(3.30)
7-1437624-8	*PKJT50B1/4	.515(13.1)	.585(14.9)	.350(8.89)	.595(15.1)	.414(10.5)	.130(3.30)
8-1437624-0	PKJT60B1/4	.640(16.3)	.605(15.4)	.470(11.9)	.760(19.3)	.445(11.3)	.118(3.00)
8-1437624-1	PKJT70B1/4	.760(19.3)	.625(15.9)	.550(14.0)	.915(23.2)	.445(11.3)	.118(3.00)

\*Knob uses #4-40 set screw.

**PKNT SERIES**



PKNT60B1/4

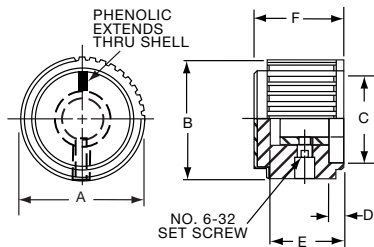


Black Spin Cap with "Diamond Cut" Less Indicator							
Tyco							
Electronics	Alcoswitch	A	B	C	D	E	F
8-1437624-6	PKNT60B1/8	.591(15.0)	.579(14.7)	.394(10.0)	.079(2.01)	.394(10.0)	.472(11.9)
8-1437624-5	PKNT60B1/4	.591(15.0)	.579(14.7)	.394(10.0)	.079(2.01)	.394(10.0)	.472(11.9)
8-1437624-7	PKNT70B1/4	.787(19.9)	.764(19.4)	.571(14.5)	.098(2.49)	.492(12.5)	.591(14.7)
8-1437624-8	PKNT90B1/4	.984(25.0)	.957(24.3)	.748(19.0)	.098(2.49)	.591(15.0)	.689(17.5)

**PKN SERIES**



PKN60B1/8



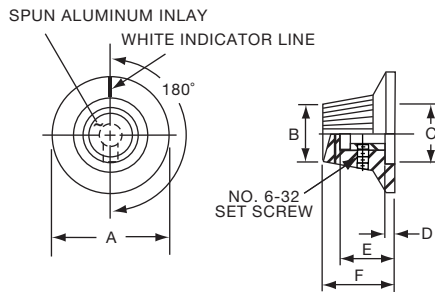
Line Indicator on Natural Aluminum Spin Cap							
Tyco							
Electronics	Alcoswitch	A	B	C	D	E	F
8-1437624-2	PKN60B1/8	.591(15.0)	.579(14.7)	.394(10.0)	.079(2.01)	.394(10.0)	.453(11.5)
	PKN60B1/4	.591(15.0)	.579(14.7)	.394(10.0)	.079(2.01)	.394(10.0)	.453(11.5)
8-1437624-3	PKN70B1/4	.787(20.0)	.764(19.4)	.571(14.5)	.098(2.49)	.492(12.5)	.591(15.0)
8-1437624-4	PKN90B1/4	.984(25.0)	.957(24.3)	.748(19.0)	.098(2.49)	.591(15.0)	.689(17.5)

**K**

P Series

**Knobs, Molded Phenolic**

PKS SERIES



PKS1104B1/4

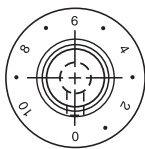
Tyco		Straight Knurl with Indicator Line on Skirt					
Electronics	Alcoswitch	A	B	C	D	E	F
9-1437624-5	PKS1104B1/4	1.12(28.5)	.567(14.4)	.620(15.8)	.090(2.29)	.510(12.95)	.670(17.0)

PKS SERIES

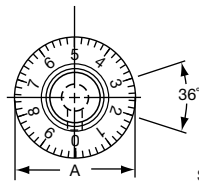
Tyco		Straight Knurl Aluminum Skirt Has Line or 0-9 Numbers						
Electronics	Alcoswitch	A	B	C	D	E	F	Marking
9-1437624-4	PKS1103B101/4	1.17(29.6)	.571(14.5)	.620(15.7)	.098(2.49)	.516(13.1)	.670(17.0)	Numbers
9-1437624-7	PKS1106B1/4	1.17(29.6)	.571(14.5)	.618(15.7)	.098(2.49)	.516(13.1)	.670(17.0)	Line
9-1437624-6	PKS1105B101/4	1.17(29.6)	.571(14.5)	.618(15.7)	.098(2.49)	.516(13.1)	.670(17.0)	Numbers



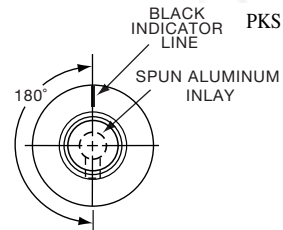
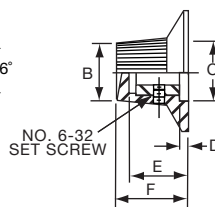
PKS1106B1/4



PKS1103B101/4

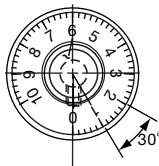


PKS1105B101/4

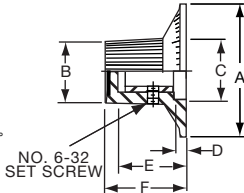


PKS SERIES

SPUN ALUMINUM INLAY



0-10



+5-5



0-9



Indicator Line



PKS1132B51/4

Tyco		Choice of Indicator Line or 0-9, 0-10, -5+5 Numerals						
Electronics	Alcoswitch	A	B	C	D	E	F	Marking
1437625-1	PKS1132B51/4	1.18(30.0)	.551(14.0)	.551(14.0)	.118(30.0)	.615(15.62)	.748(19.0)	+5-0-5
1437625-2	PKS1132B91/4	1.18(30.0)	.551(14.0)	.551(14.0)	.118(30.0)	.615(15.62)	.748(19.0)	0-9
9-1437624-9	PKS1132B101/4	1.18(30.0)	.551(14.0)	.551(14.0)	.118(30.0)	.615(15.62)	.748(19.0)	0-10
9-1437624-8	*PKS1132B1/4	1.18(30.0)	.551(14.0)	.551(14.0)	.118(30.0)	.615(15.62)	.748(19.0)	Indicator Line

\*1 Set screw 180° from indicator line.



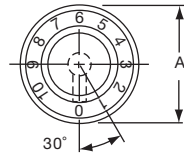
PKS1132B91/4

**Knobs, Molded Phenolic**

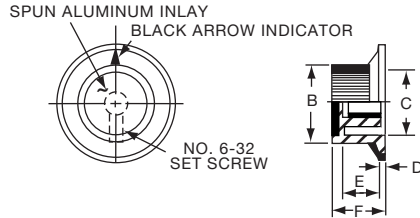
**PKS SERIES**



PKS90B1/4



PKS90B101/4

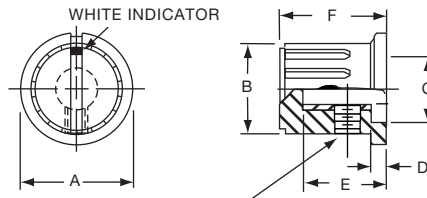


Tyco Straight Knurl with Aluminum Skirt Choice of Arrow or 1-10 Numbers									
Electronics	Alcoswitch	A	B	C	D	E	F	Marking	
1437625-5	PKS90B1/4	1.42(36.1)	.917(23.3)	.780(19.8)	.065(1.65)	.490(12.5)	.596(15.1)	Arrow	
1437625-6	PKS90B101/4	1.42(36.1)	.917(23.3)	.780(19.8)	.065(1.65)	.490(12.5)	.596(15.1)	Numbers	

**PKX SERIES**



PKX50B1/8



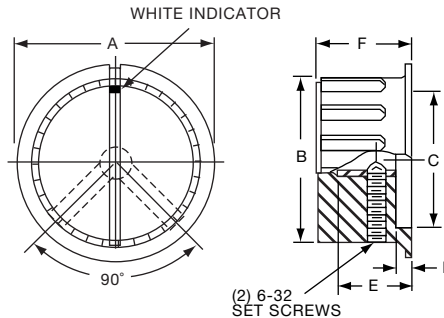
(1) 6-32 SET SCREW EXCEPT PKX-50B, (1) 4-40

Tyco Ribbed Body, Matte Finish with White Square Indicator on Top							
Electronics	Alcoswitch	A	B	C	D	E	F
1-1437625-5	PKX50B1/8	.590(15.0)	.472(12.0)	.374(9.49)	.059(1.50)	.463(11.76)	.551(14.0)
1-1437625-4	PKX50B1/4	.590(15.0)	.472(12.0)	.374(9.49)	.059(1.50)	.463(11.76)	.551(14.0)
1-1437625-7	PKX60B1/8	.787(20.0)	.625(15.9)	.472(12.0)	.078(1.98)	.510(13.0)	.598(15.2)
1-1437625-6	PKX60B1/4	.787(20.0)	.625(15.9)	.472(12.0)	.078(1.98)	.510(13.0)	.598(15.2)

**PKX SERIES**



PKX110B1/4



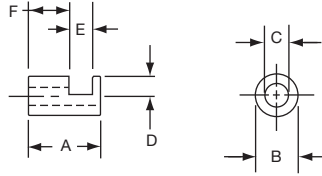
Tyco Ribbed Body, Matte Finish with White Square Indicator on Top							
Electronics	Alcoswitch	A	B	C	D	E	F
1-1437625-1	PKX100B1/4	1.17(29.7)	.970(24.6)	.780(19.81)	.114(2.90)	.570(14.48)	.674(17.12)
1-1437625-2	PKX110B1/4	1.37(34.8)	1.120(28.45)	.940(23.88)	.100(2.54)	.527(13.38)	.705(17.91)
1-1437625-3	PKX130B1/4	1.57(40.0)	1.308(33.22)	1.09(27.6)	.118(3.00)	.623(15.82)	.750(19.05)

K

P Series

**Knob Accessories**

ACCESSORIES



KR1

Tyco		Shaft Hole Size Adaptors					
Electronics	Alcoswitch	A	B	C	D	E	F
9-1437627-6	KR1 (1/4"TO1/8")	.374(9.50)	.250(6.35)	.128(3.25)	.122(3.10)	.217(5.51)	.122(3.10)
9-1437627-7	KR2 (1/4"TO3/16")	.375(9.53)	.250(6.35)	.190(4.83)	.122(3.10)	.216(5.49)	.123(3.12)
9-1437627-8	KR3 (1/4"TO4MM)	.375(9.53)	.248(6.30)	.161(4.09)	.122(3.10)	.216(5.49)	.123(3.12)

**Engineering Notes**



**K**

Engineering Notes

K22

Catalog 1308390  
Issued 9-04

[www.tycoelectronics.com](http://www.tycoelectronics.com)

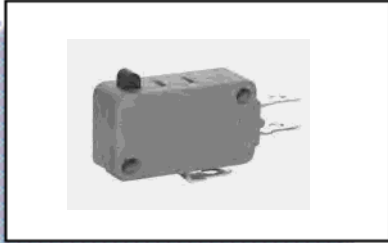
Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752  
Canada: 1-905-470-4425  
Mexico: 01-800-733-8926  
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514  
Hong Kong: 852-2735-1628  
Japan: 81-44-844-8013  
UK: 44-141-810-8967

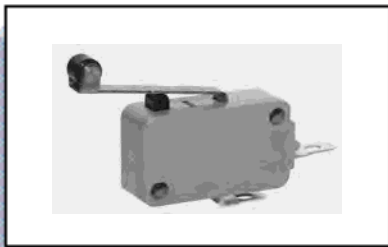




*Miniature Pin Plunger - Page L3*



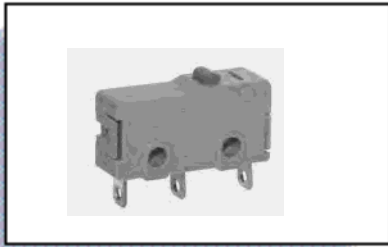
*Miniature Lever - Page L5*



*Miniature Roller - Page L7*



*Miniature Simulator Lever - Page L9*



*Subminiature Pin Plunger - Page L11*



*Subminiature Lever - Page L11*



*Subminiature Roller - Page L12*



*Subminiature Simulator Lever - Page*

# Microswitches

**Microswitches Part Number Index**

1478600-1	.....L11	1478610-2	.....L4	1478619-4	.....L6
1478600-2	.....L11	1478610-3	.....L5	1478619-5	.....L7
1478600-3	.....L11	1478610-4	.....L6	1478619-6	.....L8
1478600-4	.....L12	1478610-5	.....L7	1478619-7	.....L9
1478600-5	.....L12	1478610-6	.....L8	1478620-1	.....L3
1478601-1	.....L11	1478610-7	.....L9	1478620-2	.....L4
1478601-2	.....L11	1478611-1	.....L3	1478620-3	.....L5
1478601-3	.....L11	1478611-2	.....L4	1478620-4	.....L6
1478601-4	.....L12	1478611-3	.....L5	1478620-5	.....L7
1478601-5	.....L12	1478611-4	.....L6	1478620-6	.....L8
1478602-1	.....L11	1478611-5	.....L7	1478620-7	.....L9
1478602-2	.....L11	1478611-6	.....L8	1478667-1	.....L3
1478602-3	.....L11	1478611-7	.....L9	1478667-2	.....L4
1478602-4	.....L12	1478612-1	.....L3	1478667-3	.....L5
1478602-5	.....L12	1478612-2	.....L4	1478667-4	.....L6
1478603-1	.....L3	1478612-3	.....L5	1478667-5	.....L7
1478603-2	.....L4	1478612-4	.....L6	1478667-6	.....L8
1478603-3	.....L5	1478612-5	.....L7	1478667-7	.....L9
1478603-4	.....L6	1478612-6	.....L8	1478668-1	.....L3
1478603-5	.....L7	1478612-7	.....L9	1478668-2	.....L4
1478603-6	.....L8	1478613-1	.....L3	1478668-3	.....L5
1478603-7	.....L9	1478613-2	.....L4	1478668-4	.....L6
1478604-1	.....L3	1478613-3	.....L5	1478668-5	.....L7
1478604-2	.....L4	1478613-4	.....L6	1478668-6	.....L8
1478604-3	.....L5	1478613-5	.....L7	1478668-7	.....L9
1478604-4	.....L6	1478613-6	.....L8	1478669-1	.....L3
1478604-5	.....L7	1478613-7	.....L9	1478669-2	.....L4
1478604-6	.....L8	1478614-1	.....L3	1478669-3	.....L5
1478604-7	.....L9	1478614-2	.....L4	1478669-4	.....L6
1478605-1	.....L3	1478614-3	.....L5	1478669-5	.....L7
1478605-2	.....L4	1478614-4	.....L6	1478669-6	.....L8
1478605-3	.....L5	1478614-5	.....L7	1478669-7	.....L9
1478605-4	.....L6	1478614-6	.....L8	1478670-1	.....L3
1478605-5	.....L7	1478614-7	.....L9	1478670-2	.....L4
1478605-6	.....L8	1478615-1	.....L3	1478670-3	.....L5
1478605-7	.....L9	1478615-2	.....L4	1478670-4	.....L6
1478606-1	.....L3	1478615-3	.....L5	1478670-5	.....L7
1478606-2	.....L4	1478615-4	.....L6	1478670-6	.....L8
1478606-3	.....L5	1478615-5	.....L7	1478670-7	.....L9
1478606-4	.....L6	1478615-6	.....L8	1478671-1	.....L3
1478606-5	.....L7	1478615-7	.....L9	1478671-2	.....L4
1478606-6	.....L8	1478616-1	.....L3	1478671-3	.....L5
1478606-7	.....L9	1478616-2	.....L4	1478671-4	.....L6
1478607-1	.....L3	1478616-3	.....L5	1478671-5	.....L7
1478607-2	.....L4	1478616-4	.....L6	1478671-6	.....L8
1478607-3	.....L5	1478616-5	.....L7	1478671-7	.....L9
1478607-4	.....L6	1478616-6	.....L8	1478672-1	.....L3
1478607-5	.....L7	1478616-7	.....L9	1478672-2	.....L4
1478607-6	.....L8	1478617-1	.....L3	1478672-3	.....L5
1478607-7	.....L9	1478617-2	.....L4	1478672-4	.....L6
1478608-1	.....L3	1478617-3	.....L5	1478672-5	.....L7
1478608-2	.....L4	1478617-4	.....L6	1478672-6	.....L8
1478608-3	.....L5	1478617-5	.....L7	1478672-7	.....L9
1478608-4	.....L6	1478617-6	.....L8		
1478608-5	.....L7	1478617-7	.....L9		
1478608-6	.....L8	1478618-1	.....L3		
1478608-7	.....L9	1478618-2	.....L4		
1478609-1	.....L3	1478618-3	.....L5		
1478609-2	.....L4	1478618-4	.....L6		
1478609-3	.....L5	1478618-5	.....L7		
1478609-4	.....L6	1478618-6	.....L8		
1478609-5	.....L7	1478618-7	.....L9		
1478609-6	.....L8	1478619-1	.....L3		
1478609-7	.....L9	1478619-2	.....L4		
1478610-1	.....L3	1478619-3	.....L5		

**Miniature Microswitch Introduction**

Alcoswitch miniature microswitches are offered with many options to suit most typical applications.

These switches are available in a current range from 16A to .1A. Additional options available throughout the different current ratings include:

- Pin Plunger**
- Short, normal and long lever**
- Short and normal roller**
- Simulated lever**
- SPDT, SPNO and SPNC circuitry**

Within the 16A range, in addition to two different terminal options, there are three different actuation force options.

You can count on this offering of switches to be high reliability and low cost to fulfill your basic microswitch needs. Of course if you need something custom, we can offer that also. Contact your Tyco Electronics sales engineer for details.

**Technical Information**

**Performance Information**

Amp Rating	16	5	0.1
Insulation Resistance	Min. 100M ohm		
Contact Resistance	max 15M ohm		Max 50M ohm
Dielectric Strength	Between Non-consecutive terminals	AC 2,000V	
	Between each terminal & earth	AC 2,000V	
Operating Speed	0.2mm/sec - 1,000mm/sec		1mm/sec - 500mm/sec
Max Allowed Mechanical Open/close Frequencies	600 Cycles/min		300 Cycles/min
Shock Resistance (without lever)	300mm/sec <sup>2</sup> (approx 30G)		
Vibration Resistance (without lever)	1.5mm 10 - 55Hz (2Hr)		1.5mm 10 - 20Hz (2Hr)
Electrical Life	100,000 Operations at rated load (max 20 Operations/min)		1,000,000 Operations
Mechanical Life	10,000,000 operations (Max 200 operations/min)		
Safety Approval	UL / CSA / VDE		
Operating Temperature Range	-20°C to +130°C RH85% Max		-30°C to +130°C RH90% Max

See drawings for DC ratings.

**Materials**

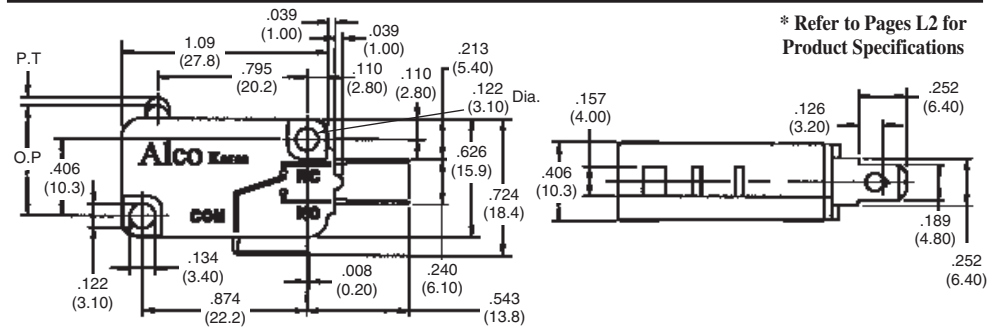
	5 & 16A	.1A
Case and Cover	P.B.T Resin, UL 94 V-0	P.B.T Resin, UL 94 V-0
Movable Contact	Brass, Silver Plated	Phosphor Bronze
Guide Plate	Brass, Silver Plated	Brass, Silver Plated
Plate Spring	Beryllium Copper	Beryllium Copper
Terminal Aid	Brass	Brass
Contact	Silver Alloy	Gold Alloy
Common Terminal	Brass, Silver Plated	Brass, Silver Plated
Terminals	Brass, Silver Plated	Brass
Actuator	Phenolic Resin, UL 94 V-0	Phenolic Resin, UL 94 V-0
Lever	Stainless Steel	Stainless Steel

**Spade/Solder Type Terminal**



**Product Facts**

- n .187 [4.75] tab with solder hole
- n Use .187 [4.75] FASTON receptacles or solder wire directly to terminal



\* Refer to Pages L2 for Product Specifications

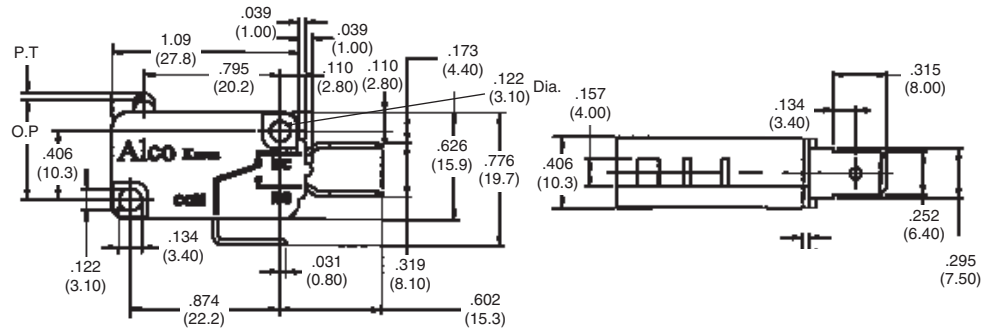
AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478603-1
		200g	50g					1478604-1
		300g	70g					1478605-1
	SPNC	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478609-1
		200g	50g					1478610-1
		300g	70g					1478611-1
SPNO	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478615-1	
	200g	50g					1478616-1	
	300g	70g					1478617-1	
5	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478667-1
	SPNC							1478668-1
	SPNO							1478669-1
0.1	SPDT	60g	12g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478670-1
	SPNC							1478671-1
	SPNO							1478672-1

**Spade Type Terminal**



**Product Facts**

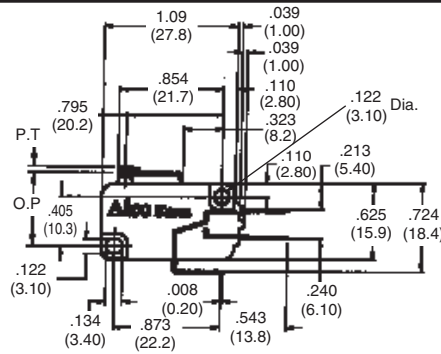
- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles



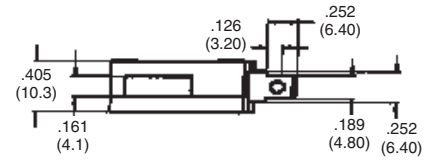
AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478606-1
		200g	50g					1478607-1
		300g	70g					1478608-1
	SPNC	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478612-1
		200g	50g					1478613-1
		300g	70g					1478614-1
SPNO	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478618-1	
	200g	50g					1478619-1	
	300g	70g					1478620-1	

**Miniature Short Lever**

**Spade/Solder Type Terminal**



\* Refer to Pages L2 for Product Specifications

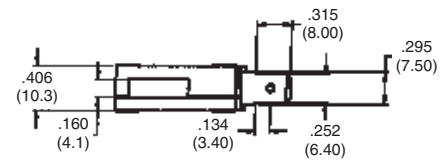
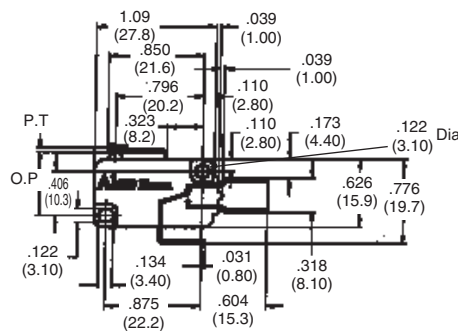


**Product Facts**

- n .187 [4.75] tab with solder hole
- n Use .187 [4.75] FASTON receptacles or solder wire directly to terminal
- n Short lever to increase operating position

AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478603-2
		200g	50g					1478604-2
		330g	70g					1478605-2
	SPNC	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478609-2
		200g	50g					1478610-2
		330g	70g					1478611-2
SPNO	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478615-2	
	200g	50g					1478616-2	
	330g	70g					1478617-2	
5	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478667-2
	SPNC							1478668-2
	SPNO							1478669-2
0.1	SPDT	60g	12g	1.6 m/m [.063]	14.8 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478670-2
	SPNC							1478671-2
	SPNO							1478672-2

**Spade Type Terminal**



**Product Facts**

- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles
- n Short lever to increase operating positions

AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	120g	20g	1.6 m/m [.063]	15.4 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478606-2
		200g	50g					1478607-2
		330g	70g					1478608-2
	SPNC	120g	20g	1.6 m/m [.063]	15.4 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478612-2
		200g	50g					1478613-2
		330g	70g					1478614-2
SPNO	120g	20g	1.6 m/m [.063]	15.4 ±0.4 [.606±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478618-2	
	200g	50g					1478619-2	
	330g	70g					1478620-2	

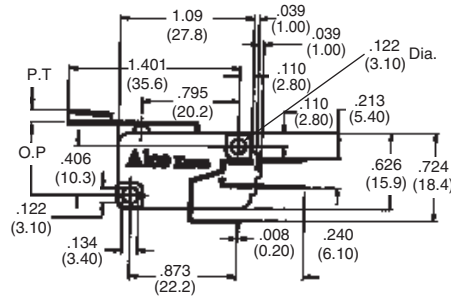
**Miniature Normal Lever**

**Spade/Solder Type Terminal**

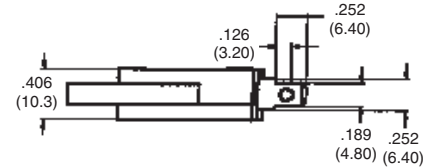


**Product Facts**

- n .187 [4.75] tab with solder hole
- n Use .187 [4.75] FASTON receptacles or solder wire directly to terminal
- n Lever to increase travel and operating position as well as reduce operating force

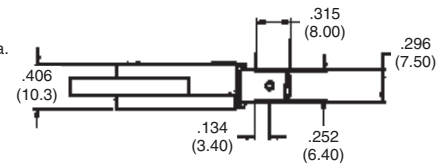
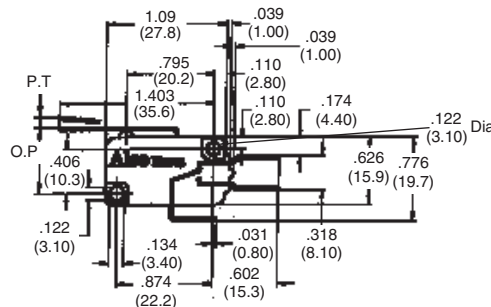


\* Refer to Pages L2 for Product Specifications



AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	60g	10g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478603-3
		120g	20g	[.157]	[.606±.055]	[.051]	[.047]	1478604-3
		180g	30g					1478605-3
	SPNC	60g	10g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478609-3
		120g	20g	[.157]	[.606±.055]	[.051]	[.047]	1478610-3
		180g	30g					1478611-3
SPNO	60g	10g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478615-3	
	120g	20g	[.157]	[.606±.055]	[.051]	[.047]	1478616-3	
	180g	30g					1478617-3	
5	SPDT							1478667-3
	SPNC	60g	10g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478668-3
	SPNO			[.157]	[.606±.055]	[.051]	[.047]	1478669-3
0.1	SPDT							1478670-3
	SPNC	35g	6g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478671-3
	SPNO			[.157]	[.606±.055]	[.051]	[.047]	1478672-3

**Spade Type Terminal**



**Product Facts**

- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles
- n Lever to increase travel and operating position as well as reduce operating force

AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	60g	10g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478606-3
		120g	20g	[.157]	[.606±.055]	[.051]	[.047]	1478607-3
		180g	30g					1478608-3
	SPNC	60g	10g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478612-3
		120g	20g	[.157]	[.606±.055]	[.051]	[.047]	1478613-3
		180g	30g					1478614-3
SPNO	60g	10g	4.0 m/m	15.4 ±1.4	1.3 m/m	1.2 m/m	1478618-3	
	120g	20g	[.157]	[.606±.055]	[.051]	[.047]	1478619-3	
	180g	30g					1478620-3	

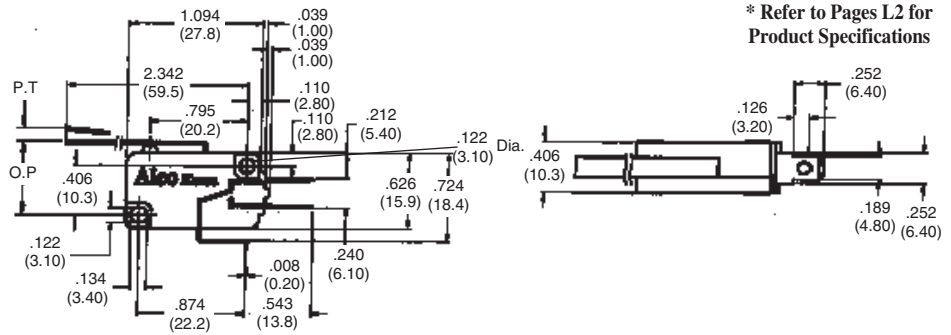
**Miniature Long Lever**

**Spade/Solder Type Terminal**



**Product Facts**

- n .187 [4.75] tab with solder holes
- n Use .187 [4.75] FASTON receptacles or solder wire directly to terminal
- n Long lever to increase travel and reduce operating force



\* Refer to Pages L2 for Product Specifications

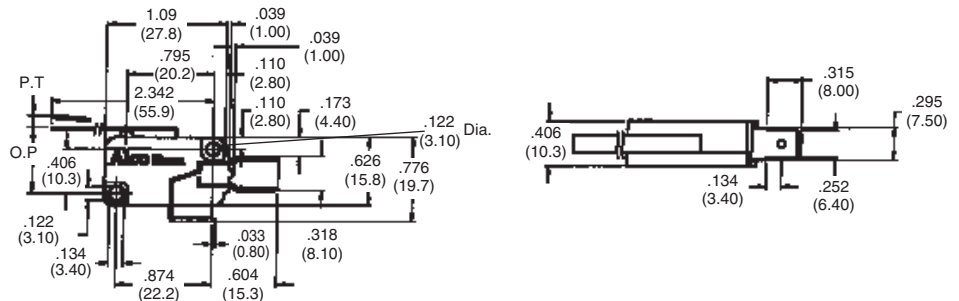
AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	30g	5g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478603-4
		60g	10g					1478604-4
		90g	15g					1478605-4
	SPNC	30g	5g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478609-4
		60g	10g					1478610-4
		90g	15g					1478611-4
SPNO	30g	5g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478615-4	
	60g	10g					1478616-4	
	90g	15g					1478617-4	
5	SPDT	30g	5g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478667-4
	SPNC							1478668-4
	SPNO							1478669-4
0.1	SPDT	15g	3g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478670-4
	SPNC							1478671-4
	SPNO							1478672-4

**Spade Type Terminal**



**Product Facts**

- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles
- n Long lever to increase travel and reduce operating force



AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	30g	5g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478606-4
		60g	10g					1478607-4
		90g	15g					1478608-4
	SPNC	30g	5g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478612-4
		60g	10g					1478613-4
		90g	15g					1478614-4
SPNO	30g	5g	7.5 m/m [.295]	15.4 ±3.0 [.606±.118]	2.6 m/m [.102]	2.4 m/m [.094]	1478618-4	
	60g	10g					1478619-4	
	90g	15g					1478620-4	



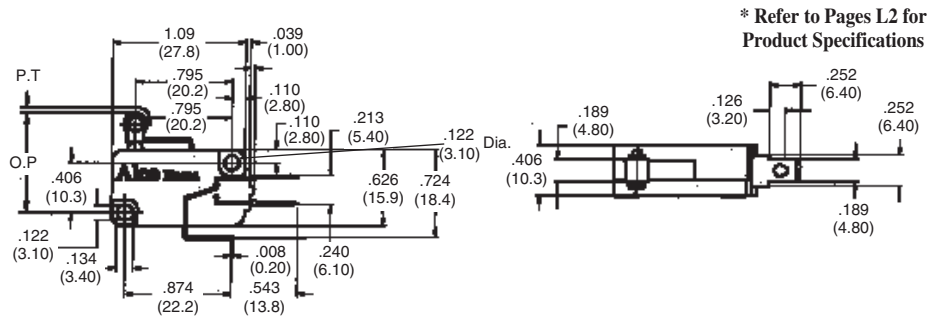
**Miniature Short Roller**

**Spade/Solder Type Terminal**



**Product Facts**

- n .187 [4.75] tab with solder holes
- n Use .187 [4.75] FASTON receptacles or solder wire directly to terminal
- n Short roller to increase operating force and position



\* Refer to Pages L2 for Product Specifications

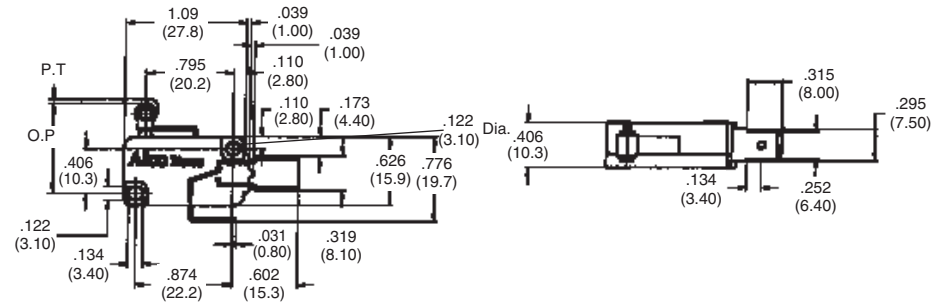
AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	140g	20g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478603-5
		240g	50g	[.063]	[.815±.003]	[.031]	[.016]	1478604-5
		350g	70g					1478605-5
	SPNC	140g	20g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478609-5
		240g	50g	[.063]	[.815±.003]	[.031]	[.016]	1478610-5
		350g	70g					1478611-5
SPNO	140g	20g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478615-5	
	240g	50g	[.063]	[.815±.003]	[.031]	[.016]	1478616-5	
	350g	70g					1478617-5	
5	SPDT	140g	20g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478667-5
	SPNC							1478668-5
	SPNO							1478669-5
0.1	SPDT	60g	12g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478670-5
	SPNC							1478671-5
	SPNO							1478672-5

**Spade Type Terminal**



**Product Facts**

- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles
- n Short roller to increase operating force and position



AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	140g	20g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478606-5
		240g	50g	[.063]	[.815±.003]	[.031]	[.016]	1478607-5
		350g	70g					1478608-5
	SPNC	140g	20g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478612-5
		240g	50g	[.063]	[.815±.003]	[.031]	[.016]	1478613-5
		350g	70g					1478614-5
SPNO	140g	20g	1.6 m/m	20.7 ±0.8	0.8 m/m	0.4 m/m	1478618-5	
	240g	50g	[.063]	[.815±.003]	[.031]	[.016]	1478619-5	
	350g	70g					1478620-5	

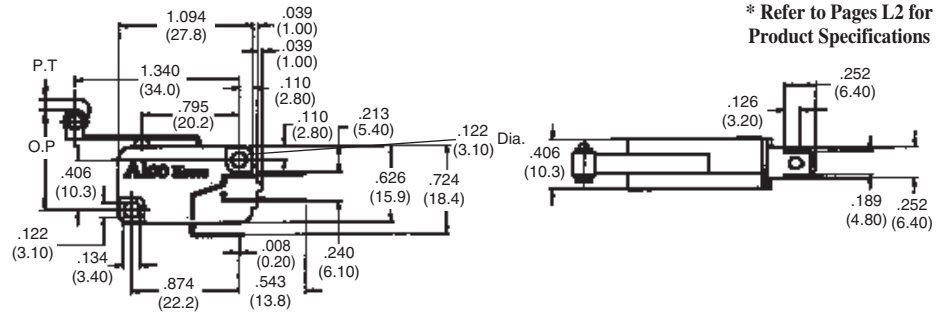
**Miniature Normal Roller**

**Spade/Solder Type Terminal**



**Product Facts**

- n .187 [4.75] tab with solder hole
- n Use with .187 [4.75] FASTON receptacles or solder directly to terminal
- n Roller to increase travel and operating position as well as reduce operating force



\* Refer to Pages L2 for Product Specifications

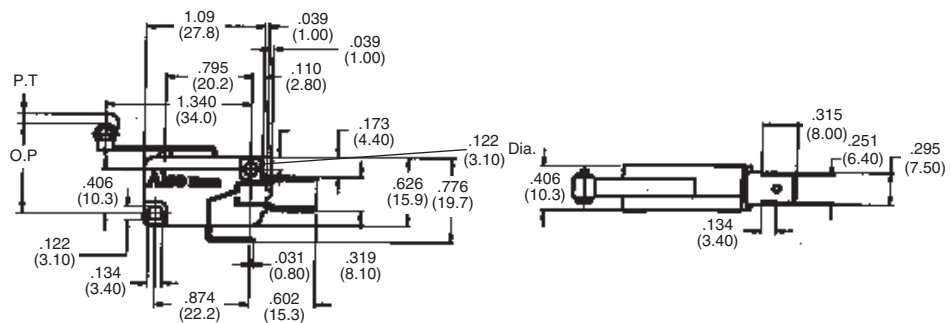
AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	60g	10g	4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478603-6
		120g	20g	[.157]	[.815±.063]	[.051]	[.047]	1478604-6
		180g	30g					1478605-6
	SPNC	60g	10g	4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478609-6
		120g	20g	[.157]	[.815±.063]	[.051]	[.047]	1478610-6
		180g	30g					1478611-6
SPNO	60g	10g	4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478615-6	
	120g	20g	[.157]	[.815±.063]	[.051]	[.047]	1478616-6	
	180g	30g					1478617-6	
5	SPDT			4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478667-6
	SPNC	60g	10g	[.157]	[.815±.063]	[.051]	[.047]	1478668-6
	SPNO							1478669-6
0.1	SPDT			4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478670-6
	SPNC	35g	6g	[.157]	[.815±.063]	[.051]	[.047]	1478671-6
	SPNO							1478672-6

**Spade Type Terminal**



**Product Facts**

- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles
- n Roller to increase travel and operating position as well as reduce operating force



AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	60g	10g	4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478606-6
		120g	20g	[.157]	[.815±.063]	[.051]	[.047]	1478607-6
		180g	30g					1478608-6
	SPNC	60g	10g	4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478612-6
		120g	20g	[.157]	[.815±.063]	[.051]	[.047]	1478613-6
		180g	30g					1478614-6
SPNO	60g	10g	4.0 m/m	20.7 ±1.6	1.3 m/m	1.2 m/m	1478618-6	
	120g	20g	[.157]	[.815±.063]	[.051]	[.047]	1478619-6	
	180g	30g					1478620-6	

**Miniature Simulator Lever**

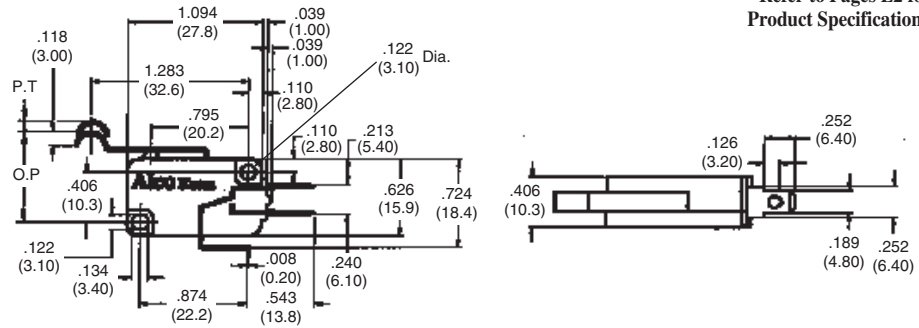
\* Refer to Pages L2 for Product Specifications

**Spade/Solder Type Terminal**



**Product Facts**

- n .187 [4.75] tab with solder hole
- n Use .187 [4.75] FASTON receptacles or solder directly to terminal
- n Simulator lever for operating position between a roller and a lever



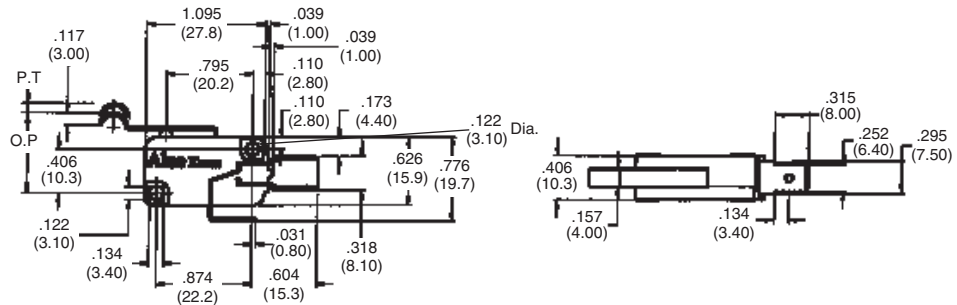
AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	60g	10g	4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478603-7
		120g	20g	[.157]	[.732±.059]	[.051]	[.047]	1478604-7
		180g	30g					1478605-7
	SPNC	60g	10g	4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478609-7
		120g	20g	[.157]	[.732±.059]	[.051]	[.047]	1478610-7
		180g	30g					1478611-7
SPNO	60g	10g	4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478615-7	
	120g	20g	[.157]	[.732±.059]	[.051]	[.047]	1478616-7	
	180g	30g					1478617-7	
5	SPDT			4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478667-7
	SPNC	60g	10g	[.157]	[.732±.059]	[.051]	[.047]	1478668-7
	SPNO							1478669-7
0.1	SPDT			4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478670-7
	SPNC	35g	6g	[.157]	[.732±.059]	[.051]	[.047]	1478671-7
	SPNO							1478672-7

**Spade Type Terminal**



**Product Facts**

- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles
- n Simulator lever for operating position between a roller and a lever



AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	60g	10g	4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478606-7
		120g	20g	[.157]	[.732±.059]	[.051]	[.047]	1478607-7
		180g	30g					1478608-7
	SPNC	60g	10g	4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478612-7
		120g	20g	[.157]	[.732±.059]	[.051]	[.047]	1478613-7
		180g	30g					1478614-7
SPNO	60g	10g	4.0 m/m	18.6 ±1.5	1.3 m/m	1.2 m/m	1478618-7	
	120g	20g	[.157]	[.732±.059]	[.051]	[.047]	1478619-7	
	180g	30g					1478620-7	

**Subminiature Microswitches**

Alcoswitch subminiature micro switches are available with many options to fit applications with limited space and a 5 Amp or less current draw.

