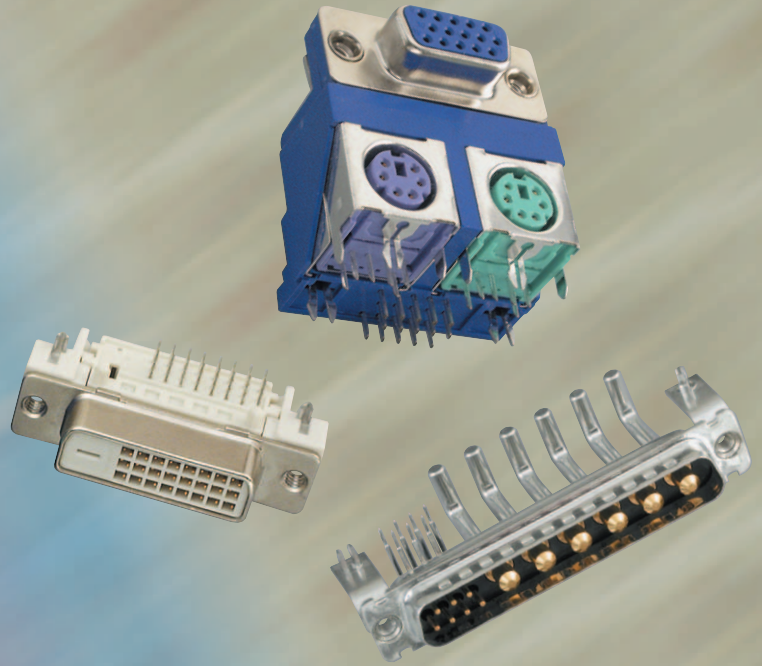


D-SUBMINIATURE CONNECTORS



Amphenol®

ACCESSORIES

STANDARD DENSITY

SURFACE MOUNT RECEPTACLES

HIGH DENSITY

Table of Contents

| DESCRIPTION | SERIES | PAGES |
|--|----------------|-------|
| General Specifications | | 1 |
| HIGH DENSITY D-SUBS | | |
| Right Angle Board Mount Connectors | 17BH..... | 2 |
| Solder Cup and Straight Board Mount Connectors | 17HD | 2 |
| Digital Video Interface (DVI) NEW | G12 | 52 |
| SURFACE MOUNT RECEPTACLES | | |
| Right Angle Connector, Front Metal Shell, Socket only | 17SM2 | 5 |
| STANDARD DENSITY D-SUBS - BOARD MOUNT | | |
| Fixed Precision-Formed Contact Connectors | 617 | 8 |
| | 17SD..... | 16 |
| Dual Port Stacked Right Angle Connectors, Front Metal Shell..... | 617H..... | 10 |
| High-Temperature Right Angle Connectors, Front Metal Shell..... | 17HTN | 12 |
| High-Temperature Vertical Connectors, Front Metal Shell | 617S..... | 14 |
| Fixed Machined Contact Industrial Connectors | 17D / DF | 20 |
| Combination (Hybrid) Connectors | 17TW | 37 |
| Filtered D-Sub Connector, Stacked | FCC17 | 55 |
| Filtered D-Sub Connector, Press Fit NEW | FCC17 | 55 |
| Filtered D-Sub Connector and Filtered Combo | FCC17 | 56 |
| Sealed D-Sub Connector NEW | SD308 | 53 |
| Filtered D-Sub Connector, Ruggedized NEW | FD308 | 54 |
| STANDARD DENSITY D-SUBS - CABLE MOUNT | | |
| Fixed Precision-Formed Contact Connectors..... | 17SD..... | 16 |
| Fixed Machined Contact Industrial Connectors | 17D / DF | 20 |
| Fixed Machined Contact Industrial Connectors, Screw Termination NEW | 17D-ST | 26 |
| Rear Release Crimp Connectors..... | 17RR..... | 29 |
| Tooling for Crimp Contacts | RR-HR | 36 |
| Combination (Hybrid) Connectors | 17TW | 37 |
| Removable Contacts (Size 8 Coax and Power) for Hybrid Connectors | 17DM | 45 |
| Tooling for Size 8 Coax Contacts | | 47 |
| Filtered D-Sub Connector and Filtered Combo | FCC17 | 56 |
| Filtered D-Sub Connector, IDC NEW | FCC17 | 55 |
| ACCESSORIES | | |
| Backshells | | 57 |
| GENERAL INFORMATION | | |
| Panel Cutouts and Mounting..... | | IBC |

GENERAL DESCRIPTION:

Amphenol's line of D-Subminiature rack and panel connectors is part of an industry standard for applications requiring reliable, rugged, connectors. These connectors are designed to accommodate rack and panel, cable to panel and cable to cable applications. D-Subminiature connectors are pin and socket devices that employ contacts encased in a molded dielectric insert surrounded by a "D" shaped shell for polarization.

MARKETS:

Amphenol D-Subminiature connectors can be used in commercial, industrial or military markets. We offer a broad selection of dielectric materials and contact styles and configurations to meet all of your design requirements.

APPLICATIONS INCLUDE:

- Business equipment
- Electronic office systems
- Data communications
- Medical equipment
- Mobile communications
- Consumer electronics

AMPHENOL D-SUB FEATURES:

- Industry standard interfacing RS232 and RS449 mating configurations per EIA standards.
- UL Component Recognition File number E64911 (617, 841, 17, 17D, 17HD, ED, 17RR, 17SD, 117DF, 17BH, 17TW)
- Variations available:
 - Solder cup
 - Straight pc mount solder
 - Right angle pc mount solder
 - Solderless wire wrap
 - Crimp
 - High Density Right Angle
 - High Density Straight
 - Stacked Right Angle PC mount
 - Surface mount
- Five shell sizes offer widest choice of contact positions: 9, 15, 25, 37 and 50 in standard density and 15, 26, 44, 62 and 78 positions in high-density.
- Inserts are flame-retardant thermoplastic.
- Accessories for all applications are available including strain reliefs, cable clamps, shielded backshells, mating hardware and connector to pc board mounting hardware.
- Automatic and manual tooling is available for both crimp and IDC versions.
- Contact Amphenol for lease information.

High Density

17 BH/HD SERIES

SPECIFICATIONS:

MATERIALS AND PLATINGS

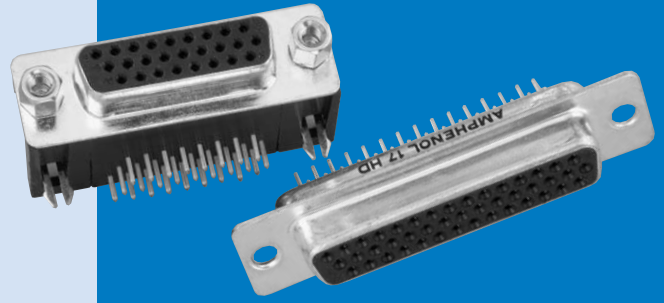
| | |
|--------------------------|---|
| Shells | Steel, tin plated, grounding indents on plug. |
| Contact Material | Copper alloy |
| Contact Plating | Engagement area: gold (see ordering information). |
| Termination End | 150µ" (3.81µm) tin/lead |
| Nickel Underplate | 50µ" (1.27µm) entire contact |

ELECTRICAL DATA

| | |
|--|---|
| Current Rating | 3 Amps maximum per contact |
| Voltage Rating | 125 VAC |
| Dielectric Withstanding Voltage | 1000 VAC (minimum) |
| Dielectric | Glass filled thermoplastic, black, UL 94 VO |
| Insulation Resistance | 5,000 Megaohms (minimum) |
| Contact Resistance | 15 Milliohms (maximum) |

CLIMATIC DATA

| | |
|------------------------------|--------------------------------|
| Operating Temperature | -67°F (-55°C) to 221°F (105°C) |
|------------------------------|--------------------------------|



Amphenol's High Density D-Subminiature connectors complement Amphenol's extensive D-Subminiature connector line. This line of connectors offers many superior features, high performance level and low installation cost.

The connector configurations are available in 15, 26, 44, 62 and 78 positions.

The product offering includes PCB mount connectors in both straight or right angle termination styles. Straight PCB mount are available in both Fixed Screw Machine and Stamped and Formed contacts, while Right Angle PCB mount are only available with Stamped and Formed contacts.

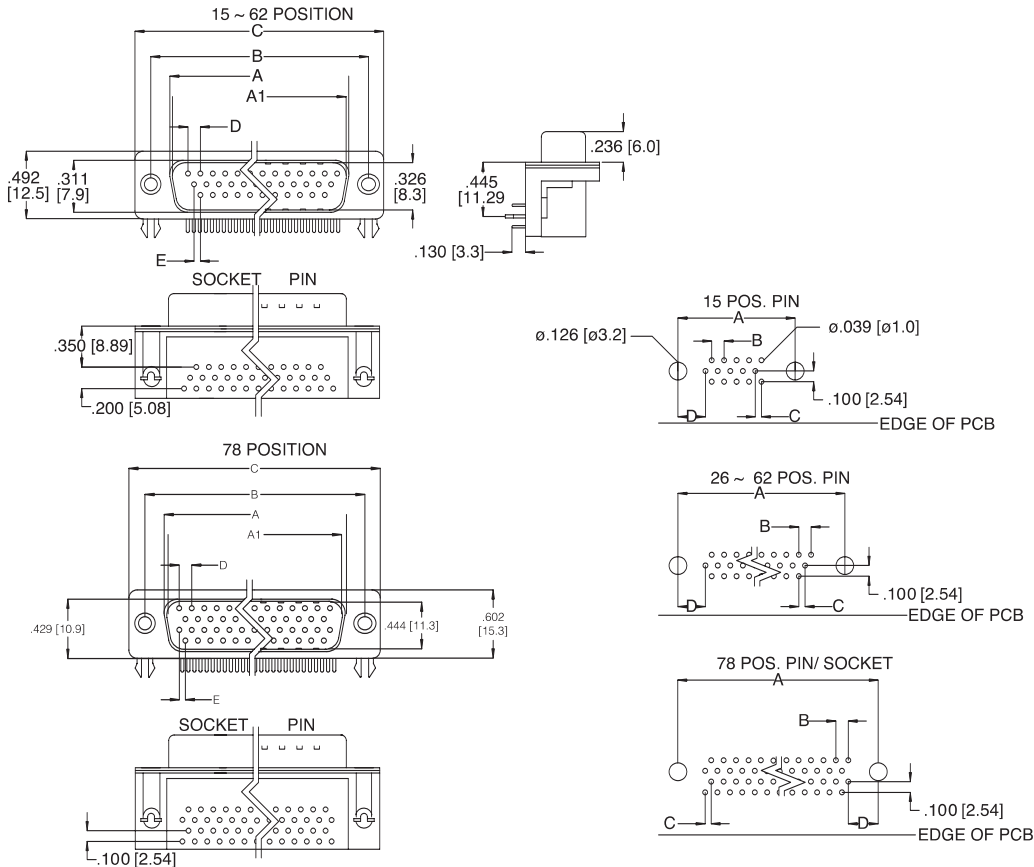
A cable mount version with solder terminations is also available, which can be combined with Amphenol's standard line of shielded or unshielded backshells.