With the options of levers, rollers and simulator, a variety of operating forces, operating positions and travel distances are available to fit most applications. In addition to tabs and solder terminals, this line is available with PC terminals to mount directly to your PC board.

If this offering doesn't fit your application needs, contact the product information center or your Tyco sales person to discuss a custom product.

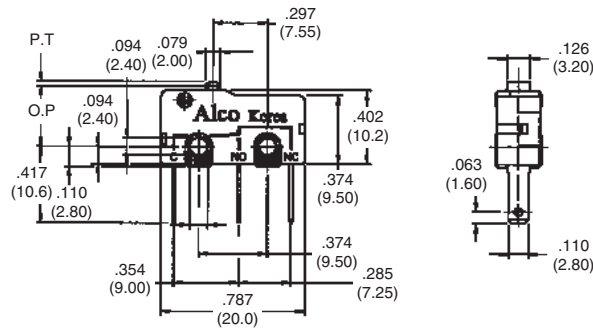
**Technical Information**

Performance Information		
Amp Rating	5	
Insulation Resistance	Min. 100M ohm (at 500V DC)	
Contact Resistance	Max 50M ohm (by voltage drop, 1A 6V-8V DC)	
Dielectric Strength	Between terminals	1000Vrms for 1 min
	Between terminals & other exposed metal parts	1500Vrms for 1 min
	Between terminals and earth	1500Vrms for 1 min
Temperature Rise	30°C Max	
Terminal Strength	6kg pulling and push torque shall be applied for 1min	
Allowable Operating Speed	0.1 to 1,000 mm/sec	
Shock Resistance (without lever)	Min 30G (O.F. 100g. 150g)	Contact opening max 1msec
	Min 15G (O.F. 50g)	—
Vibration Resistance (without lever)	9G, 10 to 55 Hz at double amplitude of 1.5mm (contact opening, max 1msec)	
Electrical Life	50,000 at 20cpm	
Mechanical Life	500,000 at 60cpm	
Mechanical Repeatability	300 cpm	
Safety Approval	UL / CSA	
Ambient Temperature	-25°C to +85°C	

Materials	
Case and Cover	P.B.T Resin, UL94 V-0 PA 66, UL94 V-0
Movable Contactor	Beryllium Copper, with or without silver plating
Button	Phenolic Resin, UL94 HB or UL94V0
Common Terminal	Brass, silver plated
Terminal (NC)	Brass
Terminal (NO)	Brass
Movable Contact	Silver alloy
Fixed Contact	Silver alloy, silver plated
Lever	Stainless Steel

**Subminiature Pin Plunger**

**Pin Plunger**



\* Refer to Pages L10 for Product Specifications

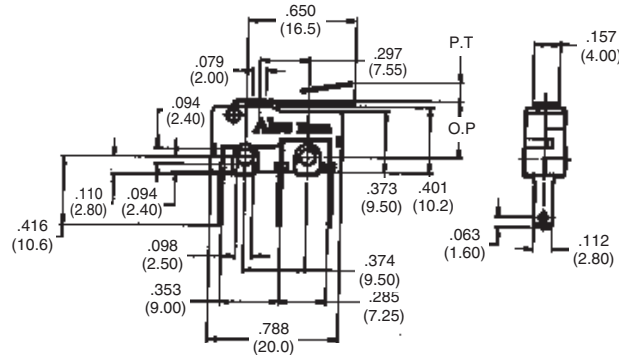
**Product Facts**

- Available in tab, PCB or solder terminals
- Versatile pin plunger option

Terminal Style	AMP	Switch Position	Operating Force	Releasing Force	Pre Travel	Operating Position	Over Travel	Movement Differential	Part Number
TAB	5	SPDT	150g	20g	0.6 m/m [.024]	8.4 ±0.4 [.331±.016]	0.3 m/m [.012]	0.2 m/m [.008]	1478600-1
PCB									1478601-1
Solder									1478602-1

**Subminiature Normal Lever**

**Normal Lever**



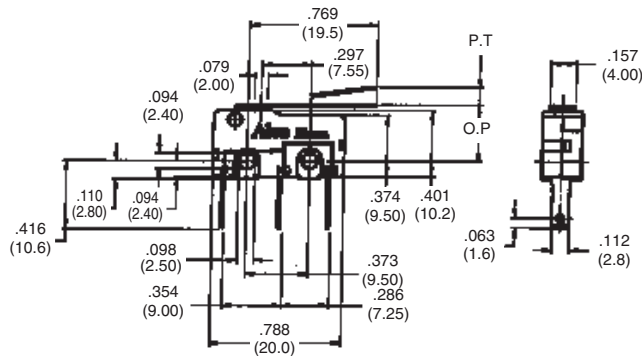
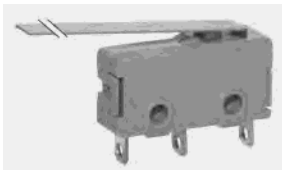
**Product Facts**

- Available in tab, PCB or solder terminals
- Lever length to reduce actuation force and increase travel

Terminal Style	AMP	Switch Position	Operating Force	Releasing Force	Pre Travel	Operating Position	Over Travel	Movement Differential	Part Number
TAB	5	SPDT	55g	3.5g	2.8 m/m [.110]	8.8 ±0.8 [.346±.031]	1.2 m/m [.047]	0.8 m/m [.031]	1478600-2
PCB									1478601-2
Solder									1478602-2

**Subminiature Long Lever**

**Long Lever**



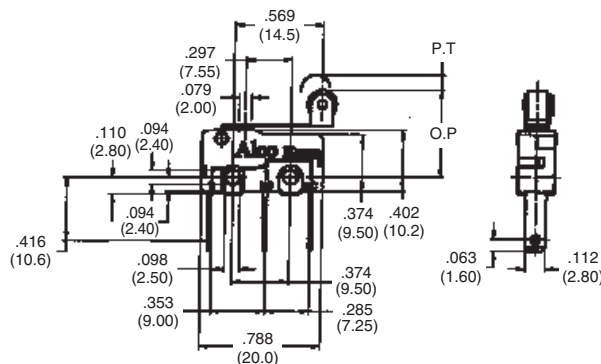
**Product Facts**

- Available in tab, PCB or solder terminals
- Long lever for increased travel and reduced force

Terminal Style	AMP	Switch Position	Operating Force	Releasing Force	Pre Travel	Operating Position	Over Travel	Movement Differential	Part Number
TAB	5	SPDT	45g	3.0g	3.5 m/m [.138]	8.8 ±1.2 [.346±.047]	1.6 m/m [.063]	1.0 m/m [.039]	1478600-3
PCB									1478601-3
Solder									1478602-3

### Subminiature Roller Lever

#### Roller Lever



\* Refer to Pages L10 for Product Specifications

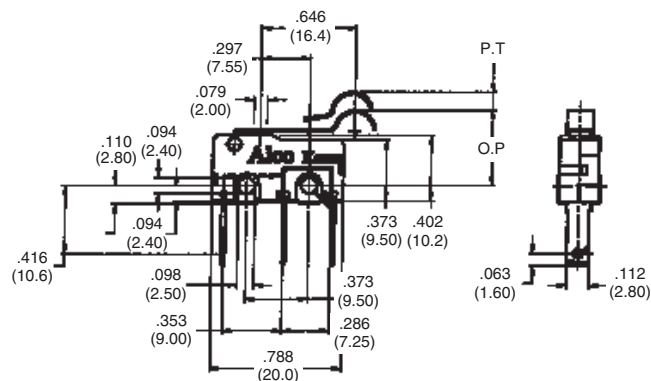
#### Product Facts

- n Available in tab, PCB or solder terminals
- n Roller lever for increased operating position

Terminal Style	AMP	Switch Position	Operating Force	Releasing Force	Pre Travel	Operating Position	Over Travel	Movement Differential	Part Number
TAB									1478600-4
PCB	5	SPDT	60g	4.0g	2.5 m/m [.098]	14.5 ±0.8 [.570±.031]	0.8 m/m [.031]	0.5 m/m [.020]	1478601-4
Solder									1478602-4

### Subminiature Simulator Lever

#### Simulator Lever



#### Product Facts

- n Available in tab, PCB, or solder terminals
- n Simulator lever for operating position between a roller and a lever

Terminal Style	AMP	Switch Position	Operating Force	Releasing Force	Pre Travel	Operating Position	Over Travel	Movement Differential	Part Number
TAB									1478600-5
PCB	5	SPDT	40g	3.0g	3.6 m/m [.142]	11.6 ±0.8 [.457±.031]	0.8 m/m [.031]	0.6 m/m [.024]	1478601-5
Solder									1478602-5

**Engineering Notes**





<b>Solder Process Guide</b>	<b>M2 - M4</b>
<b>Actuator Code Chart</b>	<b>M5 - M6</b>
<b>Glossary</b>	<b>M7 - M9</b>
<b>Worksheet</b>	<b>M10</b>
<b>Alcoswitch to Tyco Electronics Part Number Cross Reference</b>	<b>M11 - M23</b>
<b>Tyco Electronics to Alcoswitch Part Number Cross Reference</b>	<b>M24 - M36</b>

# Index/Matrixes

---

## Soldering Process Recommendation Guide

---

The majority of customers utilizing miniature or sub-miniature switches in the industry today have a great concern about the switches' capabilities during their soldering and cleaning cycles. This concern centers around the introduction of contaminants into the switch contact area which could cause the switch to experience various failure modes either immediately or during the life of the switch.

These failure modes can show in a number of manners. The following are just a few examples: high contact resistance, open contacts, low dielectric strength, and high actuation forces causing use-related malfunctions. Since most fluxes become active with the introduction of high temperatures used in all soldering techniques, the switch

must either prevent these fluxes from entering into its contact area or allow cleaning techniques to carry flux particles out. It must be understood that switch contamination can occur during any procedure: from hand soldering to Surface Mount systems for solder reflow.

We at Alcoswitch offer a wide range of switches to handle any soldering operations. However, certain soldering conditions will not apply to all switches. The following conditions and charts should help assist you in the soldering of our switches in your application. If you need additional information, please contact the factory.

---

### SOLDERING TYPES

#### A. WAVE SOLDERING

Top & Bottom board preheat: 200°F (93°C) for approximately 3 to 4 minutes.

Solder Temperature & Dwell Time: 500°F (260°C) for approximately 3 to 5 seconds.

#### B. HAND SOLDERING

1. 500°F-600°F (260°C-316°C) Utilizing a controlled 40 watt iron for 3 to 5 seconds maximum.

2. 500°F (260°C) Utilizing a controlled 30 watt iron for 10 seconds maximum.

#### C. DIP SOLDERING

1. Solder Temperature & Dwell Time: 500°F (260°C) for 3-5 seconds maximum.

2. Mounted on PCB .060" thick - Solder Temperature & Dwell Time: 500°F (260°C) for 10 seconds maximum.

#### D. SURFACE MOUNT

Tyco Electronics performs testing of their Surface Mount switches in accordance with EIA-364-56, Resistance to Soldering Heat, test procedures 4 (Vapor Phase) and Procedure 5 (Infrared).

---

### CLEANING TYPES

A. Solvent Wash (1.1.1 Trichlorethylene, T.M.S., T.M.C.)

B. Vapor Degreasing

C. Solvent Immersion

D. Aqueous Cleaning

### Soldering Process Recommendation Guide

SWITCH SERIES	SOLDERING TYPE			SURFACE MOUNT PROCESS		CLEANING PROCESSES			
	Wave	Hand	Dip*	Convection I.R.	Vapor Phase	Solvent Wash	Vapor Degrease	Solvent Immerse	Aqueous Clean
AP, AT, AS SERIES	X	X	X			X			X
ALE, ATLE, ATE, APBE	X	X	X			X	X	X	X
ASE & F	X	X	X	X	X	X	X	X	X
COMMAND SERIES, PC	X	X							
COMMAND SERIES, LUGS		X							
CST/CSS SERIES	X	X	X			X	X	X	X
DIP ROT.: DR, RR & RA/C	X	X	X			X	X		
DIP ROT: DRDE SERIES	X	X	X			X	X	X	X
DIPS: AD, AR, AA/C, ATT	X	X	X	X	X	X	X	X	X
DIPS: GD	X	X	X	X		X	X	X	X
DIPS: DTS WITH TAPE	X	X	X			X	X	X	X
DIPS: DTS, DYS W/O TAPE		X	X			X			
DIPS: S SERIES SIPs	X	X	X	X	X	X	X	X	X
DIPS: DPU WITHOUT TAPE		X	X						
FSM SERIES (Unsealed)	X	X							
FSM SERIES (Sealed)	X	X				X	X	X	X
FSM SMT TYPE (Unsealed)				X					
FSM SMT TYPE (Sealed)				X	X	X	X	X	X
GEMINI: A SERIES	X	X	X			X			
GEMINI: AE SERIES	X	X	X			X	X	X	X
GREEN SERIES: ALL MT VERSIONS		X	X			X	X		
GREEN SERIES: ALL MT VERSIONS PC	X	X	X			X			
GREEN SERIES: MPA-6, MPG, MPN, MPE		X	X			X	X		
GREEN SERIES: MTE		X	X			X	X		
MHS SERIES	X	X	X			X	X	X	X
MLL SERIES	X	X		X		X	X	X	X
MMS SERIES		X	X			X	X		
MPA-6 SERIES		X	X			X			
MPB SERIES		X	X			X	X		
MPN SERIES		X	X			X	X		
MPS SERIES		X	X			X	X		
MRD SERIES	X	X	X	X		X	X	X	X
MRJ SERIES	X	X	X			X			
MRJE/MRJB SERIES	X	X	X			X	X	X	X

**Soldering Process Recommendation Guide**

SWITCH SERIES	SOLDERING TYPE			SURFACE MOUNT PROCESS		CLEANING PROCESSES			
	Wave	Hand	Dip*	Convection I.R.	Vapor Phase	Solvent Wash	Vapor Degrease	Solvent Immerse	Aqueous Clean
MSP-3/MSPS SERIES		X	X						
MSP-5 SERIES		X	X			X	X		
MSPF SERIES		X	X			X	X		
MSPM SERIES		X	X			X	X		
MSS SERIES	X	X	X			X	X	X	X
MSSA SERIES	X	X	X			X	X	X	X
MSSA-01 & 04	X	X	X			X	X		
PUSHWHEELS, CARD EDGE		X							
PUSHWHEELS, PC PINS	X	X	X						
SDS SERIES	X	X	X			X	X	X	X
SE SERIES	X	X	X			X	X	X	X
SL SERIES	X	X	X			X	X		
SLS/SLSA SERIES	X	X	X			X	X		
SSA/SSJ SERIES	X		X			X			
SSB SERIES	X	X	X			X	X		
STS SERIES	X	X	X			X	X	X	X
SWK SERIES		X							
TP SERIES: ALL PC	X								
TP SERIES: TP-ES	X	X	X			X	X	X	X
TP SERIES:TPC, TPD, TPF, TP-N		X	X			X	X		
TRD	X	X	X			X			
TRD W/L.E.D.		X	X						
TSS-PC, TSS-RA	X	X				X			
TSP, TST	X		X	X	X	X	X	X	X
TT ALL PC	X	X				X			
TT-ES, TTE-ES	X	X	X			X	X	X	X
TT, TTE, TTN-WIRE LUG		X	X			X			

**M**

**Actuation Code Chart Toggles, Rockers and Paddles**

									A		NONE	
									D		NONE	
									E			
			SINGLE MOMENTARY ON (WHERE APPLICABLE)				SINGLE MOMENTARY ON (WHERE APPLICABLE)		F		NONE	
1		NONE		8					K		NONE	
2		NONE		9	NONE				N		NONE	
3		NONE		10	NONE				P			
4		NONE		11					R		NONE	
5									PA*			
6				12								
7												

**Note:** Three throw function achieved with external jumpers installed by customer.

⊙ In (Common)

⊗ Out

**Actuation Code Chart Pushbuttons and Slides**

The following CODE CHARTS show schematically, the electrical contact closures of a switch relative to the actuator position. All diagrams represent a TOP view of the switch with the ALCO imprint facing and bushing slot, if any, pointing left. Terminal numbers are for reference only and may not appear on switches.

Code numbers are found throughout the catalog alongside part numbers. The same schematic may show either maintained or momentary action in some cases; momentary closures are indicated by the symbol (ON).

**PUSHBUTTONS**

13	N.C. 	MOMENTARY ON 	21		MOMENTARY 
14	N.C. 	MOMENTARY ON 	22		MOM. 
15	DN 	MOMENTARY ON 	23	PUSH-ON 	PUSH-OFF 
16	PUSH-ON 	PUSH-OFF 	24	PUSH-ON 	PUSH-OFF 
17	PUSH-ON 	PUSH-OFF 	25	PUSH-ON 	PUSH-OFF 
18	PUSH-ON 	PUSH-OFF 	26	PUSH-ON 	PUSH-OFF 
19		MOMENTARY 			
20		MOMENTARY 			

**TP SERIES PUSHBUTTONS**

C		NONE	
F FT		NONE	
M		NONE	
R		NONE	

**TSS SERIES SLIDE SWITCHES**

A		NONE	
D		NONE	
E			
K		NONE	
N		NONE	
P			
PA			

M

Index/Matrices



**Glossary**

- **Actuation Force (Operating Force):** The force required to change the actuator of a switch from one position to the other. Unit of Measure: Slides - lbs., oz. or grams. Toggles and pushbuttons - oz. Rotary products-torque.
- **Actuator:** A movable part of a switch which causes a change in the electrical configurations of the switch.  
Example:      Toggle      Rocker      Slider  
                 Plunger      Paddle      Shaft
- **Alternate Action:** See Push-Push.
- **Angle of Throw:** The angle or arc through which an actuator passes during actuation. Typically used to refer to the movement of toggle or rocker actuators. Unit of Measure: Degree.
- **Antistatic:** An antistatic device will withstand a specified potential without conducting between the actuator and any conducting element, usually the terminals or bushing. Unit of Measure: Typical value 15-20 kilovolts DC.
- **Bifurcated Contact:** A wiping movable contact consisting of two spring fingers that grip fixed contacts. Typically found in slide switches. Self-cleaning action. See Wiping Contact.
- **Bobbin Contact:** A movable contact shaped like a thread bobbin that rolls along the stationary contacts. Found only in slide switches.
- **Bounce:** See Contact Bounce.
- **Break-Before-Make (Non-shorting, Break First):** On actuation, the movable contact breaks contact with one fixed contact before making contact with another fixed contact. Contrast with make-before-break. Typical of toggle and pushbutton switches. (BBM)
- **Break First:** See Break-Before-Make.
- **Butt Contact:** A contact mechanism in which the movable contact makes contact with the fixed (stationary) contact without wiping motion between the surfaces. Typical of toggle and pushbutton switches. See Wiping Contact.
- **Capacitive Load:** A load in which the initial current on making (closing) of the contacts is higher than the steady state current on breaking (opening) of the contacts, the current is less than steady state. Current leads voltage in capacitive loads. See Resistive Load, Inductive Load, Power Factor and Inrush.
- **Carrying Current:** The maximum current that can be passed through the already closed contacts of a switch. Contrast with "Contact Rating."
- **Contact (Contact Area):** The metal surfaces that come into physical contact to complete an electrical circuit. These surfaces are found on moveable contacts (see) and terminals (see).
- **Contact Block:** A switching element which is added singly or in groups to an operator (see) to make a complete switch.
- **Contact Bounce (Bounce):** The time during switching in which electrical instability caused by the rebound of the contacts is observed. Unit of Measure: Millisecond.
- **Contact Gap:** The distance between a stationary contact and a moveable contact in the open position.
- **Contact Rating (Switching Rating):** The capacity to switch (connect or interrupt) an electrical load. Unit of Measure: Volts, amps, load characteristic (resistive, inductive, capacitive, power factor). Contrast with non-switching rating.
- **Contact Resistance:** The total resistance of the switch, comprised of the contact interface and terminals. Unit of Measure: Milliohms.
- **Cycles:** The number of times a switch can be actuated from one extreme position to the opposite extreme position and back to the original position.
- **Detent:** A mechanical stop that holds the contacts in a given position after the actuation force is removed or prevents the changing of contact position at less than a specified actuation force.
- **Detent Angle:** The angle or arc between detent positions in rotary switches. Unit of Measure: Degree.
- **Dielectric Strength (Dielectric Withstanding Voltage, DWV, Leakage Resistance, Breakdown Voltage):** The ability of an insulator to withstand a voltage without arcing across its surface. Most often applies to insulator between switch terminals and metal exposed to operator of switch. Unit of Measure: Volts RMS, Volts AC.
- **Dielectric Withstanding Voltage:** See Dielectric Strength.
- **DIP: Dual-in-Line Package** refers to a component with two rows of PC terminals. The terminals are most commonly on a 0.100" pitch with 0.300" between rows.
- **Double-Break Contacts:** A contact mechanism using two sets of contacts to make or break a given circuit. This provides better power handling capacity and longer switch life. Typical of high power industrial switches. See Single-Break Contacts.
- **Dry Circuit (Low Energy, Logic Level):** An application in which power levels do not cause arcing, melting or softening of contacts. Typically requires gold plated contacts for reliable switch operation. Typical Definition: 0.4VA max. @ 20 VDC or peak AC.
- **DWV:** See Dielectric Strength.
- **Electrical Life:** The number of operations at a given electrical load that does not result in a degradation of any electrical or mechanical parameter beyond the standard set by the applicable end-of-life criteria. Unit of Measure: Cycles (on-off operations) (rotations).



## Glossary

- **End of Life Criteria:** Those specifications that a switch must meet at the end of its specified electrical life. Typically contact resistance and/or heat rise of contacts at full rated load at end of life.
- **Environmental Seal:** A seal that totally encapsulates the switch or relay providing a specified level of protection against intrusion of solids, liquids or gases into the body of the device.
- **Fixed Contact (Stationary or Statis Contact):** The non-moving contact. Typically integral to the end of the terminal inside the switch body.
- **Flux:** A material added during soldering to the metal surfaces which on heating prevents oxidation and aids the flowing of the solder.
- **Gas-Tight Contact:** A contact interface (movable to fixed contacts) in which the forces holding the contacts together are high enough to prevent gases from migrating between the members. This prevents static oxidation of the contact and subsequent intermittencies of high contact resistance. Typical forces are 280,000 PSI and higher.
- **Gold Flash:** A plating of gold typically less than 10 microinches (millionths) thick. Used only as a barrier to oxidation or corrosion of terminals to maintain solderability.
- **Heat Rise:** An indirect measurement of contact resistance used by rating agencies. The temperature rise over ambient of a contact set carrying a prescribed current is measured to determine whether it falls within safe limits.
- **Inductive Load:** A load in which the initial current on making (closing) of the contacts is lower than the steady state. On breaking (opening) of the contacts, the current is greater than the steady state. Current lags voltage in inductive loads. Motors are the most common inductive load. See Resistive Load, Capacitive Load, Power Factor.
- **Inrush:** A transitory high-level of current through a contact set on making (closing). A characteristic of capacitive and some resistive loads. The inrush currents can be large and long enough to cause severe degradation of the contacts. See Resistive Load, Capacitive Load, Power Factor.
- **Insert Molding:** In switches and relays used to refer to terminations that are placed in the mold so that plastic is molded around the terminations. The chief benefit is an inherent seal against the intrusion of flux into the body of the device. Therefore no epoxy terminal seal is required.
- **Insulation Resistance:** The resistance between insulated parts measured at a specified DC voltage. Unit of Measure: Megohm.
- **IP:** An industrial specification used in Europe (and worldwide) to indicate the degree of protection provided by a component against accidental contact, penetration of solids or liquids into or through the component. See NEMA.
- **Leakage Barrier:** A ridge or web molded into a switch housing between terminals or contacts to increase the surface distance between them.
- **Leakage Resistance:** Dielectric Strength.
- **Life:** See Electrical Life: Mechanical Life.
- **Logic Level:** Refers to power levels typical of solid state electronic circuits (TTL, CMOS, etc.). For switch selection see Dry Circuit.
- **Low Energy:** See Dry Circuit.
- **Maintained:** A position (throw) of a switch which remains unchanged when actuation force is removed from switch actuator. Contrast with Momentary.
- **Make-Before-Break (Shorting Contact, Make First):** Movable contact makes the next circuit before breaking the first circuit. Typically found in slide switches. Contrast with Break-Before-Make (MBB).
- **Make First:** See Make-Before-Break.
- **Mechanical Life:** The number of operations of a switch without electrical load that does not result in a degradation of parameters beyond the standard set by the applicable end-of-life criteria.
- **Momentary (Spring Return):** A momentary switch position (throw) is held only for duration of force applied to the switch actuator.
- **Movable Contact (Dynamic Contact):** The contact moved by the switch actuator into and away from contact with a fixed contact thus forming the electrical circuits possible for a given device.
- **N.C.:** See Normally Closed.
- **NEMA:** National Electrical Manufacturers Association. A US Standards setting group for switch products most often applied to switches mounted in various enclosures offering specified degrees of protection against intrusion of liquids, dust, corrosive elements, etc. NEMA ratings are common in industrial or outdoor applications. See IP.
- **NO:** See Normally Open.
- **Non-shorting:** See Break-Before-Make.
- **Non-switching Rating:** The power carrying capacity of a switch after contact closure and end of contact bounce. Typically far higher than the contact rating (switching rating) of a switch. Unit of Measure: Volts and Amps.
- **Normally Closed (NC):** Normally closed contacts are closed when switch actuator is in its unactuated position (e.g., the plunger is in the resting position in the case of a pushbutton switch).
- **Normally Open (NO):** Normally open contacts are open when the switch actuator is in its unactuated or resting position.

## Glossary

- **Oil-tight:** A generic term for a panel seal (see) commonly used in industrial settings. Defined by NEMA (see) and IP (see) standards.
- **Operating Force:** See Actuation Force.
- **Operating Temperature:** The range of temperature within which the device may be used. Unit of Measure: Degrees celsius or fahrenheit (C or F).
- **Operator:** A panel mounted mechanical device (pushbutton, selector, keylock, etc.) without contacts to which one or more contact blocks (see) may be added to make a complete switch.
- **Overtravel:** The distance the actuator may move between initial contact position and the extreme mechanical position of the actuator without damage to the switch. See travel. Pretravel. Unit of Measure: Inch. Degree.
- **Panel Seal:** A panel seal provides a defined level of protection against penetration of liquids through which the switch and switch-to-panel interface to the rear of a panel. Unit of Measure: Inches/ft. of water.
- **Pole:** The number of separate circuits that can be active through a switch at any one time. A single pole switch allows one closed circuit at a time. A double pole switch allows two closed circuits, etc.
- **Power Factor (PF):** A measure of the inductive or capacitive character of an electrical load. Unit of Measure: 0 to 1 (e.g. 0.75)
- **Process Seal:** A seal that prevents damage to or contamination of the switch during the specified mechanical process. See wave solderable. Surface Movable.
- **Push-On/Push-Off:** See Push-Push.
- **Push-Push (Alternative Action, Push-On/Push-Off):** A pushbutton switch style in which the electrical state of the switch is maintained between actuations of the plunger.
- **Quick-Connect Terminals:** Flat tab or blade style terminals designed to accept push-on female wire connectors (instead of soldering). The most popular sizes are: 0.250", 0.110" wide.
- **Resistive load:** A load in which the current and voltage are in phase. See Capacitive Load, Inductive Load, Power Factor, Inrush.
- **Shorting Contact:** See Make-Before-Break.
- **Single Break Contacts:** A contact mechanism using one set of contacts to make or break a given circuit. Typical of electronic or low power switches. See Double-Break Contacts.
- **Splashproof:** See panel Seal.
- **Spring Return:** See Momentary.
- **Storage Temperature:** The range of temperature within which the device may be stored. Typically this is a wider range than operating temperature. Unit of Measure: Degrees celsius or fahrenheit (C or F).
- **Surface Mount Devices:** Components that are compatible with surface mount PC board technology. Holes are not used for component mounting. Component leads are soldered to pads on the surface of the PC boards. For switches typically defined by surface mount terminations (e.g., J-bend, L-bend, butt, etc.) and compatibility with surface mount soldering (e.g., vapor phase reflow, infrared, etc.) and cleaning processes.
- **Tactile Feel (Feedback):** A mechanical signal (typically a "snap" or "click") that indicates contact closure to the operator.
- **Terminal:** The metal portion of the switch, exterior to the body, that is used to connect the switch to an electrical circuit. Examples: PC, wire lug, Turret, quick-connect, wire-wrap, etc.
- **Throws:** Number of circuits that can be controlled by any one pole of a switch. Example: In a single pole — double throw (SPDT) switch, only one circuit may be completed at a time. However, there are two possible circuits (throws) that can be made.
- **Travel:** The total distance the actuator moves to change electrical position. See Pretravel. Overtravel. Unit of Measure: Inches, degrees.
- **Washable:** Applied to PC board mounted devices indicating compatibility with cleaning processes used after soldering. No degradation of electrical or mechanical parameters occurs.
- **Wave Solderable:** Indicates the device is suitable for the wave soldering and cleaning processes as supplied. See Process Seal.
- **Wiping Contact:** A contact mechanism in which the movable contact with the fixed contact with a wiping motion. Typical to slide and rotary switches.

**Alcoswitch & Tyco Electronics Power Tool Switches Application Worksheet****Required Information****Electrical Considerations:**

Voltage of Applications: \_\_\_\_\_ Current of Application: \_\_\_\_\_

Circuitry Configuration: \_\_\_\_\_ Number of Poles: \_\_\_\_\_ Number of Throws: \_\_\_\_\_

Number of Operations anticipated: \_\_\_\_\_

Agency Approvals or Listings Desired: \_\_\_\_\_

**Mechanical Considerations**Type of Switch (Actuator Type):  Toggle  Pushbutton  Rotary  Trigger  Other

Switch Function: (On/Off/On) \_\_\_\_\_ On/Off \_\_\_\_\_ Momentary: \_\_\_\_\_

Termination:  Thru-Hole (PC)  Surface Mount  Wire Lug  Quick Connect  Other

Sealing Contamination Requirements: \_\_\_\_\_

**Product Processing Considerations**Anticipated Soldering Process:  Hand  Wave  SMT  Other**Required Information For Power Tool Switches Only****Output Characteristics:**

Variable Speed, Two Speed, On/Off, etc.: \_\_\_\_\_ Reversing/Non-Reversing: \_\_\_\_\_

Lock-on, Lock-off, or Neither: \_\_\_\_\_

Hook-up wire size and configuration (i.e. stranded/solder tinned, fused, terminated, etc.) and retention force requirements (how many pounds pull force and what directions required): \_\_\_\_\_

**Optional Information****Electrical Considerations:**

Contact Resistance Requirements: Initial: \_\_\_\_\_ After Life Cycles: \_\_\_\_\_

Electrostatic Discharge: (E.S.D.) Requirements: \_\_\_\_\_

Contact Timing:  Shorting (Make-Before-Break)  Non Shorting (Break-Before-Make)

Other Electrical Considerations: \_\_\_\_\_

**Mechanical Considerations**

Actuation Force Requirements: \_\_\_\_\_

Actuator Travel Distance or Degrees of Throw: \_\_\_\_\_

Special Plating Requirements: \_\_\_\_\_ Flammability Rating: \_\_\_\_\_ Oxygen Index: \_\_\_\_\_

Special Material Requirements: \_\_\_\_\_ % Solder Coverage: \_\_\_\_\_

Marking Required: \_\_\_\_\_

Desired Product Color Options: \_\_\_\_\_

Other Mechanical Considerations: \_\_\_\_\_

**Environmental Considerations**

Operating Temperature Range: \_\_\_\_\_

Storage Temperature Range: \_\_\_\_\_

Chemical Resistance Requirements: \_\_\_\_\_

Other Environmental Considerations: \_\_\_\_\_

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1437554-3	A101K1V30B	C22
1437554-4	A101KAB	C22
1437554-5	A101KAQ	C22
1437554-7	A101KCQ	C22
1437554-8	A101KD9AQ	C22
1437554-9	A101KZQ	C22,C31
1437555-1	A107MD9V30Q	C22
1437555-2	A107KZB	C22
1437555-3	A107MD9AV2B	C22
1437555-4	A107MD9QC	C22
1437555-5	A107P3YZQ	C22,C33
1437555-6	A107SYAQ	C22
1437555-7	A107SYCB	C22
1437555-8	A107SYCQ	C22
1437555-9	A107SYZQ	C22,C27
1437556-1	A211SYZQ	C22,C27
1437556-2	A211TIZQ	C22,C34
1437556-3	A213P4YZQ	C22
1437556-4	A213SYZQ	C22,C27
1437556-5	A215SD9V30B	C22
1437556-6	A215SY9AQ	C22
1437556-7	A215SYZQ	C22,C27
1437556-8	AE101MD1AB	C40
1437556-9	AE101MD1AG	C35
1437557-2	ATE1DGPC1	C20
1437557-3	ATE1DGPC7	C20
1437557-4	ATE1DGRA1	C21
1437557-5	ATE1DGRA7	C21
1437557-6	ATE1EGPC1	C20
1437557-8	ATE1EGRA1	C21
1437557-9	ATE1EGRA7	C21
1437559-1	MTF226P	C47
1437559-2	MTF226PA	C47
1437559-4	MTF226S	C47
1437559-5	MTF226SA	C47
1437559-6	MTF306D	C47
1437559-7	MTF326D	C47
1437559-8	MTF406N	C47
1437559-9	MTF426N	C47
1437561-9	I0264-00-120	C54
1437562-1	TT21KGPC9T1/4	C11
1437562-2	TT21NG2T	C8
1437562-3	TT21NGPC1	C10
1437562-4	TT21NGPC1ES	C16
1437562-6	TT21NGPC1T	C8
1437562-7	TT21NGPC1T1/4	C8
1437562-8	TT21NGPC2T1/4	C8
1437562-9	TT21NGPC7T1/4	C8
1437563-1	TTE21NGPC1ES	C8,C17
1437563-2	TTE21NGPC3TES	C8,C18
1437563-3	TTE21NGPC9T1/4ES	C8,C18
1437563-4	TTE21NGRA1ES	C8,C17
1437563-5	TTE23N2T	C8
1437563-6	TTE23N8T1/4	C8
1437563-7	TTE23N9T1/4	C8
1437563-8	TTE23NG2T	C8
1437563-9	TTE23P8T1/4	C8
1437564-7	TST11DGPC1D	C5
1437564-9	TST11DGPC4D	C5
1437565-1	FSM	E3
1437565-2	FSM100	E16
1437565-3	FSM101	E16
1437565-4	FSM102	E17
1437565-5	FSM103	E17
1437565-6	FSM104	E17
1437565-7	FSM10J	E5
1437565-8	FSM11J	E5
1437565-9	FSM12J	E5

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1437566-1	FSMRACDA	E8
1437566-3	FSMSM	E9
1437566-4	FSMSMTR	E9
1437566-7	JLS91439FK	D30
1437566-8	JLS91439FKBC	D30
1437566-9	JLS91439FWC	D30
1437567-2	APA1BGPC	D16
1437567-3	APA1CGPC	D16
1437567-4	APA1CGRA	D17
1437567-5	APA1FGPC	D16
1437567-6	APA1FGRA	D17
1437567-7	APA2MGPC	D16
1437567-8	APA2MGRA	D17
1437567-9	APA2RGPC	D16
1437568-1	MSPM101C2	D29
1437568-2	MSPM101CP	D29
1437568-3	MSPM101CS	D29
1437568-4	MSPM101CS1	D29
1437568-5	MSPS103B	D27
1437568-6	MSPS103C2	D27
1437568-7	MSPS103C0	D27
1437569-2	164EL11	I16
1437569-3	164EL22	I16
1437569-5	164EL511	I16
1437569-6	164EL522	I16
1437569-7	164EL533	I16
1437569-8	164EZ	I18
1437569-9	164J0A11	I17
1437571-4	TP11CGPC0	D7
1437571-6	TP11CGPC2	D7
1437571-8	TP11CGRA0	D7
1437572-1	TPBF11FGRA2	D10
1437572-2	TPBF11FGRAES0	D15
1437572-3	TPC11CGPC0	D8
1437572-4	TPC11CGPC2	D8
1437572-5	TPC11CGPCES0	D13
1437572-6	TPC11CGPCES2	D13
1437572-7	TPC11CGRA0	D8
1437572-8	TPC11CGRA2	D8
1437574-9	SEIDGPC	B12
1437575-1	MLL1200S	B47
1437575-2	MLL1200STR	B47
1437575-3	MLL1300S	B47
1437575-4	MMS12	B36
1437575-5	MMS22	B36
1437575-6	MMS22R	B36
1437575-8	MMS23	B36
1437575-9	MMS23R	B36
1437576-2	CST022NK	B45
1437576-4	CST023NK	B45
1437576-5	CST042NK	B46
1437576-6	CST043NK	B46
1437576-7	CST062NK	B46
1437576-9	MHS122	B33
1437577-2	SDS1240RA0	B17
1437577-3	SDS1240RA8	B17
1437577-4	SDS1340RA0	B17
1437577-5	SDS1340RA8	B17
1437577-6	SDS2240RA0	B17
1437577-7	SDS2340RA0	B17
1437577-8	SL1000	B40
1437577-9	SL220	B40
1437578-3	TSS11AGPC	B18
1437579-4	TSD21DDG1RA	B19
1437579-5	TSD21DDGPC	B18
1437579-6	TSD21DDGRA	B19
1437579-7	TSD21EEGRA	B19
1437579-8	TSS11DG1PC	B18

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1437579-9	TSS11DG1RA	B19
1437581-2	ASE22	B6
1437581-4	ASE22G	B6
1437581-5	ASE22GL	B6
1437581-6	ASE22GS	B7
1437581-7	ASE22L	B6
1437581-8	ASE22R	B5,B6
1437581-9	ASE22RG	B6
1437583-6	ADF04STTR	A8
1437584-6	DRD10CE	A23
1437584-8	DRD10CRA	A23
1437584-9	DRD10CSE	A23
1437585-7	DRS16CR	A25
1437586-2	ADE02	A7
1437586-4	ADE02S	A7
1437586-5	ADE02SA	A7
1437586-7	ADE03	A7
1437586-8	ADE03S	A7
1437587-1	ADF10	A8
1437587-3	ADF10S	A8
1437587-4	ADF10SAT	A8
1437587-5	ADF10ST	A8
1437587-6	ADF10STTR	A8
1437587-7	ADF10T	A8
1437587-8	ADF12S	A8
1437587-9	ADF12STTR	A8
1437590-1	GDB02	A4
1437590-2	GDB04	A4
1437590-3	GDB04S	A4
1437590-4	GDB06	A4
1437590-5	GDB06S	A4
1437590-6	GDB08	A4
1437590-7	GDB08S	A4
1437590-8	GDB10	A4
1437590-9	GDB10S	A4
1437591-3	A101J15ZQ0	F7
1437591-4	A101J16WQ00	F7
1437591-5	A101J16ZB00	F7
1437591-6	A101J16ZQ00	F7
1437591-7	A101J1AB0	F7
1437591-8	A101J1AQ0	F14
1437591-9	A101J1AQ2	F7
1437592-1	A205J51ZQ00	F7
1437592-2	A205J61ZQ00	F7
1437592-3	A207J1ZQ0	F7
1437592-4	A207J3ZQ0	F7
1437592-5	A207J51ZQ00	F7
1437592-6	A207J61ZQ00	F7
1437592-7	A208J16CQ00UL	F7
1437592-8	A208J1V3Q0	F7
1437592-9	A208J51ZQ00	F7
1437596-2	TRD21N10QC	F3
1437596-3	TRD21N10WL	F6
1437596-4	TRD21N10WLL2	F3
1437596-6	TRD21N12WL	F3
1437596-9	TRD21P10WL	F6
1437597-1	2SKF131AEL01	H4
1437597-7	2SKF132AEL01	H4
1437598-4	SKT131AEL01	H3
1437598-5	SKT131GAEL01	H3
1437598-7	SKT132AEL01	H3
1437598-8	SKT132GAEL01	H3
1437598-9	SKT331AEL01	H3
1437603-1	DPS10111AK	J11
1437603-2	DPS10131AK	J11
1437603-4	DPS10131ALD	J11
1437603-5	DPS10137AK	J11
1437603-6	DPS10141AK	J11

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1437603-7	DPS10301AK	J11
1437606-1	B11LS	J9,J10
1437606-2	B12L	J11
1437606-3	B12LS	J11
1437606-4	B5L	J7
1437606-5	B5LS	J7,J8
1437606-6	B9L	J9,J10
1437606-8	B9LS	J9,J10
1437606-9	B9LS5PIN	J9
1437607-1	SH6131AK	J6
1437607-2	SH6131AKK2	J6
1437609-2	M25310	I10
1437609-3	M25500	I10
1437609-4	M25510	I10
1437610-1	M60100	I11
1437610-2	M60102	I11
1437610-3	M60105	I11
1437610-4	M60200	I11
1437610-5	M60202	I11
1437610-6	M60532	I11
1437610-7	M60570	I11
1437610-8	M60572	I11
1437610-9	M60574	I11
1437612-7	570	I6,I7,I8,I15
1437612-8	5B0	I6,I7,I8,I15
1437612-9	F40	I8,I9,I14
1437614-1	E1	I5,I6
1437614-2	QM0100	I5
1437614-3	QM0102	I5
1437614-4	QM0105	I5
1437614-5	QM0109	I5
1437614-6	QM0202	I5
1437614-7	QM1202	I7
1437614-8	QM1204	I7
1437614-9	QM1205	I7
1437615-1	RT0500	I4
1437615-2	RT0502	I4
1437615-3	RT0504	I4
1437615-4	RT0505	I4
1437615-5	RT0506	I4
1437615-6	RT1202	I7
1437615-7	RT1205	I7
1437615-8	RT1502	I7
1437617-1	G001	I13
1437620-5	327-AG	I20
1437620-7	381-AG	I20
1437620-8	382-AG	I20
1437620-9	385	I20
1437621-2	K1250A1/4	K4
1437621-3	K1250B1/4	K4
1417566-1	MTM8206NVRA	C53
1437621-4	K1251B1/4	K4
1437621-5	K1255BS1/4	K4
1437621-6	K500A1/4	K4
1437621-7	K500A1/8	K4
1437621-8	K500B1/4	K4
1437621-9	K500B1/8	K4
1437622-1	KLN500S1/4	K7
1437622-2	KLN700A1/4	K7
1437622-3	KLN700B1/4	K7
1437622-4	KLN700B1/8	K7
1437622-5	KLN700S1/4	K7
1437622-6	KLN900A1/4	K7
1437622-7	KLN900B1/4	K7
1437622-8	KLN900S1/4	K7
1437623-2	KS500A1/4	K10
1437623-3	KS500A1/8	K10
1437623-4	KS500B1/4	K10

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1437623-5	KS500B1/8	K10
1437623-6	KS700A1/4	K10
1437623-7	KS700B1/4	K10
1437623-8	KS900A1/4	K10
1437623-9	KS900B1/4	K10
1437624-2	PH15181/4	K12
1437624-4	PK1100B1/8	K12
1437624-6	PK50B1/4	K12
1437624-7	PK50B1/8	K12
1437624-8	PK70B1/4	K12
1437624-9	PK90B1/4	K12
1437625-1	PKS1132B51/4	K19
1437625-2	PKS1132B91/4	K19
1437625-5	PKS90B1/4	K20
1437625-6	PKS90B101/4	K20
1437626-1	B10480	C55
1437626-2	B10482	C55
1437626-3	B10488	C55
1437626-4	B14400	C55
1437626-5	B14402	C55
1437626-6	B14408	C55
1437626-7	B15320	C55
1437626-8	B15322	C55
1437626-9	B15328	C55
1437628-2	LW1	C54
1437628-3	LW12-AG	C54
1437628-5	LW5-AG	C54
1437628-7	N1-AG	C54
1437628-9	N1A	C54
1437629-1	MRC110	G3
1437629-2	MRC110S	G3
1437629-3	MRC25	G3
1437629-4	MRC25S	G3
1437629-5	MRC33	G3
1437629-6	MRC33S	G3
1437629-7	MRC42	G3
1437629-8	MRC42S	G3
1437629-9	MRJ112	G4
1437805-2	TPA21MGPC0	D6
1437807-1	DRD10CS	A23
1437807-2	DRD10C	A23
1437807-3	DRD16SA	A23
1437807-4	DRD16S	A23
1437807-6	DRW16S	A23
1437807-8	DRM16S	A23
1437807-9	DRW16CE	A23
1447371-4	AE108MD1AV2Q	C40
147571-1	A21J51ZQ0	F7
147673-2	MTM8206RVRA	C53
147674-1	MTM8206PRA	C52
147676-1	MTA8106EVRA	C53
147681-1	MTM8106FRA	C52
147682-1	MTA8106FRA	C52
147682-2	MTA8106ERA	C52
147694-1	FSM8JRT	E6
147794-1	AE103MD1V30B	C35
147795-1	AE201MD1V30B	C35
147822-1	AE105J1V3Q0	F17
147823-1	AE108J1CQ0	F17
147824-1	AE103J1V3Q0	F17
147844-1	TTE11EG1	C8
1478600-1	-	L11
1478600-2	-	L11
1478600-3	-	L11
1478600-4	-	L12
1478600-5	-	L12
1478601-1	-	L11
1478601-2	-	L11

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1478601-3	-	L11
1478601-4	-	L12
1478601-5	-	L12
1478602-1	-	L11
1478602-2	-	L11
1478602-3	-	L11
1478602-4	-	L12
1478602-5	-	L12
1478603-1	-	L3
1478603-2	-	L4
1478603-3	-	L5
1478603-4	-	L6
1478603-5	-	L7
1478603-6	-	L8
1478603-7	-	L9
1478604-1	-	L3
1478604-2	-	L4
1478604-3	-	L5
1478604-4	-	L6
1478604-5	-	L7
1478604-6	-	L8
1478604-7	-	L9
1478605-1	-	L3
1478605-2	-	L4
1478605-3	-	L5
1478605-4	-	L6
1478605-5	-	L7
1478605-6	-	L8
1478605-7	-	L9
1478606-1	-	L3
1478606-2	-	L4
1478606-3	-	L5
1478606-4	-	L6
1478606-5	-	L7
1478606-6	-	L8
1478606-7	-	L9
1478607-1	-	L3
1478607-2	-	L4
1478607-3	-	L5
1478607-4	-	L6
1478607-5	-	L7
1478607-6	-	L8
1478607-7	-	L9
1478608-1	-	L3
1478608-2	-	L4
1478608-3	-	L5
1478608-4	-	L6
1478608-5	-	L7
1478608-6	-	L8
1478608-7	-	L9
1478609-1	-	L3
1478609-2	-	L4
1478609-3	-	L5
1478609-4	-	L6
1478609-5	-	L7
1478609-6	-	L8
1478609-7	-	L9
1478610-1	-	L3
1478610-2	-	L4
1478610-3	-	L5
1478610-4	-	L6
1478610-5	-	L7
1478610-6	-	L8
1478610-7	-	L9
1478611-1	-	L3
1478611-2	-	L4
1478611-3	-	L5
1478611-4	-	L6



Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1478611-5	-	L7
1478611-6	-	L8
1478611-7	-	L9
1478612-1	-	L3
1478612-2	-	L4
1478612-3	-	L5
1478612-4	-	L6
1478612-5	-	L7
1478612-6	-	L8
1478612-7	-	L9
1478613-1	-	L3
1478613-2	-	L4
1478613-3	-	L5
1478613-4	-	L6
1478613-5	-	L7
1478613-6	-	L8
1478613-7	-	L9
1478614-1	-	L3
1478614-2	-	L4
1478614-3	-	L5
1478614-4	-	L6
1478614-5	-	L7
1478614-6	-	L8
1478614-7	-	L9
1478615-1	-	L3
1478615-2	-	L4
1478615-3	-	L5
1478615-4	-	L6
1478615-5	-	L7
1478615-6	-	L8
1478615-7	-	L9
1478616-1	-	L3
1478616-2	-	L4
1478616-3	-	L5
1478616-4	-	L6
1478616-5	-	L7
1478616-6	-	L8
1478616-7	-	L9
1478617-1	-	L3
1478617-2	-	L4
1478617-3	-	L5
1478617-4	-	L6
1478617-5	-	L7
1478617-6	-	L8
1478617-7	-	L9
1478618-1	-	L3
1478618-2	-	L4
1478618-3	-	L5
1478618-4	-	L6
1478618-5	-	L7
1478618-6	-	L8
1478618-7	-	L9
1478619-1	-	L3
1478619-2	-	L4
1478619-3	-	L5
1478619-4	-	L6
1478619-5	-	L7
1478619-6	-	L8
1478619-7	-	L9
1478620-1	-	L3
1478620-2	-	L4
1478620-3	-	L5
1478620-4	-	L6
1478620-5	-	L7
1478620-6	-	L8
1478620-7	-	L9
1478667-1	-	L3
1478667-2	-	L4

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1478667-3	-	L5
1478667-4	-	L6
1478667-5	-	L7
1478667-6	-	L8
1478667-7	-	L9
1478668-1	-	L3
1478668-2	-	L4
1478668-3	-	L5
1478668-4	-	L6
1478668-5	-	L7
1478668-6	-	L8
1478668-7	-	L9
1478669-1	-	L3
1478669-2	-	L4
1478669-3	-	L5
1478669-4	-	L6
1478669-5	-	L7
1478669-6	-	L8
1478669-7	-	L9
1478670-1	-	L3
1478670-2	-	L4
1478670-3	-	L5
1478670-4	-	L6
1478670-5	-	L7
1478670-6	-	L8
1478670-7	-	L9
1478671-1	-	L3
1478671-2	-	L4
1478671-3	-	L5
1478671-4	-	L6
1478671-5	-	L7
1478671-6	-	L8
1478671-7	-	L9
1478672-1	-	L3
1478672-2	-	L4
1478672-3	-	L5
1478672-4	-	L6
1478672-5	-	L7
1478672-6	-	L8
1478672-7	-	L9
147871-1	FSM8JART	E6
147873-1	FSMJM5.0ATR	E9
147873-2	FSMJM4.3ATR	E9
147873-3	FSMJM3.5ATR	E9
147916-1	FSM15JA	E5
147942-1	FSMJM4.3	E9
147942-2	FSMJM4.3TR	E9
147944-1	A201J50AQ0	F7
147997-1	FSM4JART	E6
1571004-1	SE1GSMT	B11
1571004-2	SE1EGSMT	B11
1571004-3	SE1DGSMT	B11
1571004-4	SE1GSMTTR	B11
1571004-5	SE1EGSMTTR	B11
1571004-6	SE1DGSMTTR	B11
1571005-1	S1DGPC	B12
1571005-2	S1EGPC	B12
1571005-3	S2DGPC	B12
1571005-4	S2EGPC	B12
1571006-1	S1DGRA	B12
1571006-2	S1EGRA	B12
1571006-3	S2DGRA	B12
1571006-4	S2EGRA	B12
1571010-1	FSM14JRT	E6
1571058-1	A103J1AQ0	F7
1571060-1	TT11DGRA1T	C8
1571061-1	FSM102A	E17
1571071-1	A101J2ZB9	F7

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1571076-9	PRASA1-16F-BB000	F22
1571078-2	PRASB1-16F-BR000	F22
1571078-4	PRASB2-16F-BBR00	F22
1571079-4	PRASD1-16F-BB000	F22
1571079-5	PRASD1-16F-BB0DW	F22
1571079-6	PRASD1-16F-BB0EW	F22
1571079-7	PRASD3-16F-BB000	F22
1571079-8	PRASD3-16F-BB0FW	F22
1571079-9	PRASD3-16F-BB0GW	F22
1571083-2	PRASCI-16F-BBR00	F22
1571084-1	PRADA1-07F-BB000	F22
1571084-2	PRADA1-07F-BB0BW	F22
1571084-3	PRADA1-07F-BB0CW	F22
1571084-4	PRADA1-07F-BR000	F22
1571084-5	PRADA1-07F-BR0BW	F22
1571086-1	PRADD1-07F-BB000	F22
1571086-2	PRADD1-07F-BB0DW	F22
1571086-3	PRADD1-07F-BB0EW	F22
1571086-4	PRADD3-07F-BB000	F22
1571086-5	PRADD3-07F-BB0FW	F22
1571086-6	PRADD3-07F-BB0GW	F22
1571086-7	PRADD2-07F-BB000	F22
1571086-8	PRADD2-07F-BB0DW	F22
1571086-9	PRADD2-07F-BB0EW	F22
1571087-1	PRBSC1-16F-BBR00	F23
1571087-2	PRBSC1-16L-BBR00	F23
1571091-1	PRBSA1-16F-BB000	F23
1571091-2	PRBSA1-16F-BB0BW	F23
1571091-3	PRBSA1-16F-BB0CW	F23
1571091-4	PRBSA1-16L-BB000	F23
1571091-5	PRBSA1-16L-BB0BW	F23
1571091-6	PRBSA1-16L-BB0CW	F23
1571091-7	PRBSA1-16F-BR000	F23
1571091-8	PRBSA1-16L-BR000	F23
1571091-9	PRBSA1-16F-BB0HW	F23
1571092-1	PRBSB1-16F-BR000	F23
1571092-2	PRBSB1-16F-BR0BW	F23
1571092-3	PRBSB1-16F-BA000	F23
1571092-4	PRBSB1-16F-BC000	F23
1571094-1	PRBSD1-16F-BB000	F23
1571094-2	PRBSD1-16F-BB0DW	F23
1571094-3	PRBSD1-16F-BB0EW	F23
1571094-4	PRBSD3-16F-BB000	F23
1571094-5	PRBSD3-16F-BB0FW	F23
1571094-6	PRBSD3-16F-BB0GW	F23
1571094-7	PRBSD3-16F-BW000	F23
1571103-1	PRDDA1-16F-BB000	F24
1571103-2	PRDDA1-16F-BB0BW	F24
1571103-3	PRDDA1-16F-BB0CW	F24
1571103-4	PRDDA1-16F-BR000	F24
1571103-5	PRDDA1-16F-BB0HW	F24
1571103-6	PRDDA1-16F-BR0HW	F24
1571112-1	PRDDDB1-16F-BR000	F24
1571112-2	PRDDDB1-16F-BA000	F24
1571113-1	PRDDD1-16F-BB000	F24
1571113-2	PRDDD1-16F-BB0DW	F24
1571113-3	PRDDD1-16F-BB0EW	F24
1571113-4	PRDDD3-16F-BB000	F24
1571113-5	PRDDD3-16F-BB0FW	F24
1571113-6	PRDDD3-16F-BB0GW	F24
1571113-7	PRDDD3-16F-BR000	F24
1571139-1	FSM100A	E16
1571140-1	FSM201A	E16
1571186-1	AE101MDIZQ	C35
1571212-1	MRD10CSTR	A21
1571217-1	-	E18
1571217-2	-	E18
1571217-3	-	E18

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1571217-4	-	E18
1571218-1	-	E19
1571218-2	-	E19
1571218-3	-	E19
1571218-4	-	E19
1571219-1	-	E20
1571219-2	-	E20
1571220-1	-	E21
1571220-2	-	E21
1571236-1	A101J16Z3Q00UL	F7
1571237-1	A101J16Z3G00UL	F7
1571238-1	A101J51Z3Q00UL	F7
1571239-1	A101J51Z3G00UL	F7
1571262-1	-	E29
1571262-2	-	E29
1571278-1	TT12K8T1/4	C8
1571280-1	A203J2AQ0	F7,F15
1571289-1	A201J3V3Q0	F7
1571294-1	-	E22
1571294-2	-	E22
1571294-3	-	E22
1571294-4	-	E22
1571295-1	-	E24
1571295-2	-	E24
1571296-1	-	E23
1571296-2	-	E23
1571297-1	-	E26
1571298-1	-	E25
1571298-2	-	E25
1571299-1	-	E25
1571299-2	-	E25
1571299-3	-	E25
1571299-4	-	E25
1571300-1	-	E27
1571300-2	-	E27
1571336-1	ADF12T	A8
1571337-1	ADE12S	A7
1571354-1	AE203MD1V30Q	C35
1571369-1	TSPDF11FGVRA0	D3
1571376-1	FSM8JL	E5
1571386-1	FSMRA 2JL	E7
1571386-2	FSMRA 1JL	E7
1571386-3	FSMRA 3JL	E7
1571386-4	FSMRA 4JL	E7
1571386-5	FSMRA 5JL	E7
1571386-6	FSMRA 6JL	E7
1571386-7	FSMRA 7JL	E7
1571386-8	FSMRA 8JL	E7
1571398-1	AE101J1AV2G0	F17
1571402-1	FSM6JART	E6
1571407-1	-	E28
1571407-2	-	E28
1571412-1	AE201SD1CQUL	C35
1571413-1	TTE11AGPC9T1/4	C8
1571419-1	FSMRA 8J	E7
1571423-1	MSS1400G	B21
1571427-1	AE107J1AQ0	F17
1571461-1	TT23NRA1	C8
1571490-1	-	B48
1571491-1	-	B48
1571505-1	PICOD131ALULS	J7,J8
1571506-1	PICOD137ALULS	J7,J8
1571514-1	-	E30
1571514-2	-	E30
1571514-3	-	E30
1571515-1	-	E30
1571533-1	TSPDF11CGSRA0TR	D3
1571537-1	AE201MD1AV2Q	C41

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1571571-1	A107KAV2Q	C22
1571613-1	AE201J1AV2G0UL	F17
1571614-1	AE101J1AG0UL	F17
1571621-1	FSM4LP	E15
1571625-1	-	E12
1571625-2	-	E12
1571625-3	-	E12
1571625-4	-	E12
1571625-5	-	E12
1571625-6	-	E12
1571625-7	-	E12
1571625-8	-	E12
1571626-1	-	E13
1571626-2	-	E13
1571626-3	-	E13
1571626-4	-	E13
1571626-5	-	E13
1571626-6	-	E13
1571626-7	-	E13
1571626-8	-	E13
1571626-9	-	E13
1571636-1	-	E14
1571636-2	-	E14
1571636-3	-	E14
1571636-4	-	E14
1571636-5	-	E14
1571636-6	-	E14
1571636-7	-	E14
1571636-8	-	E14
1571636-9	-	E14
1571666-1	AE103J2CB0	F17
1571668-1	GDP02STR	A4
1571670-1	A201SDCQ	C30
1571786-1	-	F22
1571819-1	FSMRA 4JA	E7
1571837-1	AE203SD1CQ	C35,C39
1-1437554-0	A101KZQ2	C22
1-1437554-4	A101MD9AB	C22,C32
1-1437554-5	A101MD9AG	C22
1-1437554-6	A101MD9AQ	C22,C32
1-1437554-7	A101MD9AV2B	C22,C32
1-1437554-8	A101MD9AV2G	C22
1-1437554-9	A101MD9AV2Q	C22,C32
1-1437555-0	A107TZB	C22
1-1437555-2	A108MD9AB	C22,C32
1-1437555-3	A108P3CWV30B	C22
1-1437555-4	A108P3YZCQ	C22
1-1437555-5	A108P3YZQ	C22,C32
1-1437555-6	A108SD9AQ	C22,C30
1-1437555-7	A108SDZQ	C22
1-1437555-8	A108SYCB	C22,C28
1-1437555-9	A108SYCQ	C22
1-1437556-0	AE101MD1AGUL	C35
1-1437556-1	AE101MD1AQ	C40
1-1437556-2	AE101MD1AV2B	C40
1-1437556-3	AE101MD1AV2Q	C40
1-1437556-4	AE101MD1AV2QUL	C35
1-1437556-5	AE101MD1CB	C41
1-1437556-6	AE101MD1CG	C35
1-1437556-7	AE101MD1CQ	C41
1-1437556-8	AE101MD1V30B	C35
1-1437556-9	AE101MD1V30QUL	C35
1-1437557-0	ATE1FGRA1	C21
1-1437557-1	ATE1FGRA7	C21
1-1437557-2	ATE1GGPC1	C20
1-1437557-3	ATE1GGPC7	C20
1-1437557-4	ATE1GGRA1	C21
1-1437557-5	ATE2DGPC1	C20

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1-1437557-6	ATE2DGPC7	C20
1-1437557-7	ATE2DGRA1	C21
1-1437557-8	ATE2DGRA7	C21
1-1437557-9	ATE2EGPC1	C20
1-1437558-0	MTA106D	C43
1-1437558-1	MTA106DPC	C44
1-1437558-2	MTA106E	C43
1-1437558-3	MTA106EPC	C44
1-1437558-4	MTA106F	C43
1-1437558-5	MTA106FPC	C44
1-1437558-6	MTA106G	C43
1-1437558-7	MTA106GPC	C44
1-1437558-8	MTA106H	C43
1-1437558-9	MTA106HPC	C44
1-1437559-1	MTG106D	C48
1-1437559-2	MTG106E	C48
1-1437559-3	MTG106F	C48
1-1437559-4	MTG106G	C48
1-1437559-5	MTG106H	C48
1-1437559-6	MTG126D	C49
1-1437559-7	MTG126E	C49
1-1437559-8	MTG206N	C48
1-1437561-2	11106-AG	C54
1-1437562-0	TT21NGPC8T1/4	C8
1-1437562-1	TT21NGPC9T1/4	C11
1-1437562-2	TT21NGPC9T1/4ES	C16
1-1437562-5	TT21NGRA1	C8
1-1437562-6	TT21NGRA1ES	C8
1-1437562-8	TT21NGRA3T1/4	C8
1-1437562-9	TT21NGRA7T1/4	C12
1-1437563-0	TTE41NGPC1	C8
1-1437563-1	TTE41NGWW2T	C8
1-1437563-2	TTE43N8T1/4	C8
1-1437563-3	TTE43N9T1/4	C8
1-1437563-4	TTE43N9T1/4E	C8
1-1437563-5	TTE43P8T1/4	C8
1-1437564-1	TST11DGRA1D	C5
1-1437564-3	TST11DGRA2D	C5
1-1437564-4	TST11DGSPC1D	C5
1-1437564-5	TST11DGSRA1D	C5
1-1437564-6	TST11DGSRA1BD	C5
1-1437564-7	TST11DGVRA1D	C5
1-1437564-8	TST11DGVRA2D	C5
1-1437565-0	FSM13J	E5
1-1437565-1	FSM13JA	E5
1-1437565-2	FSM14J	E5
1-1437565-3	FSM16J	E5
1-1437565-4	FSM18J	E5
1-1437565-5	FSM1J	E4,E5
1-1437565-6	FSM1LP	E15
1-1437565-7	FSM1LPA	E15
1-1437565-8	FSM1LPATR	E15
1-1437565-9	FSM1LPTR	E15
1-1437567-0	APA2RGRA	D17
1-1437567-1	APB1BGPC	D18
1-1437567-2	APB1CGPC	D18
1-1437567-3	APB1CGRA	D18
1-1437567-4	APB1FGPC	D18
1-1437567-5	APB1FGRA	D18
1-1437567-6	APB2MGRA	D18
1-1437567-7	APB2RGPC	D18
1-1437567-8	APBE1FGPC	D19
1-1437567-9	APBE1FGRA	D20
1-1437569-0	164J0A22	I17
1-1437569-1	164J2A11	I17
1-1437569-2	164J2A22	I17
1-1437569-3	164J2B11	I17
1-1437569-4	164J2B22	I17



Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1-1437569-5	164J3A33	I17
1-1437569-6	164J3C22	I17
1-1437569-8	164KA	I17
1-1437569-9	164POB22	I17
1-1437571-0	TP11CGRA2	D7
1-1437571-2	TP11FGPC0	D7
1-1437571-3	TP11FGPC2	D7
1-1437571-5	TP11FGRA0	D7
1-1437571-6	TP11FGRA2	D7
1-1437571-8	TP21CCGPC0	D7
1-1437571-9	TP21CCGPC2	D7
1-1437572-0	TPC11CGVRA0	D11
1-1437572-1	TPC11FG0	D6
1-1437572-2	TPC11FG2	D6
1-1437572-3	TPC11FGPC0	D8
1-1437572-4	TPC11FGPC2	D8
1-1437572-6	TPC11FGPCES0	D13
1-1437572-7	TPC11FGRA0	D8
1-1437572-8	TPC11FGRA2	D8
1-1437572-9	TPC11FGVRA0	D11
1-1437573-1	TSPD11CGPC0	D3
1-1437573-3	TSPD11CGPC2	D3
1-1437573-4	TSPD11CGPCV0	D3
1-1437573-5	TSPD11CGRA0	D3
1-1437573-7	TSPD11CGRA2	D3
1-1437573-8	TSPD11CGSPC0	D3
1-1437573-9	TSPD11CGSRA0	D3
1-1437574-1	SE1DGRA	B12
1-1437574-4	SE1EGPC	B12
1-1437574-5	SE1EGRA	B12
1-1437574-6	SE2DGRA	B12
1-1437574-8	SE2DGRA	B12
1-1437575-0	MMS42	B37
1-1437575-1	MMS42R	B37
1-1437575-2	MMS43	B37
1-1437575-3	MMS43R	B37
1-1437575-4	SSA12	B39
1-1437575-5	SSA12G	B39
1-1437575-6	SSA22	B39
1-1437575-7	SSA22G	B39
1-1437575-8	SSB12	B38
1-1437575-9	SSB12G	B38
1-1437576-0	MHS122G	B33
1-1437576-1	MHS122GRA	B34
1-1437576-2	MHS122K	B33
1-1437576-3	MHS122KG	B33
1-1437576-4	MHS122RA	B34
1-1437576-5	MHS123	B33
1-1437576-6	MHS123GRA	B34
1-1437576-7	MHS123K	B33
1-1437576-8	MHS123RA	B34
1-1437576-9	MHS133	B33
1-1437577-0	SL330	B40
1-1437577-1	SL550	B40
1-1437577-2	SL660	B40
1-1437577-3	SL770	B40
1-1437577-4	SL880	B40
1-1437577-5	SLS120	B41
1-1437577-6	SLS120I	B42
1-1437577-7	SLS121	B43
1-1437577-8	SLS121I	B43
1-1437577-9	SLS121PC	B43
1-1437579-1	TSS11DGRA	B19
1-1437579-2	TSS11EGIPC	B18
1-1437579-3	TSS11EGIRA	B19
1-1437579-4	TSS11EGPC	B18
1-1437579-5	TSS11EGRA	B19
1-1437579-6	TSS21KGPC	B18

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1-1437579-7	TSS21NGIPC	B18
1-1437579-9	TSS21NGPC	B18
1-1437580-7	MSSA101DG	B31
1-1437580-9	MSSA101DGRA	B32
1-1437581-0	ASE22RGS	B7
1-1437581-1	ASE22RL	B7
1-1437581-2	ASE22RS	B7
1-1437581-3	ASE22S	B7
1-1437581-4	ASE42	B6
1-1437581-6	ASE42G	B6
1-1437581-7	ASE42GL	B6
1-1437581-8	ASE42L	B6
1-1437581-9	ASE42R	B6
1-1437584-0	DRD10CSETR	A23
1-1437584-1	DRD10E	A23
1-1437584-3	DRD10SE	A23
1-1437584-4	DRD10SETR	A23
1-1437584-6	DRD16CE	A23
1-1437584-7	DRD16CRA	A23
1-1437584-8	DRD16CSE	A23
1-1437584-9	DRD16E	A23
1-1437586-0	ADE04	A7
1-1437586-2	ADE04S	A7
1-1437586-3	ADE04SA	A7
1-1437586-5	ADE05	A7
1-1437586-7	ADE05S	A7
1-1437586-8	ADE06	A7
1-1437587-1	ADP02	A9
1-1437587-2	ADP02S	A9
1-1437587-3	ADP02SA	A9
1-1437587-5	ADP04	A9
1-1437587-7	ADP04S	A9
1-1437587-8	ADP04SA	A9
1-1437589-0	TSS11DGPC	B18
1-1437589-5	SLV04	A18
1-1437589-6	SLV06	A18
1-1437589-7	SSH02	A18
1-1437589-8	SSH04	A18
1-1437589-9	SSH06	A18
1-1437590-0	GDH02S	A5
1-1437590-3	GDH02STR	A5
1-1437590-4	GDH04S	A5
1-1437590-6	GDH04STR	A5
1-1437590-9	GDH06S	A5
1-1437591-0	A101J1AV2B0	F7
1-1437591-1	A101J1AV2Q0	F13
1-1437591-2	A101J1CG0	F7
1-1437591-3	A101J1CQ0	F13
1-1437591-4	A101J1V3B0	F7
1-1437591-5	A101J1V3Q0	F7
1-1437591-6	A101J1ZB0	F7
1-1437591-7	A101J1ZQ0	F14
1-1437591-8	A101J2AV2Q0	F16
1-1437591-9	A101J2ZQ0	F15
1-1437592-0	A208J61ZQ00	F7
1-1437592-1	A213J61ZQ00	F7
1-1437592-4	AE101J1AB0	F17
1-1437592-5	AE101J1AQ0	F17
1-1437592-6	AE101J1AQ4UL	F17
1-1437592-7	AE101J1AV2Q0	F17
1-1437592-8	AE101J1V3B0	F17
1-1437592-9	AE101J1V3Q0	F17
1-1437596-0	TRD21P10WLL25	F3
1-1437596-1	TRD21P12WL	F3
1-1437596-8	TRD23N10QC	F3
1-1437596-9	TRD23N10WL	F6
1-1437597-0	2SKF133AEL01	H4
1-1437597-1	2SKF231AEL01	H4

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1-1437597-7	2SWK131AL101	H2
1-1437598-0	SKT331GAEL01	H3
1-1437598-1	SKT332AEL01	H3
1-1437598-3	SKT332GAEL01	H3
1-1437601-1	PICOA	J7
1-1437601-2	PICOADP	J7
1-1437601-3	PICOBG	J7
1-1437601-4	SMCD111AL	J7
1-1437601-5	PICOD131AK	J7
1-1437601-7	PICOD131ALD	J7
1-1437601-8	PICOD137AK	J7
1-1437601-9	PICOD301AK	J7
1-1437602-2	SMCA	J9
1-1437602-3	SMCADP	J9
1-1437602-4	SMCD111AK	J9
1-1437602-5	SMCD131AK	J9
1-1437602-6	SMCD131AKLS	J9
1-1437602-7	SMCD131ALD	J9
1-1437602-8	SMCD137AK	J9
1-1437602-9	SMCD301AK	J9
1-1437603-0	DPS10L	J11
1-1437603-1	DPS8111AK	J10
1-1437603-2	DPS8131AK	J10
1-1437603-3	DPS8131AKLS	J10
1-1437603-4	DPS8131AKULS	J10
1-1437603-5	DPS8131ALD	J10
1-1437603-6	DPS8137AK	J10
1-1437603-7	DPS8137AKLS	J10
1-1437603-8	DPS8137AKU	J10
1-1437603-9	DPS8137AKULS	J10
1-1437610-0	M60575	I11
1-1437610-1	M60576	I11
1-1437610-2	M60582	I11
1-1437610-3	M60652	I11
1-1437610-4	M60800	I11
1-1437610-5	M60802	I11
1-1437610-6	M60805	I11
1-1437610-7	M61202406	I13
1-1437610-8	M612029406	I13
1-1437610-9	M61502406	I13
1-1437612-0	F50	18,19,I14
1-1437612-1	FA0	18,19,I14
1-1437612-2	FR0	18,19,I14
1-1437612-3	V40	18,19,I14
1-1437612-4	V40G	18
1-1437612-5	V50	18,19,I14
1-1437612-6	V50D	18
1-1437612-7	V50G	18
1-1437612-8	VA0	18,19,I14
1-1437612-9	VR0	18,19,I14
1-1437614-0	QM1222	I7
1-1437614-1	QM1224	I7
1-1437614-2	QM1225	I7
1-1437614-3	QM6002	I6
1-1437614-4	QM6003	I6
1-1437614-5	QM6005	I6
1-1437614-6	QT0100	I5
1-1437614-7	QT0102	I5
1-1437614-8	QT0105	I5
1-1437614-9	QT01201	I4
1-1437615-3	SR6012	I6
1-1437615-4	SR6013	I6
1-1437615-5	SR6014	I6
1-1437615-6	SR6015	I6
1-1437615-7	SR6016	I6
1-1437615-8	SR6019	I6
1-1437620-1	387	I20
1-1437620-5	755	I15

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1-1437620-6	757	I15
1-1437620-8	815-AG	I20
1-1437621-0	K700A1/4	K4
1-1437621-1	K700B1/4	K4
1-1437621-3	K900A1/4	K4
1-1437621-4	K900B1/4	K4
1-1437621-8	KA1250B1/4	K4
1-1437621-9	KA500A1/4	K4
1-1437622-5	KLNS500A1/4	K8
1-1437622-6	KLNS500A1/8	K8
1-1437622-7	KLNS500B1/4	K8
1-1437622-8	KLNS500B1/8	K8
1-1437623-2	KT500A1/4	K11
1-1437623-3	KT500B1/4	K11
1-1437623-4	KT500B1/8	K11
1-1437623-6	KT700A1/4	K11
1-1437623-7	KT700B1/4	K11
1-1437623-8	KT900A1/4	K11
1-1437623-9	KT900B1/4	K11
1-1437624-0	PKA50B1/4	K13
1-1437624-1	PKA50B1/8	K13
1-1437624-3	PKA55B1/4	K13
1-1437624-4	PKA55B1/8	K13
1-1437624-5	PKA70B1/4	K13
1-1437624-7	PKA90B1/4	K13
1-1437624-8	PKAP50B1/4	K13
1-1437624-9	PKAP50B1/8	K13
1-1437625-1	PKX100B1/4	K20
1-1437625-2	PKX110B1/4	K20
1-1437625-3	PKX130B1/4	K20
1-1437625-4	PKX50B1/4	K20
1-1437625-5	PKX50B1/8	K20
1-1437625-6	PKX60B1/4	K20
1-1437625-7	PKX60B1/8	K20
1-1437626-0	B2100	C55
1-1437626-1	B2210	C55
1-1437626-4	BP10480	D31
1-1437626-5	BP10482	D31
1-1437626-6	BP10488	D31
1-1437626-7	BP14400	D31
1-1437626-8	BP14402	D31
1-1437626-9	BP14408	D31
1-1437628-0	N1B	C54,D32
1-1437628-1	N1C	C54
1-1437628-3	N3-AG	C54
1-1437628-4	N35-AG	C54,D32
1-1437628-5	N40-AG	C54
1-1437628-6	N43-AG	C54
1-1437628-7	N45-AG	C54,D32
1-1437629-0	MRJ26	G4
1-1437629-1	MRJ34	G4
1-1437629-2	MRJ43	G4
1-1437629-3	MRJB112	G4
1-1437629-4	MRJB26	G4
1-1437629-5	MRJB34	G4
1-1437629-6	MRJB43	G4
1-1437629-7	MRJE112	G4
1-1437629-8	MRJE26	G4
1-1437629-9	MRJE34	G4
1-1437807-0	DRW16E	A25
1-1437807-1	DRW10S	A25
1-1437807-2	DRW10CE	A25
1-1437807-3	DRW10E	A25
1-1437807-4	DRM10CE	A25
1-1437807-5	DRM16E	A25
1-1437807-6	DRM16CE	A25
1-1437807-7	MRD16RAS	A21
1-1571076-0	PRASA1-16F-BB0BW	F22

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
1-1571076-1	PRASA1-16F-BB0CW	F22
1-1571076-2	PRASA1-16L-BB000	F22
1-1571076-3	PRASA1-16L-BB0BW	F22
1-1571076-4	PRASA1-16L-BB0CW	F22
1-1571076-5	PRASA1-16F-BR000	F22
1-1571076-6	PRASA1-16L-BR000	F22
1-1571076-7	PRASA2-16F-BBRBR	F22
1-1571079-0	PRASD2-16F-BB000	F22
1-1571079-1	PRASD2-16F-BB0DW	F22
1-1571079-2	PRASD2-16F-BB0EW	F22
1-1571079-3	PRASD4-16F-BB000	F22
1-1571079-4	PRASD4-16F-BB0FW	F22
1-1571079-5	PRASD4-16F-BB0GW	F22
1-1571086-0	PRADD4-07F-BB000	F22
1-1571086-1	PRADD4-07F-BB0FW	F22
1-1571086-2	PRADD4-07F-BB0GW	F22
1-1571091-0	PRBSA1-16F-BR0HW	F23
1-1571091-1	PRBSA1-16F-BW000	F23
1-1571091-2	PRBSA1-16F-BW0HB	F23
1-1571626-0	-	E13
1-1571636-0	-	E14
1-435097-1	-	G7
1-435167-1	-	G7
1-435174-1	-	G6
1-435704-0	-	A20
1-435704-2	-	A20
1-435802-0	-	A12
1-435802-5	-	A12
1-435802-6	-	A12
1-435802-7	-	A12
1-435802-8	-	A12
1-435802-9	-	A12
2-1437528-6	SPA42	C55
2-1437554-0	A101MD9V30B	C22
2-1437554-1	A101MDAQ	C22
2-1437554-2	A101MDAV2B	C22
2-1437554-3	A101MDCG	C22
2-1437554-4	A101MDZQ	C22
2-1437554-5	A101MYCQ	C22
2-1437554-6	A101MYZQ	C22
2-1437554-7	A101P3CWV30B	C22
2-1437554-8	A101P3YCB	C22
2-1437554-9	A101P3YZQ	C22,C33
2-1437555-0	A108SYZQ	C22,C27
2-1437555-1	A108SYZQL	C22
2-1437555-3	A201KAB	C22
2-1437555-4	A201KD9AQ	C22
2-1437555-5	A201KZQ	C22,C31
2-1437555-6	A201KZQL	C22
2-1437555-7	A201MD9AB	C22,C32
2-1437555-8	A201MD9AQ	C22,C32
2-1437555-9	A201MD9AV2B	C22,C32
2-1437556-2	AE101SDIAB	C42
2-1437556-3	AE108SDIAQ	C42
2-1437556-4	AE101SDIAQL	C35
2-1437556-5	AE101SDIAVB	C42
2-1437556-6	AE101SDIAV2Q	C42
2-1437556-7	AE101SDICB	C39
2-1437556-8	AE101SDICQ	C39
2-1437556-9	AE101SDIV30B	C35
2-1437557-1	ATE4DGPC2	C19
2-1437557-2	ATE4DGRA2	C19
2-1437558-0	MTA206N	C43
2-1437558-1	MTA206NPC	C44
2-1437558-2	MTA206P	C43
2-1437558-3	MTA206PA	C43
2-1437558-4	MTA206PAPC	C44
2-1437558-5	MTA206PPC	C44

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
2-1437558-7	MTA206R	C43
2-1437558-8	MTA206RPC	C44
2-1437558-9	MTA206S	C43
2-1437559-0	MTG206P	C48
2-1437559-1	MTG206PA	C48
2-1437559-2	MTG206R	C48
2-1437559-3	MTG206S	C48
2-1437559-4	MTG206T	C48
2-1437559-5	MTG226N	C49
2-1437559-6	MTG226P	C49
2-1437559-7	MTG226PA	C49
2-1437559-8	MTG306D	C48
2-1437559-9	MTG306E	C48
2-1437561-2	TT21NGVRA1	C11
2-1437561-3	TT11AGPC1	C10
2-1437561-4	TT11AGPC1ES	C16
2-1437561-5	TT11AGPC9T1/4	C11
2-1437561-6	TT11DGPCC1	C10
2-1437561-7	TT11DGPCC1ES	C16
2-1437561-9	TT11DGPCC2TES	C8
2-1437562-0	TT21NGRA8T1/4	C8
2-1437562-1	TT21NGRA9T1/4	C8
2-1437562-3	TT21NGVRA3T	C11
2-1437562-4	TT21NGWW2T	C13
2-1437563-2	TT11EGVRA1T	C8
2-1437563-6	TT13D4T1/49	C8
2-1437564-0	TST11EGPC1D	C5
2-1437564-3	TST11EGRA1D	C5
2-1437564-4	TST11EGSRA1D	C5
2-1437564-5	TST11EGSRA2D	C5
2-1437564-6	TST11EGVRA1D	C5
2-1437564-7	TST11FGPC1D	C5
2-1437564-9	TST11FGRA1D	C5
2-1437565-0	FSM2J	E4,E5
2-1437565-1	FSM2JA	E5
2-1437565-2	FSM2JART	E6
2-1437565-4	FSM2JL	E5
2-1437565-6	FSM2JRT	E6
2-1437565-7	FSM2JMA	E10
2-1437565-8	FSM2JSMAA	E10
2-1437565-9	FSM2JSMAATR	E10
2-1437567-0	APBE2RGPC	D19
2-1437567-1	APBE2RGRA	D20
2-1437567-4	MPA103B	D21
2-1437567-5	MPA103C	D21
2-1437567-6	MPA103D	D21
2-1437567-7	MPA103F	D21
2-1437567-8	MPA106D	D22
2-1437567-9	MPA106F	D22
2-1437569-0	I64P2B11	I17
2-1437569-1	I64P2B22	I17
2-1437569-2	I64P3B22	I17
2-1437569-3	I64P3B33	I17
2-1437569-5	I64SL11	I16
2-1437569-6	I64SL22	I16
2-1437569-7	I64SL33	I16
2-1437569-9	I64SL511	I16
2-1437571-0	TP21CCGRA0	D8
2-1437571-1	TP21CCGRA2	D8
2-1437571-2	TP21FFGRA0	D8
2-1437571-3	TP21FFGRA2	D8
2-1437571-5	TPA11CGPC0	D7
2-1437571-7	TPA11CGPC2	D7
2-1437571-9	TPA11CGRA0	D7
2-1437572-0	TPC11FGVRA2	D11
2-1437572-2	TPC13C0	D9
2-1437572-3	TPC13C2	D9
2-1437572-5	TPC13CPC0	D6

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
2-1437572-6	TPC13F0	D9
2-1437572-7	TPC13F2	D9
2-1437572-8	TPC21MGPC0	D9
2-1437572-9	TPC21MGRA0	D9
2-1437573-0	TSPD11CGSRA2	D3
2-1437573-1	TSPD11CGSRAB0	D3
2-1437573-2	TSPD11CGVRA0	D3
2-1437573-4	TSPD11FGPC0	D3
2-1437573-5	TSPD11FGPCV0	D3
2-1437573-6	TSPD11FGRA0	D3
2-1437573-7	TSPD11FGSPC0	D3
2-1437573-8	TSPD11FGSRA0	D3
2-1437573-9	TSPD11FGSRAB0	D3
2-1437574-0	SE2EGPC	B12
2-1437574-1	SE2EGRA	B12
2-1437575-0	SSB12R	B38
2-1437575-1	SSB12RG	B38
2-1437575-2	SSB22	B38
2-1437575-3	SSB22G	B38
2-1437575-4	SSB22R	B38
2-1437575-5	SSB22RG	B38
2-1437575-8	SSB42	B38
2-1437575-9	SSB42G	B38
2-1437576-0	MHS133G	B33
2-1437576-1	MHS133GRA	B34
2-1437576-2	MHS133K	B33
2-1437576-3	MHS133KG	B33
2-1437576-4	MHS133RA	B34
2-1437576-5	MHS222	B33
2-1437576-6	MHS222G	B33
2-1437576-7	MHS222GRA	B34
2-1437576-8	MHS222K	B33
2-1437576-9	MHS222KG	B33
2-1437577-2	SLS121IRA	B43
2-1437577-4	SLS131PC	B44
2-1437577-6	SLS131RA	B44
2-1437577-8	SLS141PC	B44
2-1437579-0	TSS21NGRA	B19
2-1437579-1	TSD21RG1PC	B18
2-1437579-3	TSS21PGPC	B18
2-1437579-4	TSS21PGRA	B19
2-1437579-5	TSS41NGPC	B18
2-1437579-7	TSS41NGRA	B19
2-1437580-1	MSSA101EGRA	B32
2-1437580-3	MSSA104D	B31
2-1437580-4	MSSA104D1	B31
2-1437580-5	MSSA104DRA	B32
2-1437580-6	MSSA104E	B31
2-1437580-8	MSSA104ERA	B32
2-1437580-9	MSSA111IDG	B30
2-1437581-0	ASE42RG	B6
2-1437581-1	ASE42RGL	B7
2-1437581-2	ASE42RL	B7
2-1437581-3	ASE42RS	B7
2-1437581-4	ASE42S	B7
2-1437581-5	ASE43	B6
2-1437581-6	ASE43G	B6
2-1437581-7	ASE43GL	B6
2-1437581-8	ASE43L	B6
2-1437581-9	ASE43R	B6
2-1437584-0	DRD16RAE	A23
2-1437584-1	DRD16SE	A23
2-1437584-2	DED16SETR	A23
2-1437586-0	ADE06S	A7
2-1437586-1	ADE06SA	A7
2-1437586-3	ADE07	A7
2-1437586-5	ADE07S	A7
2-1437586-6	ADE08	A7