- Industrial
- Telecom
- Any industry standard I / O connections

INCHES (MM)



DIMENSIONS FOR 15 - 62 POSITION (3 ROW)(SHOWN WITH FIXED FEMALE SCREWLOCKS) DIMENSIONS FOR THE 78 POSITION (4 ROW)



| CONTACTS | A SOCKET | A1 PIN | B | C | D | E |
|----------|--------------|---------------|--------------|--------------|-------------|--------------|
| 15 | .642 [16.30] | .666 [16.92] | .984 [25.0] | 1.213 [30.8] | .090 [2.29] | .045 [1.145] |
| 26 | .969 [24.6] | .994 [25.25] | 1.311 [33.3] | 1.543 [39.2] | .090 [2.29] | .045 [1.145] |
| 44 | 1.508 [38.3] | 1.534 [38.96] | 1.854 [47.1] | 2.091 [53.1] | .090 [2.29] | .045 [1.145] |
| 62 | 2.157 [54.8] | 2.182 [55.42] | 2.50 [63.5] | 2.732 [69.4] | .095 [2.41] | .047 [1.205] |
| 78 | 2.05 [52.20] | 2.079 [52.81] | 2.40 [61.0] | 2.638 [67.0] | .095 [2.41] | .047 [1.205] |

| CONTACTS | A | B | C | D |
|----------|--------------|-------------|--------------|-------------|
| 15 | .984 [25.0] | .090 [2.29] | .045 [1.145] | .277 [7.04] |
| 26 | 1.311 [33.3] | .090 [2.29] | .045 [1.145] | .271 [6.88] |
| 44 | 1.854 [47.1] | .090 [2.29] | .045 [1.145] | .271 [6.88] |
| 62 | 2.50 [63.5] | .095 [2.41] | .047 [1.205] | .275 [7.00] |
| 78 | 2.402 [61.0] | .095 [2.41] | .047 [1.205] | .300 [7.63] |

ORDERING INFORMATION

17BH Series High Density D-Sub

Front Metal Shell, Right-Angle PC Mount

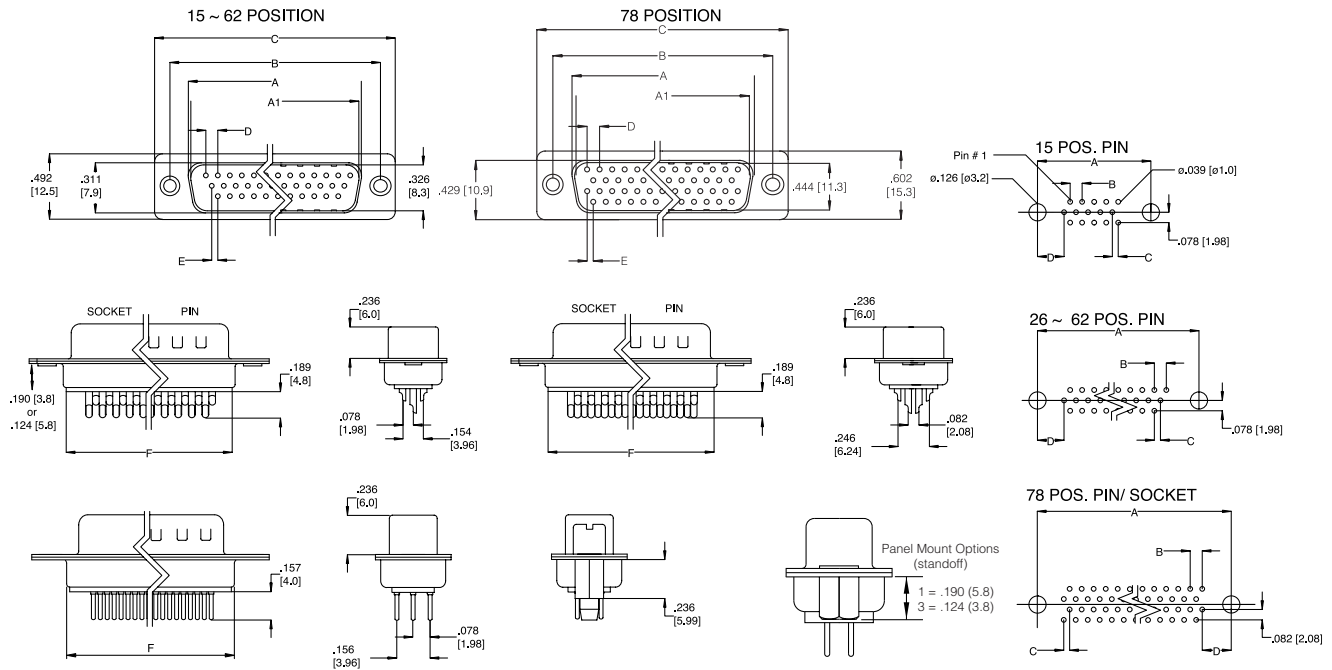
17BH - 0XX - X - XX - X - XX

Series _____
Number Of Positions _____
15, 26, 44, 62, 78
Type _____
P Pin (male)
S Socket (female)

PCB Mount Options
00 Clear hole
10 Arrowhead Board
Panel Mounting Options
0 .120 (3.05) Clear Hole
1 #4-40 Threaded Hole
2 #4-40 Fixed Female Screw

Plating Code
AA Gold Flash over Nickel
AM 30µ* (.76µm) Gold over Nickel

DIMENSIONS



| CONTACTS | A SOCKET | A1 PIN | B | C | D | E | F |
|----------|-----------------|------------------|-----------------|-----------------|----------------|-----------------|-----------------|
| 15 | .642 [16.30] | .666 [16.92] | .984 [25.0] | 1.213 [30.8] | .090 [2.29] | .045 [1.145] | .756 [19.2] |
| 26 | .969 [24.6] | .994 [25.25] | 1.311 [33.3] | 1.543 [39.2] | .090 [2.29] | .045 [1.145] | 1.071 [27.2] |
| 44 | 1.508 [38.3] | 1.534 [38.96] | 1.854 [47.1] | 2.091 [53.1] | .090 [2.29] | .045 [1.145] | 1.618 [41.1] |
| 62 | 2.157 [54.8] | 2.182 [55.42] | 2.50 [63.5] | 2.732 [69.4] | .095 [2.41] | .047 [1.205] | 2.256 [57.3] |
| 78 | 2.05 [52.20] | 2.079 [52.81] | 2.40 [61.0] | 2.638 [67.0] | .095 [2.41] | .047 [1.205] | 2.169 [55.1] |

| CONTACTS | A | B | C | D |
|----------|-----------------|----------------|-----------------|----------------|
| 15 | .984 [25.0] | .090 [2.29] | .045 [1.145] | .277 [7.04] |
| 26 | 1.311 [33.3] | .090 [2.29] | .045 [1.145] | .277 [7.04] |
| 44 | 1.854 [47.1] | .090 [2.29] | .045 [1.145] | .277 [7.04] |
| 62 | 2.50 [63.5] | .095 [2.41] | .047 [0.120] | 0.699 |
| 78 | 2.402 [61.0] | .095 [2.41] | .047 [0.120] | 0.699 |

ORDERING INFORMATION

17 HD Series High Density D-Sub

Solder Cup & Straight P.C. Mount, Front Metal Shell Fixed Contact

17HD - 0XX - X - XX - X - XX

Series _____

Number Of Positions _____
15, 26, 44, 62, 78

Type _____
P Pin (male)
S Socket (female)

Termination Types:

- 00 Solder Cup
- 30 Board-mount, Vertical
- 32 Board-mount, Vertical with Boardlocks
- 33 Board-mount, Vertical with standoff, no boardlock

Panel Mounting Options:

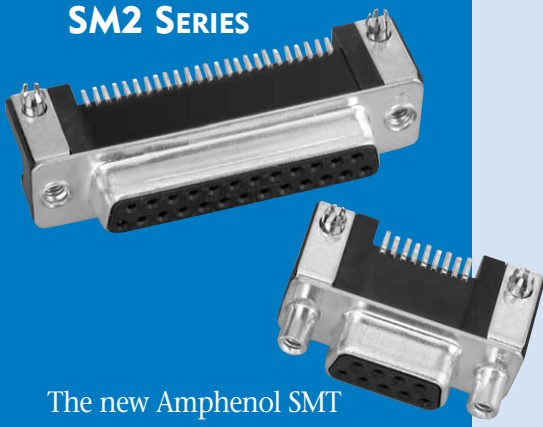
- 0 .120 (3.05) Clear Hole
- 1 #4-40 Threaded Hole .190 (5.8)
- 2 #4-40 Fixed Female Screwlock
- 3 #4-40 Threaded Hole .124 (3.8)

Plating Code:

- AA Gold Flash over Nickel
- AM 30µ" (.76µm) Gold over Nickel

INCHES (MM)

SM2 SERIES

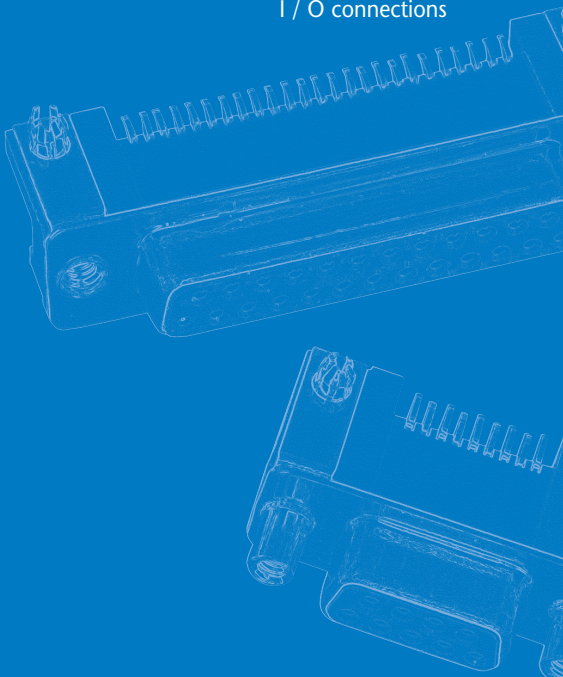


The new Amphenol SMT D-Sub is offered in right angle, receptacle with brackets, as an industry standard for I / O connections.

New boardlock features:
 -LIF (Low Insertion Force) boardlock especially designed to be fully compatible with pick and place equipment.
 -ZeFo (Zero Insertion Force) boardlock has been designed so that once placed and expanded, secures the connector in place.

Applications

- Industrial
- Telecom
- Any industry standard I / O connections



Stamped And Formed Contacts Surface Mount Connectors

SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|-----------------------|---|
| Shells | Steel with tin plating |
| Insulator | High temperature (peak at 500°F [260°C]) glass-filled thermoplastic, UL 94V-0 |
| Socket Contact | Stamped and formed brass, selected gold in mating area; 100μ" (2.54μm) min. tin-lead on termination area, with entire contact under-plated 50μ" (1.27μm) min. nickel |
| Rear Insert | Brass, 118μ" up to 197μ" (3μm up to 5μm) tinned over nickel 78μ" to 118μ" (2μm up to 3μm) |
| Boardlock | Tin-lead plating 157μ" up to 236μ" (4μm up to 6μm) over nickel 78μ" up to 118μ" (2μm up to 3μm) Insertion force: Low Insertion Force = LIF (bronze) Zero Insertion Force = ZeFo (brass) |
| Screwlock | Brass, 236μ" up to 394μ" (6μm up to 10μm) tinned over nickel 78μ" up to 118μ" (2μm up to 3μm) |
| Grounding | Grounding strap: brass, (4μ" up to 6μ") (0.10μm up to 0.15μm) tin-lead plating over nickel 78μ" up to 118μ" (2μm up to 3μm) |

ELECTRICAL DATA

| | |
|------------------------------|-----------------------------------|
| Current Rating | 3A |
| Voltage Rating | 300V AC/ rms 50Hz |
| Withstanding Voltage | 1000V AC/ rms 50Hz for one minute |
| Insulation Resistance | 5000MΩ |
| Contact Resistance | 10 mΩ max. |

CLIMATIC DATA

| | |
|------------------------------|-------------------------------------|
| Operating Temperature | 185°F (85°C), peak at 221°F (105°C) |
| Damp Heat | 56 days 221°F (105°C) - 95% RH |

MECHANICAL DATA

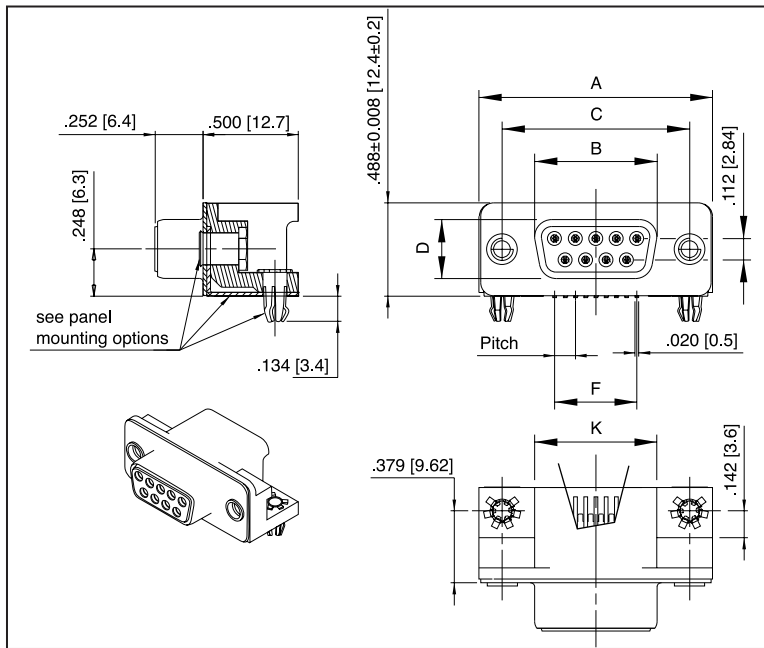
| | |
|--|-----------------------|
| Single Contact Insertion Force | 1.2N < F < 2.5N |
| Single Contact Withdrawal Force | 0.4N min. |
| LIF Boardlock | 8N max. per connector |
| Coplanarity of Contacts | .008" (0.2) max. |

Mating and Unmating Force

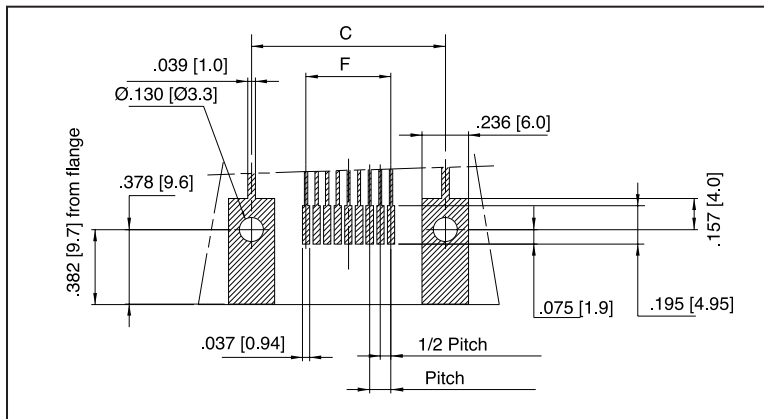
Unit: N

| No. of Contacts | Mate (max.) | Unmate (min.) |
|-----------------|-------------|---------------|
| 9 (size E) | 30 | 3.5 |
| 15 (size A) | 50 | 4.5 |
| 25 (size B) | 83 | 8.0 |

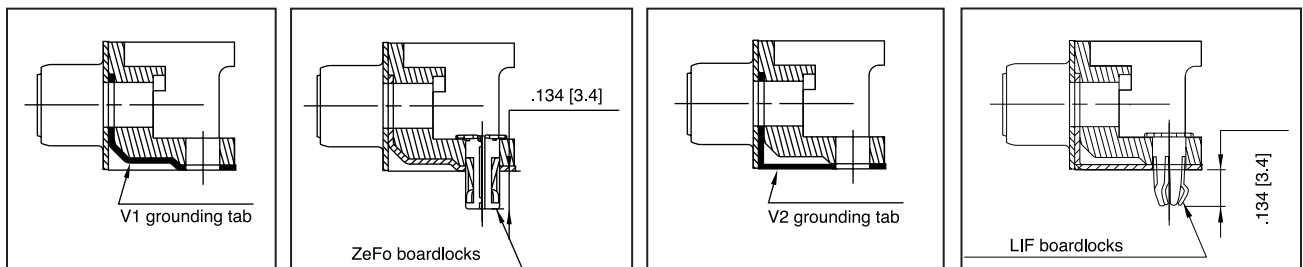
SHELL DIMENSIONS



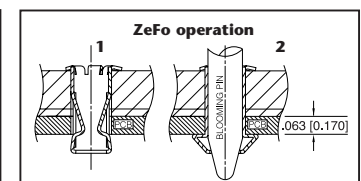
PCB LAYOUT



GROUNDING TABS



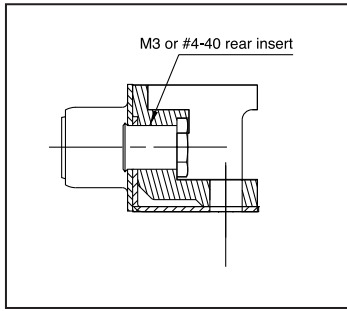
| SHELL SIZE | A | B | C | D | PITCH | F | K |
|------------|-------------------------------|-------------------|--------------|-------------------|--------------|---------------|--------------|
| | + .002 (0.05) - .004 (0.1) | 0 - .008 (0.2) | ± .004 (0.1) | 0 - .01 (0.25) | | | |
| E | 1.226 (31.15) | .645 (16.4) | .984 (25) | .316 (8.03) | .1078 (2.74) | .432 (10.97) | .642 (16.3) |
| A | 1.551 (39.4) | .976 (24.8) | 1.311 (33.3) | .316 (8.03) | .1078 (2.74) | .756 (19.2) | .968 (24.6) |
| B | 2.098 (53.3) | 1.515 (38.5) | 1.850 (47) | .316 (8.03) | .1086 (2.76) | 1.304 (33.12) | 1.508 (38.3) |



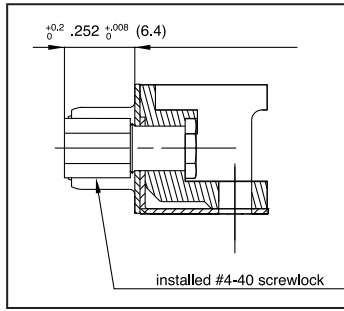
Blooming Pin Tool
P.N. 356-500

INCHES (MM)

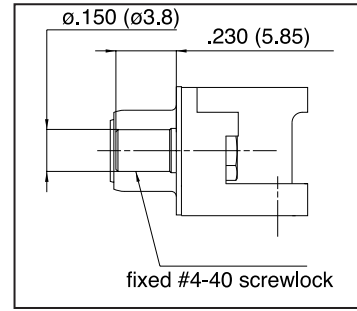
FLANGE ACCESSORIES



Threaded Rear
1/2



Installed Front Female
5



Fixed Front Female
6

ORDERING INFORMATION

17SM2 - XX - S - X - X - X - X

Configuration :

- 09
- 15
- 25

SOCKET ONLY

Board locks / grounding tab:

- 1** V1 grounding tab +ZeFo boardlocks (PCB = .062 [1.6])
- 4** ZeFo boardlocks only (PCB = .062 [1.6])
- 7** V1 grounding tab only
- 8** no grounding tab and no boardlocks
- B** V2 grounding tab + LIF boardlocks (PCB = .062 [1.6])

Packaging:

- R** reel (9 Pos only, 100/reel)
- T** tube

Contact plating:

- 1** 7.9µ" (0.2µm Au)
- 2** 15.7µ" (0.4µm Au)
- 3** 19.7µ" (0.5µm Au)
- 4** 31.5µ" (0.8µm Au)
- 6** 50µ" (1.27µm Au)

Mounting options:

- 1** rear insert 4-40
- 2** rear insert M3
- 5** installed front screwlock 4-40
- 6** fixed front screwlock 4-40

■ : Standard options

**Right-Angle Board Mount Connectors
Front Metal Shell**

617 SERIES

SPECIFICATIONS:

MATERIALS AND PLATINGS

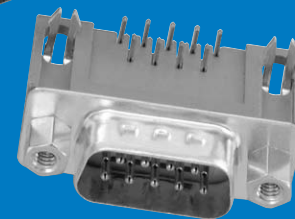
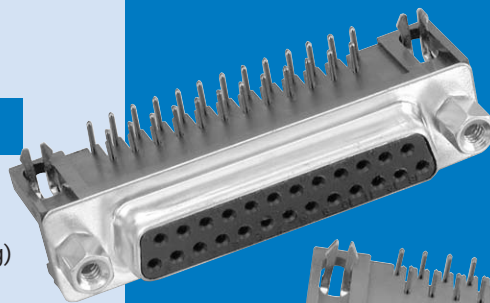
| | |
|-----------------|---|
| Shells | Steel, tin plated |
| Contacts | Precision formed copper alloy |
| Contact Plating | Gold over nickel |
| Contact Forces | Engagement: 12 oz. max. (340.2 g) Separation: .75 oz. min. (21.26 g) |

ELECTRICAL DATA

| | |
|---------------------------------|--|
| Current Rating | 5 amps |
| Dielectric Withstanding Voltage | 1000 VAC/60 sec. |
| Dielectric | Glass filled thermoplastic, black, UL 94 VO |
| Contact Resistance | 15 milliohms max. |

CLIMATIC DATA

| | |
|-------------------|--------------------------------|
| Temperature Range | -67°F (-55°C) to 221°F (105°C) |
|-------------------|--------------------------------|

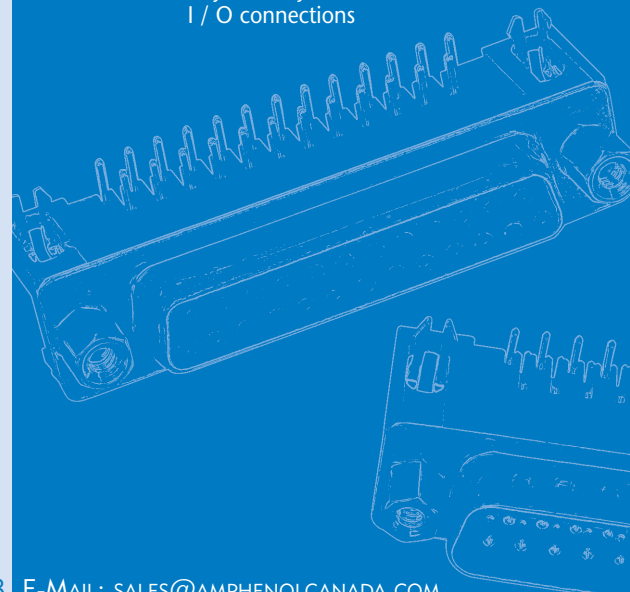


Amphenol's 617 series of right angle commercial connectors provide high performance at competitive prices.

The front metal shell helps to provide reduced EMI/ RFI emissions, and the contacts are selectively plated to provide additional high performance. The 617 series are available in a variety of board mounting and grounding options including arrowhead boardlocks and #4-40 threaded inserts.

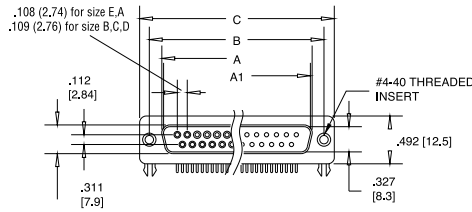
Front mounting holes are also available threaded, un-threaded and with installed female hex screwlocks.

- Industrial
- Telecom
- Any industry standard I / O connections

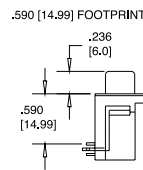
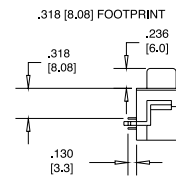
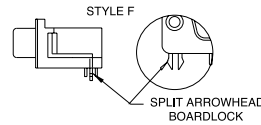
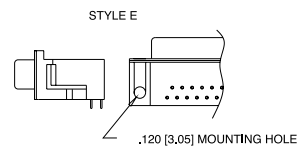
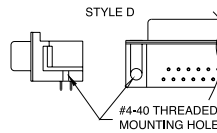
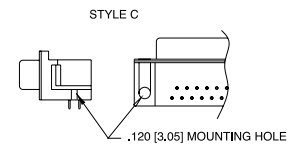
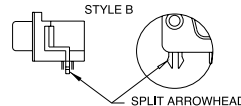
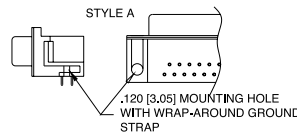
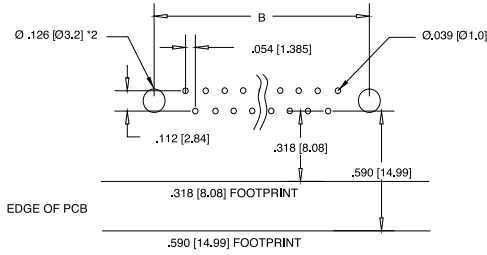
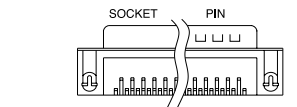


INCHES (MM)

DIMENSIONS



| CONTACTS | A SOCKET | A1 PIN | B | C |
|----------|-----------------|------------------|-----------------|-----------------|
| 9 | .642 [16.30] | .666 [16.92] | .984 [25.0] | 1.213 [30.8] |
| 15 | .969 [24.6] | .994 [25.25] | 1.311 [33.3] | 1.543 [39.2] |
| 25 | 1.508 [38.3] | 1.534 [38.96] | 1.854 [47.1] | 2.091 [53.1] |
| 37 | 2.157 [54.8] | 2.182 [55.42] | 2.50 [63.5] | 2.732 [69.4] |



ORDERING INFORMATION

617 - X - 0XX - X - XX - X - XX - X

Series

Number of Contacts
09, 15, 25, 37

Variation Code

E for U & Y Footprint

Contact

- 20 Tin plated receptacle
- 21 Tin plated plug with grounding indents

Housing Characteristics

Code

- 0 .120 (3.05) clear hole
- 1 #4-40 threaded hole
- 2 #4-40 threaded hole with female screwlock
- 4 Fixed female round screwlock

Panel Mounting Options

Code

BF

Contact Plating

Engagement area 3μ" (.076μm) gold flash, terminal end area 100μ"/200μ" (2.54μm/5.08μm) tin/lead underplate of 50μ" (1.27μm) nickel
 Engagement area 15μ" (.381μm) gold flash, terminal end area 100μ"/200μ" (2.54μm/5.08μm) tin/lead underplate of 50μ" (1.27μm) nickel
 Engagement area 30μ" (.76μm) gold, terminal end area 100μ"/200μ" (2.54μm/5.08μm) tin/lead underplate of 50μ" (1.27μm) nickel

| .318 (8.08) Footprint | .590 (14.99) Footprint | Description of PC Board Mounting Characteristics | Style |
|-----------------------------|------------------------------|---|-------|
| A | | .120 (3.05) diameter mtg hole with wrap-around ground strap | A |
| C | | split arrowhead boardlock | B |
| D | U | .120 (3.05) diameter mtg hole | C&E |
| J | | #4-40 threaded mtg hole | D |
| | Y | split arrowhead boardlock | F |

Code

- P Pin (male)
- S Socket (female)

Contact Type

- Pin (male)
- Socket (female)

For filtered version, see page 56.

Dual Port Connectors

617 H SERIES

SPECIFICATIONS:

MATERIALS AND PLATINGS

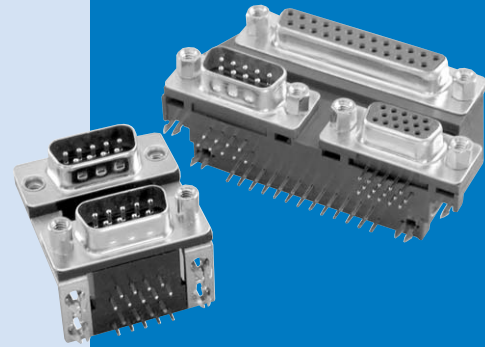
| | |
|-----------------|---|
| Shells | Steel, tin plated |
| Contacts | Precision formed copper alloy |
| Contact Plating | Gold over nickel |
| Contact Forces | Engagement: 12 oz. max. (340.2 g) Separation: .75 oz. min. (21.26 g) |

ELECTRICAL DATA

| | |
|---------------------------------|--|
| Current Rating | 5 amps |
| Dielectric Withstanding Voltage | 1000 VAC/60 sec. |
| Dielectric | Glass filled thermoplastic, black, UL 94 VO |
| Contact Resistance | 15 milliohms max. |

CLIMATIC DATA

| | |
|-------------------|--------------------------------|
| Temperature Range | -67°F (-55°C) to 221°F (105°C) |
|-------------------|--------------------------------|

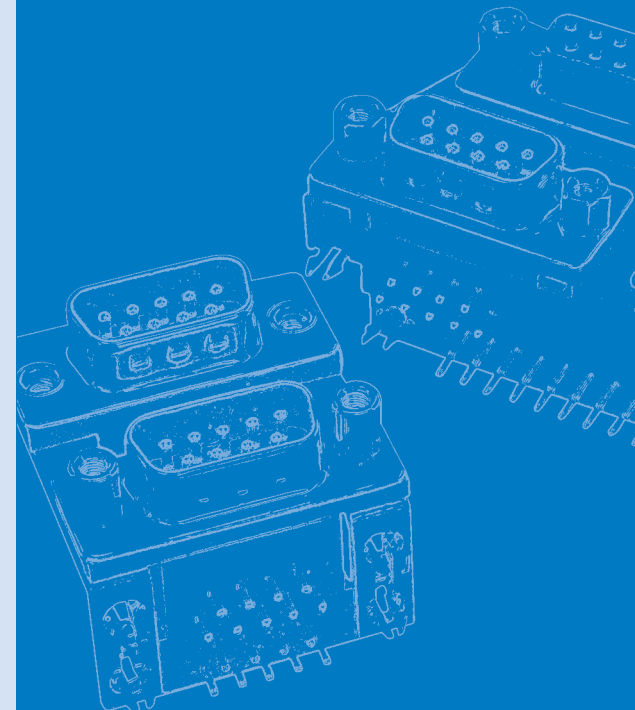


Amphenol's 617 series dual port connectors are a state of the art design. The front metal shell helps reduce EMI/RFI emissions.

Contacts are selectively plated for high performance at a low cost.