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
2-1437586-8	ADE08S	A7
2-1437586-9	ADE08SA	A7
2-1437587-0	ADP05	A9
2-1437587-1	ADP05S	A9
2-1437587-2	ADP06	A9
2-1437587-3	ADP06S	A9
2-1437587-4	ADP06SA	A9
2-1437587-5	ADP07	A9
2-1437587-6	ADP08	A9
2-1437587-8	ADP08S	A9
2-1437587-9	ADP08SA	A9
2-1437589-0	SSH08	A18
2-1437589-1	SSH10	A18
2-1437589-2	SSV02	A18
2-1437589-3	SSV04	A18
2-1437589-4	SSV06	A18
2-1437589-6	SSV08	A18
2-1437589-7	SSV10	A18
2-1437590-1	GDH06STR	A5
2-1437590-2	GDH08S	A5
2-1437590-4	GDH08STR	A5
2-1437590-6	GDH10S	A5
2-1437590-8	GDH10STR	A5
2-1437591-0	A101J3V3Q2	F7
2-1437591-1	A101J3ZQ0UL	F7
2-1437591-2	A101J4ZQ0	F7
2-1437591-4	A101J50AV2Q0	F7
2-1437591-5	A101J50V3Q0	F7
2-1437591-6	A101J50V3Q2	F7
2-1437591-7	A101J50ZQ0	F7
2-1437591-8	A101J51CB00	F7
2-1437591-9	A101J51Z3Q00	F7
2-1437592-0	AE103J50V3B0	F17
2-1437592-1	AE103J60V3Q02	F17
2-1437592-2	AE105J1AQ0	F17
2-1437592-3	AE105J1V3B0	F17
2-1437592-4	AE105J1ZB0	F17
2-1437592-5	AE105J60V3B0	F17
2-1437592-6	AE201J1AQ0	F17
2-1437592-7	AE201J1V2Q0	F17
2-1437592-8	AE201J1V3B0	F17
2-1437592-9	AE201J2AQ2	F17
2-1437596-0	TRD23N10WLL5	F3
2-1437596-2	TRD23N12QC	F3
2-1437596-3	TRD23N12QCL5	F3
2-1437596-4	TRD23N12WL	F3
2-1437596-8	TRD23N20QC	F3
2-1437596-9	TRD23N20WL	F3
2-1437597-3	2SWK132AL101	H2
2-1437597-7	2SWK231AL101	H2
2-1437601-0	PICOD301ALD	J7
2-1437601-1	PICOD301ALULS	J7,J8
2-1437601-7	PICOP	J7
2-1437603-0	DPS8301AK	J10
2-1437603-1	DPS8301AKULS	J10
2-1437603-5	DPS8A	J10
2-1437603-7	DPS8L	J10
2-1437603-8	DPS8P	J10
2-1437603-9	DPS8PW	J10
2-1437610-0	M61532406	I13
2-1437610-1	M61534406	I13
2-1437610-2	M6200	I13
2-1437610-3	M6201	I13
2-1437610-5	M6210	I13
2-1437610-6	M6250	I13
2-1437610-7	M6270	I13
2-1437610-8	M6280	I13
2-1437610-9	M64020	I12

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
2-1437614-0	RM0100	I3
2-1437614-1	RM0102	I3
2-1437614-2	RM0104	I3
2-1437614-3	KA500B1/4	I3
2-1437614-4	RM0106	I3
2-1437614-5	RM0109	I3
2-1437614-6	RM0152	I3
2-1437614-7	RM0200	I3
2-1437614-8	RM0202	I3
2-1437614-9	RM0209	I3
2-1437621-0	KA500A1/8	K4
2-1437621-1	KA500B1/4	K4
2-1437621-2	KA500B1/8	K4
2-1437621-3	KA700A1/4	K4
2-1437621-4	KA700B1/4	K4
2-1437621-5	KA900A1/4	K4
2-1437621-6	KA900B1/4	K4
2-1437621-7	KAS500A1/4	K4
2-1437621-8	KAS500A1/8	K4
2-1437621-9	KAS500B1/4	K4
2-1437622-0	KLNS700A1/4	K8
2-1437622-1	KLNS700B1/4	K8
2-1437622-2	KLNS900A1/4	K8
2-1437622-3	KLNS900B1/4	K8
2-1437622-5	KN1250A1/4	K9
2-1437622-6	KN1250AB1/4	K9
2-1437622-7	KN1250B1/4	K9
2-1437622-8	KN1250BA1/4	K9
2-1437622-9	KN1251A1/4	K9
2-1437623-1	KU401B1/8	K11
2-1437623-2	KU402B1/8	K11
2-1437623-3	KLNS900B1/8	K11
2-1437623-4	KU700B1/4	K11
2-1437623-9	KUS402B1/8	K11
2-1437624-0	PKAP70B1/4	K13
2-1437624-3	PKB70B1/4	K14
2-1437624-4	PKB90B1/4	K14
2-1437624-5	PKD100B1/4	K14
2-1437624-6	PKD100B101/4	K14
2-1437624-7	PKD60B1/4	K14
2-1437624-8	PKD60B1/8	K14
2-1437624-9	PKD60B101/4	K14
2-1437626-0	BP15320	D31
2-1437626-1	BP15322	D31
2-1437626-2	BP15328	D31
2-1437626-3	BP1900	D31
2-1437626-4	BP2010	D31
2-1437626-5	BP5890	D31
2-1437626-6	BP5900	D31
2-1437626-7	BPA14400	D31
2-1437626-8	BPA14402	D31
2-1437626-9	BPA14408	D31
2-1437628-2	SDR0	D25
2-1437628-4	SPA32	C55
2-1437629-0	MRJE43	G4
2-1571076-0	PRASA1-16F-BB0HW	F22
2-1571076-1	PRASA3-16F-BB0JW	F22
2-435097-1	-	G7
2-435166-9	-	A15
2-435167-1	-	G7
2-435469-1	-	A14
2-435469-2	-	A14
2-435469-4	-	A14
2-435469-5	-	A14
2-435469-6	-	A14
2-435470-1	-	A13
2-435470-2	-	A13
2-435470-4	-	A13

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
2-435470-5	-	A13
2-435470-6	-	A13
2-435640-9	-	A17
2-435668-5	-	A17
2-435668-6	-	A17
2-435668-7	-	A17
2-435668-8	-	A17
2-435668-9	-	A17
2-435802-0	-	A12
2-435802-1	-	A12
2-435802-2	-	A12
3-1437554-0	A101P4YCB	C22
3-1437554-1	A101SCWCQO	C22
3-1437554-2	A101SCWZQ	C22
3-1437554-3	A101SD9AB	C22,C30
3-1437554-4	A101SD9AQ	C22,C30
3-1437554-5	A101SD9AV2B	C22
3-1437554-6	A101SD9AV2Q	C22,C31
3-1437554-7	A101SD9V30B	C22
3-1437554-8	A101SD9V30Q	C22
3-1437554-9	A101SDCQ	C22,C30
3-1437555-0	A201MD9AV2Q	C22,C32
3-1437555-1	A201MDAQ	C22
3-1437555-2	A201MPY9AV2Q	C22
3-1437555-3	A201MYAQ	C22
3-1437555-4	A201MYCB	C22
3-1437555-5	A201MYZQ	C22
3-1437555-6	A201P3YZQ	C22,C33
3-1437555-7	A201SCWZB	C22
3-1437555-8	A201SD9AQ	C22,C30
3-1437555-9	A201SD9AV2Q	C22,C31
3-1437556-0	AE101SD1V30QUL	C35
3-1437556-1	AE103MD1AB	C40
3-1437556-2	AE103MD1AV2B	C40
3-1437556-3	AE103MD1CB	C41
3-1437556-6	AE103SD1AV2B	C42
3-1437556-7	AE103SD1CB	C39
3-1437556-8	AE103SD1CQ	C39
3-1437556-9	AE103SD1CQUL	C35
3-1437558-0	MTA206SA	C43
3-1437558-1	MTA206SPC	C44
3-1437558-2	MTA206T	C43
3-1437558-3	MTA206TA	C43
3-1437558-4	MTA206TPC	C44
3-1437558-5	MTA306D	C43
3-1437558-6	MTA306DPC	C44
3-1437558-7	MTA306E	C43
3-1437558-8	MTA306EPC	C44
3-1437558-9	MTA306F	C43
3-1437559-0	MTG326D	C49
3-1437559-1	MTG406N	C48
3-1437559-2	MTG406P	C48
3-1437559-3	MTG426N	C49
3-1437559-4	MTL106D	C50
3-1437559-5	MTL106E	C50
3-1437559-7	MTL206N	C50
3-1437559-9	MTL206P	C50
3-1437561-0	TT11DGPC3	C8
3-1437561-1	TT11DGPC42	C8
3-1437561-2	TT11DGPC5T1/42	C8
3-1437561-3	TT11DGPC7T1/4	C8
3-1437561-4	TT11DGPC8T1/4	C8
3-1437561-5	TT11DGPC9T1/4	C11
3-1437561-8	TT11DGRA1	C8
3-1437561-9	TT11DGRA1ES	C8
3-1437562-4	TT21PGPC1	C10
3-1437562-5	TT21PGPC3	C8
3-1437562-6	TT21PGPC7T1/4	C8

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
3-1437562-7	TT21PGPC8T1/4	C8
3-1437562-8	TT21PGPC9T1/4	C11
3-1437562-9	TT21PGRA1	C8
3-1437564-0	TSM11FGSPCID	C5
3-1437564-1	TST11FGSRA1D	C5
3-1437564-2	TST11FGVRA1D	C5
3-1437564-3	TST11GGPC1D	C5
3-1437564-4	TST11GGPC4D	C5
3-1437564-5	TST11GGRA1D	C5
3-1437564-6	TST11GGSRA1D	C5
3-1437564-7	TST11GGSRA4D	C5
3-1437565-0	FSM2JSMATR	E10
3-1437565-3	FSM3J	E5
3-1437565-6	FSM4J	E5
3-1437565-7	FSM4JA	E5
3-1437565-8	FSM4JAA	E5
3-1437566-8	FSM8JSMA	E10
3-1437567-1	MPA206N	D22
3-1437567-2	MPA206NPCDPTD	D22
3-1437567-3	MPA206R	D22
3-1437567-4	MPA206RPCDPTD	D22
3-1437567-5	MPA306D	D22
3-1437567-6	MPA306F	D22
3-1437567-7	MPA406N	D22
3-1437567-8	MPA406R	D22
3-1437567-9	MPB103B	D21
3-1437569-0	164SL522	I16
3-1437569-1	164SL533	I16
3-1437569-2	164SZ	I18
3-1437569-4	164TL11	I16
3-1437569-5	164TL22	I16
3-1437569-6	164TL33	I16
3-1437569-8	164TL511	I16
3-1437569-9	164TL522	I16
3-1437571-0	TPA11CGRA2	D7
3-1437571-2	TPA11FGPC0	D7
3-1437571-4	TPA11FGPC2	D7
3-1437571-6	TPA11FGRA0	D7
3-1437571-8	TPA11FGRA2	D7
3-1437572-0	TPC21MGRA2	D9
3-1437572-1	TPC21RGPC0	D9
3-1437572-2	TPC21RGRA0	D9
3-1437572-3	TPC23M0	D9
3-1437572-4	TPC23R0	D9
3-1437572-5	TPC23R2	D9
3-1437572-8	TPCF11CGPC0	D10
3-1437572-9	TPCF11CGPC2	D10
3-1437573-0	TSPD11FGVRA0	D3
3-1437573-1	TSPDF11CGPC0	D3
3-1437573-2	TSPDF11CGRA0	D3
3-1437573-3	TSPDF11CGSRA0	D3
3-1437573-4	TSPDF11CGVRA0	D3
3-1437573-5	TSPDF11FGPC0	D3
3-1437573-6	TSPDF11FGRA0	D3
3-1437573-7	TSPDF11FGSRA0	D3
3-1437575-1	SSJ12	B35
3-1437575-2	SSJ12R	B35
3-1437575-3	SSJ13	B35
3-1437576-0	MHS222RA	B34
3-1437576-1	MHS223	B33
3-1437576-2	MHS223G	B33
3-1437576-3	MHS223GRA	B34
3-1437576-4	MHS223K	B33
3-1437576-5	MHS223RA	B34
3-1437576-6	MHS233	B33
3-1437576-7	MHS233G	B33
3-1437576-8	MHS233GRA	B34
3-1437576-9	MHS233K	B33

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
3-1437577-0	SLS141RA	B44
3-1437577-2	SLS151PC	B44
3-1437577-4	SLS151RA	B44
3-1437577-7	SLS220	B41
3-1437577-8	SLS2201	B42
3-1437577-9	SLS220PC	B40
3-1437580-0	MSSA111EG	B30
3-1437580-1	MSSA114D	B30
3-1437580-2	MSSA114E	B30
3-1437580-3	MSSA1350	B26
3-1437580-4	MSSA1350G	B26
3-1437580-5	MSSA1350R	B26
3-1437580-6	MSSA1350RG	B26
3-1437580-7	MSSA1450	B26
3-1437580-8	MSSA1450G	B26
3-1437580-9	MSSA1450R	B26
3-1437581-0	ASE43RG	B6
3-1437581-1	ASE62	B6
3-1437581-3	ASE62G	B5,B6
3-1437581-4	ASE62GL	B6
3-1437581-5	ASE62L	B6
3-1437581-6	ASE62R	B6
3-1437581-7	ASE62RG	B6
3-1437581-8	ASE62RGL	B7
3-1437581-9	ASE62RL	B7
3-1437584-2	DRM10	A25
3-1437584-3	DRM10C	A25
3-1437584-4	DRM10CRA	A25
3-1437584-5	DRM10E	A25
3-1437584-6	DRM10RA	A25
3-1437584-7	DRM16	A25
3-1437584-8	DRM16C	A25
3-1437584-9	DRM16CRA	A25
3-1437586-0	ADE09	A7
3-1437586-2	ADE10	A7
3-1437586-7	ADE10S	A7
3-1437586-8	ADE12	A7
3-1437587-0	ADP09	A9
3-1437587-1	ADP09SA	A9
3-1437587-3	ADP10	A9
3-1437587-6	ADP10S	A9
3-1437590-2	GDP02	A4
3-1437590-3	GDP02NTS	A4
3-1437590-4	GDP02S	A4
3-1437590-5	GDP04	A4
3-1437590-6	GDP04NTS	A4
3-1437590-7	GDP04S	A4
3-1437590-8	GDP06	A4
3-1437590-9	GDP06S	A4
3-1437591-0	A101J51ZB00	F7
3-1437591-1	A101J51ZQ00	F7
3-1437591-2	A101J51ZQ20	F7
3-1437591-3	A101J61ZQ00	F7
3-1437591-4	A101P4DCB	C22
3-1437591-5	A103J16ZQ00	F7
3-1437591-6	A103J1AV2B0	F7
3-1437591-7	A103J1V3Q0	F7
3-1437591-8	A103J1ZQ0	F14
3-1437591-9	A103J2CB0	F7
3-1437592-0	AE203J1AQ0	F17
3-1437592-1	AE203MD1AQ	C40
3-1437592-2	AE205J50V3B0	F17
3-1437592-3	AE205J60V3B0	F17
3-1437592-4	AE208J50V3B0	F17
3-1437592-7	ATE2EGRA1	C21
3-1437595-6	TRD11D10PC	F3
3-1437595-7	TRD11D10QC	F3
3-1437595-8	TRD11D10QC5LR5	F3



Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
3-1437595-9	TRD11D10QCL2	F3
3-1437596-0	TRD23N20WLL2	F3
3-1437596-1	TRD23N20WLL5	F3
3-1437596-2	TRD23N22WL	F3
3-1437596-4	TRD23P10QC	F3
3-1437596-5	TRD23P10WL	F6
3-1437596-6	TRD23P12WL	F3
3-1437596-7	TRD23P20WL	F3
3-1437597-4	SKF1323AEL01	H4
3-1437597-6	SWK121F315	H5
3-1437597-8	SWK123F315	H5
3-1437598-4	SKT1323AEL01	H3
3-1437602-1	SMCL	J9
3-1437602-2	SMCPK	J9
3-1437602-5	SP1.2	J9, J10
3-1437602-6	SP1.5	J11
3-1437603-4	DPS910A	J11
3-1437603-5	DPS910P	J11
3-1437603-6	DPS9111AK	J11
3-1437603-8	DPS9131AK	J11
3-1437603-9	DPS9131AL	J11
3-1437610-0	M64022	I12
3-1437610-1	M64100	I12
3-1437610-2	M64102	I12
3-1437610-3	M64700	I12
3-1437610-4	M64800	I12
3-1437610-5	M65310	I12
3-1437610-6	M65510	I12
3-1437610-7	M65810	I12
3-1437610-8	M66502406	I14
3-1437610-9	M66505406	I14
3-1437614-0	RM0209	I3
3-1437614-1	RM0302	I4
3-1437614-2	RM0305	I4
3-1437614-3	RM0306	I4
3-1437614-4	RM0450	I4
3-1437614-5	RM0452	I4
3-1437614-6	RM0500	I4
3-1437614-7	RM0502	I4
3-1437614-8	RM0532	I4
3-1437614-9	RM0552	I4
3-1437621-0	KAS500B1/8	K4
3-1437621-1	KAS700A1/4	K4
3-1437621-2	KAS700B1/4	K4
3-1437621-3	KAS900A1/4	K4
3-1437621-4	KAS900B1/4	K4
3-1437621-5	KB500A1/4	K5
3-1437621-6	KB500A1/8	K5
3-1437621-8	KB500B1/4	K5
3-1437621-9	KB500B1/8	K5
3-1437622-0	KN1251B1/4	K9
3-1437622-1	KN1750B1/4	K8
3-1437622-2	KN1751A1/4	K8
3-1437622-3	KN1751AB1/4	K8
3-1437622-5	KN1751AS1/4	K8
3-1437622-6	KN1751B1/4	K8
3-1437622-7	KN1751BA1/4	K8
3-1437622-8	KN1751BS1/4	K8
3-1437622-9	KN1755ABS1/4	K9
3-1437623-0	KUS500B1/8	K11
3-1437623-1	KUS700B1/4	K11
3-1437624-0	PKD60B101/8	K14
3-1437624-1	PKD70B1/4	K14
3-1437624-2	PKD70B101/4	K14
3-1437624-3	PKDT100B1/4	K15
3-1437624-4	PKDT100B101/4	K15
3-1437624-8	PKDT60B101/8	K15
3-1437624-9	PKDT70B1/4	K15

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
3-1437626-0	BPM15320	D33
3-1437626-1	BPM15322	D33
3-1437626-2	BPM15328	D33
3-1437626-3	BPT15320	D33
3-1437626-4	BPT15322	D33
3-1437626-5	BPT15328	D33
3-1437626-6	BT14400	C55
3-1437626-7	BT15320	C55
3-1437626-8	BT15322	C55
3-1437626-9	BT15328	C55
3-1437628-9	N1A0	C54
3-435167-1	-	G7
3-435469-1	-	A14
3-435470-1	-	A13
3-435626-6	-	A15
3-435626-7	-	A15
3-435626-8	-	A15
3-435640-0	-	A17
3-435640-2	-	A17
3-435640-5	-	A17
3-435640-6	-	A17
3-435640-7	-	A17
3-435640-8	-	A17
3-435640-9	-	A17
3-435668-0	-	A17
3-435668-1	-	A17
3-435668-2	-	A17
3-435668-3	-	A17
3-435668-4	-	A17
3-435668-5	-	A17
3-435802-8	-	A12
4-1437554-0	A101SDZQ	C22,C29
4-1437554-1	A101SHZQ	C22
4-1437554-2	A101SY9CQUL	C22
4-1437554-3	A101SYAB	C22,C28
4-1437554-4	A101SYAQ	C22
4-1437554-5	A101SYCB	C22,C28
4-1437554-6	A101SYCQ	C22
4-1437554-7	A101SYCQUL	C22
4-1437554-8	A101SYWQ	C22,C29
4-1437554-9	A101SYZB	C22,C27
4-1437555-0	A201SDCB	C22
4-1437555-1	A201SDZQ	C22,C29
4-1437555-2	A201SY9AB	C22
4-1437555-3	A201SYAB	C22,C28
4-1437555-4	A201SYAQ	C22
4-1437555-5	A201SYCB	C22,C28
4-1437555-6	A201SYCQ	C22
4-1437555-7	A201SYWQ	C22,C29
4-1437555-8	A201SYZB	C22
4-1437555-9	A201SYZQ	C22,C27
4-1437556-0	AE103SD1V30B	C35
4-1437556-2	AE105MD1AB	C35
4-1437556-3	AE105MD1AG	C35
4-1437556-4	AE105MD1AV2B	C35
4-1437556-6	AE105SD1CB	C39
4-1437556-7	AE105SD1V30B	C35
4-1437556-9	AE107J1ZQ0	F17
4-1437558-0	MTA306FPC	C44
4-1437558-1	MTA306H	C43
4-1437558-2	MTA306HPC	C44
4-1437558-3	MTA406N	C43
4-1437558-4	MTA406NPC	C44
4-1437558-5	MTA406P	C43
4-1437558-6	MTA406PA	C43
4-1437558-7	MTA406PAPC	C44
4-1437558-8	MTA406PPC	C44
4-1437559-0	MTL206PA	C50

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
4-1437559-1	MTL206S	C50
4-1437559-2	MTL306D	C50
4-1437559-4	MTL406N	C50
4-1437559-5	MTL406PA	C50
4-1437559-6	MTM106DPC	C51
4-1437559-7	MTM106EPC	C51
4-1437559-8	MTM106FPC	C51
4-1437559-9	MTM206NPC	C51
4-1437561-1	TT11DGRA40	C8
4-1437561-2	TT11DGRA42	C8
4-1437561-3	TT11DGRA46	C8
4-1437561-4	TT11DGRA49	C8
4-1437561-5	TT11DGRA7T1/4	C12
4-1437561-6	TT11DGRA8T1/4	C8
4-1437561-7	TT11DGRA9T1/4	C8
4-1437561-8	TT11DGVRA1	C11
4-1437561-9	TT11DGVRA3T	C11
4-1437562-0	TT21PGRA7T1/4	C12
4-1437562-1	TT21PGRA8T1/4	C8
4-1437562-2	TT21PGRA9T1/4	C8
4-1437562-3	TT21PGVRA1	C11
4-1437562-4	TT21PGWW2T	C13
4-1437562-5	TT21RGPC1	C8
4-1437562-6	TT21RGPC9T1/4	C11
4-1437562-7	TT23K2T	C14
4-1437562-8	TT23K3T	C15
4-1437562-9	TT23K9T1/4	C15
4-1437565-0	FSM4JRT	E6
4-1437565-1	FSM4JSMA	E10
4-1437565-2	FSM4JSMATR	E10
4-1437565-3	FSM4LPTR	E15
4-1437565-4	FSM5J	E5
4-1437565-5	FSM6J	E5
4-1437565-6	FSM6JA	E5
4-1437565-8	FSM6JRT	E6
4-1437565-9	FSM6JSMA	E10
4-1437567-0	MPB103C	D21
4-1437567-2	MPE106D	D23
4-1437567-3	MPE106F	D23
4-1437567-4	MPE206N	D23
4-1437567-5	MPE206R	D23
4-1437567-6	MPE306F	D23
4-1437567-7	MPE406N	D23
4-1437567-8	MPE406R	D23
4-1437567-9	MPG106D	D24
4-1437569-0	I64TL533	I16
4-1437569-1	I64TZ	I18
4-1437569-2	I65EL11	I16
4-1437569-3	I65EL22	I16
4-1437569-4	I65EL511	I16
4-1437569-5	I65EL522	I16
4-1437569-7	I65J2A11	I17
4-1437569-8	I65P2B11	I17
4-1437569-9	I65SL11	I16
4-1437571-0	TPA21CCGPC0	D7
4-1437571-1	TPA21CCGRA0	D8
4-1437571-2	TPA21CCGRA2	D8
4-1437571-3	TPA21FFGPC0	D7
4-1437571-5	TPA21FFGRA0	D8
4-1437571-6	TPA21FFGRA2	D8
4-1437571-7	TPA21MGRA0	D8
4-1437572-0	TPCF11CGRA0	D10
4-1437572-1	TPCF11CGRA2	D10
4-1437572-2	TPCF11FGPC0	D10
4-1437572-3	TPCF11FGPCES0	D15
4-1437572-4	TPCF11FGRA0	D10
4-1437572-5	TPCF13C0	D10
4-1437572-6	TPCF13F0	D10

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
4-1437572-7	TPD11CGPC0	D11
4-1437572-8	TPD11CGPC2	D11
4-1437573-2	TSPD11CGRA6	D3
4-1437576-0	MHS233KG	B33
4-1437576-1	MHS233RA	B34
4-1437577-1	SLS230PC	B40
4-1437577-3	SLS240PCA	B40
4-1437577-5	SLS250PC	B40
4-1437577-7	SLS260PC	B40
4-1437580-0	MSSA1450RG	B26
4-1437580-2	MSSA201NGRA	B32
4-1437580-4	MSSA204N	B31
4-1437580-5	MSSA204N1	B31
4-1437580-6	MSSA204NRA	B32
4-1437580-8	MSSA204P1	B31
4-1437580-9	MSSA211NG	B30
4-1437584-0	DRM16RA	A25
4-1437584-4	DRS10	A25
4-1437584-5	DRS10C	A25
4-1437584-6	DRS10CRA	A25
4-1437584-7	DRS10RA	A25
4-1437584-8	DRS16	A25
4-1437584-9	DRS16CRA	A25
4-1437586-2	ADF02	A8
4-1437586-4	ADF02S	A8
4-1437586-5	ADF02SA	A8
4-1437586-6	ADF02SAT	A8
4-1437586-8	ADF02ST	A8
4-1437586-9	ADF02STTR	A8
4-1437587-7	ADPA02	A9
4-1437587-8	ADPA04	A9
4-1437590-0	GDP08	A4
4-1437590-1	GDP08S	A4
4-1437590-2	GDP08STR	A4
4-1437590-3	GDP10	A4
4-1437590-4	GDP10S	A4
4-1437590-5	GDP10STR	A4
4-1437590-6	GDR02	A5
4-1437590-7	GDR02S	A5
4-1437590-8	GDR04	A5
4-1437590-9	GDR04S	A5
4-1437591-0	A103J2ZQ0	F15
4-1437591-1	A103J3ZQ0	F7
4-1437591-2	A103J51ZQ00	F7
4-1437591-3	A103J61ZQ00	F7
4-1437591-4	A105J16CQ00	F7
4-1437591-5	A105J16ZQ00	F7
4-1437591-6	A105J1AQ0	F14
4-1437591-7	A105J1AV2Q0	F7,F13
4-1437591-8	A105J1CQ00	F13
4-1437591-9	A105J1V3B0	F7
4-1437595-0	TRD11D10QCL5	F3
4-1437595-1	TRD11D10WL	F6
4-1437595-2	TRD11D10WLLR5	F6
4-1437595-4	TRD11D12WL	F3
4-1437595-7	TRD11E10WL	F6
4-1437595-8	TRD11E10WLLR25	F6
4-1437595-9	TRD11F10QC	F3
4-1437597-0	SWK12F315	H5
4-1437597-2	SWK12KF315	H5
4-1437597-3	SWK1323AL101	H2
4-1437603-0	DPS9131ALD	J11
4-1437603-1	DPS9137AK	J11
4-1437603-3	DPS9301AK	J11
4-1437603-4	DPS9307AK	J11
4-1437603-5	DPS9L	J11
4-1437614-0	RM0652	I4
4-1437614-1	RM1222	I6

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
4-1437614-2	RM1224	I6
4-1437614-3	RM1225	I6
4-1437614-4	RM1226	I6
4-1437614-5	RM1229	I6
4-1437614-6	RM1302	I6
4-1437614-7	RM1304	I6
4-1437614-8	RM1305	I6
4-1437614-9	RM1452	I6
4-1437621-0	KB700A1/4	K5
4-1437621-2	KB700B1/4	K5
4-1437621-4	KB900A1/4	K5
4-1437621-5	KB900B1/4	K5
4-1437621-7	KBS500A1/4	K5
4-1437621-8	KBS500A1/8	K5
4-1437621-9	KBS500A101/8	K5
4-1437622-0	KN1755BAS1/4	K9
4-1437622-1	KN1755BS1/4	K9
4-1437622-2	KN500A1/4	K9
4-1437622-3	KN500A1/8	K9
4-1437622-4	KN500AB1/4	K9
4-1437622-5	KN500AB1/8	K9
4-1437622-6	KN500B1/4	K9
4-1437622-7	KN500B1/8	K9
4-1437622-8	KN500BA1/4	K9
4-1437622-9	KN500BA1/8	K9
4-1437624-0	PKDT70B101/4	K15
4-1437624-3	PKE60B1/4	K15
4-1437624-4	PKE60B1/8	K15
4-1437624-5	PKE90B1/4	K15
4-1437624-6	PKES120B1/4	K15
4-1437624-7	PKES140B1/4	K15
4-1437624-8	PKES150B1/4	K15
4-1437627-1	C220	D32
4-1437627-2	C222	D32
4-1437627-3	C223	D32
4-1437627-4	C224	D32
4-1437627-5	C225	D32
4-1437627-6	C226	D32
4-1437627-7	C229	D32
4-1437627-8	C230	D32
4-1437627-9	C232	D32
435005-1	-	G6
435097-1	-	G7
435097-2	-	G7
435123-1	-	G6
435128-1	-	G6
435166-1	-	A15
435166-2	-	A15
435166-4	-	A15
435166-5	-	A15
435166-6	-	A15
435166-7	-	A15
435174-1	-	G6
435469-3	-	A14
435469-7	-	A14
435469-9	-	A14
435470-1	-	A13
435470-2	-	A13
435470-3	-	A13
435470-5	-	A13
435470-7	-	A13
435470-9	-	A13
435626-1	-	A15
435626-2	-	A15
435626-5	-	A15
435640-1	-	A17
435640-2	-	A17
435640-3	-	A17

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
435640-4	-	A17
435640-5	-	A17
435640-6	-	A17
435640-7	-	A17
435668-1	-	A17
435668-3	-	A17
435668-4	-	A17
435668-5	-	A17
435668-7	-	A17
435668-9	-	A17
435704-4	-	A20
435704-6	-	A20
435704-7	-	A20
435704-8	-	A20
435704-9	-	A20
435802-1	-	A12
435802-2	-	A12
435802-3	-	A12
435802-4	-	A12
435802-5	-	A12
435802-6	-	A12
435802-7	-	A12
435802-8	-	A12
435802-9	-	A12
435862-1	-	A20
435984-1	-	G10
435984-7	-	G10
435986-1	-	G10
435987-1	-	G10
436022-1	-	G10
436024-1	-	G10
436028-1	-	G10
436037-1	-	G10
436287-1	-	G11
436860-7	-	A20
4-435166-9	-	A15
4-435626-0	-	A15
4-435626-1	-	A15
4-435626-2	-	A15
4-435626-4	-	A15
4-435640-0	-	A17
4-435640-1	-	A17
4-435640-3	-	A17
5-1437554-0	A101SYZQ	C22,C27
5-1437554-1	A101SYZQN	C22
5-1437554-2	A101SYZQUL	C22
5-1437554-3	A101T1ZB	C22
5-1437554-4	A101T1ZQ	C22,C34
5-1437554-5	A101TCQ	C22
5-1437554-6	A101TZQ	C22,C33
5-1437554-7	A103J1AV2Q0	F7
5-1437554-8	A103KZQ	C22,C31
5-1437554-9	A103MD9AB	C22,C32
5-1437555-0	A201T1ZQ	C22,C34
5-1437555-1	A201TCWZQ	C22
5-1437555-2	A201TZQ	C22,C33
5-1437555-3	A203KZQ	C22,C31
5-1437555-4	A203MD9AB	C22,C32
5-1437555-5	A203P3YAV2Q	C22
5-1437555-6	A203P3YZQ	C22,C33
5-1437555-7	A203SD9AV2B	C22
5-1437555-8	A203SD9AV2Q	C22,C31
5-1437555-9	A203SDZQ	C22,C29
5-1437556-0	AE107MD1AV2B	C35
5-1437556-1	AE107SD1AB	C35
5-1437556-2	AE107SD1AG	C35
5-1437556-3	AE107SD1CB	C39
5-1437556-4	AE107SD1V30B	C35

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
5-1437556-5	AE1081JZQ0	F17
5-1437556-6	AE108160V3B0	F17
5-1437556-7	AE108MD1AQ	C40
5-1437556-8	AE108MD1AV2B	C40
5-1437556-9	AE108SD1AB	C42
5-1437558-0	MTA8106DRA	C52
5-1437558-1	MTA8106DVRA	C53
5-1437558-6	MTA8206NRA	C53
5-1437558-7	MTA8206NVRA	C54
5-1437558-9	MTA8206PRA	C53
5-1437559-0	MTM206PAC	C51
5-1437559-2	MTM206SPC	C51
5-1437559-3	MTM306DPC	C51
5-1437559-4	MTM406NPC	C51
5-1437559-6	MTM8106DRA	C52
5-1437559-7	MTM8106DVRA	C53
5-1437559-8	MTM8106ERA	C52
5-1437559-9	MTM8106EVRA	C53
5-1437561-0	TT11DGWW2T	C13
5-1437561-1	TT11EGPC1	C10
5-1437561-3	TT11EGPC1T	C8
5-1437561-4	TT11EGPC3	C8
5-1437561-5	TT11EGPC40	C8
5-1437561-6	TT11EGPC5T1/40	C8
5-1437561-7	TT11EGPC7T1/4	C8
5-1437561-8	TT11EGPC8T1/4	C8
5-1437561-9	TT11EGPC9T1/4	C11
5-1437562-0	TT23N6T6	C8
5-1437562-1	TT23N2T	C14
5-1437562-2	TT23N3T	C15
5-1437562-3	TT23N4T1/40	C8
5-1437562-4	TT23N6T0	C8
5-1437562-5	TT23N7T1/4	C14
5-1437562-6	TT23N9T1/4	C15
5-1437562-7	TT23P2T	C14
5-1437562-8	TT23P3T	C15
5-1437562-9	TT23P6T0	C8
5-1437563-4	TT21RGPC7T1/4	C8
5-1437565-0	FSM6JSMATR	E10
5-1437565-1	FSM7J	E5
5-1437565-2	FSM8J	E5
5-1437565-3	FSM8JA	E5
5-1437565-4	FSM8JAA	E5
5-1437567-0	MPG106F	D24
5-1437567-1	MPG206N	D24
5-1437567-2	MPG206NPC	D24
5-1437567-3	MPG206R	D24
5-1437567-4	MPG206RPC	D24
5-1437567-5	MPG306D	D24
5-1437567-6	MPG306F	D24
5-1437567-7	MPG406N	D24
5-1437567-8	MPG406R	D24
5-1437567-9	MPS103D	D25
5-1437569-0	165SL22	I16
5-1437569-1	165SL511	I16
5-1437569-2	165SL522	I16
5-1437569-4	165TL11	I16
5-1437569-5	165TL22	I16
5-1437569-6	165TL511	I16
5-1437569-7	165TL522	I16
5-1437569-8	165TL533	I16
5-1437571-1	TPB11CGPC0	D8
5-1437571-3	TPB11CGPC2	D8
5-1437571-5	TPB11CGPCES0	D13
5-1437571-6	TPB11CGPCES2	D13
5-1437571-7	TPB11CGRA0	D8
5-1437571-9	TPB11CGRA2	D8
5-1437572-0	TPD11CGPCES0	D13

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
5-1437572-1	TPD11CGRA0	D12
5-1437572-2	TPD11CGRA2	D12
5-1437572-4	TPD11FGPC0	D11
5-1437572-5	TPD11FGPC2	D11
5-1437572-6	TPD11FGPCES0	D13
5-1437572-7	TPD11FGRA0	D12
5-1437572-8	TPD11FGRA2	D12
5-1437572-9	TPD21MGPC0	D12
5-1437576-0	MSS1200	B20
5-1437576-1	MSS1200G	B20
5-1437576-2	MSS1200R	B20
5-1437576-3	MSS1200RG	B20
5-1437576-4	MSS1300	B20
5-1437576-5	MSS1300G	B20
5-1437576-6	MSS1300R	B20
5-1437576-7	MSS1300RG	B20
5-1437576-8	MSS1400	B21
5-1437577-3	SLSA120	B41
5-1437577-4	SLSA120I	B42
5-1437577-5	SLSA220	B41
5-1437577-6	SLSA220I	B42
5-1437577-8	STS121PC	B13
5-1437577-9	STS121RA	B13
5-1437580-2	MSSA214N	B30
5-1437580-3	MSSA2350	B27
5-1437580-4	MSSA2350G	B27
5-1437580-5	MSSA2350R	B27
5-1437580-6	MSSA2350RG	B27
5-1437580-7	MSSA2450	B27
5-1437580-8	MSSA2450G	B27
5-1437580-9	MSSA2450R	B27
5-1437581-6	ASF22	B5,B8
5-1437581-8	ASF22G	B8
5-1437581-9	ASF22GL	B8
5-1437583-2	MRD16STL	A21
5-1437584-0	DRS16RA	A25
5-1437584-3	DRW10	A25
5-1437584-4	DRW10C	A25
5-1437584-5	DRW10CRA	A25
5-1437584-6	DRW10RA	A25
5-1437584-7	DRW16	A25
5-1437584-8	DRW16C	A25
5-1437584-9	DRW16CRA	A25
5-1437586-0	ADF02T	A8
5-1437586-1	ADF03	A8
5-1437586-2	ADF03S	A8
5-1437586-3	ADF03SA	A8
5-1437586-4	ADF03ST	A8
5-1437586-5	ADF03STTR	A8
5-1437586-6	ADF03T	A8
5-1437586-7	ADF04	A8
5-1437586-9	ADF04S	A8
5-1437587-0	ADPA04S	A9
5-1437587-1	ADPA04SA	A9
5-1437587-2	ADPA05	A9
5-1437587-3	ADPA05S	A9
5-1437587-4	ADPA06	A9
5-1437587-5	ADPA06S	A9
5-1437587-6	ADPA06SA	A9
5-1437587-7	ADPA07	A9
5-1437587-8	ADPA08	A9
5-1437590-0	GDR06	A5
5-1437590-1	GDR06S	A5
5-1437590-2	GDR08	A5
5-1437590-3	GDR08S	A5
5-1437590-4	GDR10	A5
5-1437590-5	GDS02	A3
5-1437590-6	GDS02NTS	A3

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
5-1437590-7	GDS02S	A3
5-1437590-8	GDS02STR	A3
5-1437590-9	GDS04	A3
5-1437591-0	A105J1ZQ0	F14
5-1437591-1	A105J2AQ0	F15
5-1437591-2	A105J2AV2Q0	F16
5-1437591-3	A105J2ZQ0	F15
5-1437591-4	A105J3CQ0	F7
5-1437591-5	A105J3CQ20	F7
5-1437591-6	A105J3ZQ0	F7
5-1437591-7	A105J4ZQ0	F7
5-1437591-8	A105J51ZQ00	F7
5-1437591-9	A105J52ZQ20	F7
5-1437595-0	TRD11F10QCL2	F3
5-1437595-1	TRD11F10QCLR2	F3
5-1437595-2	TRD11F10WL	F6
5-1437595-4	TRD11F20QC	F3
5-1437595-5	TRD11G10QC5	F3
5-1437595-6	TRD11G10WL	F3
5-1437595-8	TRD11G20QC	F3
5-1437596-3	TRD21N12QCL2	F3
5-1437596-4	TRD13D10QCLR5	F3
5-1437596-6	TRD13D12QCLR25	F3
5-1437596-8	TRD11D10QCLR2	F3
5-1437614-0	RM1502	I6
5-1437614-1	RM1504	I6
5-1437614-2	RM1505	I6
5-1437614-3	RM1652	I6
5-1437614-4	RM200	I5
5-1437614-5	RM201	I5
5-1437614-6	RM204	I5
5-1437614-7	RM205	I5
5-1437614-8	RM210	I6
5-1437614-9	RM220	I6
5-1437621-0	KBS500B1/4	K5
5-1437621-1	KBS500B1/8	K5
5-1437621-2	KBS500B101/4	K5
5-1437621-3	KBS500B101/8	K5
5-1437621-6	KCB500A1/4	K5
5-1437621-7	KCB500A1/8	K5
5-1437621-8	KCB500B1/4	K5
5-1437621-9	KCB500B1/8	K5
5-1437622-0	KN501A1/4	K8
5-1437622-1	KN501A1/8	K8
5-1437622-2	KN501B1/4	K8
5-1437622-3	KN501B1/8	K8
5-1437622-4	KN501BA1/4	K8
5-1437622-5	KN501BA1/8	K8
5-1437622-6	KN5700A1/4	K9
5-1437622-7	KN5700B1/4	K9
5-1437622-8	KN700A1/4	K9
5-1437622-9	KN700AB1/4	K9
5-1437624-0	PKES60B1/4	K15
5-1437624-1	PKES60B1/8	K15
5-1437624-2	PKES70B1/4	K15
5-1437624-3	PKES90B1/4	K15
5-1437624-5	PKF50B1/8	K16
5-1437624-7	PKG100B1/4	K17
5-1437624-8	PKG125B1/4	K17
5-1437624-9	PKG40B1/8	K16
5-1437627-0	C233	D32
5-1437627-1	C234	D32
5-1437627-2	C235	D32
5-1437627-3	C236	D32
5-1437627-4	C239	D32
5-1437627-5	C330	D25
5-1437627-6	C332	D25
5-1437627-7	C336	D32



Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
5-1437627-8	C339	D25
5-435166-0	-	A15
5-435166-1	-	A15
5-435166-2	-	A15
5-435166-3	-	A15
5-435166-5	-	A15
6-1437554-0	A103MD9AG	C22
6-1437554-1	A103MD9AQ	C22,C32
6-1437554-2	A103MD9AV2B	C22,C32
6-1437554-3	A103P3YZQ	C22,C33
6-1437554-4	A103SD9AQ	C22,C30
6-1437554-5	A103SD9AV2B	C22
6-1437554-6	A103SD9AV2Q	C22,C31
6-1437554-7	A103SDCB	C22
6-1437554-8	A103SDCQ	C22,C30
6-1437554-9	A103SDZQ	C22,C29
6-1437555-0	A203SYCB	C22,C28
6-1437555-1	A203SYCQ	C22
6-1437555-2	A203SYZQ	C22,C27
6-1437555-3	A203T1ZQ	C22,C34
6-1437555-4	A203TZQ	C22,C32
6-1437555-5	A205KZB	C22,C31
6-1437555-6	A205P3YZQ	C22,C33
6-1437555-7	A205SD9AB	C22
6-1437555-8	A205SYCB	C22
6-1437555-9	A205SYCQ	C22
6-1437556-0	AE101SD1AQ	C42
6-1437556-1	AE108SD1CQ	C39
6-1437556-2	AE108SD1CQUL	C35
6-1437556-3	AE108SD1V30B	C35
6-1437556-5	AE201MD1AB	C40
6-1437556-6	AE201MD1AQ	C40
6-1437556-7	AE201MD1AV2B	C41
6-1437556-8	AE201MD1CB	C41
6-1437556-9	AE201MD1CQ	C41
6-1437558-0	MTA8206PVRA	C54
6-1437558-2	MTB106E	C45
6-1437558-3	MTB106D	C45
6-1437558-4	MTB206N	C45
6-1437558-5	MTB206P	C45
6-1437558-6	MTB306D	C45
6-1437558-7	MTB406N	C45
6-1437558-8	MTE106D	C46
6-1437558-9	MTE106E	C46
6-1437559-0	MTM8206NRA	C52
6-1437561-1	TT11EGRA1	C8
6-1437561-3	TT11EGRA3	C8
6-1437561-4	TT11EGRA40	C8
6-1437561-5	TT11EGRA42	C8
6-1437561-6	TT11EGRA46	C8
6-1437561-7	TT11EGRA7T1/4	C12
6-1437561-8	TT11EGRA9T1/4	C8
6-1437561-9	TT11EGVRA1	C11
6-1437562-0	TT23P7T1/4	C14
6-1437562-1	TT23P8T1/4	C8
6-1437562-2	TT23P9T1/4	C15
6-1437562-6	TT41NGPC1	C10
6-1437562-7	TT41NGPC8T1/4	C8
6-1437562-8	TT41NGPC9T1/4	C11
6-1437562-9	TT41INGRA1	C8
6-1437567-0	MPS103DPC	D26
6-1437567-1	MPS103DPCV	D26
6-1437567-2	MPS103DRA	D27
6-1437567-3	MPS103F	D25
6-1437567-4	MPS103FPC	D26
6-1437567-5	MPS103FPCV	D26
6-1437567-6	MPS103FRA	D27
6-1437567-7	MPS103FWW	D26

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
6-1437567-8	MPS203N	D25
6-1437567-9	MPS203NPC	D26
6-1437569-0	601-AG	I19
6-1437569-2	616-OFF	I19
6-1437569-3	616-ON	I19
6-1437569-9	618-AG	I19
6-1437571-1	TPB11CGRAES0	D14
6-1437571-2	TPB11CGRAES2	D14
6-1437571-3	TPB11CGVRA0	D11
6-1437571-4	TPB11CGVRA2	D11
6-1437571-5	TPB11FGPC0	D8
6-1437571-6	TPB11FGPC2	D8
6-1437571-8	TPB11FGPCE0	D13
6-1437571-9	TPB11FGPCE2	D13
6-1437572-0	TPD21MGPCES0	D14
6-1437572-1	TPD21MGPCES2	D14
6-1437572-2	TPD21MGRA0	D12
6-1437572-3	TPD21RGPC0	D12
6-1437572-4	TPD21RGPCE0	D14
6-1437572-5	TPD21RGRA0	D12
6-1437572-8	TPF11CGPC0	D11
6-1437572-9	TPF11CGPC2	D11
6-1437576-3	MSS2225	B21
6-1437576-4	MSS2225G	B21
6-1437576-5	MSS2250	B21
6-1437576-6	MSS2250G	B21
6-1437576-7	MSS2250R	B22
6-1437576-8	MSS2250RG	B22
6-1437576-9	MSS4200	B22
6-1437577-0	STS1300PC	B14
6-1437577-1	STS1300RA	B14
6-1437577-2	STS131PC	B13
6-1437577-3	STS131RA	B13
6-1437577-5	STS1400PC	B14
6-1437577-6	STS1400RA	B14
6-1437577-7	STS141PC	B14
6-1437577-8	STS141RA	B14
6-1437577-9	STS151PC	B15
6-1437580-0	MSSA2450RG	B27
6-1437580-1	MSSA3350	B28
6-1437580-2	MSSA3350G	B28
6-1437580-3	MSSA3350R	B28
6-1437580-4	MSSA3350RG	B28
6-1437580-5	MSSA3450	B28
6-1437580-6	MSSA3450G	B28
6-1437580-7	MSSA3450R	B28
6-1437580-8	MSSA3450RG	B28
6-1437580-9	MSSA4350	B29
6-1437581-0	ASF22GS	B9
6-1437581-1	ASF22L	B8
6-1437581-2	ASF22R	B5,B8
6-1437581-3	ASF22RG	B8
6-1437581-4	ASF22RGL	B9
6-1437581-5	ASF22RGS	B9
6-1437581-6	ASF22RS	B9
6-1437581-7	ASF22S	B9
6-1437581-8	ASF42	B8
6-1437584-0	DRW16RA	A25
6-1437584-3	MRD10	A21
6-1437584-4	MRD10C	A21
6-1437584-5	MRD10CRA	A21
6-1437584-6	MRD10CRAS	A21
6-1437584-7	MRD10CS	A21
6-1437584-8	MRD10CSTL	A21
6-1437584-9	MRD10CTL	A21
6-1437586-0	ADF04SA	A8
6-1437586-1	ADF04SAT	A8
6-1437586-3	ADF04ST	A8

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
6-1437586-4	ADF04T	A8
6-1437586-5	ADF05	A8
6-1437586-6	ADF05S	A8
6-1437586-8	ADF05ST	A8
6-1437586-9	ADF05STTR	A8
6-1437587-0	ADPA08S	A9
6-1437587-1	ADPA10	A9
6-1437590-0	GDS04NTS	A3
6-1437590-1	GDS04S	A3
6-1437590-2	GDS04STR	A3
6-1437590-3	GDS06	A3
6-1437590-4	GDS06NTS	A3
6-1437590-5	GDS06S	A3
6-1437590-6	GDS06STR	A3
6-1437590-7	GDS08	A3
6-1437590-8	GDS08NTS	A3
6-1437590-9	GDS08S	A3
6-1437591-0	A105J61ZQ00	F7
6-1437591-1	A105P4YAV2B	C22
6-1437591-2	A107J51ZQ00	F7
6-1437591-3	A107J61ZQ00	F7
6-1437591-4	A108J1V3Q00	F7
6-1437591-5	A108J1ZQ00	F7
6-1437591-6	A108J51ZQ00	F7
6-1437591-7	A108J61ZQ00	F7
6-1437591-8	A201J16ZQ00	F7
6-1437591-9	A201J1AQ00	F14
6-1437595-1	TRD13D10QC	F3
6-1437595-2	TRD13D10QCL5	F3
6-1437595-3	TRD13D10QCL5UL	F3
6-1437595-4	TRD13D10QCLR2	F3
6-1437595-5	TRD13D10QCLR25	F3
6-1437595-6	TRD13D10WL	F6
6-1437595-7	TRD13D10WLL2	F3
6-1437595-8	TRD13D10WLL2	F3
6-1437595-9	TRD13D10WLLR2	F6
6-1437596-3	TRD11D10PCLR25	F3
6-1437614-0	RM222	I6
6-1437614-1	RM230	I6
6-1437614-2	RM232	I6
6-1437614-3	RM233	I6
6-1437614-4	RM243	I6
6-1437614-5	RM250	I5
6-1437614-6	RM270	I6
6-1437614-7	RM272	I6,I9
6-1437614-8	RM273	I6
6-1437614-9	RM280	I6
6-1437621-0	KCB600A1/8	K5
6-1437621-1	KCB600B1/4	K5
6-1437621-2	KCB600B1/8	K5
6-1437621-3	KCB700A1/4	K5
6-1437621-4	KCB700B1/4	K5
6-1437621-5	KCB900A1/4	K5
6-1437621-7	KCB900B1/4	K5
6-1437621-8	KD1250A1/4	K6
6-1437621-9	KD1250B1/4	K6
6-1437622-0	KN700B1/4	K9
6-1437622-1	KN700BA1/4	K9
6-1437622-2	KN701A1/4	K8
6-1437622-3	KN701B1/4	K8
6-1437622-4	KN701BA1/4	K8
6-1437622-5	KN701BA1/8	K8
6-1437622-6	KN900A1/4	K9
6-1437622-7	KN900AB1/4	K9
6-1437622-8	KN900B1/4	K9
6-1437622-9	KN900BA1/4	K9
6-1437624-0	PKG50B1/4	K16
6-1437624-1	PKG50B1/8	K16

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
6-1437624-5	PKG60B1/4	K17
6-1437624-6	PKG60B1/8	K17
6-1437624-7	PKG70B1/4	K17
6-1437624-8	PKG70B1/8	K17
6-1437624-9	PKG90B1/4	K17
6-1437626-6	C59	D32
6-1437626-7	C80	D32
6-1437626-8	C82	D32
6-1437626-9	C85	D32
6-1437627-2	C50	D32
6-1437627-3	C52	D32
6-1437627-5	C55	D32
6-1437830-0	TPF11FGPCES2	D13
6-1437830-2	TT11DGPC9T1/4ES	C16
6-1437830-4	TT21NGPC4	C8
7-1347584-0	MRD10RA	A21
7-1347584-1	MRD10RAS	A21
7-1347584-2	MRD10S	A21
7-1347584-3	MRD10STL	A21
7-1347584-4	MRD10STR	A21
7-1347584-5	MRD10TL	A21
7-1347584-6	MRD16	A21
7-1347584-7	MRD16C	A21
7-1347584-8	MRD16CRA	A21
7-1347584-9	MRD16CRAS	A21
7-1437554-0	A103SYAQ	C22
7-1437554-1	A103SYAV2Q	C22
7-1437554-2	A103SYCB	C22,C28
7-1437554-3	A103SYCQ	C22
7-1437554-4	A103SYWB	C22
7-1437554-5	A103SYWQ	C22,C29
7-1437554-6	A103SYZB	C22,C27
7-1437554-7	A103SYZQ	C22,C27
7-1437554-8	A103TICG	C22
7-1437554-9	A103T1ZQ	C22,C34
7-1437555-0	A205SYZQ	C22,C27
7-1437555-1	A205T1ZQ	C22,C34
7-1437555-2	A205TZQ	C22
7-1437555-3	A207P3YZQ	C22,C33
7-1437555-4	A207SYCB	C22
7-1437555-5	A207SYCQ	C22
7-1437555-6	A207SYZQ	C22,C27
7-1437555-7	A207T1ZQ	C22,C34
7-1437555-8	A207TZQ	C22
7-1437555-9	A208KZGUL	C22
7-1437556-1	AE201SDIAB	C42
7-1437556-2	AE201SDIAG	C35
7-1437556-3	AE201SDIAV2B	C42
7-1437556-4	AE201SDICB	C39
7-1437556-5	AE201SDICQ	C39
7-1437556-7	AE203MDIAB	C40
7-1437556-8	AE203MDIAV2B	C41
7-1437556-9	AE208SDIAB	C42
7-1437558-0	MTE106F	C46
7-1437558-1	MTE106G	C46
7-1437558-2	MTE206N	C46
7-1437558-3	MTE206P	C46
7-1437558-4	MTE206PA	C46
7-1437558-5	MTE206R	C46
7-1437558-6	MTE206S	C46
7-1437558-7	MTE206T	C46
7-1437558-8	MTE306D	C46
7-1437558-9	MTE306E	C46
7-1437561-0	TT11IEGVRA3T	C11
7-1437561-1	TT11IEGW2T	C13
7-1437561-2	TT11IFGPC7T1/4	C8
7-1437561-3	TT11IFGPC9T1/4	C11
7-1437561-4	TT11IFGRA7T1/4	C12

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
7-1437561-5	TT11IFGRA9T1/4	C8
7-1437561-6	TT11IFGVRA3T	C8
7-1437561-8	TT13A2T	C14
7-1437562-0	TT41NGRA2T1/4	C8
7-1437562-1	TT41NGRA3	C8
7-1437562-2	TT41NGRA7T1/4	C12
7-1437562-3	TT41NGRA9T1/4	C8
7-1437562-4	TT41NGWW2T	C13
7-1437562-5	TT41PGPC9T1/4	C11
7-1437562-6	TT43N2T	C14
7-1437562-7	TT43N3T	C15
7-1437562-8	TT43N7T1/4	C14
7-1437562-9	TT43N9T1/4	C15
7-1437565-5	FSM9J	E5
7-1437565-6	FSMC	E3
7-1437565-7	FSMCD	E8
7-1437565-9	FSMCDA	E8
7-1437567-1	MPS203NRA	D27
7-1437567-2	MPS203R	D25
7-1437567-3	MPS203RPC	D26
7-1437567-4	MPS203RPCV	D26
7-1437567-5	MPS203RRA	D27
7-1437567-6	MPS203RWW	D26
7-1437569-1	64E0	I18
7-1437569-2	64E2	I18
7-1437569-3	64E3	I18
7-1437569-4	64E4	I18
7-1437569-5	64E5	I18
7-1437569-6	64E6	I18
7-1437569-7	64E9	I18
7-1437569-8	64S0	I18
7-1437569-9	64S2	I18
7-1437571-0	TPB11FGRA0	D8
7-1437571-2	TPB11FGRA2	D8
7-1437571-4	TPB11FGRAES0	D14
7-1437571-5	TPB11FGRAES2	D14
7-1437571-7	TPB11FGVRA0	D11
7-1437571-8	TPB11FGVRA2	D11
7-1437571-9	TPB21MGP0C	D9
7-1437572-1	TPF11CGPCES0	D13
7-1437572-2	TPF11CGRA0	D12
7-1437572-3	TPF11CGRA2	D12
7-1437572-5	TPF11CGRAES0	D6
7-1437572-6	TPF11FGPC0	D11
7-1437572-7	TPF11FGPC2	D11
7-1437572-9	TPF11FGPCES0	D13
7-1437576-0	MSS4200G	B22
7-1437576-2	MSS4200R	B23
7-1437576-3	MSS4200RG	B23
7-1437576-4	MSS4250	B22
7-1437576-5	MSS4300	B23
7-1437576-6	MSS4300G	B23
7-1437576-7	MSS4300R	B24
7-1437576-8	MSS4300RG	B24
7-1437576-9	MSS4335	B23
7-1437577-0	STS15IRA	B15
7-1437577-1	STS16IPC	B15
7-1437577-2	STS16IRA	B15
7-1437577-3	STS220PC	B16
7-1437577-4	STS2300PC	B15
7-1437577-5	STS230PC	B16
7-1437577-6	STS2400PC	B15
7-1437577-7	STS240PC	B16
7-1437577-8	STS250PC	B16
7-1437577-9	STS260PC	B16
7-1437580-0	MSSA4350G	B29
7-1437580-1	MSSA4350R	B29
7-1437580-2	MSSA4350RG	B29

Tyco Electronics Part Number	Alcoswitch Part Number	Page Number
7-1437580-3	MSSA4450	B29
7-1437580-4	MSSA4450G	B29
7-1437580-5	MSSA4450R	B29
7-1437580-6	MSSA4450RG	B29
7-1437581-0	ASF42G	B8
7-1437581-1	ASF42GL	B8
7-1437581-2	ASF42L	B8
7-1437581-3	ASF42R	B8
7-1437581-4	ASF42RG	B8
7-1437581-5	ASF42RGL	B9
7-1437581-6	ASF42RL	B9
7-1437581-7	ASF42S	B9
7-1437581-8	ASF43	B8
7-1437581-9	ASF43G	B8
7-1437586-0	ADF05T	A8
7-1437586-1	ADF06	A8
7-1437586-5	ADF06S	A8
7-1437586-6	ADF06SA	A8
7-1437586-7	ADF06SAT	A8
7-1437586-8	ADF06ST	A8
7-1437586-9	ADF06STTR	A8
7-1437590-0	GDS08STR	A3
7-1437590-1	GDS10	A3
7-1437590-2	GDS10S	A3
7-1437590-3	GDS10STR	A3
7-1437590-5	MGDH04	A6
7-1437591-0	A201J1AQ2	F7
7-1437591-1	A201J1AV2Q0	F7,F13
7-1437591-2	A201J1CQ0	F13
7-1437591-3	A201J1V3Q0	F7
7-1437591-4	A201J1ZQ0	F14
7-1437591-5	A201J2CQ0	F16
7-1437591-6	A201J2ZQ0	F15
7-1437591-7	A201J3ZB0	F7
7-1437591-8	A201J3ZQ0	F7
7-1437591-9	A201J50AV2Q0	F7
7-1437595-0	TRD13D10WLLR25	F6
7-1437595-1	TRD13D10WLLR4	F3
7-1437595-2	TRD13D10WLLR5	F3
7-1437595-3	TRD13D10WLUL	F3
7-1437595-5	TRD13D12QC	F3
7-1437595-6	TRD13D12QC5	F3
7-1437595-7	TRD13D12WL	F3
7-1437595-8	TRD13D12WL5LR2	F3
7-1437614-0	RM3040	I5
7-1437614-1	RM3100	I5
7-1437614-2	RM3120	I5
7-1437614-3	RM3130	I5
7-1437614-4	RM3700	I5
7-1437614-5	RM3800	I5
7-1437614-6	RM3830	I5
7-1437614-7	RM4040	I5
7-1437614-8	RM4100	I5
7-1437614-9	RM4800	I5
7-1437621-0	KD500A1/4	K6
7-1437621-1	KD500A1/8	K6
7-1437621-2	KD500B1/4	K6
7-1437621-3	KD500B1/8	K6
7-1437621-4	KD700A1/4	K6
7-1437621-5	KD700B1/4	K6
7-1437621-6	KD900A1/4	K6
7-1437621-7	KD900B1/4	K6
7-1437621-8	KE1250AB1/4	K6
7-1437621-9	KE500AB1/4	K6
7-1437622-2	KNS501A1/4	K10
7-1437622-3	KNS501A1/8	K10
7-1437622-4	KNS501B1/4	K10
7-1437622-5	KNS501B1/8	K10

Tyco Part Number	Alcoswitch Part Number	Page Number
7-1437622-6	KNS501BA1/4	K10
7-1437622-7	KNS501BA1/8	K10
7-1437622-8	KNS701A1/4	K10
7-1437622-9	KNS701B1/4	K10
7-1437624-0	PKG90B1/8	K17
7-1437624-1	PKG100B1/4	K17
7-1437624-2	PKG100B1/4	K17
7-1437624-3	PKG90B1/4	K17
7-1437624-4	PKJ50B1/4	K17
7-1437624-5	PKJ50B1/8	K17
7-1437624-6	PKJ60B1/4	K17
7-1437624-7	PKJ70B1/4	K17
7-1437624-8	PKJT50B1/4	K18
7-1437624-9	PKJT50B1/8	K18
7-1437627-0	C89	D32
7-1437627-1	C90	D32
7-1437627-2	C91	D32
7-1437627-3	C96	D32
7-1437627-4	C99	D32
7-1437627-6	G11A	D32
7-1437627-7	G11B	D32
7-1437627-8	G11C	D32
8-1347584-0	MRD16CS	A21
8-1347584-1	MRD16CTL	A21
8-1347584-2	MRD16RA	A21
8-1347584-3	MRD16S	A21
8-1347584-4	MRD16STR	A21
8-1347584-5	MRD16TL	A21
8-1437554-0	A103TZQ	C22,C33
8-1437554-1	A105J6ZG00	F7
8-1437554-2	A105MD9AB	C22
8-1437554-3	A105MD9AQ	C22
8-1437554-4	A105MYV30Q	C22
8-1437554-5	A105P3YCG	C22
8-1437554-6	A105P3YCQ	C22
8-1437554-7	A105P3YZQ	C22,C33
8-1437554-8	A105SD9AB	C22
8-1437554-9	A105SD9AV2QUL	C22
8-1437555-0	A208P3YZQ	C22,C33
8-1437555-1	A208SD9AQ	C22,C30
8-1437555-2	A208SD9AV2Q	C22,C31
8-1437555-3	A208SYCB	C22,C28
8-1437555-4	A208SYCQ	C22
8-1437555-5	A208SYZQ	C22,C27
8-1437555-6	A208T1ZQ	C22,C34
8-1437555-7	A208TZQ	C22
8-1437555-8	A211KZB	C22,C31
8-1437555-9	A211MD9AQ	C22
8-1437556-0	AE203SD1AV2B	C42
8-1437556-1	AE203SD1AV2Q	C42
8-1437556-2	AE203SD1CB	C39
8-1437556-4	AE205MD1AV2B	C35
8-1437556-5	AE205SD1CQ	C39
8-1437556-6	AE205SD1CQUL	C35
8-1437556-7	AE207MD1AB	C35
8-1437556-9	AE211MD1CB	C41
8-1437558-0	MTE406N	C46
8-1437558-1	MTE406P	C46
8-1437558-3	MTF106D	C47
8-1437558-4	MTF106E	C47
8-1437558-5	MTF106F	C47
8-1437558-6	MTF106G	C47
8-1437558-7	MTF106H	C47
8-1437558-8	MTF126D	C47
8-1437558-9	MTF126E	C47
8-1437561-0	TT13A3T	C15
8-1437561-1	TT13A6T	C8
8-1437561-2	TT13A6T0	C8

Tyco Part Number	Alcoswitch Part Number	Page Number
8-1437561-3	TT13A6T2	C8
8-1437561-4	TT13A9T1/4	C15
8-1437561-5	TT13D2T	C14
8-1437561-6	TT13D2T1/4	C8
8-1437561-8	TT13D3T	C15
8-1437561-9	TT13D4T0	C8
8-1437562-0	TT43P3T	C15
8-1437562-1	TT43P9T1/4	C15
8-1437562-4	TTE11AG9T1/4ES	C8
8-1437562-5	TTE11AGPC3TES	C18
8-1437562-6	TTE11DGPC1ES	C17
8-1437562-7	TTE11DGPC3TES	C18
8-1437562-8	TTE11DGPC9T1/4ES	C18
8-1437562-9	TTE11DGRA1ES	C17
8-1437565-0	FSMCTTR	E11
8-1437565-1	FSMCTATR	E11
8-1437565-4	FSMRA 1J	E7
8-1437565-5	FSMRA 2J	E7
8-1437565-8	FSMRA 2JA	E7
8-1437565-9	FSMRA 2JH	E7
8-1437567-0	MPSN103F	D25
8-1437567-1	MPSR103F	D25
8-1437567-2	MPSR203R	D25
8-1437567-3	MSP103B	D27
8-1437567-4	MSP103C	D27
8-1437567-5	MSP103C0	D27
8-1437567-6	MSP103C2	D27
8-1437567-8	MSPF101B	D28
8-1437567-9	MSPF101BC0	D28
8-1437569-0	64S3	I18
8-1437569-1	64S4	I18
8-1437569-2	64S5	I18
8-1437569-3	64S6	I18
8-1437569-4	64S9	I18
8-1437569-5	64T2	I18
8-1437569-6	64T3	I18
8-1437569-7	64T4	I18
8-1437569-8	64T5	I18
8-1437569-9	64T6	I18
8-1437571-0	TPB21MGPC2	D9
8-1437571-1	TPB21MGRA0	D9
8-1437571-2	TPB21MGRA2	D9
8-1437571-3	TPB21RGPC0	D9
8-1437571-4	TPB21RGPC2	D9
8-1437571-5	TPB21RGPCES0	D13
8-1437571-6	TPB21RGRA0	D9
8-1437571-8	TPB21RGRA2	D9
8-1437571-9	TPB21RGRAES0	D14
8-1437572-0	TPF11FGRA0	D12
8-1437572-1	TPF11FGRA2	D12
8-1437572-2	TPF13C0	D11
8-1437572-3	TPF13C2	D11
8-1437572-4	TPF13F0	D11
8-1437572-5	TPF13F2	D11
8-1437572-7	TPF21MGPC0	D12
8-1437572-8	TPF21MGPCES0	D14
8-1437572-9	TPF21MGRA0	D12
8-1437576-0	MSS4350R	B24
8-1437576-1	MSS4350RG	B24
8-1437576-8	MSS6200	B24
8-1437576-9	MSS6200G	B24
8-1437577-0	STSA220RA	B16
8-1437577-1	STSA220RA1	B16
8-1437577-2	STSA230RA	B16
8-1437577-3	STSA230RA1	B16
8-1437580-2	MSSA201PGRA	B32
8-1437581-0	ASF43GL	B8
8-1437581-1	ASF43L	B8

Tyco Part Number	Alcoswitch Part Number	Page Number
8-1437581-2	ASF43RG	B8
8-1437581-3	ASF43S	B9
8-1437581-4	ASF62	B8
8-1437581-6	ASF62G	B8
8-1437581-7	ASF62GL	B8
8-1437581-8	ASF62L	B8
8-1437581-9	ASF62R	B8
8-1437586-0	ADF03T	A8
8-1437586-1	ADF07	A8
8-1437586-2	ADF07S	A8
8-1437586-3	ADF07ST	A8
8-1437586-4	ADF07STTR	A8
8-1437586-5	ADF07T	A8
8-1437586-6	ADF08	A8
8-1437586-8	ADF08S	A8
8-1437586-9	ADF08SA	A8
8-1437591-0	A201J50ZQ0	F7
8-1437591-1	A201J51ZQ00	F7
8-1437591-2	A201J51ZQ00UL	F7
8-1437591-3	A201J51ZQ99	F7
8-1437591-5	A201J61ZQ00	F7
8-1437591-7	A203J1AQ0	F14
8-1437591-8	A203J1AV2Q0	F7
8-1437591-9	A203J1CQ2	F7
8-1437595-3	TRD13E10QC	F3
8-1437595-4	TRD13E10WL	F6
8-1437595-5	TRD13E10WL5	F6
8-1437595-6	TRD13E10WLLR2	F6
8-1437595-7	TRD13F10QC	F3
8-1437595-8	TRD13F10QLR2	F3
8-1437595-9	TRD13F10WL	F6
8-1437614-0	RM6002	I6
8-1437614-1	RM6004	I6
8-1437614-2	RM6005	I6
8-1437614-3	RM6006	I6
8-1437614-4	RM6502	I6
8-1437614-5	RM6504	I6
8-1437614-9	RT0100	I3
8-1437621-0	KE500AB1/8	K6
8-1437621-1	KE700AB1/4	K6
8-1437621-2	KE900AB1/4	K6
8-1437621-3	KES500AB1/4	K6
8-1437621-4	KES500AB1/8	K6
8-1437621-5	KES700AB1/4	K6
8-1437621-6	KFS400B1/8	K7
8-1437621-7	KFS500B1/4	K7
8-1437621-8	KFS500B1/8	K7
8-1437621-9	KFS600B1/4	K7
8-1437622-0	KNS701BA1/4	K10
8-1437622-1	KNS701BA1/8	K10
8-1437624-0	PKJT60B1/4	K18
8-1437624-1	PKJT70B1/4	K18
8-1437624-2	PKN60B1/8	K18
8-1437624-3	PKN70B1/4	K18
8-1437624-4	PKN90B1/4	K18
8-1437624-5	PKN21MGPC1/4	K18
8-1437624-6	PKNT60B1/8	K18
8-1437624-7	PKNT70B1/4	K18
8-1437624-8	PKNT90B1/4	K18
8-1437627-1	G12A	D32
8-1437627-2	G12B	D32
8-1437627-3	G12C	D32
8-1437627-4	G12KA	D32
8-1437627-5	G12KB	D32
8-1437627-6	G12KC	D32
8-1437627-7	G13A	D32
8-1437627-8	G13B	D32
8-1437627-9	G13C	D32

Tyco Part Number	Alcoswitch Part Number	Page Number
9-1436555-3	A211P3YZQ	C33
9-1437554-0	A105SD9V30B	C22
9-1437554-1	A105SYAB	C22
9-1437554-2	A105SYAV2B	C22
9-1437554-3	A105SYCB	C22
9-1437554-4	A105SYCQ	C22
9-1437554-5	A105SYZB	C22,C27
9-1437554-6	A105SYZQ	C22,C27
9-1437554-7	A105T1ZB	C22
9-1437554-8	A105T1ZQ	C22,C34
9-1437554-9	A105TZQ	C22
9-1437555-0	A211MYCQ	C22
9-1437555-1	A211P3YQC	C22
9-1437555-2	A211P3YV40GUL	C22
9-1437555-3	A211P3YZQ	C22
9-1437555-4	A211SCWCQO	C22
9-1437555-5	A211SDZQ	C22
9-1437555-6	A211SHZQ	C22
9-1437555-7	A211SY9AQ	C22
9-1437555-8	A211SYCQ	C22
9-1437555-9	A211SYZB	C22
9-1437556-0	AE211MD1V30B	C35
9-1437558-0	MTF126F	C47
9-1437558-1	MTF126G	C47
9-1437558-2	MTF206N	C47
9-1437558-3	MTF206P	C47
9-1437558-4	MTF206PA	C47
9-1437558-5	MTF206R	C47
9-1437558-6	MTF206S	C47
9-1437558-7	MTF206SA	C47
9-1437558-8	MTF206T	C47
9-1437558-9	MTF226N	C47
9-1437561-0	TT13D6T0	C8
9-1437561-1	TT13D7T1/4	C14
9-1437561-2	TT13D9T1/4	C15
9-1437561-3	TT13D9T1/4ES	C8
9-1437561-4	TT13DPC2TE	C8
9-1437561-5	TT13E2T	C14
9-1437561-6	TT13E3T	C15
9-1437561-7	TT13E7T1/4	C14
9-1437561-8	TT13E9T1/4	C15
9-1437561-9	TT21KGPC1	C10
9-1437562-0	TTE11EGPC3TES	C18
9-1437562-1	TTE11EGPC9T1/4ES	C18
9-1437562-2	TTE11EGRA1ES	C17
9-1437562-3	TTE13A9T1/4	C8
9-1437562-4	TTE13D2T	C8
9-1437562-5	TTE13D8T1/4	C8
9-1437562-6	TTE13D9T1/4	C8
9-1437562-7	TTE13DG2T	C8
9-1437562-8	TTE13E8T1/4	C8
9-1437562-9	TTE21NG2T1/4ES	C8
9-1437565-0	FSMRA 3J	E7
9-1437565-1	FSMRA 4J	E7
9-1437565-2	FSMRA 5J	E7
9-1437565-3	FSMRA 6J	E7
9-1437565-5	FSMRA 7J	E7
9-1437565-9	FSMRACD	E8
9-1437567-0	MSPF101BC2	D28
9-1437567-1	MSPF101BC6	D28
9-1437567-2	MSPF101BC9	D28
9-1437567-3	MSPF101C	D28
9-1437567-4	MSPM101B0	D29
9-1437567-5	MSPM101B1	D29
9-1437567-6	MSPM101BP	D29
9-1437567-7	MSPM101BS	D29
9-1437567-8	MSPM101BS1	D29
9-1437567-9	MSPM101C1	D29

Tyco Part Number	Alcoswitch Part Number	Page Number
9-1437569-2	668	I19
9-1437569-3	671-AG	I19
9-1437569-4	669	I19
9-1437569-5	697-PL	I20
9-1437571-2	TPBF11CGPCES0	D15
9-1437571-3	TPBF11CGPCES2	D15
9-1437571-4	TPBF11CGRA0	D10
9-1437571-5	TPBF11CGRA2	D10
9-1437571-6	TPBF11CGRAES0	D15
9-1437571-7	TPBF11FGPC0	D10
9-1437571-8	TPBF11FGPCES0	D15
9-1437571-9	TPBF11FGRA0	D10
9-1437572-0	TPF21RGPC0	D12
9-1437572-1	TPF21RGPC2	D12
9-1437572-2	TPF21RGPCES0	D14
9-1437572-3	TPF21RGRA0	D12
9-1437572-4	TPF23M0	D11
9-1437572-5	TPF23M2	D11
9-1437572-6	TPF23R0	D11
9-1437572-7	TPF23R2	D11
9-1437576-0	MSS6250	B25
9-1437576-3	MSS6350	B25
9-1437576-4	MSS6350R	B25
9-1437581-1	ASF62RG	B8
9-1437581-2	ASF62RGL	B9
9-1437581-3	ASF62RGS	B9
9-1437581-4	ASF62S	B9
9-1437584-1	DRD16RAS	A23
9-1437584-2	DRD16CS	A23
9-1437584-3	DRD16C	A23
9-1437584-4	DRD16	A23
9-1437584-5	DRD10S	A23
9-1437584-7	DRD10	A23
9-1437584-8	DRD10RAS	A23
9-1437584-9	DRD10RAE	A23
9-1437586-0	ADF08SAT	A8
9-1437586-1	ADF08ST	A8
9-1437586-2	ADF08STTR	A8
9-1437586-5	ADF08T	A8
9-1437586-6	ADF09	A8
9-1437586-7	ADF09S	A8
9-1437586-8	ADF09ST	A8
9-1437586-9	ADF09STTR	A8
9-1437591-1	A203J1ZQ0	F14
9-1437591-2	A203J51ZQ00	F7
9-1437591-3	A203J51ZQ00	F7
9-1437591-4	A203J61ZQ00	F7
9-1437591-5	A205J15ZQ00	F7
9-1437591-6	A205J1AV2Q0	F13
9-1437591-7	A205J1ZQ0	F7,F14
9-1437591-8	A205J2CQ0	F16
9-1437591-9	A205J2ZQ0	F15
9-1437595-0	TRD13F12QC	F3
9-1437595-1	TRD13F12WL	F3
9-1437595-5	TRD13G10QC	F3
9-1437595-6	TRD13G10WL	F3
9-1437595-7	TRD13G10WLLR2	F3
9-1437595-8	TRD13G20QC	F3
9-1437595-9	TRD13G20WL	F3
9-1437614-0	RT0102	I3
9-1437614-1	RT0104	I3
9-1437614-2	RT0105	I3
9-1437614-3	RT0106	I3
9-1437614-4	RT0109	I3
9-1437614-5	RT0200	I3
9-1437614-6	RT0202	I3
9-1437614-7	RT0204	I3
9-1437614-8	RT0205	I3

Tyco Part Number	Alcoswitch Part Number	Page Number
9-1437614-9	RT0206	I3
9-1437620-6	7333	I20
9-1437621-0	KHF1250A1/4	K7
9-1437621-1	KHF500A1/4	K7
9-1437621-2	KHF700A1/4	K7
9-1437621-3	KHF900A1/4	K7
9-1437621-4	KLN1250A1/4	K7
9-1437621-5	KLN1250B1/4	K7
9-1437621-6	KLN500A1/4	K7
9-1437621-7	KLN500A1/8	K7
9-1437621-8	KLN500B1/4	K7
9-1437621-9	TPBF11FGRA0	K7
9-1437622-0	KPN500A1/4	K10
9-1437622-1	KPN500A1/8	K10
9-1437622-2	KPN500B1/4	K10
9-1437622-3	KPN500B1/8	K10
9-1437622-5	KPN700A1/4	K10
9-1437622-6	KPN700B1/4	K10
9-1437622-7	KPN900A1/4	K10
9-1437622-9	KPN900B1/4	K10
9-1437624-4	PKS1103B101/4	K18
9-1437624-5	PKS1104B1/4	K19
9-1437624-6	PKS1105B101/4	K19
9-1437624-7	PKS1106B1/4	K19
9-1437624-8	PKS1132B1/4	K19
9-1437624-9	PKS1132B101/4	K19
9-1437627-0	G13KA	D32
9-1437627-1	G13KB	D32
9-1437627-2	G13KC	D32
9-1437627-3	G15	D32
9-1437627-6	KR1	K21
9-1437627-7	KR2	K21
9-1437627-8	KR3	K21

Alcoswitch Part Number	Tyco Part Number	Page Number
385	1437620-9	I20
387	1-1437620-1	I20
570	1437612-7	I6,17,18,115
668	9-1437569-2	I19
669	9-1437569-4	I19
755	1-1437620-5	I15
757	1-1437620-6	I15
7333	9-1437620-6	I20
10264-00-120	1437561-9	C54
11106-AG	1-1437561-2	C54
164EL11	1437569-2	I16
164EL22	1437569-3	I16
164EL33	-	I16
164EL511	1437569-5	I16
164EL522	1437569-6	I16
164EL533	1437569-7	I16
164EZ	1437569-8	I18
164J0A11	1437569-9	I17
164J0A22	1-1437569-0	I17
164J0A33	-	I17
164J2A11	1-1437569-1	I17
164J2A22	1-1437569-2	I17
164J2A33	-	I17
164J2B11	1-1437569-3	I17
164J2B22	1-1437569-4	I17
164J2B33	-	I17
164J3A22	-	I17
164J3A33	1-1437569-5	I17
164J3C22	1-1437569-6	I17
164J3C33	-	I17
164J3E22	-	I17
164J3E33	-	I17
164J7A22	-	I17
164KA	1-1437569-8	I17
164POB22	1-1437569-9	I17
164POB33	-	I17
164P2B11	2-1437569-0	I17
164P2B22	2-1437569-1	I17
164P2B33	-	I17
164P3B22	2-1437569-2	I17
164P3B33	2-1437569-3	I17
164SL11	2-1437569-5	I16
164SL22	2-1437569-6	I16
164SL33	2-1437569-7	I16
164SL511	2-1437569-9	I16
164SL522	3-1437569-0	I16
164SL533	3-1437569-1	I16
164SZ	3-1437569-2	I18
164TL11	3-1437569-4	I16
164TL22	3-1437569-5	I16
164TL33	3-1437569-6	I16
164TL511	3-1437569-8	I16
164TL522	3-1437569-9	I16
164TL533	4-1437569-0	I16
164TZ	4-1437569-1	I18
165EL11	4-1437569-2	I16
165EL22	4-1437569-3	I16
165EL33	-	I16
165EL511	4-1437569-4	I16
165EL522	4-1437569-5	I16
165EL533	-	I16
165EZ	-	I18
165J2A11	4-1437569-7	I17
165J2A22	-	I17
165J2A33	-	I17
165J2B11	-	I17
165J2B22	-	I17
165J2B33	-	I17

Alcoswitch Part Number	Tyco Part Number	Page Number
165J3A22	-	I17
165J3A33	-	I17
165J3C22	-	I17
165J3C33	-	I17
165J3E22	-	I17
165J3E33	-	I17
165J7A22	-	I17
165P2B11	4-1437569-8	I17
165P2B22	-	I17
165P2B33	-	I17
165P3B22	-	I17
165P3B33	-	I17
165SSL11	4-1437569-9	I16
165SSL22	5-1437569-0	I16
165SSL33	-	I16
165SSL511	5-1437569-1	I16
165SSL522	5-1437569-2	I16
165SSL533	-	I16
165SZ	-	I18
165TL11	5-1437569-4	I16
165TL22	5-1437569-5	I16
165TL33	-	I16
165TL511	5-1437569-6	I16
165TL522	5-1437569-7	I16
165TL533	5-1437569-8	I16
165TZ	-	I18
2SKF131AEL01	1437597-1	H4
2SKF132AEL01	1437597-7	H4
2SKF133AEL01	1-1437597-0	H4
2SKF231AEL01	1-1437597-1	H4
2SWK131AL101	1-1437597-7	H2
2SWK132AL101	2-1437597-3	H2
2SWK231AL101	2-1437597-7	H2
327-AG	1437620-5	I20
381-AG	1437620-7	I20
382-AG	1437620-8	I20
5B0	1437612-8	I6,17,18,115
601-AG	6-1437569-0	I19
616-OFF	6-1437569-2	I19
616-ON	6-1437569-3	I19
618-AG	6-1437569-9	I19
64E	-	I18
64E0	7-1437569-1	I18
64E2	7-1437569-2	I18
64E3	7-1437569-3	I18
64E4	7-1437569-4	I18
64E5	7-1437569-5	I18
64E6	7-1437569-6	I18
64E9	7-1437569-7	I18
64S	-	I18
64S0	7-1437569-8	I18
64S2	7-1437569-9	I18
64S3	8-1437569-0	I18
64S4	8-1437569-1	I18
64S5	8-1437569-2	I18
64S6	8-1437569-3	I18
64S9	8-1437569-4	I18
64T	-	I18
64T2	8-1437569-5	I18
64T3	8-1437569-6	I18
64T4	8-1437569-7	I18
64T5	8-1437569-8	I18
64T6	8-1437569-9	I18
671-AG	9-1437569-3	I19
697-PL	9-1437569-5	I20
815-AG	1-1437620-8	I20
A101MDAQ	2-1437554-1	C22
A101J15ZQ0	1437591-3	F7

Alcoswitch Part Number	Tyco Part Number	Page Number
A101J16WQ00	1437591-4	F7
A101J16Z3G00UL	1571237-1	F7
A101J16Z3Q00UL	1571236-1	F7
A101J16ZB00	1437591-5	F7
A101J16ZQ00	1437591-6	F7
A101J1AB0	1437591-7	F7
A101J1AQ0	1437591-8	F14
A101J1AQ2	1437591-9	F7
A101J1AV2B0	1-1437591-0	F7
A101J1AV2Q0	1-1437591-1	F13
A101J1CG0	1-1437591-2	F7
A101J1CQ0	1-1437591-3	F13
A101J1V3B0	1-1437591-4	F7
A101J1V3Q0	1-1437591-5	F7
A101J1ZB0	1-1437591-6	F7
A101J1ZQ0	1-1437591-7	F14
A101J2AQ0	-	F15
A101J2AV2Q0	1-1437591-8	F16
A101J2ZB9	1571071-1	F7
A101J2ZQ0	1-1437591-9	F15
A101J3V3Q2	2-1437591-0	F7
A101J3ZQ0UL	2-1437591-1	F7
A101J4ZQ0	2-1437591-2	F7
A101J50AV2Q0	2-1437591-4	F7
A101J50V3Q0	2-1437591-5	F7
A101J50V3Q2	2-1437591-6	F7
A101J50ZQ0	2-1437591-7	F7
A101J51CB00	2-1437591-8	F7
A101J51Z3G00UL	1571239-1	F7
A101J51Z3Q00UL	2-1437591-9	F7
A101J51Z3Q00UL	1571238-1	F7
A101J51ZB00	3-1437591-0	F7
A101J51ZQ00	3-1437591-1	F7
A101J51ZQ20	3-1437591-2	F7
A101J61ZQ00	3-1437591-3	F7
A101K1V30B	1437554-3	C22
A101KAB	1437554-4	C22
A101KAQ	1437554-5	C22
A101KCCQ	1437554-7	C22
A101KD9AQ	1437554-8	C22
A101KZQ	1437554-9	C22,C31
A101KZQ2	1-1437554-0	C22
A101MD9AB	1-1437554-4	C22,C32
A101MD9AG	1-1437554-5	C22
A101MD9AQ	1-1437554-6	C22,C32
A101MD9AV2B	1-1437554-7	C22,C32
A101MD9AV2G	1-1437554-8	C22
A101MD9AV2Q	1-1437554-9	C22,C32
A101MD9V30B	2-1437554-0	C22
A101MDAV2B	2-1437554-2	C22
A101MDCQ	2-1437554-3	C22
A101MDZG	2-1437554-4	C22
A101MYCQ	2-1437554-5	C22
A101MYZQ	2-1437554-6	C22
A101P3CWV30B	2-1437554-7	C22
A101P3YCB	2-1437554-8	C22
A101P3YZB	2-1437554-9	C22,C33
A101P4DCB	3-1437591-4	C22
A101P4YCB	3-1437554-0	C22
A101SCWCQ0	3-1437554-1	C22
A101SCWZQ	3-1437554-2	C22
A101SD9AB	3-1437554-3	C22,C30
A101SD9AQ	3-1437554-4	C22,C30
A101SD9AV2B	3-1437554-5	C22
A101SD9AV2Q	3-1437554-6	C22,C31
A101SD9V30B	3-1437554-7	C22
A101SD9V30Q	3-1437554-8	C22
A101SDCQ	3-1437554-9	C22,C30