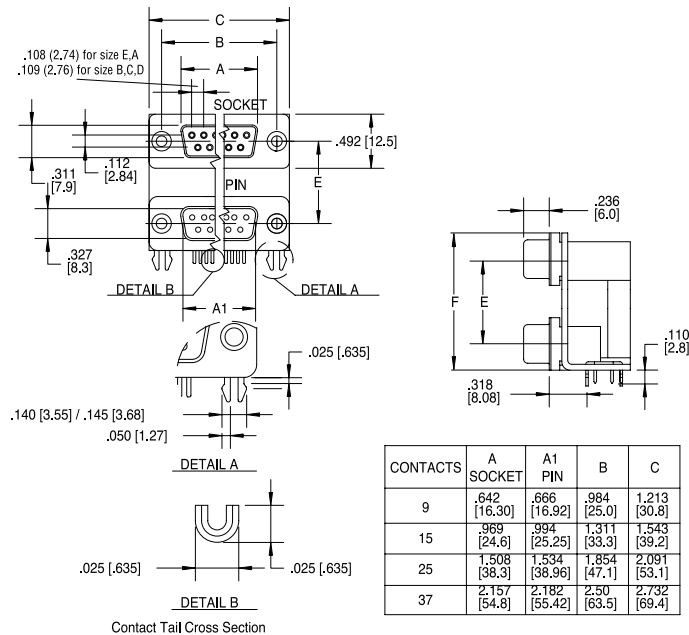
Designed to save PC board space, Amphenol's dual port "D" provides two input output connectors in a minimal amount of board space.

These connectors are available with various stacking options: same gender, mixed gender and multiple pin counts.

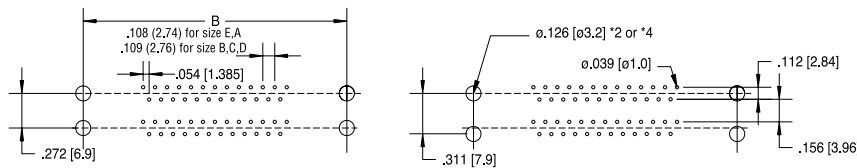


INCHES (MM)

DIMENSIONS



| Code Letter | Product Description | | Dimensions | |
|-------------|---------------------|------------------|---------------------------------|------------------|
| | Top Connector | Bottom Connector | E | F |
| A | Pin | Pin | 0.900 ± 0.010 (22.86 ± 0.25) | 1.415 (35.94) |
| B | Socket | Socket | | |
| C | Pin | Socket | | |
| D | Socket | Pin | 0.750 ± 0.010 (19.05 ± 0.25) | 1.265 (32.13) |
| E | Pin | Pin | | |
| F | Socket | Socket | | |
| G | Pin | Socket | 0.625 ± 0.010 (15.88 ± 0.25) | 1.140 (28.96) |
| H | Socket | Pin | | |
| J | Pin | Pin | | |
| K | Socket | Socket | 0.625 ± 0.010 (15.88 ± 0.25) | 1.140 (28.96) |
| L | Pin | Socket | | |
| M | Socket | Pin | | |



PCB EDGE

ORDERING INFORMATION

617H - X - XX - X - XX - X - XX - X

Series
617H Dual port;
right angle solder tail

Code Boardlock
C Boardlock option
O No PC boardlock

Code Number of Contacts

| | | | |
|----|---------|------|--------------------|
| 18 | 2 x 9 | 15 | 15 over blank |
| 30 | 2 x 15 | 34 | 9 / 25 |
| 50 | 2 x 25 | 43 | 25 / 9+9 |
| 74 | 2 x 37 | H15A | VGA / Triple Audio |
| 40 | 15 / 25 | | |

Consult factory for other available configurations

Variation Code
L for .311 (7.89) Footprint

Code Housing Characteristics

- 00 Steel shell, tin plated receptacles without grounding dimples (options B, F, K)
- 01 Steel shells, tin plated plugs with grounding dimples (options A, E, J)
- 03 Steel shells, tin plated, plug shell with grounding dimples and receptacle shell without dimples (options C,G,L,D,H,M)

Code Panel Mounting Options

- 0 120° clear hole
- 1 #4-40 threaded hole
- 2 #4-40 threaded hole with female screwlock

Code Contact Plating

- BF Engagement area 3µ (.076µm) gold flash, terminal end area 100µ/200µ tin/lead, (2.54µm/5.08µm) tin/lead underplate of 50µ (1.27µm) nickel
- CF Engagement area 15µ (.381µm) gold flash, terminal end area 100µ/200µ (2.54µm/5.08µm) tin/lead underplate of 50µ (1.27µm) nickel
- AJ Engagement area 30µ (.76µm) gold, terminal end area 100µ/200µ (2.54µm/5.08µm) tin/lead underplate of 50µ (1.27µm) nickel

| 58.064 (22.86) Spacing | 48.388 (19.05) Spacing | 40.31 (15.87) Spacing | Product Description | |
|------------------------------|------------------------------|-----------------------------|---------------------|------------------|
| | | | Top Connector | Bottom Connector |
| A | E | J | Pin | Pin |
| B | F | K | Socket | Socket |
| C | G | L | Pin | Socket |
| D | H | M | Socket | Pin |

For filtered version, see page 55.

**High Temperature Right Angle,
Board Mount Connectors Front Metal Shell**

SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|-----------------------|--|
| Shells | Steel/nickel plated |
| Contacts | Precision formed copper alloy |
| Contact Plating | Gold over nickel |
| Process Compatibility | IR - air convection: 500° F (260°) for 20 seconds |

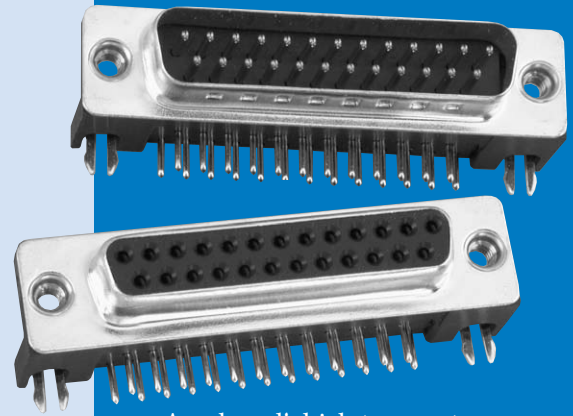
ELECTRICAL DATA

| | |
|--------------------|--|
| Current Rating | 5 amps |
| Voltage Rating | 600 V |
| Dielectric | Glass filled thermoplastic, black, UL 94 VO |
| Contact Resistance | 10 milliohms (max.) |

CLIMATIC DATA

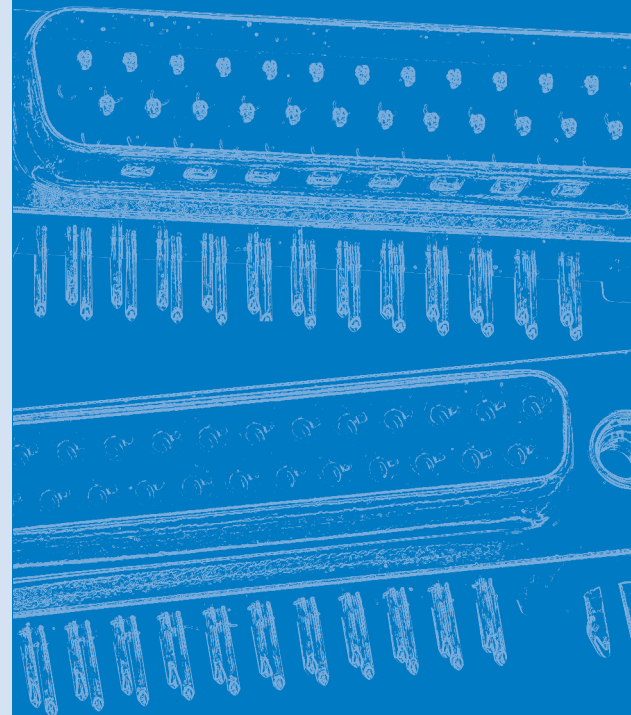
| | |
|-------------------|--|
| Temperature Range | Environmental: -67°F (-55°C) to 257°F (125°C) |
|-------------------|--|

17 HTN SERIES



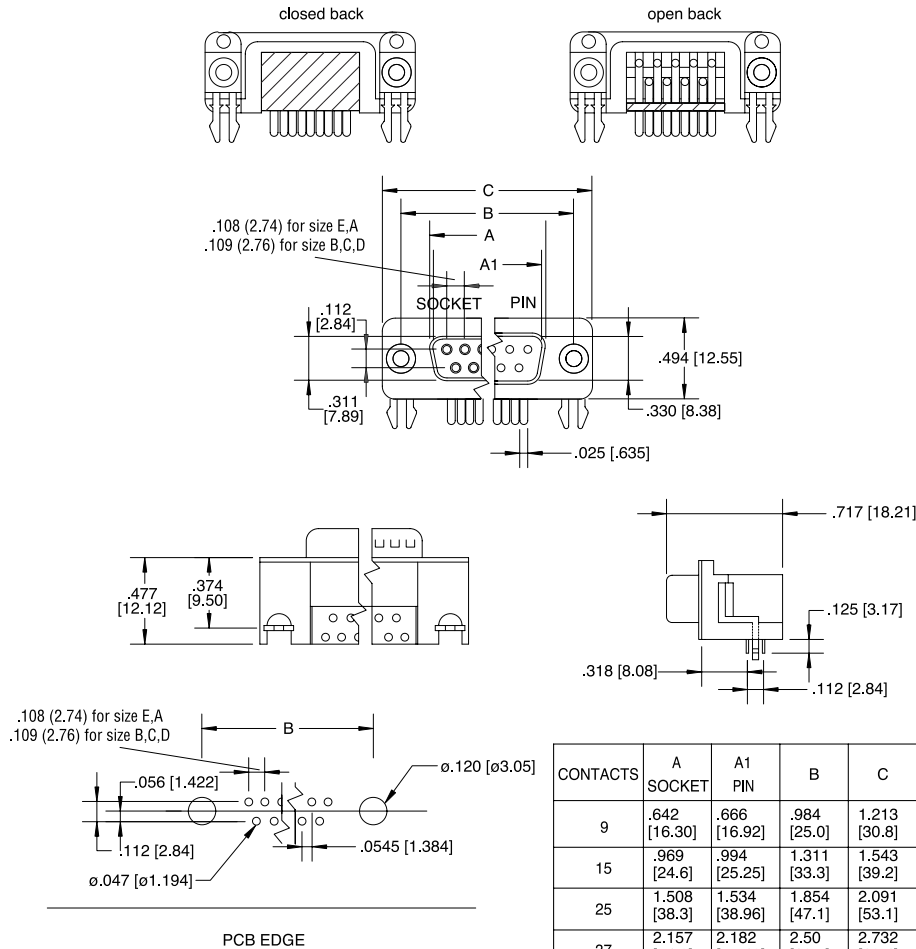
Amphenol's high temperature series meets the market demand for connectors that can withstand the high temperature soldering process. These connectors are compatible with surface-mount, infrared reflow soldering process.

17HTN Series right-angle connectors are available in 9, 15, 25 and 37 positions.



INCHES (MM)

DIMENSIONS



ORDERING INFORMATION

17HTN - X - X - XX - X - C - X

- Series** _____
- Code** **Number of contacts** _____
- E 9
- A 15
- B 25
- C 37
- Code** **Contact** _____
- P Pin (male)
- S Socket
- Code** **Panel Mounting Options** _____
- 4R #4-40 Threaded hole
- 4F #4-40 Female screwlocks

- Code** **Back Configuration**
- Blank Closed back
- O Open back
- Code** **Packaging**
- C Cartons
- Code** **Contact Plating**
- 0 3µ" (.07µm) flash gold
terminal end area 100µ"/200µ" (2.54µm/5.08µm)
-tin/lead, underplate of 50µ" (1.27µm) nickel
Engagement area 10µ" (.25µm) gold,
- 1 terminal end area 100µ"/200µ" (2.54µm/5.08µm)
-tin/lead, underplate of 50µ" (1.27µm) nickel
Engagement area 30µ" (.76µm) gold,
- 2 terminal end area 100µ"/200µ" (2.54µm/5.08µm)
-tin/lead, underplate of 50µ" (1.27µm) nickel
15µ" (.38µm)
- 3 terminal end area 100µ"/200µ" (2.54µm/5.08µm)
-tin/lead, underplate of 50µ" (1.27µm) nickel

**High Temperature
Straight Board Mount Connectors**

SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|-----------------|-------------------------------|
| Shells | Steel/nickel plated |
| Contacts | Precision formed copper alloy |
| Contact Plating | Gold over nickel |

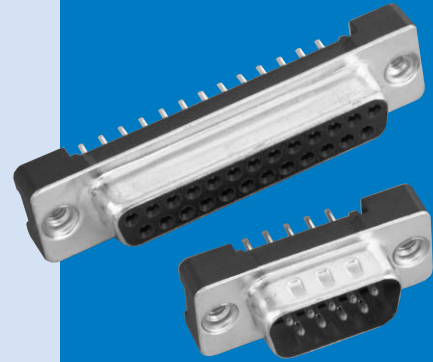
ELECTRICAL DATA

| | |
|--------------------|--|
| Current Rating | 5 amps |
| Voltage Rating | 600 V |
| Dielectric | Glass filled thermoplastic, black, UL 94 VO |
| Contact Resistance | 10 milliohms (max.) |

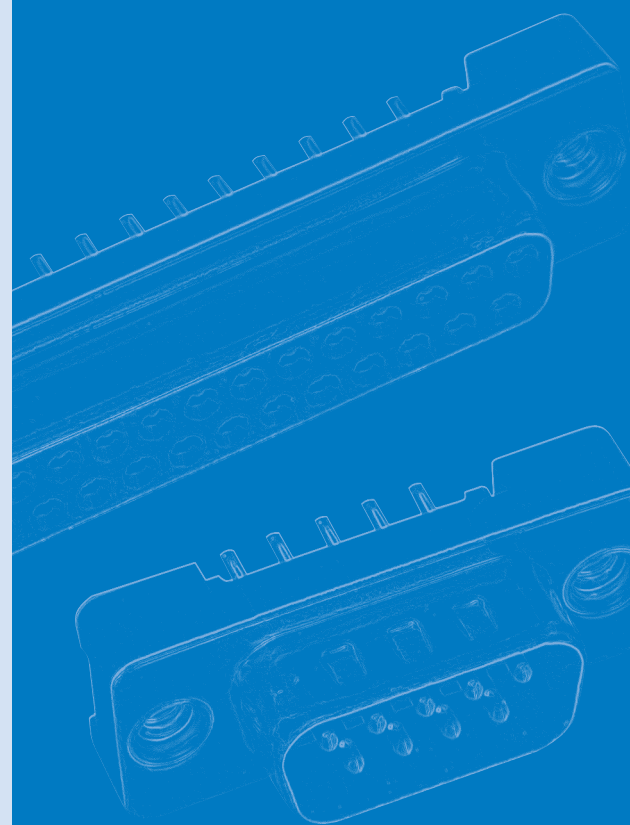
CLIMATIC DATA

| | |
|-----------------------|---|
| Temperature Range | Environmental: -67°F (-55°C) to 302°F (150°C) |
| Process Compatibility | IR-Air Convection 500°F (260°C) for 20 seconds |

617S SERIES

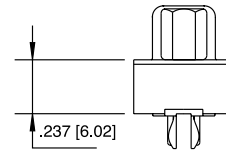
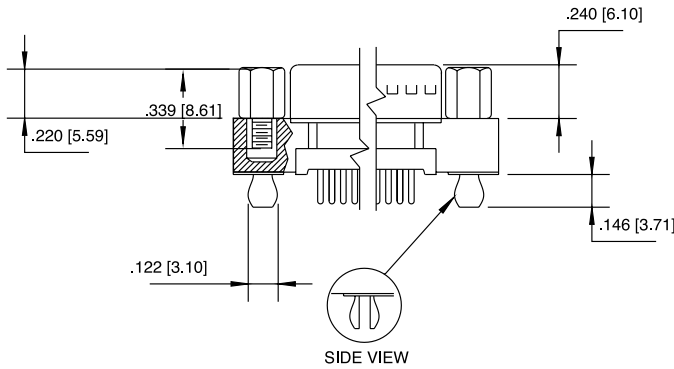
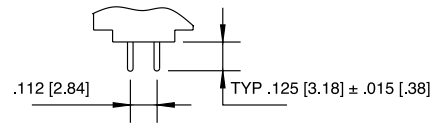
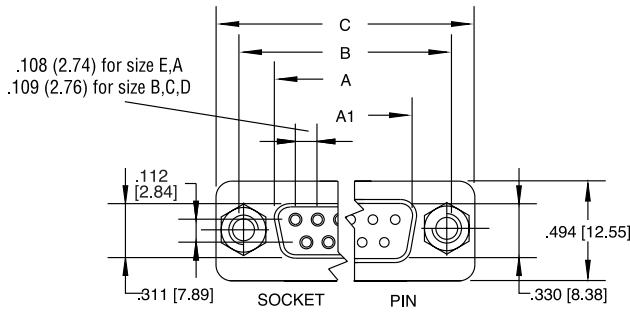


Amphenol's high temperature, low profile D-Sub connector gives you a high quality, reliable commercial connector to meet today's market demands.

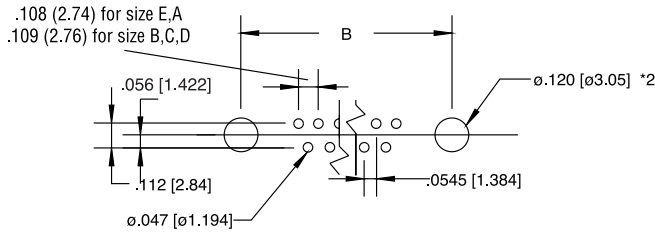


INCHES (MM)

DIMENSIONS



| CONTACTS | A SOCKET | A1 PIN | B | C |
|----------|-----------------|------------------|-----------------|-----------------|
| 9 | .642 [16.30] | .666 [16.92] | .984 [25.0] | 1.213 [30.8] |
| 15 | .969 [24.6] | .994 [25.25] | 1.311 [33.3] | 1.543 [39.2] |
| 25 | 1.508 [38.3] | 1.534 [38.96] | 1.854 [47.1] | 2.091 [53.1] |
| 37 | 2.157 [54.8] | 2.182 [55.42] | 2.50 [63.5] | 2.732 [69.4] |



ORDERING INFORMATION

617S - C - 0XX - X - XX - X - XX

| | | | |
|---------------------------|--|-------------|---|
| Series | _____ | Code | Housing Characteristics |
| Code | Boardlock | 20 | Tin plated receptacle |
| C | Split arrowhead boardlock | 21 | Tin plated |
| O | No boardlock | | |
| Number of contacts | _____ | Code | Panel Mounting Options |
| 9, 15, 25 or 37 | | 1 | #4-40 threaded hole |
| | | 2 | #4-40 threaded hole with female screwlock |
| | | 3 | M-3 threaded hole |
| Code | Gender | | |
| P | Pin (male) | | |
| S | Socket (female) | | |
| Code | Contact Plating | | |
| BJ | Engagement area 10µ" (2.54µ), terminal end area 100µ"/200µ" (2.54µ/5.08µ) -tin/lead, underplate of 50µ" (1.27µ) nickel | | |
| AJ | Engagement area 30µ" (.76µ) gold, terminal end area 100µ"/200µ" (2.54µ/5.08µ) -tin/lead, underplate of 50µ" (1.27µ) nickel | | |

Stamped And Formed Contacts Solder-Cup And Straight PCB Termination

Standards: UL File: E149426
Connectors according to: MIL C24308 - NFC 93425-HE5

SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|----------------|--|
| Shells | Steel |
| Insulator | Glass-filled thermoplastic, UL 94V-0 |
| Pin Contact | Brass, selected gold in mating area; 100µ" (2.54µm) min. tin-lead on termination area over 50µ" (1.27µm) min. nickel |
| Socket Contact | Phosphor bronze, selected gold in mating area; 100µ" (2.54µ) min. tin-lead on termination area over 50µ" (1.27µm) min. nickel |
| Rear Insert | Brass, 100µ" (2.54µm) min. nickel plated |
| Boardlock | Brass, 100µ" (2.54µm) min. nickel plated |
| Screwlock | Brass, 100µ" (2.54µm) min. nickel plated |

ELECTRICAL DATA

| | |
|-----------------------|-----------------------------------|
| Current Rating | Standard Density: 5A per contact |
| Voltage Rating | 250V AC/ rms 50Hz |
| Withstanding Voltage | 1000V AC/ rms 50Hz for one minute |
| Insulation Resistance | 1000MΩ at 500V DC |
| Contact Resistance | 20 mΩ max. |

CLIMATIC DATA

Operating Temperature -67°F (-55°C) to +257°F (125°C)

MECHANICAL DATA

Single Contact Insertion Force 1.19 lb. (0.54 kg.) max.
Single Contact Withdrawal Force 0.13 lb. (0.06 kg.) min.