Alcoswitch Part Number	Tyco Part Number	Page Number
A101SDZQ	4-1437554-0	C22,C29
A101SHZQ	4-1437554-1	C22
A101SY9CQUL	4-1437554-2	C22
A101SYAB	4-1437554-3	C22,C28
A101SYAQ	4-1437554-4	C22
A101SYCB	4-1437554-5	C22,C28
A101SYCQ	4-1437554-6	C22
A101SYCQUL	4-1437554-7	C22
A101SYWQ	4-1437554-8	C22,C29
A101SYZB	4-1437554-9	C22,C27
A101SYZQ	5-1437554-0	C22,C27
A101SYZQN	5-1437554-1	C22
A101SYZQUL	5-1437554-2	C22
A101TIZB	5-1437554-3	C22
A101TIZQ	5-1437554-4	C22,C34
A101TICQ	5-1437554-5	C22
A101TIZQ	5-1437554-6	C22,C33
A103J16ZQ00	3-1437591-5	F7
A103J1AQ0	1571058-1	F7
A103J1AV2B0	3-1437591-6	F7
A103J1AV2Q0	5-1437554-7	F7
A103J1V3Q0	3-1437591-7	F7
A103J1ZQ0	3-1437591-8	F14
A103J2AQ0	-	F15
A103J2CB0	3-1437591-9	F7
A103J2ZQ0	4-1437591-0	F15
A103J3ZQ0	4-1437591-1	F7
A103J51ZQ00	4-1437591-2	F7
A103J61ZQ00	4-1437591-3	F7
A103KZQ	5-1437554-8	C22,C31
A103MD9AB	5-1437554-9	C22,C32
A103MD9AG	6-1437554-0	C22
A103MD9AQ	6-1437554-1	C22,C32
A103MD9AV2B	6-1437554-2	C22,C32
A103MD9AV2Q	-	C32
A103P3YZQ	6-1437554-3	C22,C33
A103SD9AB	-	C30
A103SD9AQ	6-1437554-4	C22,C30
A103SD9AV2B	6-1437554-5	C22
A103SD9AV2Q	6-1437554-6	C22,C31
A103SDCB	6-1437554-7	C22
A103SDCQ	6-1437554-8	C22,C30
A103SDZQ	6-1437554-9	C22,C29
A103SYAB	-	C28
A103SYAQ	7-1437554-0	C22
A103SYAV2Q	7-1437554-1	C22
A103SYCB	7-1437554-2	C22,C28
A103SYCQ	7-1437554-3	C22
A103SYWB	7-1437554-4	C22
A103SYWQ	7-1437554-5	C22,C29
A103SYZB	7-1437554-6	C22,C27
A103SYZQ	7-1437554-7	C22,C27
A103T1CG	7-1437554-8	C22
A103T1ZQ	7-1437554-9	C22,C34
A103TZQ	8-1437554-0	C22,C33
A105J16CQ00	4-1437591-4	F7
A105J16ZQ00	4-1437591-5	F7
A105J1AQ0	4-1437591-6	F14
A105J1AV2Q0	4-1437591-7	F7,F13
A105J1CQ0	4-1437591-8	F13
A105J1V3B0	4-1437591-9	F7
A105J1ZQ0	5-1437591-0	F14
A105J2AQ0	5-1437591-1	F15
A105J2AV2Q0	5-1437591-2	F16
A105J2CQ0	-	F16
A105J2ZQ0	5-1437591-3	F15
A105J3CQ0	5-1437591-4	F7
A105J3CQ20	5-1437591-5	F7

Alcoswitch Part Number	Tyco Part Number	Page Number
A105J3ZQ0	5-1437591-6	F7
A105J4ZQ0	5-1437591-7	F7
A105J51ZQ00	5-1437591-8	F7
A105J52ZQ20	5-1437591-9	F7
A105J61ZG00	8-1437554-1	F7
A105J61ZQ00	6-1437591-0	F7
A105MD9AB	8-1437554-2	C22
A105MD9AQ	8-1437554-3	C22
A105MYV30Q	8-1437554-4	C22
A105P3YCG	8-1437554-5	C22
A105P3YCQ	8-1437554-6	C22
A105P3YZQ	8-1437554-7	C22,C33
A105P4YAV2B	6-1437591-1	C22
A105SD9AB	8-1437554-8	C22
A105SD9AV2QUL	8-1437554-9	C22
A105SD9V30B	9-1437554-0	C22
A105SYAB	9-1437554-1	C22
A105SYAV2B	9-1437554-2	C22
A105SYCB	9-1437554-3	C22
A105SYCQ	9-1437554-4	C22
A105SYZB	9-1437554-5	C22,C27
A105SYZQ	9-1437554-6	C22,C27
A105T1ZB	9-1437554-7	C22
A105T1ZQ	9-1437554-8	C22,C34
A105TZQ	9-1437554-9	C22
A107J51ZQ00	6-1437591-2	F7
A107J61ZQ00	6-1437591-3	F7
A107KAV2Q	1571571-1	C22
A107KZB	1437555-2	C22
A107MD9AV2B	1437555-3	C22
A107MD9CQ	1437555-4	C22
A107MD9V30Q	1437555-5	C22
A107P3YZQ	1437555-5	C22,C33
A107SYAQ	1437555-6	C22
A107SYCB	1437555-7	C22
A107SYCQ	1437555-8	C22
A107SYZB	-	C27
A107SYZQ	1437555-9	C22,C27
A107TZB	1-1437555-0	C22
A108J1V3Q0	6-1437591-4	F7
A108J1ZQ0	6-1437591-5	F7
A108J51ZQ00	6-1437591-6	F7
A108J61ZQ00	6-1437591-7	F7
A108MD9AB	1-1437555-2	C22,C32
A108MD9AQ	-	C32
A108MD9AV2Q	-	C32
A108P3CWV30B	1-1437555-3	C22
A108P3YCQ	1-1437555-4	C22
A108P3YZQ	1-1437555-5	C22,C32
A108SD9AQ	1-1437555-6	C22,C30
A108SDZQ	1-1437555-7	C22
A108SYCB	1-1437555-8	C22,C28
A108SYCQ	1-1437555-9	C22
A108SYZQ	2-1437555-0	C22,C27
A108SYZQUL	2-1437555-1	C22
A108TZQ	-	C34
A201J16ZQ00	6-1437591-8	F7
A201J1AQ0	6-1437591-9	F14
A201J1AQ2	7-1437591-0	F7
A201J1AV2Q0	7-1437591-1	F7,F13
A201J1CQ0	7-1437591-2	F13
A201J1V3Q0	7-1437591-3	F7
A201J1ZQ0	7-1437591-4	F14
A201J2AQ0	-	F15
A201J2AV2Q0	-	F16
A201J2CQ0	7-1437591-5	F16
A201J2ZQ0	7-1437591-6	F15
A201J3V3Q0	1571289-1	F7

Alcoswitch Part Number	Tyco Part Number	Page Number
A201J3ZB0	7-1437591-7	F7
A201J3ZQ0	7-1437591-8	F7
A201J50AQ0	147944-1	F7
A201J50AV2Q0	7-1437591-9	F7
A201J50ZQ0	8-1437591-0	F7
A201J51ZQ00	8-1437591-1	F7
A201J51ZQ00UL	8-1437591-2	F7
A201J51ZQ99	8-1437591-3	F7
A201J61ZQ00	8-1437591-5	F7
A201KAB	2-1437555-3	C22
A201KD9AQ	2-1437555-4	C22
A201KZB	-	C31
A201KZQ	2-1437555-5	C22,C31
A201KZQUL	2-1437555-6	C22
A201MD9AB	2-1437555-7	C22,C32
A201MD9AQ	2-1437555-8	C22,C32
A201MD9AV2B	2-1437555-9	C22,C32
A201MD9AV2Q	3-1437555-0	C22,C32
A201MDAQ	3-1437555-1	C22
A201MPY9AV2Q	3-1437555-2	C22
A201MYAQ	3-1437555-3	C22
A201MYCB	3-1437555-4	C22
A201MYZQ	3-1437555-5	C22
A201P3YZQ	3-1437555-6	C22,C33
A201SCWZB	3-1437555-7	C22
A201SD9AB	-	C30
A201SD9AQ	3-1437555-8	C22,C30
A201SD9AV2Q	3-1437555-9	C22,C31
A201SDCB	4-1437555-0	C22
A201SDCQ	1571670-1	C30
A201SDZQ	4-1437555-1	C22,C29
A201SY9AB	4-1437555-2	C22
A201SYAB	4-1437555-3	C22,C28
A201SYAQ	4-1437555-4	C22
A201SYCB	4-1437555-5	C22,C28
A201SYCQ	4-1437555-6	C22
A201SYWQ	4-1437555-7	C22,C29
A201SYZB	4-1437555-8	C22
A201SYZQ	4-1437555-9	C22,C27
A201T1ZQ	5-1437555-0	C22,C34
A201TCWZQ	5-1437555-1	C22
A201TZQ	5-1437555-2	C22,C33
A203J1AQ0	8-1437591-7	F14
A203J1AV2Q0	8-1437591-8	F7
A203J1CQ0	-	F13
A203J1CQ2	8-1437591-9	F7
A203J1ZQ0	9-1437591-1	F14
A203J2AQ0	1571280-1	F7,F15
A203J2ZQ0	-	F15
A203J51ZQ00	9-1437591-3	F7
A203J61ZQ00	9-1437591-4	F7
A203KZB	-	C31
A203KZQ	5-1437555-3	C22,C31
A203MD9AB	5-1437555-4	C22,C32
A203MD9AV2B	-	C32
A203MD9AV2Q	-	C32
A203P3YAV2Q	5-1437555-5	C22
A203P3YZQ	5-1437555-6	C22,C33
A203SD9AV2B	5-1437555-7	C22
A203SD9AV2Q	5-1437555-8	C22,C31
A203SDCQ	-	C30
A203SDZQ	5-1437555-9	C22,C29
A203SYCB	6-1437555-0	C22,C28
A203SYCQ	6-1437555-1	C22
A203SYWQ	-	C29
A203SYZQ	6-1437555-2	C22,C27
A203T1ZQ	6-1437555-3	C22,C34
A203TZQ	6-1437555-4	C22,C32

Alcoswitch Part Number	Tyco Part Number	Page Number
A205J15ZQ00	9-1437591-5	F7
A205J1A00	-	F14
A205J1AV2Q0	9-1437591-6	F13
A205J1C00	-	F13
A205J1ZQ0	9-1437591-7	F7,F14
A205J2A00	-	F15
A205J2C00	9-1437591-8	F16
A205J2ZQ0	9-1437591-9	F15
A205J51ZQ00	1437592-1	F7
A205J61ZQ00	1437592-2	F7
A205KZB	6-1437555-5	C22,C31
A205KZQ	-	C31
A205P3YZQ	6-1437555-6	C22,C33
A205SD9AB	6-1437555-7	C22
A205SYCB	6-1437555-8	C22
A205SYCQ	6-1437555-9	C22
A205SYZQ	7-1437555-0	C22,C27
A205T1ZQ	7-1437555-1	C22,C34
A205TZQ	7-1437555-2	C22
A207J1ZQ0	1437592-3	F7
A207J3ZQ0	1437592-4	F7
A207J51ZQ00	1437592-5	F7
A207J61ZQ00	1437592-6	F7
A207P3YZQ	7-1437555-3	C22,C33
A207SYCB	7-1437555-4	C22
A207SYCQ	7-1437555-5	C22
A207SYZQ	7-1437555-6	C22,C27
A207T1ZQ	7-1437555-7	C22,C34
A207TZQ	7-1437555-8	C22
A208J16CQ00UL	1437592-7	F7
A208J1V3Q0	1437592-8	F7
A208J51ZQ00	1437592-9	F7
A208J61ZQ00	1-1437592-0	F7
A208KZGUL	7-1437555-9	C22
A208MD9AV2B	-	C32
A208MD9AV2Q	-	C32
A208P3YZQ	8-1437555-0	C22,C33
A208SD9AB	-	C30
A208SD9AQ	8-1437555-1	C22,C30
A208SD9AV2Q	8-1437555-2	C22,C31
A208SDCQ	-	C30
A208SYAB	-	C28
A208SYCB	8-1437555-3	C22,C28
A208SYCQ	8-1437555-4	C22
A208SYZQ	8-1437555-5	C22,C27
A208T1ZQ	8-1437555-6	C22,C34
A208TZQ	8-1437555-7	C22
A211J51ZQ0	147571-1	F7
A211KZB	8-1437555-8	C22,C31
A211KZQ	-	C31
A211MD9AQ	8-1437555-9	C22
A211MYCQ	9-1437555-0	C22
A211P3YCQ	9-1437555-1	C22
A211P3YV40GUL	9-1437555-2	C22
A211P3YZQ	9-1436555-3	C33
A211P3YZQ	9-1437555-3	C22
A211SCWCQ0	9-1437555-4	C22
A211SDZQ	9-1437555-5	C22
A211SHZQ	9-1437555-6	C22
A211SY9AQ	9-1437555-7	C22
A211SYCQ	9-1437555-8	C22
A211SYZB	9-1437555-9	C22
A211SYZQ	1437556-1	C22,C27
A211T1ZQ	1437556-2	C22,C34
A211TZQ	-	C33
A213J61ZQ00	1-1437592-1	F7
A213P4YZQ	1437556-3	C22
A213SYZQ	1437556-4	C22,C27

Alcoswitch Part Number	Tyco Part Number	Page Number
A215P3YZQ	-	C33
A215SD9V30B	1437556-5	C22
A215SY9AQ	1437556-6	C22
A215SYZQ	1437556-7	C22,C27
ADE02	1437586-2	A7
ADE02S	1437586-4	A7
ADE02SA	1437586-5	A7
ADE03	1437586-7	A7
ADE03S	1437586-8	A7
ADE03SA	-	A7
ADE04	1-1437586-0	A7
ADE04S	1-1437586-2	A7
ADE04SA	1-1437586-3	A7
ADE05	1-1437586-5	A7
ADE05S	1-1437586-7	A7
ADE05SA	-	A7
ADE06	1-1437586-8	A7
ADE06S	2-1437586-0	A7
ADE06SA	2-1437586-1	A7
ADE07	2-1437586-3	A7
ADE07S	2-1437586-5	A7
ADE07SA	-	A7
ADE08	2-1437586-6	A7
ADE08S	2-1437586-8	A7
ADE08SA	2-1437586-9	A7
ADE09	3-1437586-0	A7
ADE09S	-	A7
ADE09SA	-	A7
ADE10	3-1437586-2	A7
ADE10S	3-1437586-7	A7
ADE10SA	-	A7
ADE12	3-1437586-8	A7
ADE12S	1571337-1	A7
ADE12SA	-	A7
ADF02	4-1437586-2	A8
ADF02S	4-1437586-4	A8
ADF02SA	4-1437586-5	A8
ADF02SAT	4-1437586-6	A8
ADF02ST	4-1437586-8	A8
ADF02STTR	4-1437586-9	A8
ADF02T	5-1437586-0	A8
ADF03	5-1437586-1	A8
ADF03S	5-1437586-2	A8
ADF03SA	5-1437586-3	A8
ADF03SAT	-	A8
ADF03ST	5-1437586-4	A8
ADF03STTR	5-1437586-5	A8
ADF03T	5-1437586-6	A8
ADF04	5-1437586-7	A8
ADF04S	5-1437586-9	A8
ADF04SA	6-1437586-0	A8
ADF04SAT	6-1437586-1	A8
ADF04ST	6-1437586-3	A8
ADF04STTR	1437583-6	A8
ADF04T	6-1437586-4	A8
ADF05	6-1437586-5	A8
ADF05S	6-1437586-6	A8
ADF05SA	-	A8
ADF05SAT	-	A8
ADF05ST	6-1437586-8	A8
ADF05STTR	6-1437586-9	A8
ADF05T	7-1437586-0	A8
ADF06	7-1437586-1	A8
ADF06S	7-1437586-5	A8
ADF06SA	7-1437586-6	A8
ADF06SAT	7-1437586-7	A8
ADF06ST	7-1437586-8	A8
ADF06STTR	7-1437586-9	A8

Alcoswitch Part Number	Tyco Part Number	Page Number
ADF06T	8-1437586-0	A8
ADF07	8-1437586-1	A8
ADF07S	8-1437586-2	A8
ADF07SA	-	A8
ADF07SAT	-	A8
ADF07ST	8-1437586-3	A8
ADF07STTR	8-1437586-4	A8
ADF07T	8-1437586-5	A8
ADF08	8-1437586-6	A8
ADF08S	8-1437586-8	A8
ADF08SA	8-1437586-9	A8
ADF08SAT	9-1437586-0	A8
ADF08ST	9-1437586-1	A8
ADF08STTR	9-1437586-2	A8
ADF08T	9-1437586-5	A8
ADF09	9-1437586-6	A8
ADF09S	9-1437586-7	A8
ADF09SA	-	A8
ADF09SAT	-	A8
ADF09ST	9-1437586-8	A8
ADF09STTR	9-1437586-9	A8
ADF09T	-	A8
ADF10	1437587-1	A8
ADF10S	1437587-3	A8
ADF10SA	-	A8
ADF10SAT	1437587-4	A8
ADF10ST	1437587-5	A8
ADF10STTR	1437587-6	A8
ADF10T	1437587-7	A8
ADF12	-	A8
ADF12S	1437587-8	A8
ADF12SA	-	A8
ADF12SAT	-	A8
ADF12ST	-	A8
ADF12STTR	1437587-9	A8
ADF12T	1571336-1	A8
ADP02	1-1437587-1	A9
ADP02S	1-1437587-2	A9
ADP02SA	1-1437587-3	A9
ADP04	1-1437587-5	A9
ADP04S	1-1437587-7	A9
ADP04SA	1-1437587-8	A9
ADP05	2-1437587-0	A9
ADP05S	2-1437587-1	A9
ADP05SA	-	A9
ADP06	2-1437587-2	A9
ADP06S	2-1437587-3	A9
ADP06SA	2-1437587-4	A9
ADP07	2-1437587-5	A9
ADP07S	-	A9
ADP07SA	-	A9
ADP08	2-1437587-6	A9
ADP08S	2-1437587-8	A9
ADP08SA	2-1437587-9	A9
ADP09	3-1437587-0	A9
ADP09S	-	A9
ADP09SA	3-1437587-1	A9
ADP10	3-1437587-3	A9
ADP10S	3-1437587-6	A9
ADPA02	4-1437587-7	A9
ADPA02S	-	A9
ADPA02SA	-	A9
ADPA04	4-1437587-8	A9
ADPA04S	5-1437587-0	A9
ADPA04SA	5-1437587-1	A9
ADPA05	5-1437587-2	A9
ADPA05S	5-1437587-3	A9
ADPA05SA	-	A9



Alcoswitch Part Number	Tyco Part Number	Page Number
ADPA06	5-1437587-4	A9
ADPA06S	5-1437587-5	A9
ADPA06SA	5-1437587-6	A9
ADPA07	5-1437587-7	A9
ADPA07S	-	A9
ADPA07SA	-	A9
ADPA08	5-1437587-8	A9
ADPA08S	6-1437587-0	A9
ADPA08SA	-	A9
ADPA09	-	A9
ADPA09S	-	A9
ADPA09SA	-	A9
ADPA10	6-1437587-1	A9
ADPA10S	-	A9
ADPA10SA	-	A9
AE101J1AB0	1-1437592-4	F17
AE101J1AG0UL	1571614-1	F17
AE101J1AQ0	1-1437592-5	F17
AE101J1AQ4UL	1-1437592-6	F17
AE101J1AV2G0	1571398-1	F17
AE101J1AV2Q0	1-1437592-7	F17
AE101J1V3B0	1-1437592-8	F17
AE101J1V3Q0	1-1437592-9	F17
AE101MD1AB	1437556-8	C40
AE101MD1AG	1437556-9	C35
AE101MD1AGUL	1-1437556-0	C35
AE101MD1AQ	1-1437556-1	C40
AE101MD1AV2B	1-1437556-2	C40
AE101MD1AV2Q	1-1437556-3	C40
AE101MD1AV2QUL	1-1437556-4	C35
AE101MD1CB	1-1437556-5	C41
AE101MD1CG	1-1437556-6	C35
AE101MD1CQ	1-1437556-7	C41
AE101MD1V30B	1-1437556-8	C35
AE101MD1V30QUL	1-1437556-9	C35
AE101MD1ZQ	1571186-1	C35
AE101SD1AB	2-1437556-2	C42
AE101SD1AQ	6-1437556-0	C42
AE101SD1AQUL	2-1437556-4	C35
AE101SD1AV2B	2-1437556-5	C42
AE101SD1AV2Q	2-1437556-6	C42
AE101SD1CB	2-1437556-7	C39
AE101SD1CQ	2-1437556-8	C39
AE101SD1V30B	2-1437556-9	C35
AE101SD1V30QUL	3-1437556-0	C35
AE103J1V3Q0	147824-1	F17
AE103J2CB0	1571666-1	F17
AE103J50V3B0	2-1437592-0	F17
AE103J60V3Q02	2-1437592-1	F17
AE103MD1AB	3-1437556-1	C40
AE103MD1AQ	-	C40
AE103MD1AV2B	3-1437556-2	C40
AE103MD1AV2Q	-	C40
AE103MD1CB	3-1437556-3	C41
AE103MD1CQ	-	C41
AE103MD1V30B	147794-1	C35
AE103SD1AB	-	C42
AE103SD1AQ	-	C42
AE103SD1AV2B	3-1437556-6	C42
AE103SD1AV2Q	-	C42
AE103SD1CB	3-1437556-7	C39
AE103SD1CQ	3-1437556-8	C39
AE103SD1CQUL	3-1437556-9	C35
AE103SD1V30B	4-1437556-0	C35
AE105J1AQ0	2-1437592-2	F17
AE105J1V3B0	2-1437592-3	F17
AE105J1V3Q0	147822-1	F17
AE105J1ZB0	2-1437592-4	F17

Alcoswitch Part Number	Tyco Part Number	Page Number
AE105J60V3B0	2-1437592-5	F17
AE105MD1AB	4-1437556-2	C35
AE105MD1AG	4-1437556-3	C35
AE105MD1AV2B	4-1437556-4	C35
AE105MD1CB	-	C41
AE105MD1CQ	-	C41
AE105SD1CB	4-1437556-6	C39
AE105SD1CQ	ó	C39
AE105SD1V30B	4-1437556-7	C35
AE107J1AQ0	1571427-1	F17
AE107J1ZQ0	4-1437556-9	F17
AE107MD1AV2B	5-1437556-0	C35
AE107MD1CB	-	C41
AE107MD1CQ	-	C41
AE107SD1AB	5-1437556-1	C35
AE107SD1AG	5-1437556-2	C35
AE107SD1CB	5-1437556-3	C39
AE107SD1CQ	-	C39
AE107SD1V30B	5-1437556-4	C35
AE108J1CQ0	147823-1	F17
AE108J1ZQ0	5-1437556-5	F17
AE108J60V3B0	5-1437556-6	F17
AE108MD1AB	-	C40
AE108MD1AQ	5-1437556-7	C40
AE108MD1AV2B	5-1437556-8	C40
AE108MD1AV2Q	1447371-4	C40
AE108MD1CB	-	C41
AE108MD1CQ	-	C41
AE108SD1AB	5-1437556-9	C42
AE108SD1AQ	2-1437556-3	C42
AE108SD1AV2B	-	C42
AE108SD1AV2Q	-	C42
AE108SD1CB	-	C39
AE108SD1CQ	6-1437556-1	C39
AE108SD1CQUL	6-1437556-2	C35
AE108SD1V30B	6-1437556-3	C35
AE201J1AQ0	2-1437592-6	F17
AE201J1AV2G0UL	1571613-1	F17
AE201J1AV2Q0	2-1437592-7	F17
AE201J1V3B0	2-1437592-8	F17
AE201J2AQ2	2-1437592-9	F17
AE201MD1AB	6-1437556-5	C40
AE201MD1AQ	6-1437556-6	C40
AE201MD1AV2B	6-1437556-7	C41
AE201MD1AV2Q	1571537-1	C41
AE201MD1CB	6-1437556-8	C41
AE201MD1CQ	6-1437556-9	C41
AE201MD1V30B	147795-1	C35
AE201SD1AB	7-1437556-1	C42
AE201SD1AG	7-1437556-2	C35
AE201SD1AQ	-	C42
AE201SD1AV2B	7-1437556-3	C42
AE201SD1AV2Q	-	C42
AE201SD1CB	7-1437556-4	C39
AE201SD1CQ	7-1437556-5	C39
AE201SD1CQUL	1571412-1	C35
AE203J1AQ0	3-1437592-0	F17
AE203MD1AB	7-1437556-7	C40
AE203MD1AQ	3-1437592-1	C40
AE203MD1AV2B	7-1437556-8	C41
AE203MD1AV2Q	-	C41
AE203MD1CB	-	C41
AE203MD1CQ	-	C41
AE203MD1V30Q	1571354-1	C35
AE203SD1AB	-	C42
AE203SD1AQ	-	C42
AE203SD1AV2B	8-1437556-0	C42
AE203SD1AV2Q	8-1437556-1	C42

Alcoswitch Part Number	Tyco Part Number	Page Number
AE203SD1CB	8-1437556-2	C39
AE203SD1CQ	1571837-1	C35,C39
AE205J50V3B0	3-1437592-2	F17
AE205J60V3B0	3-1437592-3	F17
AE205MD1AV2B	8-1437556-4	C35
AE205MD1CB	-	C41
AE205MD1CQ	-	C41
AE205SD1CB	-	C39
AE205SD1CQ	8-1437556-5	C39
AE205SD1CQUL	8-1437556-6	C35
AE207MD1AB	8-1437556-7	C35
AE207MD1CB	-	C41
AE207MD1CQ	-	C41
AE207SD1CB	-	C39
AE207SD1CQ	-	C39
AE208J50V3B0	3-1437592-4	F17
AE208MD1AB	-	C40
AE208MD1AQ	-	C40
AE208MD1AV2B	-	C41
AE208MD1AV2Q	-	C41
AE208MD1CB	-	C41
AE208MD1CQ	-	C41
AE208SD1AB	7-1437556-9	C42
AE208SD1AQ	-	C42
AE208SD1AV2B	-	C42
AE208SD1AV2Q	-	C42
AE208SD1CB	-	C39
AE208SD1CQ	-	C39
AE211MD1CB	8-1437556-9	C41
AE211MD1CQ	-	C41
AE211MD1V30B	9-1437556-0	C35
AE211SD1CB	-	C39
AE211SD1CQ	-	C39
AE215MD1CB	-	C41
AE215MD1CQ	-	C41
AE215SD1CB	-	C39
AE215SD1CQ	-	C39
APA1BGPC	1437567-2	D16
APA1BGRA	-	D17
APA1CGPC	1437567-3	D16
APA1CGRA	1437567-4	D17
APA1FGPC	1437567-5	D16
APA1FGRA	1437567-6	D17
APA2LGPC	-	D16
APA2MGPC	1437567-7	D16
APA2MGRA	1437567-8	D17
APA2RGPC	1437567-9	D16
APA2RGRA	1-1437567-0	D17
APB1BGPC	1-1437567-1	D18
APB1BGRA	-	D18
APB1CGPC	1-1437567-2	D18
APB1CGRA	1-1437567-3	D18
APB1FGPC	1-1437567-4	D18
APB1FGRA	1-1437567-5	D18
APB2LGPC	-	D18
APB2MGRA	1-1437567-6	D18
APB2RGPC	1-1437567-7	D18
APB2RGRA	-	D18
APBE1FGPC	1-1437567-8	D19
APBE1FGRA	1-1437567-9	D20
APBE2RGPC	2-1437567-0	D19
APBE2RGRA	2-1437567-1	D20
APD10SA	-	A9
ASE22	1437581-2	B6
ASE22G	1437581-4	B6
ASE22GL	1437581-5	B6
ASE22GS	1437581-6	B7
ASE22L	1437581-7	B6

Alcoswitch Part Number	Tyco Part Number	Page Number
ASE22R	1437581-8	B5,B6
ASE22RG	1437581-9	B6
ASE22RGL	-	B7
ASE22RGS	1-1437581-0	B7
ASE22RL	1-1437581-1	B7
ASE22RS	1-1437581-2	B7
ASE22S	1-1437581-3	B7
ASE42	1-1437581-4	B6
ASE42G	1-1437581-6	B6
ASE42GL	1-1437581-7	B6
ASE42GS	-	B7
ASE42L	1-1437581-8	B6
ASE42R	1-1437581-9	B6
ASE42RG	2-1437581-0	B6
ASE42RGL	2-1437581-1	B7
ASE42RGS	-	B7
ASE42RL	2-1437581-2	B7
ASE42RS	2-1437581-3	B7
ASE42S	2-1437581-4	B7
ASE43	2-1437581-5	B6
ASE43G	2-1437581-6	B6
ASE43GL	2-1437581-7	B6
ASE43GS	-	B7
ASE43L	2-1437581-8	B6
ASE43R	2-1437581-9	B6
ASE43RG	3-1437581-0	B6
ASE43RGL	-	B7
ASE43RGS	-	B7
ASE43RL	-	B7
ASE43RS	-	B7
ASE43S	-	B7
ASE62	3-1437581-1	B6
ASE62G	3-1437581-3	B5,B6
ASE62GL	3-1437581-4	B6
ASE62GS	-	B7
ASE62L	3-1437581-5	B6
ASE62R	3-1437581-6	B6
ASE62RG	3-1437581-7	B6
ASE62RGL	3-1437581-8	B7
ASE62RGS	-	B7
ASE62RL	3-1437581-9	B7
ASE62RS	-	B7
ASE62S	-	B7
ASF22	5-1437581-6	B5,B8
ASF22G	5-1437581-8	B8
ASF22GL	5-1437581-9	B8
ASF22GS	6-1437581-0	B9
ASF22L	6-1437581-1	B8
ASF22R	6-1437581-2	B5,B8
ASF22RG	6-1437581-3	B8
ASF22RGL	6-1437581-4	B9
ASF22RGS	6-1437581-5	B9
ASF22RL	-	B9
ASF22RS	6-1437581-6	B9
ASF22S	6-1437581-7	B9
ASF42	6-1437581-8	B8
ASF42G	7-1437581-0	B8
ASF42GL	7-1437581-1	B8
ASF42GS	-	B9
ASF42L	7-1437581-2	B8
ASF42R	7-1437581-3	B8
ASF42RG	7-1437581-4	B8
ASF42RGL	7-1437581-5	B9
ASF42RGS	-	B9
ASF42RL	7-1437581-6	B9
ASF42RS	-	B9
ASF42S	7-1437581-7	B9
ASF43	7-1437581-8	B8

Alcoswitch Part Number	Tyco Part Number	Page Number
ASF43G	7-1437581-9	B8
ASF43GL	8-1437581-0	B8
ASF43GS	-	B9
ASF43L	8-1437581-1	B8
ASF43R	-	B8
ASF43RG	8-1437581-2	B8
ASF43RGL	-	B9
ASF43RGS	-	B9
ASF43RL	-	B9
ASF43RS	-	B9
ASF43S	8-1437581-3	B9
ASF62	8-1437581-4	B8
ASF62G	8-1437581-6	B8
ASF62GL	8-1437581-7	B8
ASF62GS	-	B9
ASF62L	8-1437581-8	B8
ASF62R	8-1437581-9	B8
ASF62RG	9-1437581-1	B8
ASF62RGL	9-1437581-2	B9
ASF62RGS	9-1437581-3	B9
ASF62RL	-	B9
ASF62RS	-	B9
ASF62S	9-1437581-4	B9
ATE1DGPC1	1437557-2	C20
ATE1DGPC7	1437557-3	C20
ATE1DGRA1	1437557-4	C21
ATE1DGRA7	1437557-5	C21
ATE1EGPC1	1437557-6	C20
ATE1EGRA1	1437557-8	C21
ATE1EGRA7	1437557-9	C21
ATE1FGPC1	-	C20
ATE1FGRA1	1-1437557-0	C21
ATE1FGRA7	1-1437557-1	C21
ATE1GGPC1	1-1437557-2	C20
ATE1GGPC7	1-1437557-3	C20
ATE1GGRA1	1-1437557-4	C21
ATE2DGPC1	1-1437557-5	C20
ATE2DGPC7	1-1437557-6	C20
ATE2DGRA1	1-1437557-7	C21
ATE2DGRA7	1-1437557-8	C21
ATE2EGPC1	1-1437557-9	C20
ATE2EGRA1	3-1437592-7	C21
ATE2GGRA1	-	C21
ATE4DGPC2	2-1437557-1	C19
ATE4DGRA2	2-1437557-2	C19
B10480	1437626-1	C55
B10482	1437626-2	C55
B10488	1437626-3	C55
B11LS	1437606-1	J9,J10
B12L	1437606-2	J11
B12LS	1437606-3	J11
B14400	1437626-4	C55
B14402	1437626-5	C55
B14408	1437626-6	C55
B15320	1437626-7	C55
B15322	1437626-8	C55
B15328	1437626-9	C55
B2100	1-1437626-0	C55
B2210	1-1437626-1	C55
B5L	1437606-4	J7
B5LS	1437606-5	J7,J8
B9L	1437606-6	J9,J10
B9LS	1437606-8	J9,J10
B9LS5PIN	1437606-9	J9
BP10480	1-1437626-4	D31
BP10482	1-1437626-5	D31
BP10488	1-1437626-6	D31
BP14400	1-1437626-7	D31

Alcoswitch Part Number	Tyco Part Number	Page Number
BP14402	1-1437626-8	D31
BP14408	1-1437626-9	D31
BP15320	2-1437626-0	D31
BP15322	2-1437626-1	D31
BP15328	2-1437626-2	D31
BP1900	2-1437626-3	D31
BP2010	2-1437626-4	D31
BP5890	2-1437626-5	D31
BP5900	2-1437626-6	D31
BPA14400	2-1437626-7	D31
BPA14402	2-1437626-8	D31
BPA14408	2-1437626-9	D31
BPM15320	3-1437626-0	D33
BPM15322	3-1437626-1	D33
BPM15328	3-1437626-2	D33
BPT15320	3-1437626-3	D33
BPT15322	3-1437626-4	D33
BPT15328	3-1437626-5	D33
BT14400	3-1437626-6	C55
BT14402	-	C55
BT14408	-	C55
BT15320	3-1437626-7	C55
BT15322	3-1437626-8	C55
BT15328	3-1437626-9	C55
C220	4-1437627-1	D32
C222	4-1437627-2	D32
C223	4-1437627-3	D32
C224	4-1437627-4	D32
C225	4-1437627-5	D32
C226	4-1437627-6	D32
C229	4-1437627-7	D32
C230	4-1437627-8	D32
C232	4-1437627-9	D32
C233	5-1437627-0	D32
C234	5-1437627-1	D32
C235	5-1437627-2	D32
C236	5-1437627-3	D32
C239	5-1437627-4	D32
C330	5-1437627-5	D25
C332	5-1437627-6	D25
C336	5-1437627-7	D32
C339	5-1437627-8	D25
C50	6-1437627-2	D32
C52	6-1437627-3	D32
C55	6-1437627-5	D32
C59	6-1437626-6	D32
C80	6-1437626-7	D32
C82	6-1437626-8	D32
C85	6-1437626-9	D32
C89	7-1437627-0	D32
C90	7-1437627-1	D32
C91	7-1437627-2	D32
C96	7-1437627-3	D32
C99	7-1437627-4	D32
CST022NK	1437576-2	B45
CST023NK	1437576-4	B45
CST042NK	1437576-5	B46
CST043NK	1437576-6	B46
CST062NK	1437576-7	B46
DED16SETR	2-1437584-2	A23
DPS10111AK	1437603-1	J11
DPS10131AK	1437603-2	J11
DPS10131ALD	1437603-4	J11
DPS10137AK	1437603-5	J11
DPS10141AK	1437603-6	J11
DPS10301AK	1437603-7	J11
DPS10L	1-1437603-0	J11
DPS8111AK	1-1437603-1	J10

Alcoswitch Part Number	Tyco Part Number	Page Number
DPS8131AK	1-1437603-2	J10
DPS8131AKLS	1-1437603-3	J10
DPS8131AKULS	1-1437603-4	J10
DPS8131ALD	1-1437603-5	J10
DPS8137AK	1-1437603-6	J10
DPS8137AKLS	1-1437603-7	J10
DPS8137AKU	1-1437603-8	J10
DPS8137AKULS	1-1437603-9	J10
DPS8301AK	2-1437603-0	J10
DPS8301AKULS	2-1437603-1	J10
DPS8A	2-1437603-5	J10
DPS8L	2-1437603-7	J10
DPS8P	2-1437603-8	J10
DPS8PW	2-1437603-9	J10
DPS910A	3-1437603-4	J11
DPS910P	3-1437603-5	J11
DPS9111AK	3-1437603-6	J11
DPS9131AK	3-1437603-8	J11
DPS9131AL	3-1437603-9	J11
DPS9131ALD	4-1437603-0	J11
DPS9137AK	4-1437603-1	J11
DPS9301AK	4-1437603-3	J11
DPS9307AK	4-1437603-4	J11
DPS9L	4-1437603-5	J11
DRD*RAE	-	A25
DRD10	9-1437584-7	A23
DRD10C	1437807-2	A23
DRD10CE	1437584-6	A23
DRD10CES	-	A23
DRD10CRA	1437584-8	A23
DRD10CS	1437807-1	A23
DRD10CSE	1437584-9	A23
DRD10CSETR	1-1437584-0	A23
DRD10E	1-1437584-1	A23
DRD10ES	-	A23
DRD10RAE	9-1437584-9	A23
DRD10RAS	9-1437584-8	A23
DRD10S	9-1437584-5	A23
DRD10SE	1-1437584-3	A23
DRD10SETR	1-1437584-4	A23
DRD16	9-1437584-4	A23
DRD16C	9-1437584-3	A23
DRD16CE	1-1437584-6	A23
DRD16CES	-	A23
DRD16CRA	1-1437584-7	A23
DRD16CS	9-1437584-2	A23
DRD16CSE	1-1437584-8	A23
DRD16E	-	A23
DRD16E	1-1437584-9	A23
DRD16ES	-	A23
DRD16RAE	2-1437584-0	A23
DRD16RAS	9-1437584-1	A23
DRD16S	1437807-4	A23
DRD16SA	1437807-3	A23
DRD16SE	2-1437584-1	A23
DRM	-	A25
DRM10	3-1437584-2	A25
DRM10C	3-1437584-3	A25
DRM10CE	1-1437807-4	A25
DRM10CRA	3-1437584-4	A25
DRM10E	3-1437584-5	A25
DRM10RA	3-1437584-6	A25
DRM16	3-1437584-7	A25
DRM16C	3-1437584-8	A25
DRM16CE	1-1437807-6	A25
DRM16CRA	3-1437584-9	A25
DRM16E	1-1437807-5	A25
DRM16RA	4-1437584-0	A25

Alcoswitch Part Number	Tyco Part Number	Page Number
DRM16S	1437807-8	A23
DRS	-	A25
DRS10	4-1437584-4	A25
DRS10C	4-1437584-5	A25
DRS10CRA	4-1437584-6	A25
DRS10RA	4-1437584-7	A25
DRS16	4-1437584-8	A25
DRS16CR	1437585-7	A25
DRS16CRA	4-1437584-9	A25
DRS16RA	5-1437584-0	A25
DRW	-	A25
DRW10	5-1437584-3	A25
DRW10C	5-1437584-4	A25
DRW10CE	1-1437807-2	A25
DRW10CRA	5-1437584-5	A25
DRW10E	1-1437807-3	A25
DRW10RA	5-1437584-6	A25
DRW10S	1-1437807-1	A25
DRW16	5-1437584-7	A25
DRW16C	5-1437584-8	A25
DRW16CE	1437807-9	A23
DRW16CRA	5-1437584-9	A25
DRW16E	1-1437807-0	A25
DRW16RA	6-1437584-0	A25
DRW16S	1437807-6	A23
E1	1437614-1	I5,16
F40	1437612-9	I8,19,114
F50	1-1437612-0	I8,19,114
FA0	1-1437612-1	I8,19,114
FR0	1-1437612-2	I8,19,114
FSM	1437565-1	E3
FSM100	1437565-2	E16
FSM100A	1571139-1	E16
FSM101	1437565-3	E16
FSM102	1437565-4	E17
FSM102A	1571061-1	E17
FSM103	1437565-5	E17
FSM104	1437565-6	E17
FSM10J	1437565-7	E5
FSM10JA	-	E5
FSM10JAA	-	E5
FSM10JL	-	E5
FSM11J	1437565-8	E5
FSM11JA	-	E5
FSM11JAA	-	E5
FSM11JL	-	E5
FSM12J	1437565-9	E5
FSM12JA	-	E5
FSM12JAA	-	E5
FSM12JL	-	E5
FSM13J	1-1437565-0	E5
FSM13JA	1-1437565-1	E5
FSM13JAA	-	E5
FSM13JL	-	E5
FSM14J	1-1437565-2	E5
FSM14JA	-	E5
FSM14JAA	-	E5
FSM14JL	-	E5
FSM14JRT	1571010-1	E6
FSM15J	-	E5
FSM15JA	147916-1	E5
FSM15JAA	-	E5
FSM15JL	-	E5
FSM16J	1-1437565-3	E5
FSM16JA	-	E5
FSM16JAA	-	E5
FSM16JL	-	E5
FSM17J	-	E5