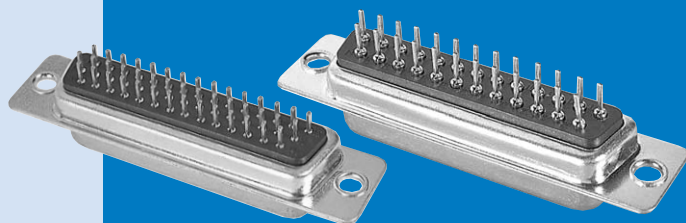
Mating and Unmating Force
Unit: lb. (kg.)

| No. of Pos | SD | |
|------------|---------------|---------------|
| | Mate (max.) | Unmate (min.) |
| 9 | 3.05 (6.74) | 0.36 (0.79) |
| 15 | 5.09 (11.24) | 0.46 (1.01) |
| 25 | 8.44 (18.66) | 0.81 (1.8) |
| 37 | 12.51 (27.65) | 1.1 (2.47) |
| 50 | 14.65 (32.38) | 1.6 (3.56) |

Standard plating thicknesses

- gold flash
- 15µ" (0.381µm) gold
- 30µ" (0.76 µm) gold

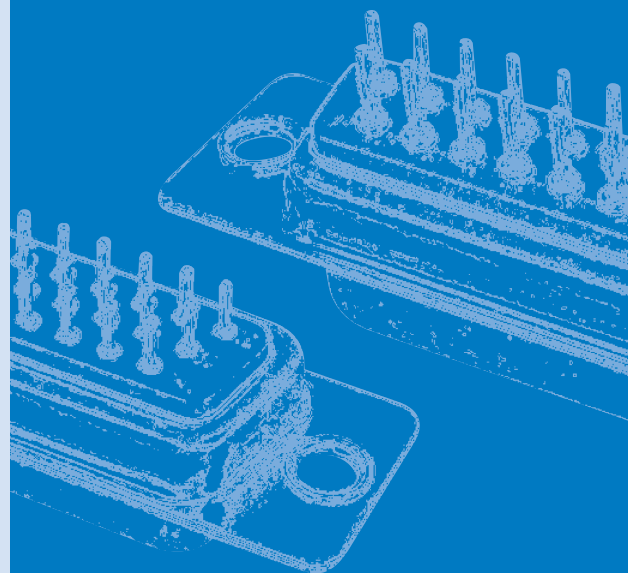
SD SERIES



Amphenol's SD series, features precision stamped and formed contacts with closed entry contact cavities in insulator.

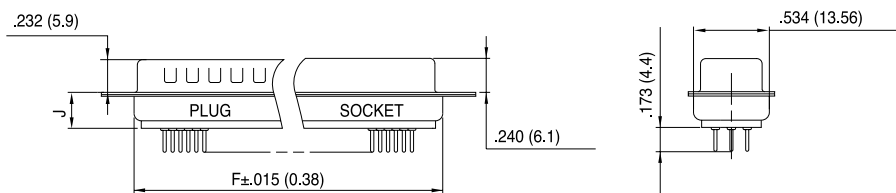
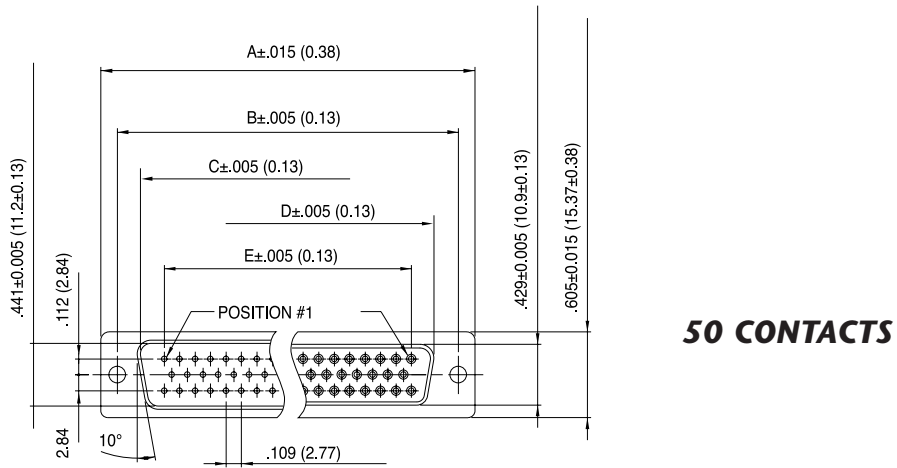
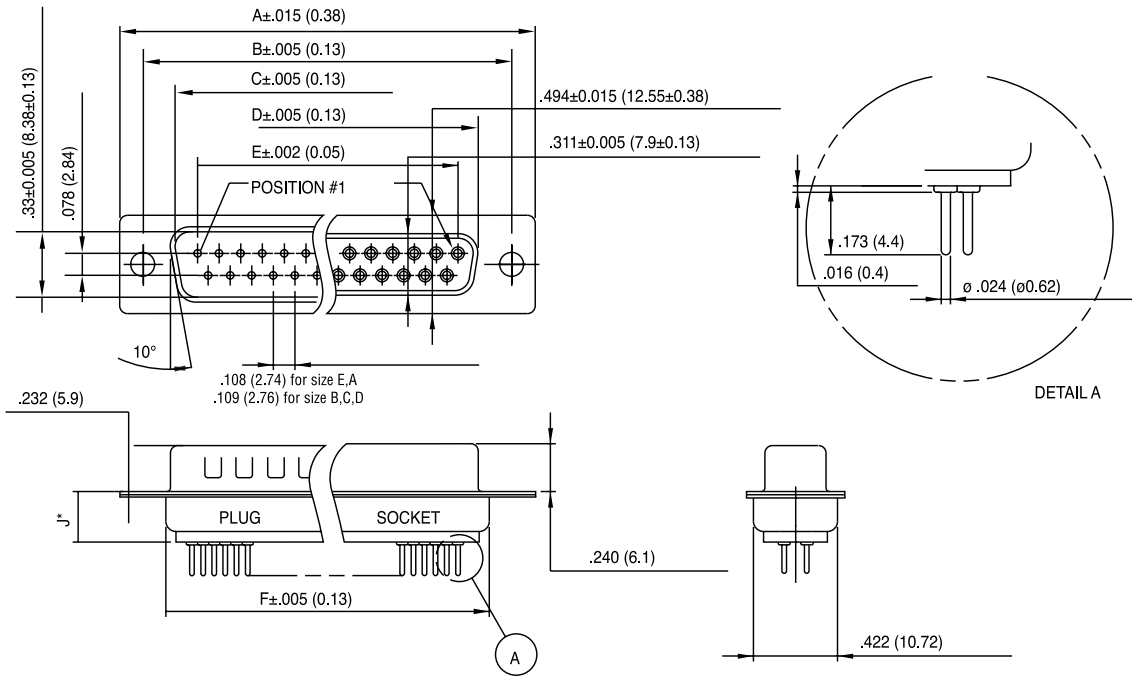
This series provides Amphenol's high standard of quality and reliability, to meet all of your commercial requirements.

- Industrial
- Telecom
- Any industry standard I / O connections



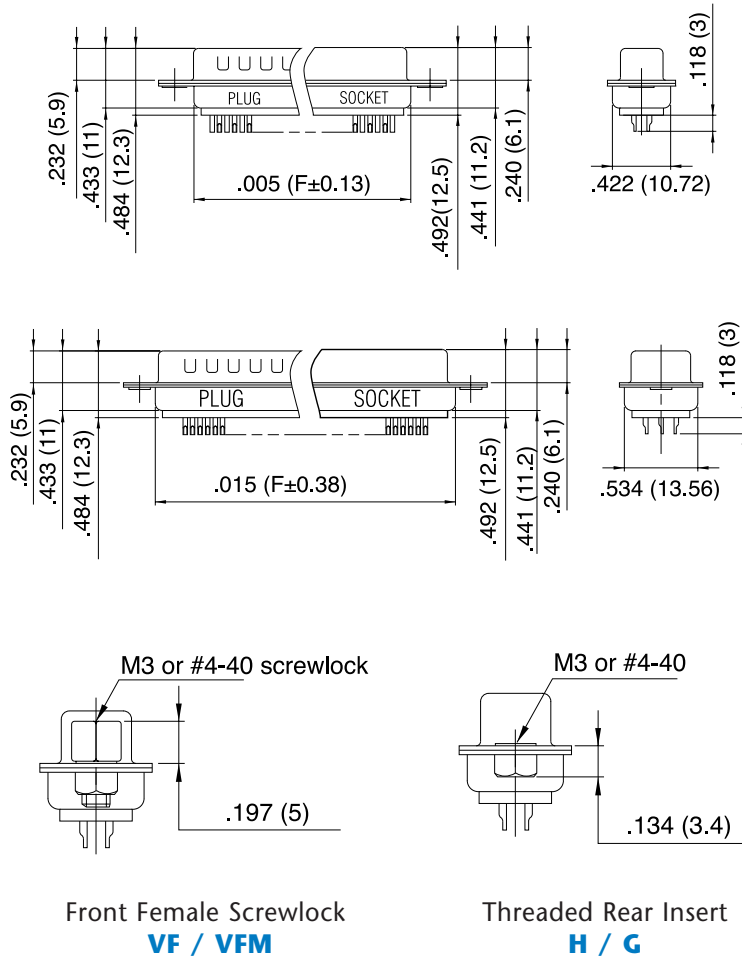
INCHES (MM)

DIMENSIONS

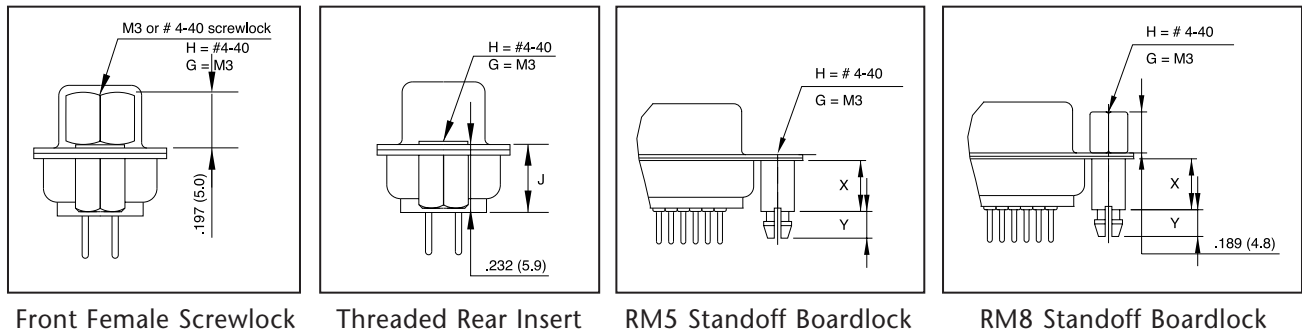


| No. of Contacts | Dimensions | | | | | |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | A | B | C | D | E | F |
| 9 | 1.21 (30.84) | .98 (24.99) | .67 (16.92) | .64 (16.24) | .44 (11.09) | .76 (19.28) |
| 15 | 1.54 (39.24) | 1.31 (33.32) | .972 (24.7) | .97 (24.56) | .76 (19.39) | 1.08 (27.51) |
| 25 | 2.09 (53.04) | 1.85 (47.04) | 1.53 (38.96) | 1.51 (38.38) | 1.31 (33.24) | 1.63 (41.30) |
| 37 | 2.73 (69.32) | 2.50 (63.50) | 2.18 (55.42) | 2.16 (54.76) | 1.96 (49.86) | 2.27 (57.71) |
| 50 | 2.64 (67.06) | 2.41 (61.11) | 2.08 (52.86) | 2.06 (52.34) | 1.75 (44.32) | 2.18 (55.3) |