Alcoswitch Part Number	Tyco Part Number	Page Number
FSM17JA	-	E5
FSM17JAA	-	E5
FSM17JL	-	E5
FSM18J	1-1437565-4	E5
FSM18JA	-	E5
FSM18JAA	-	E5
FSM18JL	-	E5
FSM1IJ	1-1437565-5	E4,E5
FSM1IJA	-	E5
FSM1IJAA	-	E5
FSM1IJL	-	E5
FSM1ILP	1-1437565-6	E15
FSM1ILPA	1-1437565-7	E15
FSM1ILPATR	1-1437565-8	E15
FSM1ILPTR	1-1437565-9	E15
FSM201A	1571140-1	E16
FSM2J	2-1437565-0	E4,E5
FSM2JA	2-1437565-1	E5
FSM2JAA	-	E5
FSM2JART	2-1437565-2	E6
FSM2JL	2-1437565-4	E5
FSM2JRT	2-1437565-6	E6
FSM2JSMA	2-1437565-7	E10
FSM2JSMAA	2-1437565-8	E10
FSM2JSMAATR	2-1437565-9	E10
FSM2JSMATR	3-1437565-0	E10
FSM3J	3-1437565-3	E5
FSM3JA	-	E5
FSM3JAA	-	E5
FSM3JL	-	E5
FSM4J	3-1437565-6	E5
FSM4JA	3-1437565-7	E5
FSM4JAA	3-1437565-8	E5
FSM4JART	147997-1	E6
FSM4JL	-	E5
FSM4JRT	4-1437565-0	E6
FSM4JSMA	4-1437565-1	E10
FSM4JSMAA	-	E10
FSM4JSMAATR	-	E10
FSM4JSMATR	4-1437565-2	E10
FSM4LP	1571621-1	E15
FSM4LPTR	4-1437565-3	E15
FSM5J	4-1437565-4	E5
FSM5JA	-	E5
FSM5JAA	-	E5
FSM5JL	-	E5
FSM6J	4-1437565-5	E5
FSM6JA	4-1437565-6	E5
FSM6JAA	-	E5
FSM6JART	1571402-1	E6
FSM6JL	-	E5
FSM6JRT	4-1437565-8	E6
FSM6JSMA	4-1437565-9	E10
FSM6JSMAA	-	E10
FSM6JSMAATR	-	E10
FSM6JSMATR	5-1437565-0	E10
FSM7J	5-1437565-1	E5
FSM7JA	-	E5
FSM7JAA	-	E5
FSM7JL	-	E5
FSM8J	5-1437565-2	E5
FSM8JA	5-1437565-3	E5
FSM8JAA	5-1437565-4	E5
FSM8JART	147871-1	E6
FSM8JL	1571376-1	E5
FSM8JRT	147694-1	E6
FSM8JSMA	3-1437566-8	E10
FSM8JSMATR	-	E10

Alcoswitch Part Number	Tyco Part Number	Page Number
FSM9J	7-1437565-5	E5
FSM9JA	-	E5
FSM9JAA	-	E5
FSM9JL	-	E5
FSMC	7-1437565-6	E3
FSMCD	7-1437565-8	E8
FSMCDA	7-1437565-9	E8
FSMCTATR	8-1437565-1	E11
FSMCTTR	8-1437565-0	E11
FSMJM3.5ATR	147873-3	E9
FSMJM4.3	147942-1	E9
FSMJM4.3ATR	147873-2	E9
FSMJM4.3TR	147942-2	E9
FSMJM5.0ATR	147873-1	E9
FSMRA 1J	8-1437565-4	E7
FSMRA 1JL	1571386-2	E7
FSMRA 2J	8-1437565-5	E7
FSMRA 2JA	8-1437565-8	E7
FSMRA 2JH	8-1437565-9	E7
FSMRA 2JL	1571386-1	E7
FSMRA 3J	9-1437565-0	E7
FSMRA 3JL	1571386-3	E7
FSMRA 4J	9-1437565-1	E7
FSMRA 4JA	1571819-1	E7
FSMRA 4JL	1571386-4	E7
FSMRA 5J	9-1437565-2	E7
FSMRA 5JL	1571386-5	E7
FSMRA 6J	9-1437565-3	E7
FSMRA 6JL	1571386-6	E7
FSMRA 7J	9-1437565-5	E7
FSMRA 7JL	1571386-7	E7
FSMRA 8J	1571419-1	E7
FSMRA 8JL	1571386-8	E7
FSMRACD	9-1437565-9	E8
FSMRACDA	1437566-1	E8
FSMSM	1437566-3	E9
FSMSMTR	1437566-4	E9
G001	1437617-1	I13
G11A	7-1437627-6	D32
G11B	7-1437627-7	D32
G11C	7-1437627-8	D32
G12A	8-1437627-1	D32
G12B	8-1437627-2	D32
G12C	8-1437627-3	D32
G12KA	8-1437627-4	D32
G12KB	8-1437627-5	D32
G12KC	8-1437627-6	D32
G13A	8-1437627-7	D32
G13B	8-1437627-8	D32
G13C	8-1437627-9	D32
G13KA	9-1437627-0	D32
G13KB	9-1437627-1	D32
G13KC	9-1437627-2	D32
G15	9-1437627-3	D32
GDB02	1437590-1	A4
GDB02S	-	A4
GDB04	1437590-2	A4
GDB04S	1437590-3	A4
GDB06	1437590-4	A4
GDB06S	1437590-5	A4
GDB08	1437590-6	A4
GDB08S	1437590-7	A4
GDB10	1437590-8	A4
GDB10S	1437590-9	A4
GDH02S	1-1437590-0	A5
GDH02STR	1-1437590-3	A5
GDH04S	1-1437590-4	A5
GDH04STR	1-1437590-6	A5

Alcoswitch Part Number	Tyco Part Number	Page Number
GDH06S	1-1437590-9	A5
GDH06STR	2-1437590-1	A5
GDH08S	2-1437590-2	A5
GDH08STR	2-1437590-4	A5
GDH10S	2-1437590-6	A5
GDH10STR	2-1437590-8	A5
GDP02	3-1437590-2	A4
GDP02NTS	3-1437590-3	A4
GDP02S	3-1437590-4	A4
GDP02STR	1571668-1	A4
GDP04	3-1437590-5	A4
GDP04NTS	3-1437590-6	A4
GDP04S	3-1437590-7	A4
GDP06	3-1437590-8	A4
GDP06S	3-1437590-9	A4
GDP08	4-1437590-0	A4
GDP08S	4-1437590-1	A4
GDP08STR	4-1437590-2	A4
GDP10	4-1437590-3	A4
GDP10S	4-1437590-4	A4
GDP10STR	4-1437590-5	A4
GDR02	4-1437590-6	A5
GDR02S	4-1437590-7	A5
GDR04	4-1437590-8	A5
GDR04S	4-1437590-9	A5
GDR06	5-1437590-0	A5
GDR06S	5-1437590-1	A5
GDR08	5-1437590-2	A5
GDR08S	5-1437590-3	A5
GDR10	5-1437590-4	A5
GDR10S	-	A5
GDS02	5-1437590-5	A3
GDS02NTS	5-1437590-6	A3
GDS02S	5-1437590-7	A3
GDS02STR	5-1437590-8	A3
GDS04	5-1437590-9	A3
GDS04NTS	6-1437590-0	A3
GDS04S	6-1437590-1	A3
GDS04STR	6-1437590-2	A3
GDS06	6-1437590-3	A3
GDS06NTS	6-1437590-4	A3
GDS06S	6-1437590-5	A3
GDS06STR	6-1437590-6	A3
GDS08	6-1437590-7	A3
GDS08NTS	6-1437590-8	A3
GDS08S	6-1437590-9	A3
GDS08STR	7-1437590-0	A3
GDS10	7-1437590-1	A3
GDS10S	7-1437590-2	A3
GDS10STR	7-1437590-3	A3
JLS91439FK	1437566-7	D30
JLS91439FKBC	1437566-8	D30
JLS91439FWC	1437566-9	D30
K1250A1/4	1437621-2	K4
K1250B1/4	1437621-3	K4
K1251B1/4	1437621-4	K4
K1255AS1/4	-	K4
K1255BS1/4	1437621-5	K4
K500A1/4	1437621-6	K4
K500A1/8	1437621-7	K4
K500B1/4	1437621-8	K4
K500B1/8	1437621-9	K4
K700A1/4	1-1437621-0	K4
K700B1/4	1-1437621-1	K4
K900A1/4	1-1437621-3	K4
K900B1/4	1-1437621-4	K4
KA1250A1/4	-	K4
KA1250B1/4	1-1437621-8	K4

Alcoswitch Part Number	Tyco Part Number	Page Number
KA500A1/4	1-1437621-9	K4
KA500A1/8	2-1437621-0	K4
KA500B1/4	2-1437621-1	K4
KA500B1/8	2-1437621-2	K4
KA700A1/4	2-1437621-3	K4
KA700B1/4	2-1437621-4	K4
KA900A1/4	2-1437621-5	K4
KA900B1/4	2-1437621-6	K4
KAS500A1/4	2-1437621-7	K4
KAS500A1/8	2-1437621-8	K4
KAS500B1/4	2-1437621-9	K4
KAS500B1/8	3-1437621-0	K4
KAS700A1/4	3-1437621-1	K4
KAS700B1/4	3-1437621-2	K4
KAS900A1/4	3-1437621-3	K4
KAS900B1/4	3-1437621-4	K4
KB500A1/4	3-1437621-5	K5
KB500A1/8	3-1437621-6	K5
KB500B1/4	3-1437621-8	K5
KB500B1/8	3-1437621-9	K5
KB700A1/4	4-1437621-0	K5
KB700B1/4	4-1437621-2	K5
KB900A1/4	4-1437621-4	K5
KB900B1/4	4-1437621-5	K5
KBS500A1/4	4-1437621-7	K5
KBS500A1/8	4-1437621-8	K5
KBS500A101/4	-	K5
KBS500A101/8	4-1437621-9	K5
KBS500B1/4	5-1437621-0	K5
KBS500B1/8	5-1437621-1	K5
KBS500B101/4	5-1437621-2	K5
KBS500B101/8	5-1437621-3	K5
KCB500A1/4	5-1437621-6	K5
KCB500A1/8	5-1437621-7	K5
KCB500B1/4	5-1437621-8	K5
KCB500B1/8	5-1437621-9	K5
KCB600A1/4	-	K5
KCB600A1/8	6-1437621-0	K5
KCB600B1/4	6-1437621-1	K5
KCB600B1/8	6-1437621-2	K5
KCB700A1/4	6-1437621-3	K5
KCB700B1/4	6-1437621-4	K5
KCB900A1/4	6-1437621-5	K5
KCB900B1/4	6-1437621-7	K5
KD1250A1/4	6-1437621-8	K6
KD1250B1/4	6-1437621-9	K6
KD500A1/4	7-1437621-0	K6
KD500A1/8	7-1437621-1	K6
KD500B1/4	7-1437621-2	K6
KD500B1/8	7-1437621-3	K6
KD700A1/4	7-1437621-4	K6
KD700B1/4	7-1437621-5	K6
KD900A1/4	7-1437621-6	K6
KD900B1/4	7-1437621-7	K6
KE1250AB1/4	7-1437621-8	K6
KE500AB1/4	7-1437621-9	K6
KE500AB1/8	8-1437621-0	K6
KE700AB1/4	8-1437621-1	K6
KE900AB1/4	8-1437621-2	K6
KES500AB1/4	8-1437621-3	K6
KES500AB1/8	8-1437621-4	K6
KES700AB1/4	8-1437621-5	K6
KES900AB1/4	-	K6
KFS400B1/8	8-1437621-6	K7
KFS500B1/4	8-1437621-7	K7
KFS500B1/8	8-1437621-8	K7
KFS600B1/4	8-1437621-9	K7
KHF1250A1/4	9-1437621-0	K7

Alcoswitch Part Number	Tyco Part Number	Page Number
KHF500A1/4	9-1437621-1	K7
KHF700A1/4	9-1437621-2	K7
KHF900A1/4	9-1437621-3	K7
KLN1250A1/4	9-1437621-4	K7
KLN1250B1/4	9-1437621-5	K7
KLN500A1/4	9-1437621-6	K7
KLN500A1/8	9-1437621-7	K7
KLN500B1/4	9-1437621-8	K7
KLN500B1/8	9-1437621-9	K7
KLN500S1/4	1437622-1	K7
KLN700A1/4	1437622-2	K7
KLN700B1/4	1437622-3	K7
KLN700B1/8	1437622-4	K7
KLN700S1/4	1437622-5	K7
KLN900A1/4	1437622-6	K7
KLN900B1/4	1437622-7	K7
KLN900S1/4	1437622-8	K7
KLNS500A1/4	1-1437622-5	K8
KLNS500A1/8	1-1437622-6	K8
KLNS500B1/4	1-1437622-7	K8
KLNS500B1/8	1-1437622-8	K8
KLNS700A1/4	2-1437622-0	K8
KLNS700B1/4	2-1437622-1	K8
KLNS900A1/4	2-1437622-2	K8
KLNS900B1/4	2-1437622-3	K8
KN1250A1/4	2-1437622-5	K9
KN1250AB1/4	2-1437622-6	K9
KN1250B1/4	2-1437622-7	K9
KN1250BA1/4	2-1437622-8	K9
KN1251A1/4	2-1437622-9	K9
KN1251B1/4	3-1437622-0	K9
KN1750A1/4	-	K8
KN1750B1/4	3-1437622-1	K8
KN1751A1/4	3-1437622-2	K8
KN1751AB1/4	3-1437622-3	K8
KN1751AS1/4	3-1437622-5	K8
KN1751B1/4	3-1437622-6	K8
KN1751BA1/4	3-1437622-7	K8
KN1751BS1/4	3-1437622-8	K8
KN1755ABS1/4	3-1437622-9	K9
KN1755AS1/4	-	K9
KN1755BAS1/4	4-1437622-0	K9
KN1755BS1/4	4-1437622-1	K9
KN500A1/4	4-1437622-2	K9
KN500A1/8	4-1437622-3	K9
KN500AB1/4	4-1437622-4	K9
KN500AB1/8	4-1437622-5	K9
KN500B1/4	4-1437622-6	K9
KN500B1/8	4-1437622-7	K9
KN500BA1/4	4-1437622-8	K9
KN500BA1/8	4-1437622-9	K9
KN501A1/4	5-1437622-0	K8
KN501A1/8	5-1437622-1	K8
KN501B1/4	5-1437622-2	K8
KN501B1/8	5-1437622-3	K8
KN501BA1/4	5-1437622-4	K8
KN501BA1/8	5-1437622-5	K8
KN5700A1/4	5-1437622-6	K9
KN5700B1/4	5-1437622-7	K9
KN700A1/4	5-1437622-8	K9
KN700AB1/4	5-1437622-9	K9
KN700B1/4	6-1437622-0	K9
KN700BA1/4	6-1437622-1	K9
KN701A1/4	6-1437622-2	K8
KN701B1/4	6-1437622-3	K8
KN701BA1/4	6-1437622-4	K8
KN701BA1/8	6-1437622-5	K8
KN900A1/4	6-1437622-6	K9

Alcoswitch Part Number	Tyco Part Number	Page Number
KN900AB1/4	6-1437622-7	K9
KN900B1/4	6-1437622-8	K9
KN900BA1/4	6-1437622-9	K9
KNS501A1/4	7-1437622-2	K10
KNS501A1/8	7-1437622-3	K10
KNS501B1/4	7-1437622-4	K10
KNS501B1/8	7-1437622-5	K10
KNS501BA1/4	7-1437622-6	K10
KNS501BA1/8	7-1437622-7	K10
KNS701A1/4	7-1437622-8	K10
KNS701B1/4	7-1437622-9	K10
KNS701BA1/4	8-1437622-0	K10
KNS701BA1/8	8-1437622-1	K10
KPN500A1/4	9-1437622-0	K10
KPN500A1/8	9-1437622-1	K10
KPN500B1/4	9-1437622-2	K10
KPN500B1/8	9-1437622-3	K10
KPN700A1/4	9-1437622-5	K10
KPN700B1/4	9-1437622-6	K10
KPN900A1/4	9-1437622-7	K10
KPN900B1/4	9-1437622-9	K10
KR1	9-1437622-6	K21
KR2	9-1437622-7	K21
KR3	9-1437622-8	K21
KS500A1/4	1437623-2	K10
KS500A1/8	1437623-3	K10
KS500B1/4	1437623-4	K10
KS500B1/8	1437623-5	K10
KS700A1/4	1437623-6	K10
KS700B1/4	1437623-7	K10
KS900A1/4	1437623-8	K10
KS900B1/4	1437623-9	K10
KSS10A	-	B40
KSS10B	-	B40
KSS20A	-	B40
KSS20B	-	B40
KT500A1/4	1-1437623-2	K11
KT500B1/4	1-1437623-3	K11
KT500B1/8	1-1437623-4	K11
KT700A1/4	1-1437623-6	K11
KT700B1/4	1-1437623-7	K11
KT900A1/4	1-1437623-8	K11
KT900B1/4	1-1437623-9	K11
KU401B1/8	2-1437623-1	K11
KU402B1/8	2-1437623-2	K11
KU500B1/4	-	K11
KU500B1/8	2-1437623-3	K11
KU700B1/4	2-1437623-4	K11
KUS402B1/8	2-1437623-9	K11
KUS500B1/4	-	K11
KUS500B1/8	3-1437623-0	K11
KUS700B1/4	3-1437623-1	K11
LW1	1437628-2	C54
LW12-AG	1437628-3	C54
LW5-AG	1437628-5	C54
M25310	1437609-2	I10
M25500	1437609-3	I10
M25510	1437609-4	I10
M6010	-	I11
M60100	1437610-1	I11
M60102	1437610-2	I11
M60105	1437610-3	I11
M6020	-	I11
M60200	1437610-4	I11
M60202	1437610-5	I11
M60532	1437610-6	I11
M6057	-	I11
M60570	1437610-7	I11

Alcoswitch Part Number	Tyco Part Number	Page Number
M60572	1437610-8	I11
M60574	1437610-9	I11
M60575	1-1437610-0	I11
M60576	1-1437610-1	I11
M60582	1-1437610-2	I11
M60652	1-1437610-3	I11
M6080	-	I11
M60800	1-1437610-4	I11
M60802	1-1437610-5	I11
M60805	1-1437610-6	I11
M610209406	1-1437610-8	I13
M6120(*406)	-	I13
M61202406	1-1437610-7	I13
M6150(*406)	-	I13
M61502406	1-1437610-9	I13
M6153(*406)	-	I13
M61532406	2-1437610-0	I13
M61534406	2-1437610-1	I13
M6200	2-1437610-2	I13
M6201	2-1437610-3	I13
M6210	2-1437610-5	I13
M6250	2-1437610-6	I13
M6270	2-1437610-7	I13
M6280	2-1437610-8	I13
M6402	-	I12
M64020	2-1437610-9	I12
M64022	3-1437610-0	I12
M6410	-	I12
M64100	3-1437610-1	I12
M64102	3-1437610-2	I12
M6412	-	I12
M6470	-	I12
M64700	3-1437610-3	I12
M6480	-	I12
M64800	3-1437610-4	I12
M65310	3-1437610-5	I12
M65500	-	I12
M65510	3-1437610-6	I12
M65810	3-1437610-7	I12
M6650	-	I15
M66502406	3-1437610-8	I14
M66505406	3-1437610-9	I14
M6653(*406)	-	I14
M6655	-	I15
MGDH04	7-1437590-5	A6
MHS122	1437576-9	B33
MHS122G	1-1437576-0	B33
MHS122GRA	1-1437576-1	B34
MHS122K	1-1437576-2	B33
MHS122KG	1-1437576-3	B33
MHS122RA	1-1437576-4	B34
MHS123	1-1437576-5	B33
MHS123G	-	B33
MHS123GRA	1-1437576-6	B34
MHS123K	1-1437576-7	B33
MHS123KG	-	B33
MHS123RA	1-1437576-8	B34
MHS133	1-1437576-9	B33
MHS133G	2-1437576-0	B33
MHS133GRA	2-1437576-1	B34
MHS133K	2-1437576-2	B33
MHS133KG	2-1437576-3	B33
MHS133RA	2-1437576-4	B34
MHS222	2-1437576-5	B33
MHS222G	2-1437576-6	B33
MHS222GRA	2-1437576-7	B34
MHS222K	2-1437576-8	B33
MHS222KG	2-1437576-9	B33



Alcoswitch Part Number	Tyco Part Number	Page Number
MHS222RA	3-1437576-0	B34
MHS223	3-1437576-1	B33
MHS223G	3-1437576-2	B33
MHS223GRA	3-1437576-3	B34
MHS223K	3-1437576-4	B33
MHS223KG	-	B33
MHS223RA	3-1437576-5	B34
MHS233	3-1437576-6	B33
MHS233G	3-1437576-7	B33
MHS233GRA	3-1437576-8	B34
MHS233K	3-1437576-9	B33
MHS233KG	4-1437576-0	B33
MHS233RA	4-1437576-1	B34
MLL1200S	1437575-1	B47
MLL1200STR	1437575-2	B47
MLL1300S	1437575-3	B47
MMS12	1437575-4	B36
MMS22	1437575-5	B36
MMS22R	1437575-6	B36
MMS23	1437575-8	B36
MMS23R	1437575-9	B36
MMS42	1-1437575-0	B37
MMS42R	1-1437575-1	B37
MMS43	1-1437575-2	B37
MMS43R	1-1437575-3	B37
MPA103B	2-1437567-4	D21
MPA103C	2-1437567-5	D21
MPA103D	2-1437567-6	D21
MPA103F	2-1437567-7	D21
MPA106D	2-1437567-8	D22
MPA106F	2-1437567-9	D22
MPA206N	3-1437567-1	D22
MPA206NPCDPDT	3-1437567-2	D22
MPA206R	3-1437567-3	D22
MPA206RPCDPDT	3-1437567-4	D22
MPA306D	3-1437567-5	D22
MPA306F	3-1437567-6	D22
MPA406N	3-1437567-7	D22
MPA406R	3-1437567-8	D22
MPB103B	3-1437567-9	D21
MPB103C	4-1437567-0	D21
MPE106D	4-1437567-2	D23
MPE106F	4-1437567-3	D23
MPE206N	4-1437567-4	D23
MPE206R	4-1437567-5	D23
MPE306D	-	D23
MPE306F	4-1437567-6	D23
MPE406N	4-1437567-7	D23
MPE406R	4-1437567-8	D23
MPG106D	4-1437567-9	D24
MPG106F	5-1437567-0	D24
MPG206N	5-1437567-1	D24
MPG206NPC	5-1437567-2	D24
MPG206R	5-1437567-3	D24
MPG206RPC	5-1437567-4	D24
MPG306D	5-1437567-5	D24
MPG306F	5-1437567-6	D24
MPG406N	5-1437567-7	D24
MPG406R	5-1437567-8	D24
MPS103D	5-1437567-9	D25
MPS103DPC	6-1437567-0	D26
MPS103DPCV	6-1437567-1	D26
MPS103DRA	6-1437567-2	D27
MPS103F	6-1437567-3	D25
MPS103FPC	6-1437567-4	D26
MPS103FPCV	6-1437567-5	D26
MPS103FRA	6-1437567-6	D27
MPS103FWW	6-1437567-7	D26

Alcoswitch Part Number	Tyco Part Number	Page Number
MPS203N	6-1437567-8	D25
MPS203NPC	6-1437567-9	D26
MPS203NRA	7-1437567-1	D27
MPS203NWW	-	D26
MPS203R	7-1437567-2	D25
MPS203RPC	7-1437567-3	D26
MPS203RPCV	7-1437567-4	D26
MPS203RRA	7-1437567-5	D27
MPS203RWW	7-1437567-6	D26
MPSN103F	8-1437567-0	D25
MPSR103F	8-1437567-1	D25
MPSR203R	8-1437567-2	D25
MRC110	1437629-1	G3
MRC110S	1437629-2	G3
MRC25	1437629-3	G3
MRC25S	1437629-4	G3
MRC33	1437629-5	G3
MRC33S	1437629-6	G3
MRC42	1437629-7	G3
MRC42S	1437629-8	G3
MRD10	6-1437584-3	A21
MRD10C	6-1437584-4	A21
MRD10CRA	6-1437584-5	A21
MRD10CRAS	6-1437584-6	A21
MRD10CS	6-1437584-7	A21
MRD10CSTL	6-1437584-8	A21
MRD10CSTR	1571212-1	A21
MRD10CTL	6-1437584-9	A21
MRD10RA	7-1347584-0	A21
MRD10RAS	7-1347584-1	A21
MRD10S	7-1347584-2	A21
MRD10STL	7-1347584-3	A21
MRD10STR	7-1347584-4	A21
MRD10TL	7-1347584-5	A21
MRD16	7-1347584-6	A21
MRD16C	7-1347584-7	A21
MRD16CRA	7-1347584-8	A21
MRD16CRAS	7-1347584-9	A21
MRD16CS	8-1347584-0	A21
MRD16CTL	8-1347584-1	A21
MRD16RA	8-1347584-2	A21
MRD16RAS	1-1437807-7	A21
MRD16S	8-1347584-3	A21
MRD16STL	5-1437583-2	A21
MRD16STR	8-1347584-4	A21
MRD16TL	8-1347584-5	A21
MRJ112	1437629-9	G4
MRJ26	1-1437629-0	G4
MRJ34	1-1437629-1	G4
MRJ43	1-1437629-2	G4
MRJB112	1-1437629-3	G4
MRJB26	1-1437629-4	G4
MRJB34	1-1437629-5	G4
MRJB43	1-1437629-6	G4
MRJE112	1-1437629-7	G4
MRJE26	1-1437629-8	G4
MRJE34	1-1437629-9	G4
MRJE43	2-1437629-0	G4
MSP103B	8-1437567-3	D27
MSP103C	8-1437567-4	D27
MSP103C0	8-1437567-5	D27
MSP103C2	8-1437567-6	D27
MSPF101B	8-1437567-8	D28
MSPF101BC0	8-1437567-9	D28
MSPF101BC2	9-1437567-0	D28
MSPF101BC6	9-1437567-1	D28
MSPF101BC9	9-1437567-2	D28
MSPF101C	9-1437567-3	D28

Alcoswitch Part Number	Tyco Part Number	Page Number
MSPM101B0	9-1437567-4	D29
MSPM101B1	9-1437567-5	D29
MSPM101BP	9-1437567-6	D29
MSPM101BS	9-1437567-7	D29
MSPM101BS1	9-1437567-8	D29
MSPM101C1	9-1437567-9	D29
MSPM101C2	1437568-1	D29
MSPM101CP	1437568-2	D29
MSPM101CS	1437568-3	D29
MSPM101CS1	1437568-4	D29
MSPS103B	1437568-5	D27
MSPS103C0	1437568-7	D27
MSPS103C2	1437568-6	D27
MSS1200	5-1437576-0	B20
MSS1200G	5-1437576-1	B20
MSS1200R	5-1437576-2	B20
MSS1200RG	5-1437576-3	B20
MSS1300	5-1437576-4	B20
MSS1300G	5-1437576-5	B20
MSS1300R	5-1437576-6	B20
MSS1300RG	5-1437576-7	B20
MSS1400	5-1437576-8	B21
MSS1400G	1571423-1	B21
MSS2225	6-1437576-3	B21
MSS2225G	6-1437576-4	B21
MSS2250	6-1437576-5	B21
MSS2250G	6-1437576-6	B21
MSS2250R	6-1437576-7	B22
MSS2250RG	6-1437576-8	B22
MSS4200	6-1437576-9	B22
MSS4200G	7-1437576-0	B22
MSS4200R	7-1437576-2	B23
MSS4200RG	7-1437576-3	B23
MSS4250	7-1437576-4	B22
MSS4300	7-1437576-5	B23
MSS4300G	7-1437576-6	B23
MSS4300R	7-1437576-7	B24
MSS4300RG	7-1437576-8	B24
MSS4335	7-1437576-9	B23
MSS4350R	8-1437576-0	B24
MSS4350RG	8-1437576-1	B24
MSS6200	8-1437576-8	B24
MSS6200G	8-1437576-9	B24
MSS6250	9-1437576-0	B25
MSS6350	9-1437576-3	B25
MSS6350G	-	B25
MSS6350R	9-1437576-4	B25
MSS6350RG	-	B25
MSSA101DG	1-1437580-7	B31
MSSA101DGRA	1-1437580-9	B32
MSSA101EG	-	B31
MSSA101EGRA	2-1437580-1	B32
MSSA104D	2-1437580-3	B31
MSSA104D1	2-1437580-4	B31
MSSA104DRA	2-1437580-5	B32
MSSA104E	2-1437580-6	B31
MSSA104ERA	2-1437580-8	B32
MSSA111DG	2-1437580-9	B30
MSSA111EG	3-1437580-0	B30
MSSA114D	3-1437580-1	B30
MSSA114E	3-1437580-2	B30
MSSA1350	3-1437580-3	B26
MSSA1350G	3-1437580-4	B26
MSSA1350R	3-1437580-5	B26
MSSA1350RG	3-1437580-6	B26
MSSA1450	3-1437580-7	B26
MSSA1450G	3-1437580-8	B26
MSSA1450R	3-1437580-9	B26

Alcoswitch Part Number	Tyco Part Number	Page Number
MSSA1450RG	4-1437580-0	B26
MSSA201NGRA	4-1437580-2	B32
MSSA201PGRA	8-1437580-2	B32
MSSA204N	4-1437580-4	B31
MSSA204N1	4-1437580-5	B31
MSSA204NRA	4-1437580-6	B32
MSSA204P1	4-1437580-8	B31
MSSA204PRA	-	B32
MSSA211NG	4-1437580-9	B30
MSSA214N	5-1437580-2	B30
MSSA2350	5-1437580-3	B27
MSSA2350G	5-1437580-4	B27
MSSA2350R	5-1437580-5	B27
MSSA2350RG	5-1437580-6	B27
MSSA2450	5-1437580-7	B27
MSSA2450G	5-1437580-8	B27
MSSA2450R	5-1437580-9	B27
MSSA2450RG	6-1437580-0	B27
MSSA3350	6-1437580-1	B28
MSSA3350G	6-1437580-2	B28
MSSA3350R	6-1437580-3	B28
MSSA3350RG	6-1437580-4	B28
MSSA3450	6-1437580-5	B28
MSSA3450G	6-1437580-6	B28
MSSA3450R	6-1437580-7	B28
MSSA3450RG	6-1437580-8	B28
MSSA4350	6-1437580-9	B29
MSSA4350G	7-1437580-0	B29
MSSA4350R	7-1437580-1	B29
MSSA4350RG	7-1437580-2	B29
MSSA4450	7-1437580-3	B29
MSSA4450G	7-1437580-4	B29
MSSA4450R	7-1437580-5	B29
MSSA4450RG	7-1437580-6	B29
MTA106D	1-1437558-0	C43
MTA106DPC	1-1437558-1	C44
MTA106E	1-1437558-2	C43
MTA106EPC	1-1437558-3	C44
MTA106F	1-1437558-4	C43
MTA106FPC	1-1437558-5	C44
MTA106G	1-1437558-6	C43
MTA106GPC	1-1437558-7	C44
MTA106H	1-1437558-8	C43
MTA106HPC	1-1437558-9	C44
MTA206N	2-1437558-0	C43
MTA206NPC	2-1437558-1	C44
MTA206P	2-1437558-2	C43
MTA206PA	2-1437558-3	C43
MTA206PAPC	2-1437558-4	C44
MTA206PPC	2-1437558-5	C44
MTA206R	2-1437558-7	C43
MTA206RPC	2-1437558-8	C44
MTA206S	2-1437558-9	C43
MTA206SA	3-1437558-0	C43
MTA206SAPC	-	C44
MTA206SPC	3-1437558-1	C44
MTA206T	3-1437558-2	C43
MTA206TA	3-1437558-3	C43
MTA206TPC	3-1437558-4	C44
MTA306D	3-1437558-5	C43
MTA306DPC	3-1437558-6	C44
MTA306E	3-1437558-7	C43
MTA306EPC	3-1437558-8	C44
MTA306F	3-1437558-9	C43
MTA306FPC	4-1437558-0	C44
MTA306H	4-1437558-1	C43
MTA306HPC	4-1437558-2	C44
MTA406N	4-1437558-3	C43

Alcoswitch Part Number	Tyco Part Number	Page Number
MTA406NPC	4-1437558-4	C44
MTA406P	4-1437558-5	C43
MTA406PA	4-1437558-6	C43
MTA406PAPC	4-1437558-7	C44
MTA406PPC	4-1437558-8	C44
MTA8106DRA	5-1437558-0	C52
MTA8106DVRA	5-1437558-1	C53
MTA8106ERA	147682-2	C52
MTA8106EVRA	147676-1	C53
MTA8106FRA	147682-1	C52
MTA8106FVRA	-	C53
MTA8206NRA	5-1437558-6	C53
MTA8206NVRA	5-1437558-7	C54
MTA8206PRA	5-1437558-9	C53
MTA8206PVRA	6-1437558-0	C54
MTA8206RRA	-	C53
MTB106D	6-1437558-3	C45
MTB106E	6-1437558-2	C45
MTB106F	-	C45
MTB106G	-	C45
MTB206N	6-1437558-4	C45
MTB206P	6-1437558-5	C45
MTB206T	-	C45
MTB306D	6-1437558-6	C45
MTB406N	6-1437558-7	C45
MTE106D	6-1437558-8	C46
MTE106E	6-1437558-9	C46
MTE106F	7-1437558-0	C46
MTE106G	7-1437558-1	C46
MTE106H	-	C46
MTE206N	7-1437558-2	C46
MTE206P	7-1437558-3	C46
MTE206PA	7-1437558-4	C46
MTE206R	7-1437558-5	C46
MTE206S	7-1437558-6	C46
MTE206T	7-1437558-7	C46
MTE306D	7-1437558-8	C46
MTE306E	7-1437558-9	C46
MTE406N	8-1437558-0	C46
MTE406P	8-1437558-1	C46
MTF106D	8-1437558-3	C47
MTF106E	8-1437558-4	C47
MTF106F	8-1437558-5	C47
MTF106G	8-1437558-6	C47
MTF106H	8-1437558-7	C47
MTF126D	8-1437558-8	C47
MTF126E	8-1437558-9	C47
MTF126F	9-1437558-0	C47
MTF126G	9-1437558-1	C47
MTF206N	9-1437558-2	C47
MTF206P	9-1437558-3	C47
MTF206PA	9-1437558-4	C47
MTF206R	9-1437558-5	C47
MTF206S	9-1437558-6	C47
MTF206SA	9-1437558-7	C47
MTF206T	9-1437558-8	C47
MTF226N	9-1437558-9	C47
MTF226P	1437559-1	C47
MTF226PA	1437559-2	C47
MTF226S	1437559-4	C47
MTF226SA	1437559-5	C47
MTF306D	1437559-6	C47
MTF326D	1437559-7	C47
MTF406N	1437559-8	C47
MTF426N	1437559-9	C47
MTG106D	1-1437559-1	C48
MTG106E	1-1437559-2	C48
MTG106F	1-1437559-3	C48

Alcoswitch Part Number	Tyco Part Number	Page Number
MTG106G	1-1437559-4	C48
MTG106H	1-1437559-5	C48
MTG126D	1-1437559-6	C49
MTG126E	1-1437559-7	C49
MTG206N	1-1437559-8	C48
MTG206P	2-1437559-0	C48
MTG206PA	2-1437559-1	C48
MTG206R	2-1437559-2	C48
MTG206S	2-1437559-3	C48
MTG206T	2-1437559-4	C48
MTG226N	2-1437559-5	C49
MTG226P	2-1437559-6	C49
MTG226PA	2-1437559-7	C49
MTG306D	2-1437559-8	C48
MTG306E	2-1437559-9	C48
MTG326D	3-1437559-0	C49
MTG406N	3-1437559-1	C48
MTG406P	3-1437559-2	C48
MTG426N	3-1437559-3	C49
MTL106D	3-1437559-4	C50
MTL106E	3-1437559-5	C50
MTL206N	3-1437559-7	C50
MTL206P	3-1437559-9	C50
MTL206PA	4-1437559-0	C50
MTL206S	4-1437559-1	C50
MTL306D	4-1437559-2	C50
MTL406N	4-1437559-4	C50
MTL406PA	4-1437559-5	C50
MTM106DPC	4-1437559-6	C51
MTM106EPC	4-1437559-7	C51
MTM106FPC	4-1437559-8	C51
MTM206NPC	4-1437559-9	C51
MTM206PAPC	5-1437559-0	C51
MTM206SPC	5-1437559-2	C51
MTM306DPC	5-1437559-3	C51
MTM406NPC	5-1437559-4	C51
MTM8106DRA	5-1437559-6	C52
MTM8106DVRA	5-1437559-7	C53
MTM8106ERA	5-1437559-8	C52
MTM8106EVRA	5-1437559-9	C53
MTM8106FRA	147681-1	C52
MTM8206NRA	6-1437559-0	C52
MTM8206NVRA	1417566-1	C53
MTM8206PRA	147674-1	C52
MTM8206PVRA	-	C53
MTM8206RRA	-	C52
MTM8206RVRA	147673-2	C53
N1A	1437628-9	C54
N1A0	3-1437628-9	C54
N1-AG	1437628-7	C54
N1B	1-1437628-0	C54,D32
N1C	1-1437628-1	C54
N35-AG	1-1437628-4	C54,D32
N3-AG	1-1437628-3	C54
N40-AG	1-1437628-5	C54
N43-AG	1-1437628-6	C54
N45-AG	1-1437628-7	C54,D32
PHI5181/4	1437624-2	K12
PICOA	1-1437601-1	J7
PICOADP	1-1437601-2	J7
PICOBG	1-1437601-3	J7
PICOD	-	J4,J6,J8
PICOD111AL	1-1437601-4	J7
PICOD131AK	1-1437601-5	J7
PICOD131ALD	1-1437601-7	J7
PICOD131ALULS	1571505-1	J7,J8
PICOD137AK	1-1437601-8	J7
PICOD137ALULS	1571506-1	J7,J8



Alcoswitch Part Number	Tyco Part Number	Page Number
PICOD301AK	1-1437601-9	J7
PICOD301ALD	2-1437601-0	J7
PICOD301ALULS	2-1437601-1	J7,J8
PICOP	2-1437601-7	J7
PK1100B1/8	1437624-4	K12
PK50B1/4	1437624-6	K12
PK50B1/8	1437624-7	K12
PK70B1/4	1437624-8	K12
PK90B1/4	1437624-9	K12
PKA50B1/4	1-1437624-0	K13
PKA50B1/8	1-1437624-1	K13
PKA55B1/4	1-1437624-3	K13
PKA55B1/8	1-1437624-4	K13
PKA70B1/4	1-1437624-5	K13
PKA90B1/4	1-1437624-7	K13
PKAP50B1/4	1-1437624-8	K13
PKAP50B1/8	1-1437624-9	K13
PKAP70B1/4	2-1437624-0	K13
PKB70B1/4	2-1437624-3	K14
PKB90B1/4	2-1437624-4	K14
PKD100B1/4	2-1437624-5	K14
PKD100B101/4	2-1437624-6	K14
PKD60B1/4	2-1437624-7	K14
PKD60B1/8	2-1437624-8	K14
PKD60B101/4	2-1437624-9	K14
PKD60B101/8	3-1437624-0	K14
PKD70B1/4	3-1437624-1	K14
PKD70B101/4	3-1437624-2	K14
PKDT100B1/4	3-1437624-3	K15
PKDT100B101/4	3-1437624-4	K15
PKDT60B101/8	3-1437624-8	K15
PKDT70B1/4	3-1437624-9	K15
PKDT70B101/4	4-1437624-0	K15
PKE60B1/4	4-1437624-3	K15
PKE60B1/8	4-1437624-4	K15
PKE90B1/4	4-1437624-5	K15
PKES120B1/4	4-1437624-6	K15
PKES140B1/4	4-1437624-7	K15
PKES150B1/4	4-1437624-8	K15
PKES60B1/4	5-1437624-0	K15
PKES60B1/8	5-1437624-1	K15
PKES70B1/4	5-1437624-2	K15
PKES90B1/4	5-1437624-3	K15
PKF50B1/8	5-1437624-5	K16
PKG100B1/4	5-1437624-7	K17
PKG1255B1/4	5-1437624-8	K17
PKG40B1/8	5-1437624-9	K16
PKG50B1/4	6-1437624-0	K16
PKG50B1/8	6-1437624-1	K16
PKG60B1/4	6-1437624-5	K17
PKG60B1/8	6-1437624-6	K17
PKG70B1/4	6-1437624-7	K17
PKG70B1/8	6-1437624-8	K17
PKG90B1/4	6-1437624-9	K17
PKG90B1/8	7-1437624-0	K17
PKG100B1/4	7-1437624-1	K17
PKG100B1/8	7-1437624-2	K17
PKG100B1/4	7-1437624-3	K17
PKJ50B1/4	7-1437624-4	K17
PKJ50B1/8	7-1437624-5	K17
PKJ60B1/4	7-1437624-6	K17
PKJ70B1/4	7-1437624-7	K17
PKJT50B1/4	7-1437624-8	K18
PKJT50B1/8	7-1437624-9	K18
PKJT60B1/4	8-1437624-0	K18
PKJT70B1/4	8-1437624-1	K18
PKN60B1/4	-	K18
PKN60B1/8	8-1437624-2	K18

Alcoswitch Part Number	Tyco Part Number	Page Number
PKN70B1/4	8-1437624-3	K18
PKN90B1/4	8-1437624-4	K18
PKNT60B1/4	8-1437624-5	K18
PKNT60B1/8	8-1437624-6	K18
PKNT70B1/4	8-1437624-7	K18
PKNT90B1/4	8-1437624-8	K18
PKS1103B101/4	9-1437624-4	K18
PKS1104B1/4	9-1437624-5	K19
PKS1105B101/4	9-1437624-6	K19
PKS1106B1/4	9-1437624-7	K19
PKS1132B1/4	9-1437624-8	K19
PKS1132B101/4	9-1437624-9	K19
PKS1132B51/4	1437625-1	K19
PKS1132B91/4	1437625-2	K19
PKS90B1/4	1437625-5	K20
PKS90B101/4	1437625-6	K20
PXX100B1/4	1-1437625-1	K20
PXX110B1/4	1-1437625-2	K20
PXX130B1/4	1-1437625-3	K20
PXX50B1/4	1-1437625-4	K20
PXX50B1/8	1-1437625-5	K20
PXX60B1/4	1-1437625-6	K20
PXX60B1/8	1-1437625-7	K20
PRADA1-07F-BB000	1571084-1	F22
PRADA1-07F-BB0B	1571084-2	F22
PRADA1-07F-BB0CW	1571084-3	F22
PRADA1-07F-BR000	1571084-4	F22
PRADA1-07F-BR0B	1571084-5	F22
PRADD1-07F-BB000	1571086-1	F22
PRADD1-07F-BB0D	1571086-2	F22
PRADD1-07F-BB0EW	1571086-3	F22
PRADD2-07F-BB000	1571086-7	F22
PRADD2-07F-BB0D	1571086-8	F22
PRADD2-07F-BB0EW	1571086-9	F22
PRADD3-07F-BB000	1571086-4	F22
PRADD3-07F-BB0FW	1571086-5	F22
PRADD3-07F-BB0GW	1571086-6	F22
PRADD4-07F-BB000	1-1571086-0	F22
PRADD4-07F-BB0FW	1-1571086-1	F22
PRADD4-07F-BB0GW	1-1571086-2	F22
PRASA1-16F-BB000	1571076-9	F22
PRASA1-16F-BB0B	1-1571076-0	F22
PRASA1-16F-BB0B	1-1571076-1	F22
PRASA1-16F-BB0CW	2-1571076-0	F22
PRASA1-16F-BR000	1-1571076-5	F22
PRASA1-16L-BB000	1-1571076-2	F22
PRASA1-16L-BB0B	1-1571076-3	F22
PRASA1-16L-BB0CW	1-1571076-4	F22
PRASA1-16L-BR000	1-1571076-6	F22
PRASA2-16F-BBRBR	1-1571076-7	F22
PRASA3-16F-BB0JW	2-1571076-1	F22
PRASB1-16F-BR000	1571078-2	F22
PRASB2-16F-BR000	1571078-4	F22
PRASCI-16F-BR000	1571083-2	F22
PRASDI-16F-BB000	1571079-4	F22
PRASDI-16F-BB0D	1571079-5	F22
PRASDI-16F-BB0EW	1571079-6	F22
PRASD2-16F-BB000	1-1571079-0	F22
PRASD2-16F-BB0D	1-1571079-1	F22
PRASD2-16F-BB0EW	1-1571079-2	F22
PRASD3-16F-BB000	1571079-7	F22
PRASD3-16F-BB0FW	1571079-8	F22
PRASD3-16F-BB0GW	1571079-9	F22
PRASD4-16F-BB000	1-1571079-3	F22
PRASD4-16F-BB0FW	1-1571079-4	F22
PRASD4-16F-BB0GW	1-1571079-5	F22
PRBSA1-16F-BB000	1571091-1	F23
PRBSA1-16F-BB0B	1571091-2	F23

Alcoswitch Part Number	Tyco Part Number	Page Number
PRBSA1-16F-BB0CW	1571091-3	F23
PRBSA1-16F-BB0HW	1571091-9	F23
PRBSA1-16F-BR000	1571091-7	F23
PRBSA1-16F-BR0HW	1-1571091-0	F23
PRBSA1-16F-BW000	1-1571091-1	F23
PRBSA1-16F-BW0HB	1-1571091-2	F23
PRBSA1-16L-BB000	1571091-4	F23
PRBSA1-16L-BB0B	1571091-5	F23
PRBSA1-16L-BB0CW	1571091-6	F23
PRBSA1-16L-BR000	1571091-8	F23
PRBSB1-16F-BA000	1571092-3	F23
PRBSB1-16F-BC000	1571092-4	F23
PRBSB1-16F-BR000	1571092-1	F23
PRBSB1-16F-BR0B	1571092-2	F23
PRBSB1-16F-BR0BW	1571092-5	F23
PRBSB1-16F-BR0D	1571092-6	F23
PRBSB1-16F-BR0E	1571092-7	F23
PRBSB1-16F-BR0F	1571092-8	F23
PRBSB1-16F-BR0GW	1571092-9	F23
PRBSB1-16F-BW000	1571093-1	F24
PRDDA1-16F-BB0B	1571103-2	F24
PRDDA1-16F-BB0CW	1571103-3	F24
PRDDA1-16F-BB0HW	1571103-5	F24
PRDDA1-16F-BR000	1571103-4	F24
PRDDA1-16F-BR0B	1571103-6	F24
PRDDA1-16F-BA000	1571112-2	F24
PRDDA1-16F-BR000	1571112-1	F24
PRDDA1-16F-BB000	1571113-1	F24
PRDDA1-16F-BB0D	1571113-2	F24
PRDDA1-16F-BB0E	1571113-3	F24
PRDDA1-16F-BB0F	1571113-4	F24
PRDDA1-16F-BB0GW	1571113-5	F24
PRDDA1-16F-BB0JW	1571113-6	F24
PRDDA1-16F-BR000	1571113-7	F24
QM010	-	I5
QM0100	1437614-2	I5
QM0102	1437614-3	I5
QM0105	1437614-4	I5
QM0109	1437614-5	I5
QM020	-	I5
QM0202	1437614-6	I5
QM120	-	I7,I15
QM1202	1437614-7	I7
QM1204	1437614-8	I7
QM1205	1437614-9	I7
QM122	-	I7,I15
QM1222	1-1437614-0	I7
QM1224	1-1437614-1	I7
QM1225	1-1437614-2	I7
QM600	-	I6,I15
QM6002	1-1437614-3	I6
QM6003	1-1437614-4	I6
QM6005	1-1437614-5	I6
QT010	-	I5
QT0100	1-1437614-6	I5
QT0102	1-1437614-7	I5
QT0105	1-1437614-8	I5
QT01201	1-1437614-9	I4
QT012STSTH	-	I4
QT020	-	I5
RM010	-	I3
RM0100	2-1437614-0	I3
RM0102	2-1437614-1	I3
RM0104	2-1437614-2	I3

Catalog 1308390  
Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752  
Canada: 1-905-470-4425  
Mexico: 01-800-733-8926  
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514  
Hong Kong: 852-2735-1628  
Japan: 81-44-844-8013  
UK: 44-141-810-8967

Alcoswitch Part Number	Tyco Part Number	Page Number
RM0105	2-1437614-3	I3
RM0106	2-1437614-4	I3
RM0109	2-1437614-5	I3
RM015	-	I3
RM0152	2-1437614-6	I3
RM020	-	I3
RM0200	2-1437614-7	I3
RM0202	2-1437614-8	I3
RM0209	3-1437614-0	I3
RM030	-	I4
RM0302	3-1437614-1	I4
RM0305	3-1437614-2	I4
RM0306	3-1437614-3	I4
RM0450	3-1437614-4	I4
RM0452	3-1437614-5	I4
RM0500	3-1437614-6	I4
RM0502	3-1437614-7	I4
RM0532	3-1437614-8	I4
RM0552	3-1437614-9	I4
RM0652	4-1437614-0	I4
RM120	-	I6
RM122	-	I6
RM1222	4-1437614-1	I6
RM1224	4-1437614-2	I6
RM1225	4-1437614-3	I6
RM1226	4-1437614-4	I6
RM1229	4-1437614-5	I6
RM130	-	I6
RM1302	4-1437614-6	I6
RM1304	4-1437614-7	I6
RM1305	4-1437614-8	I6
RM145	-	I6
RM1452	4-1437614-9	I6
RM150	-	I6
RM1502	5-1437614-0	I6
RM1504	5-1437614-1	I6
RM1505	5-1437614-2	I6
RM1652	5-1437614-3	I6
RM200	5-1437614-4	I5
RM201	5-1437614-5	I5
RM204	5-1437614-6	I5
RM205	5-1437614-7	I5
RM210	5-1437614-8	I6
RM220	5-1437614-9	I6
RM222	6-1437614-0	I6
RM230	6-1437614-1	I6
RM232	6-1437614-2	I6
RM233	6-1437614-3	I6
RM240	-	I6
RM243	6-1437614-4	I6
RM250	6-1437614-5	I5
RM270	6-1437614-6	I6
RM272	6-1437614-7	I6,19
RM273	6-1437614-8	I6
RM280	6-1437614-9	I6
RM3040	7-1437614-0	I5
RM3100	7-1437614-1	I5
RM3120	7-1437614-2	I5
RM3130	7-1437614-3	I5
RM3700	7-1437614-4	I5
RM3800	7-1437614-5	I5
RM3830	7-1437614-6	I5
RM4040	7-1437614-7	I5
RM4100	7-1437614-8	I5
RM4120	-	I5
RM4130	-	I5
RM4700	-	I5
RM4800	7-1437614-9	I5

Alcoswitch Part Number	Tyco Part Number	Page Number
RM600	-	I6,115
RM6002	8-1437614-0	I6
RM6004	8-1437614-1	I6
RM6005	8-1437614-2	I6
RM6006	8-1437614-3	I6
RM650	-	I6
RM6502	8-1437614-4	I6
RM6504	8-1437614-5	I6
RM653	-	I6
RT010	-	I3
RT0100	8-1437614-9	I3
RT0102	9-1437614-0	I3
RT0104	9-1437614-1	I3
RT0105	9-1437614-2	I3
RT0106	9-1437614-3	I3
RT0109	9-1437614-4	I3
RT020	-	I3
RT0200	9-1437614-5	I3
RT0202	9-1437614-6	I3
RT0204	9-1437614-7	I3
RT0205	9-1437614-8	I3
RT0206	9-1437614-9	I3
RT0500	1437615-1	I4
RT0502	1437615-2	I4
RT0504	1437615-3	I4
RT0505	1437615-4	I4
RT0506	1437615-5	I4
RT120	-	I7
RT1202	1437615-6	I7
RT1205	1437615-7	I7
RT1502	1437615-8	I7
S1DGPC	1571005-1	B12
S1DGRA	1571006-1	B12
S1EGPC	1571005-2	B12
S1EGRA	1571006-2	B12
S2DGPC	1571005-3	B12
S2DGRA	1571006-3	B12
S2EGPC	1571005-4	B12
S2EGRA	1571006-4	B12
SDR0	2-1437628-2	D25
SDS1240RA0	1437577-2	B17
SDS1240RA8	1437577-3	B17
SDS1340RA0	1437577-4	B17
SDS1340RA8	1437577-5	B17
SDS2240RA0	1437577-6	B17
SDS2240RA8	-	B17
SDS2340RA0	1437577-7	B17
SDS2340RA8	-	B17
SE1DGPC	1437574-9	B12
SE1DGRA	1-1437574-1	B12
SE1DGSMT	1571004-3	B11
SE1DGSMTTR	1571004-6	B11
SE1EGPC	1-1437574-4	B12
SE1EGRA	1-1437574-5	B12
SE1EGSMT	1571004-2	B11
SE1EGSMTTR	1571004-5	B11
SE1GSMT	1571004-1	B11
SE1GSMTR	1571004-4	B11
SE2DGPC	1-1437574-6	B12
SE2DGRA	1-1437574-8	B12
SE2EGPC	2-1437574-0	B12
SE2EGRA	2-1437574-1	B12
SH131AK	-	J6
SH6131AK	1437607-1	J6
SH6131AKK2	1437607-2	J6
SKF1323AEL01	3-1437597-4	H4
SKT13	-	H3
SKT131AEL01	1437598-4	H3

Alcoswitch Part Number	Tyco Part Number	Page Number
SKT131GAEL01	1437598-5	H3
SKT1323AEL01	3-1437598-4	H3
SKT132AEL01	1437598-7	H3
SKT132GAEL01	1437598-8	H3
SKT331AEL01	1437598-9	H3
SKT331GAEL01	1-1437598-0	H3
SKT332AEL01	1-1437598-1	H3
SKT332GAEL01	1-1437598-3	H3
SL1000	1437577-8	B40
SL220	1437577-9	B40
SL330	1-1437577-0	B40
SL550	1-1437577-1	B40
SL660	1-1437577-2	B40
SL770	1-1437577-3	B40
SL880	1-1437577-4	B40
SLS120	1-1437577-5	B41
SLS1201	1-1437577-6	B42
SLS121	1-1437577-7	B43
SLS1211	1-1437577-8	B43
SLS121PC	1-1437577-9	B43
SLS121RA	2-1437577-2	B43
SLS131PC	2-1437577-4	B44
SLS131RA	2-1437577-6	B44
SLS141PC	2-1437577-8	B44
SLS141RA	3-1437577-0	B44
SLS151PC	3-1437577-2	B44
SLS151RA	3-1437577-4	B44
SLS220	3-1437577-7	B41
SLS2201	3-1437577-8	B42
SLS220PC	3-1437577-9	B40
SLS230PC	4-1437577-1	B40
SLS240PCA	4-1437577-3	B40
SLS250PC	4-1437577-5	B40
SLS260PC	4-1437577-7	B40
SLSA120	5-1437577-3	B41
SLSA1201	5-1437577-4	B42
SLSA220	5-1437577-5	B41
SLSA2201	5-1437577-6	B42
SLV04	1-1437589-5	A18
SLV06	1-1437589-6	A18
SMCA	1-1437602-2	J9
SMCADP	1-1437602-3	J9
SMCD111AK	1-1437602-4	J9
SMCD131AK	1-1437602-5	J9
SMCD131AKLS	1-1437602-6	J9
SMCD131ALD	1-1437602-7	J9
SMCD137AK	1-1437602-8	J9
SMCD301AK	1-1437602-9	J9
SMCL	3-1437602-1	J9
SMCPK	3-1437602-2	J9
SPI.2	3-1437602-5	J9, J10
SPI.5	3-1437602-6	J11
SPA32	2-1437628-4	C55
SPA42	2-1437528-6	C55
SR601	-	I6
SR6012	1-1437615-3	I6
SR6013	1-1437615-4	I6
SR6014	1-1437615-5	I6
SR6015	1-1437615-6	I6
SR6016	1-1437615-7	I6
SR6019	1-1437615-8	I6
SSA12	1-1437575-4	B39
SSA12G	1-1437575-5	B39
SSA22	1-1437575-6	B39
SSA22G	1-1437575-7	B39
SSB12	1-1437575-8	B38
SSB12G	1-1437575-9	B38
SSB12R	2-1437575-0	B38

Alcoswitch Part Number	Tyco Part Number	Page Number
SSB12RG	2-1437575-1	B38
SSB22	2-1437575-2	B38
SSB22G	2-1437575-3	B38
SSB22R	2-1437575-4	B38
SSB22RG	2-1437575-5	B38
SSB42	2-1437575-8	B38
SSB42G	2-1437575-9	B38
SSH02	1-1437589-7	A18
SSH04	1-1437589-8	A18
SSH06	1-1437589-9	A18
SSH08	2-1437589-0	A18
SSH10	2-1437589-1	A18
SSJ12	3-1437575-1	B35
SSJ12R	3-1437575-2	B35
SSJ13	3-1437575-3	B35
SSV02	2-1437589-2	A18
SSV04	2-1437589-3	A18
SSV06	2-1437589-4	A18
SSV08	2-1437589-6	A18
SSV10	2-1437589-7	A18
STS121PC	5-1437577-8	B13
STS121RA	5-1437577-9	B13
STS1300PC	6-1437577-0	B14
STS1300RA	6-1437577-1	B14
STS131PC	6-1437577-2	B13
STS131RA	6-1437577-3	B13
STS1400PC	6-1437577-5	B14
STS1400RA	6-1437577-6	B14
STS141PC	6-1437577-7	B14
STS141RA	6-1437577-8	B14
STS151PC	6-1437577-9	B15
STS151RA	7-1437577-0	B15
STS161PC	7-1437577-1	B15
STS161RA	7-1437577-2	B15
STS220PC	7-1437577-3	B16
STS2300PC	7-1437577-4	B15
STS230PC	7-1437577-5	B16
STS2400PC	7-1437577-6	B15
STS240PC	7-1437577-7	B16
STS250PC	7-1437577-8	B16
STS260PC	7-1437577-9	B16
STSA220RA	8-1437577-0	B16
STSA220RA1	8-1437577-1	B16
STSA230RA	8-1437577-2	B16
STSA230RA1	8-1437577-3	B16
SWK12	-	H5
SWK121F315	3-1437597-6	H5
SWK123F315	3-1437597-8	H5
SWK12F315	4-1437597-0	H5
SWK12KF315	4-1437597-2	H5
SWK1323AL101	4-1437597-3	H2
T6632	-	I15
TP11CGPC0	1437571-4	D7
TP11CGPC2	1437571-6	D7
TP11CGRA0	1437571-8	D7
TP11CGRA2	1-1437571-0	D7
TP11FGPC0	1-1437571-2	D7
TP11FGPC2	1-1437571-3	D7
TP11FGRA0	1-1437571-5	D7
TP11FGRA2	1-1437571-6	D7
TP21CCGPC0	1-1437571-8	D7
TP21CCGPC2	1-1437571-9	D7
TP21CCGRA0	2-1437571-0	D8
TP21CCGRA2	2-1437571-1	D8
TP21FFGRA0	2-1437571-2	D8
TP21FFGRA2	2-1437571-3	D8
TPA11CGPC0	2-1437571-5	D7
TPA11CGPC2	2-1437571-7	D7

Alcoswitch Part Number	Tyco Part Number	Page Number
TPA11CGRA0	2-1437571-9	D7
TPA11CGRA2	3-1437571-0	D7
TPA11FGPC0	3-1437571-2	D7
TPA11FGPC2	3-1437571-4	D7
TPA11FGRA0	3-1437571-6	D7
TPA11FGRA2	3-1437571-8	D7
TPA21CCGPC0	4-1437571-0	D7
TPA21CCGRA0	4-1437571-1	D8
TPA21CCGRA2	4-1437571-2	D8
TPA21FFGPC0	4-1437571-3	D7
TPA21FFGRA0	4-1437571-5	D8
TPA21FFGRA2	4-1437571-6	D8
TPA21MGPC0	1437805-2	D6
TPA21MGRA0	4-1437571-7	D8
TPB11CGPC0	5-1437571-1	D8
TPB11CGPC2	5-1437571-3	D8
TPB11CGPCES0	5-1437571-5	D13
TPB11CGPCES2	5-1437571-6	D13
TPB11CGRA0	5-1437571-7	D8
TPB11CGRA2	5-1437571-9	D8
TPB11CGRAES0	6-1437571-1	D14
TPB11CGRAES2	6-1437571-2	D14
TPB11CGVRA0	6-1437571-3	D11
TPB11CGVRA2	6-1437571-4	D11
TPB11FGPC0	6-1437571-5	D8
TPB11FGPC2	6-1437571-6	D8
TPB11FGPCES0	6-1437571-8	D13
TPB11FGPCES2	6-1437571-9	D13
TPB11FGRA0	7-1437571-0	D8
TPB11FGRA2	7-1437571-2	D8
TPB11FGRAES0	7-1437571-4	D14
TPB11FGRAES2	7-1437571-5	D14
TPB11FGVRA0	7-1437571-7	D11
TPB11FGVRA2	7-1437571-8	D11
TPB21MGPC0	7-1437571-9	D9
TPB21MGPC2	8-1437571-0	D9
TPB21MGPCES	-	D13
TPB21MGRA0	8-1437571-1	D9
TPB21MGRA2	8-1437571-2	D9
TPB21MGRAES	-	D14
TPB21RGPC0	8-1437571-3	D9
TPB21RGPC2	8-1437571-4	D9
TPB21RGPCES	-	D13
TPB21RGPCES0	8-1437571-5	D13
TPB21RGRA0	8-1437571-6	D9
TPB21RGRA2	8-1437571-8	D9
TPB21RGRAES0	8-1437571-9	D14
TPBF11CGPC	-	D10
TPBF11CGPCES0	9-1437571-2	D15
TPBF11CGPCES2	9-1437571-3	D15
TPBF11CGRA0	9-1437571-4	D10
TPBF11CGRA2	9-1437571-5	D10
TPBF11CGRAES0	9-1437571-6	D15
TPBF11FGPC0	9-1437571-7	D10
TPBF11FGPCES0	9-1437571-8	D15
TPBF11FGRA0	9-1437571-9	D10
TPBF11FGRA2	1437572-1	D10
TPBF11FGRAES0	1437572-2	D15
TPC11CGPC0	1437572-3	D8
TPC11CGPC2	1437572-4	D8
TPC11CGPCES0	1437572-5	D13
TPC11CGPCES2	1437572-6	D13
TPC11CGRA0	1437572-7	D8
TPC11CGRA2	1437572-8	D8
TPC11CGVRA0	1-1437572-0	D11
TPC11FG0	1-1437572-1	D6
TPC11FG2	1-1437572-2	D6
TPC11FGPC0	1-1437572-3	D8

Alcoswitch Part Number	Tyco Part Number	Page Number
TPC11FGPC2	1-1437572-4	D8
TPC11FGPCES0	1-1437572-6	D13
TPC11FGRA0	1-1437572-7	D8
TPC11FGRA2	1-1437572-8	D8
TPC11FGVRA0	1-1437572-9	D11
TPC11FGVRA2	2-1437572-0	D11
TPC13C0	2-1437572-2	D9
TPC13C2	2-1437572-3	D9
TPC13CPC0	2-1437572-5	D6
TPC13F0	2-1437572-6	D9
TPC13F2	2-1437572-7	D9
TPC21MGPC0	2-1437572-8	D9
TPC21MGPCES	-	D13
TPC21MGRA0	2-1437572-9	D9
TPC21MGRA2	3-1437572-0	D9
TPC21RGPC0	3-1437572-1	D9
TPC21RGPCES	-	D13
TPC21RGRA0	3-1437572-2	D9
TPC23M0	3-1437572-3	D9
TPC23R0	3-1437572-4	D9
TPC23R2	3-1437572-5	D9
TPCF11CGPC0	3-1437572-8	D10
TPCF11CGPC2	3-1437572-9	D10
TPCF11CGVRA0	4-1437572-0	D10
TPCF11CGRA2	4-1437572-1	D10
TPCF11FGPC0	4-1437572-2	D10
TPCF11FGPCES0	4-1437572-3	D15
TPCF11FGRA0	4-1437572-4	D10
TPCF13C0	4-1437572-5	D10
TPCF13F0	4-1437572-6	D10
TPD11CGPC0	4-1437572-7	D11
TPD11CGPC2	4-1437572-8	D11
TPD11CGPCES0	5-1437572-0	D13
TPD11CGRA0	5-1437572-1	D12
TPD11CGRA2	5-1437572-2	D12
TPD11FGPC0	5-1437572-4	D11
TPD11FGPC2	5-1437572-5	D11
TPD11FGPCES0	5-1437572-6	D13
TPD11FGRA0	5-1437572-7	D12
TPD11FGRA2	5-1437572-8	D12
TPD21MGPC0	5-1437572-9	D12
TPD21MGPCES0	6-1437572-0	D14
TPD21MGPCES2	6-1437572-1	D14
TPD21MGRA0	6-1437572-2	D12
TPD21RGPC0	6-1437572-3	D12
TPD21RGPCES0	6-1437572-4	D14
TPD21RGRA0	6-1437572-5	D12
TPF11CGPC0	6-1437572-8	D11
TPF11CGPC2	6-1437572-9	D11
TPF11CGPCES0	7-1437572-1	D13
TPF11CGRA0	7-1437572-2	D12
TPF11CGRA2	7-1437572-3	D12
TPF11CGRAES0	7-1437572-5	D6
TPF11FGPC0	7-1437572-6	D11
TPF11FGPC2	7-1437572-7	D11
TPF11FGPCES0	7-1437572-9	D13
TPF11FGPCES2	6-1437830-0	D13
TPF11FGRA0	8-1437572-0	D12
TPF11FGRA2	8-1437572-1	D12
TPF13C0	8-1437572-2	D11
TPF13C2	8-1437572-3	D11
TPF13F0	8-1437572-4	D11
TPF13F2	8-1437572-5	D11
TPF21MGPC0	8-1437572-7	D12
TPF21MGPCES0	8-1437572-8	D14
TPF21MGRA0	8-1437572-9	D12
TPF21RGPC0	9-1437572-0	D12
TPF21RGPC2	9-1437572-1	D12

Alcoswitch Part Number	Tyco Part Number	Page Number
TPF21RGPCE50	9-1437572-2	D14
TPF21RGRA0	9-1437572-3	D12
TPF23M0	9-1437572-4	D11
TPF23M2	9-1437572-5	D11
TPF23R0	9-1437572-6	D11
TPF23R2	9-1437572-7	D11
TRD11D10PC	3-1437595-6	F3
TRD11D10PCLR25	6-1437596-3	F3
TRD11D10QC	3-1437595-7	F3
TRD11D10QC5LR5	3-1437595-8	F3
TRD11D10QCL2	3-1437595-9	F3
TRD11D10QCL5	4-1437595-0	F3
TRD11D10QCLR2	5-1437596-8	F3
TRD11D10WL	4-1437595-1	F6
TRD11D10WLLR	-	F6
TRD11D10WLLR5	4-1437595-2	F6
TRD11D12WL	4-1437595-4	F3
TRD11E10WL	4-1437595-7	F6
TRD11E10WLLR	-	F6
TRD11E10WLLR25	4-1437595-8	F6
TRD11F10QC	4-1437595-9	F3
TRD11F10QCL2	5-1437595-0	F3
TRD11F10QCLR2	5-1437595-1	F3
TRD11F10WL	5-1437595-2	F6
TRD11F10WLLR	-	F6
TRD11F20QC	5-1437595-4	F3
TRD11G10QC5	5-1437595-5	F3
TRD11G10WL	5-1437595-6	F3
TRD11G20QC	5-1437595-8	F3
TRD13D10QC	6-1437595-1	F3
TRD13D10QCL5	6-1437595-2	F3
TRD13D10QCL5LUL	6-1437595-3	F3
TRD13D10QCLR2	6-1437595-4	F3
TRD13D10QCLR25	6-1437595-5	F3
TRD13D10QCLR5	5-1437596-4	F3
TRD13D10WL	6-1437595-6	F6
TRD13D10WL5L2	6-1437595-7	F3
TRD13D10WLL2	6-1437595-8	F3
TRD13D10WLLR	-	F6
TRD13D10WLLR2	6-1437595-9	F6
TRD13D10WLLR25	7-1437595-0	F6
TRD13D10WLLR4	7-1437595-1	F3
TRD13D10WLLR5	7-1437595-2	F3
TRD13D10WLUL	7-1437595-3	F3
TRD13D12QC	7-1437595-5	F3
TRD13D12QC5	7-1437595-6	F3
TRD13D12QCLR25	5-1437596-6	F3
TRD13D12WL	7-1437595-7	F3
TRD13D12WL5LR2	7-1437595-8	F3
TRD13E10QC	8-1437595-3	F3
TRD13E10WL	8-1437595-4	F6
TRD13E10WL5	8-1437595-5	F6
TRD13E10WLLR	-	F6
TRD13E10WLLR2	8-1437595-6	F6
TRD13F10QC	8-1437595-7	F3
TRD13F10QCLR2	8-1437595-8	F3
TRD13F10WL	8-1437595-9	F6
TRD13F10WLLR	-	F6
TRD13F12QC	9-1437595-0	F3
TRD13F12WL	9-1437595-1	F3
TRD13G10QC	9-1437595-5	F3
TRD13G10WL	9-1437595-6	F3
TRD13G10WLLR2	9-1437595-7	F3
TRD13G20QC	9-1437595-8	F3
TRD13G20WL	9-1437595-9	F3
TRD21N10QC	1437596-2	F3
TRD21N10WL	1437596-3	F6
TRD21N10WLL2	1437596-4	F3

Alcoswitch Part Number	Tyco Part Number	Page Number
TRD21N12QCL2	5-1437596-3	F3
TRD21N12WL	1437596-6	F3
TRD21P10WL	1437596-9	F6
TRD21P10WLL25	1-1437596-0	F3
TRD21P12WL	1-1437596-1	F3
TRD23N10QC	1-1437596-8	F3
TRD23N10WL	1-1437596-9	F6
TRD23N10WLL5	2-1437596-0	F3
TRD23N12QC	2-1437596-2	F3
TRD23N12QCL5	2-1437596-3	F3
TRD23N12WL	2-1437596-4	F3
TRD23N20QC	2-1437596-8	F3
TRD23N20WL	2-1437596-9	F3
TRD23N20WLL2	3-1437596-0	F3
TRD23N20WLL5	3-1437596-1	F3
TRD23N22WL	3-1437596-2	F3
TRD23P10QC	3-1437596-4	F3
TRD23P10WL	3-1437596-5	F6
TRD23P12WL	3-1437596-6	F3
TRD23P20WL	3-1437596-7	F3
TSD21AAGPC	-	B18
TSD21DDGIPC	-	B18
TSD21DDG1RA	1437579-4	B19
TSD21DDGPC	1437579-5	B18
TSD21DDGRA	1437579-6	B19
TSD21EEG1RA	-	B19
TSD21EEGRA	1437579-7	B19
TSD21RG1PC	2-1437579-1	B18
TSPD11CGPC0	1-1437573-1	D3
TSPD11CGPC2	1-1437573-3	D3
TSPD11CGPCV0	1-1437573-4	D3
TSPD11CGRA1	1-1437573-5	D3
TSPD11CGRA2	1-1437573-7	D3
TSPD11CGRA6	4-1437573-2	D3
TSPD11CGSPC0	1-1437573-8	D3
TSPD11CGSRA0	1-1437573-9	D3
TSPD11CGSRA2	2-1437573-0	D3
TSPD11CGSRAB0	2-1437573-1	D3
TSPD11CGVRA0	2-1437573-2	D3
TSPD11FGPC0	2-1437573-4	D3
TSPD11FGPCV0	2-1437573-5	D3
TSPD11FGRA0	2-1437573-6	D3
TSPD11FGSPC0	2-1437573-7	D3
TSPD11FGSRA0	2-1437573-8	D3
TSPD11FGSRAB0	2-1437573-9	D3
TSPD11FGVRA0	3-1437573-0	D3
TSPDF11CGPC0	3-1437573-1	D3
TSPDF11CGRA0	3-1437573-2	D3
TSPDF11CGSRA0	3-1437573-3	D3
TSPDF11CGSRA0TR	1571533-1	D3
TSPDF11CGVRA0	3-1437573-4	D3
TSPDF11FGPC0	3-1437573-5	D3
TSPDF11FGRA0	3-1437573-6	D3
TSPDF11FGSRA0	3-1437573-7	D3
TSPDF11FGVRA0	1571369-1	D3
TSS11AGIPC	-	B18
TSS11AGPC	1437578-3	B18
TSS11DGIPC	1437579-8	B18
TSS11DG1RA	1437579-9	B19
TSS11DGPC	1-1437589-0	B18
TSS11DGRA	1-1437579-1	B19
TSS11EGIPC	1-1437579-2	B18
TSS11EG1RA	1-1437579-3	B19
TSS11EGPC	1-1437579-4	B18
TSS11EGRA	1-1437579-5	B19
TSS21KGIPC	-	B18
TSS21KGPC	1-1437579-6	B18
TSS21NG1PC	1-1437579-7	B18

Alcoswitch Part Number	Tyco Part Number	Page Number
TSS21NG1RA	-	B19
TSS21NGPC	1-1437579-9	B18
TSS21NGRA	2-1437579-0	B19
TSS21PAGRA	-	B19
TSS21PG1RA	-	B19
TSS21PGPC	2-1437579-3	B18
TSS21PGRA	2-1437579-4	B19
TSS41NGPC	2-1437579-5	B18
TSS41NGRA	2-1437579-7	B19
TST11DGPC1D	1437564-7	C5,C6
TST11DGPC4D	1437564-9	C5
TST11DGRA1D	1-1437564-1	C5,C7
TST11DGRA2D	1-1437564-3	C5
TST11DGSPC1D	1-1437564-4	C5,C6
TST11DGSRA1D	1-1437564-5	C5,C6
TST11DGSRAB1D	1-1437564-6	C5,C6
TST11DGVRA1D	1-1437564-7	C5,C7
TST11DGVRA2D	1-1437564-8	C5
TST11EGPC1D	2-1437564-0	C5
TST11EGRA1D	2-1437564-3	C5
TST11EGSRA1D	2-1437564-4	C5
TST11EGSRA2D	2-1437564-5	C5
TST11EGVRA1D	2-1437564-6	C5
TST11FGC1D	2-1437564-7	C5
TST11FGRA1D	2-1437564-9	C5
TST11FGSPC1D	3-1437564-0	C5
TST11FGSRA1D	3-1437564-1	C5
TST11FGVRA1D	3-1437564-2	C5
TST11GGPC1D	3-1437564-3	C5
TST11GGPC4D	3-1437564-4	C5
TST11GGRA1D	3-1437564-5	C5
TST11GGSRA1D	3-1437564-6	C5
TST11GGSRA4D	3-1437564-7	C5
TT11AGPC1	2-1437561-3	C10
TT11AGPC1ES	2-1437561-4	C16
TT11AGPC9T1/4	2-1437561-5	C11
TT11AGPC9T1/4ES	-	C16
TT11DGPC1	2-1437561-6	C10
TT11DGPC1ES	2-1437561-7	C16
TT11DGPCTES	2-1437561-9	C8
TT11DGPC3	3-1437561-0	C8
TT11DGPC42	3-1437561-1	C8
TT11DGPC5T1/42	3-1437561-2	C8
TT11DGPC7T1/4	3-1437561-3	C8
TT11DGPC8T1/4	3-1437561-4	C8
TT11DGPC9T1/4	3-1437561-5	C11
TT11DGPC9T1/4ES	6-1437830-2	C16
TT11DGRA1	3-1437561-8	C8
TT11DGRA1ES	3-1437561-9	C8
TT11DGRA1T	1571060-1	C8
TT11DGRA40	4-1437561-1	C8
TT11DGRA42	4-1437561-2	C8
TT11DGRA46	4-1437561-3	C8
TT11DGRA49	4-1437561-4	C8
TT11DGRA7T1/4	4-1437561-5	C12
TT11DGRA8T1/4	4-1437561-6	C8
TT11DGRA9T1/4	4-1437561-7	C8
TT11DGVRA1	4-1437561-8	C11
TT11DGVRA3T	4-1437561-9	C11
TT11DGVW2T	5-1437561-0	C13
TT11EGPC1	5-1437561-1	C10
TT11EGPC1T	5-1437561-3	C8
TT11EGPC3	5-1437561-4	C8
TT11EGPC40	5-1437561-5	C8
TT11EGPC5T1/40	5-1437561-6	C8
TT11EGPC7T1/4	5-1437561-7	C8
TT11EGPC8T1/4	5-1437561-8	C8
TT11EGPC9T1/4	5-1437561-9	C11

Alcoswitch Part Number	Tyco Part Number	Page Number
TT11EGPC9T1/4ES	-	C16
TT11EGRA1	6-1437561-1	C8
TT11EGRA3	6-1437561-3	C8
TT11EGRA40	6-1437561-4	C8
TT11EGRA42	6-1437561-5	C8
TT11EGRA46	6-1437561-6	C8
TT11EGRA7T1/4	6-1437561-7	C12
TT11EGRA9T1/4	6-1437561-8	C8
TT11EGVRA1	6-1437561-9	C11
TT11EGVRA1T	2-1437563-2	C8
TT11EGVRA3T	7-1437561-0	C11
TT11EGWW2T	7-1437561-1	C13
TT11FGPC7T1/4	7-1437561-2	C8
TT11FGPC9T1/4	7-1437561-3	C11
TT11FGRA7T1/4	7-1437561-4	C12
TT11FGRA9T1/4	7-1437561-5	C8
TT11FGVRA3T	7-1437561-6	C8
TT12K8T1/4	1571278-1	C8
TT13A2T	7-1437561-8	C14
TT13A3T	8-1437561-0	C15
TT13A6T	8-1437561-1	C8
TT13A6T0	8-1437561-2	C8
TT13A6T2	8-1437561-3	C8
TT13A9T1/4	8-1437561-4	C15
TT13D2T	8-1437561-5	C14
TT13D2T1/4	8-1437561-6	C8
TT13D3T	8-1437561-8	C15
TT13D4T0	8-1437561-9	C8
TT13D4T1/49	2-1437563-6	C8
TT13D6T0	9-1437561-0	C8
TT13D7T1/4	9-1437561-1	C14
TT13D9T1/4	9-1437561-2	C15
TT13D9T1/4ES	9-1437561-3	C8
TT13DPC2TE	9-1437561-4	C8
TT13E2T	9-1437561-5	C14
TT13E3T	9-1437561-6	C15
TT13E7T1/4	9-1437561-7	C14
TT13E9T1/4	9-1437561-8	C15
TT21KGPC1	9-1437561-9	C10
TT21KGPC9T1/4	1437562-1	C11
TT21KGPC9T1/4ES	-	C16
TT21NG2T	1437562-2	C8
TT21NGPC1	1437562-3	C10
TT21NGPC1ES	1437562-4	C16
TT21NGPC1T	1437562-6	C8
TT21NGPC1T1/4	1437562-7	C8
TT21NGPC2T1/4	1437562-8	C8
TT21NGPC4	6-1437830-4	C8
TT21NGPC7T1/4	1437562-9	C8
TT21NGPC8T1/4	1-1437562-0	C8
TT21NGPC9T1/4	1-1437562-1	C11
TT21NGPC9T1/4ES	1-1437562-2	C16
TT21NGRA1	1-1437562-5	C8
TT21NGRA1ES	1-1437562-6	C8
TT21NGRA3T1/4	1-1437562-8	C8
TT21NGRA7T1/4	1-1437562-9	C12
TT21NGRA8T1/4	2-1437562-0	C8
TT21NGRA9T1/4	2-1437562-1	C8
TT21NGVRA1	2-1437561-2	C11
TT21NGVRA3T	2-1437562-3	C11
TT21NGWW2T	2-1437562-4	C13
TT21PGPC1	3-1437562-4	C10
TT21PGPC3	3-1437562-5	C8
TT21PGPC7T1/4	3-1437562-6	C8
TT21PGPC8T1/4	3-1437562-7	C8
TT21PGPC9T1/4	3-1437562-8	C11
TT21PGPC9T1/4ES	-	C16
TT21PGRA1	3-1437562-9	C8

Alcoswitch Part Number	Tyco Part Number	Page Number
TT21PGRA7T1/4	4-1437562-0	C12
TT21PGRA8T1/4	4-1437562-1	C8
TT21PGRA9T1/4	4-1437562-2	C8
TT21PGVRA1	4-1437562-3	C11
TT21PGWW2T	4-1437562-4	C13
TT21RGPC1	4-1437562-5	C8
TT21RGPC7T1/4	5-1437563-4	C8
TT21RGPC9T1/4	4-1437562-6	C11
TT23K2T	4-1437561-7	C14
TT23K3T	4-1437562-8	C15
TT23K9T1/4	4-1437562-9	C15
TT23N2T	5-1437562-1	C14
TT23N3T	5-1437562-2	C15
TT23N4T1/40	5-1437562-3	C8
TT23N6T0	5-1437562-4	C8
TT23N6T6	5-1437562-0	C8
TT23N7T1/4	5-1437562-5	C14
TT23N9T1/4	5-1437562-6	C15
TT23NRA1	1571461-1	C8
TT23P2T	5-1437562-7	C14
TT23P3T	5-1437562-8	C15
TT23P6T0	5-1437562-9	C8
TT23P7T1/4	6-1437562-0	C14
TT23P8T1/4	6-1437562-1	C8
TT23P9T1/4	6-1437562-2	C15
TT41NGPC1	6-1437562-6	C10
TT41NGPC8T1/4	6-1437562-7	C8
TT41NGPC9T1/4	6-1437562-8	C11
TT41NGRA1	6-1437562-9	C8
TT41NGRA2T1/4	7-1437562-0	C8
TT41NGRA3	7-1437562-1	C8
TT41NGRA7T1/4	7-1437562-2	C12
TT41NGRA9T1/4	7-1437562-3	C8
TT41NGWW2T	7-1437562-4	C13
TT41PGPC9T1/4	7-1437562-5	C11
TT43N2T	7-1437562-6	C14
TT43N3T	7-1437562-7	C15
TT43N7T1/4	7-1437562-8	C14
TT43N9T1/4	7-1437562-9	C15
TT43P3T	8-1437562-0	C15
TT43P7T1/4	-	C14
TT43P9T1/4	8-1437562-1	C15
TT41NGWW2T	7-1437562-4	C13
TTE11AG9T1/4ES	8-1437562-4	C8
TTE11AGPC3TES	8-1437562-5	C18
TTE11AGPC9T1/4	1571413-1	C8
TTE11AGPC9T1/4ES	-	C18
TTE11DGPC1ES	8-1437562-6	C17
TTE11DGPC3TES	8-1437562-7	C18
TTE11DGPC9T1/4ES	8-1437562-8	C18
TTE11DGRA1ES	8-1437562-9	C17
TTE11EG1	147844-1	C8
TTE11EGPC1ES	-	C17
TTE11EGPC3TES	9-1437562-0	C18
TTE11EGPC9T1/4ES	9-1437562-1	C18
TTE11EGRA1ES	9-1437562-2	C17
TTE13A9T1/4	9-1437562-3	C8
TTE13D2T	9-1437562-4	C8
TTE13D8T1/4	9-1437562-5	C8
TTE13D9T1/4	9-1437562-6	C8
TTE13DG2T	9-1437562-7	C8
TTE13E8T1/4	9-1437562-8	C8
TTE21KGPC9T1/4ES	-	C18
TTE21NG2T1/4ES	9-1437562-9	C8
TTE21NGPC1ES	1437563-1	C8,C17
TTE21NGPC3TES	1437563-2	C8,C18
TTE21NGPC9T1/4ES	1437563-3	C18
TTE21NGPC9T1/4S	1437563-3	C8

Alcoswitch Part Number	Tyco Part Number	Page Number
TTE21NGRA1ES	1437563-4	C8,C17
TTE21PGPC1ES	-	C17
TTE21PGPC3TES	-	C18
TTE21PGPC9T1/4ES	-	C18
TTE21PGRA1ES	-	C17
TTE23N2T	1437563-5	C8
TTE23N8T1/4	1437563-6	C8
TTE23N9T1/4	1437563-7	C8
TTE23NG2T	1437563-8	C8
TTE23P8T1/4	1437563-9	C8
TTE41NGPC1	1-1437563-0	C8
TTE41NGWW2T	1-1437563-1	C8
TTE43N8T1/4	1-1437563-2	C8
TTE43N9T1/4	1-1437563-3	C8
TTE43N9T1/4E	1-1437563-4	C8
TTE43P8T1/4	1-1437563-5	C8
V40	1-1437612-3	18,19,114
V40G	1-1437612-4	18
V50	1-1437612-5	18,19,114
V50D	1-1437612-6	18
V50G	1-1437612-7	18
VA0	1-1437612-8	18,19,114
VR0	1-1437612-9	18,19,114



**A**  
**B**  
**C**  
**D**  
**E**  
**F**  
**G**  
**H**  
**I**  
**J**  
**K**  
**L**  
**M**

# Table of Contents

<b>Dip Switches</b>	<b>A1 - A28</b>
<b>Slide Switches</b>	<b>B1 - B48</b>
<b>Toggle Switches</b>	<b>C1 - C55</b>
<b>Pushbutton Switches</b>	<b>D1 - D33</b>
<b>Tactile</b>	<b>E1 - E30</b>
<b>Rocker/Paddle Switches</b>	<b>F1 - F24</b>
<b>Rotary Switches</b>	<b>G1 - G11</b>
<b>Keylock Switches</b>	<b>H1 - H5</b>
<b>Industrial Controls</b>	<b>I1 - I20</b>
<b>Pushwheel Switches</b>	<b>J1 - J11</b>
<b>Knobs</b>	<b>K1 - K21</b>
<b>Microswitches</b>	<b>L1 - L13</b>
<b>Indexes/Matrixes</b>	<b>M1 - M40</b>

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



## JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А