50 CONTACTS



PANEL MOUNTING OPTION PRINTED CIRCUIT BOARD TERMINATIONS



| | RM5 RM8 | RM5G RM8G |
|---|------------|--------------|
| X | .236 (6.0) | .500 (12.7) |
| Y | .126 (4.2) | .126 (3.2) |
| J | .244 (6.2) | .465 (11.8) |

INCHES (MM)

ORDERING INFORMATION

XXX - XX - X - X - XX - X - XXX - XXX - 309

| | |
|--------------|---|
| Gold Flash | <p>77: tinned shell for receptacle</p> <p>717: tinned shell + dimples for plug</p> |
| 15µ" (0.4µm) | <p>177: tinned shell for receptacle</p> <p>777: tinned shell + dimples for plug</p> |

SD: standard density

Shell size: E, A, B, C, D

Mounting Type:

- H rear insert 4-40
- G rear insert M3
- blank standard rivet .120 (3.05)

H,G must also be used to specify the threading of RM5 or RM8 grounding tabs.

Plating Option:

valid only for 30µ" (0.76µm)

77 C309

or

717 C309

Grounding Tabs*:

RM5 boardlock

RM8 boardlock + front screwlock

*not available with s-cup

Termination

Straight for PCB = OL2

Blank = solder cup

Contact Type:

P pin

S socket

Configuration:

SD 9, 15, 25, 37, 50

For Filtered D-Sub, see page 56.

Fixed Machined Contact Connector

- Standards:
- UL File: E119881
 - Connectors according to MIL C24308

SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|----------------------------|---|
| Shells | Steel yellow chromated over zinc or tinned steel with or without dimples on plug connector |
| Insulator | Glass-filled thermoplastic, UL 94V-0 |
| Rear Insert | Brass, 118µ" up to 197µ" (3µm up to 5µm) tinned over nickel 78µ" up to 118µ" (2µm up to 3µm) |
| Boardlock | Tin-lead plating 157µ" up to 236µ" (4µm up to 6µm) over nickel 78µ" up to 118µ" (2µm up to 3µm) |
| Screwlock | Brass, 236µ" up to 394µ" (6µm up to 10µm) tinned over nickel 78µ" up to 118µ" (2µm up to 3µm) |
| Contacts | D: brass DF: pin = brass Socket = copper alloy |
| Right Angle Version | Selective gold in mating area over 78µ" up to 118µ" (2µm up to 3µm) nickel; 118µ" up to 197µ" (3µm up to 5µm) tin-lead on termination area over 78µ" up to 118µ" (2µm up to 3µm) nickel |
| Straight Version | Full gold plating over 78µ" up to 118µ" (2µm up to 3µm) nickel |

ELECTRICAL DATA

| | |
|------------------------------|----------------------------------|
| Current Rating | 7.5 A |
| Voltage Rating | 300 V AC/rms 50Hz |
| Withstanding Voltage | 1000V AC/rms 50Hz for one minute |
| Insulation Resistance | 5000MΩ |
| Contact Resistance | D: 8.5mΩ max. DF: 5mΩ max. |

CLIMATIC DATA

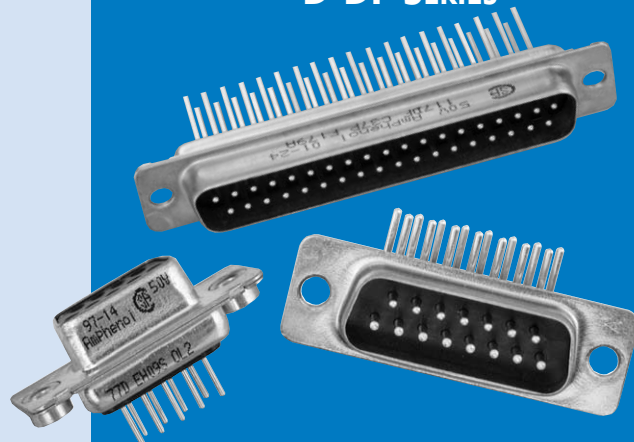
| | |
|------------------------------|--|
| Operating Temperature | D: -67°F (-55°C) to +185°F (85°C), peak at 257°F (125°C) DF: -67°F (-55°C) to + 257°F (125°C) |
|------------------------------|--|

MECHANICAL DATA

| No. of Contacts | Mate (max.) | Unmate (min.) |
|-----------------|---------------|---------------|
| 9 (size E) | 6.74 (3.05) | 0.79 (0.36) |
| 15 (size A) | 11.24 (5.09) | 1.01 (0.46) |
| 25 (size B) | 18.66 (8.44) | 1.8 (0.81) |
| 37 (size C) | 27.65 (12.51) | 2.47 (1.1) |
| 50 (size D) | 32.38 (14.65) | 3.56 (1.6) |

INCHES (MM)

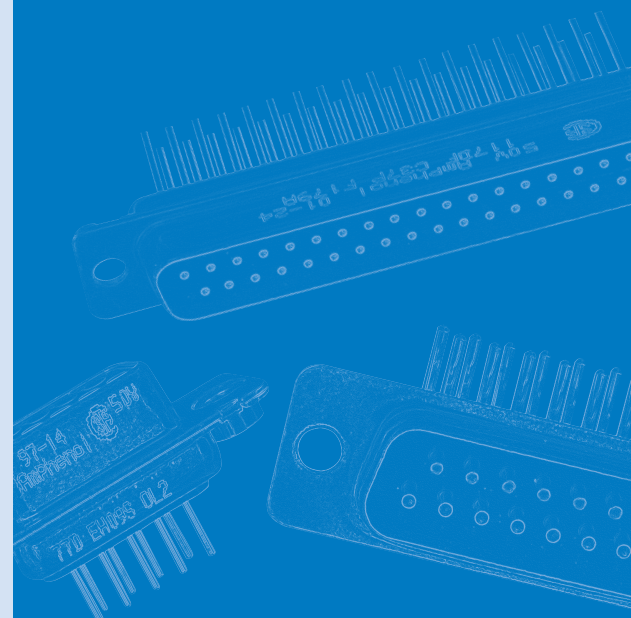
D-DF SERIES



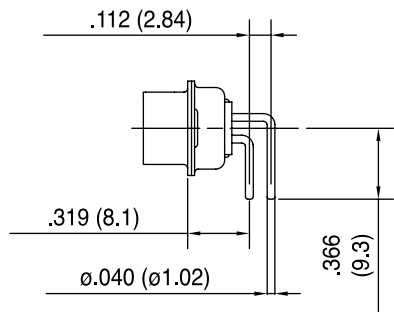
The Amphenol SD series features precision formed contacts, and 4 finger boardlocks.

This series gives you Amphenol's high standards of quality and reliability to meet all of your commercial requirements.

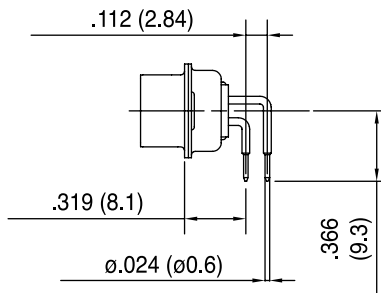
- Industrial
- Telecom
- Any industry standard I / O connections



Without bracket

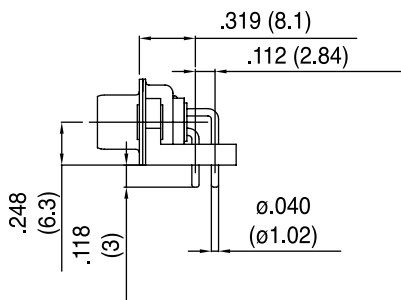


C

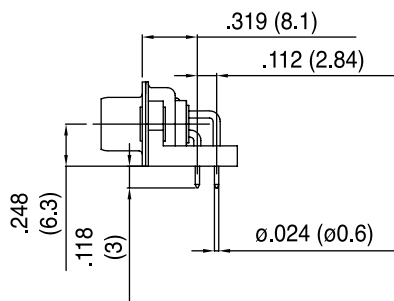


A4

Plastic bracket

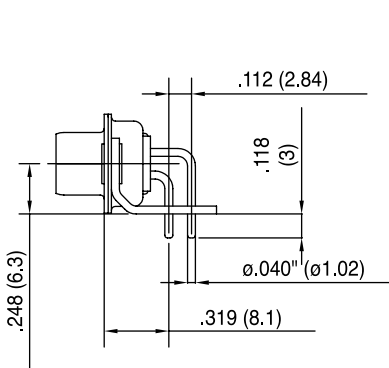


AJ3

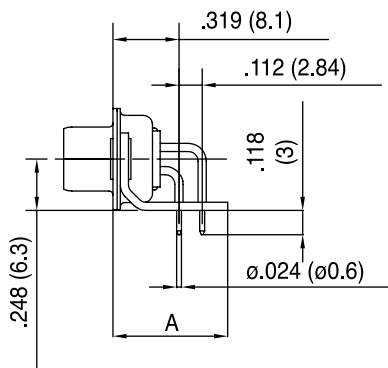


AJ4

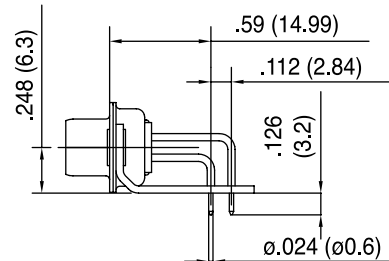
Metal bracket



A

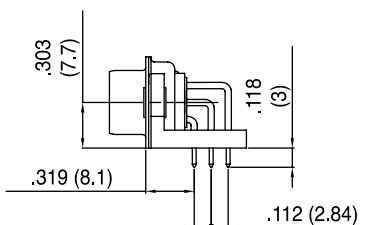


AM4 : A=.519 (13.2)
AZ4 : A=.453 (11.5)

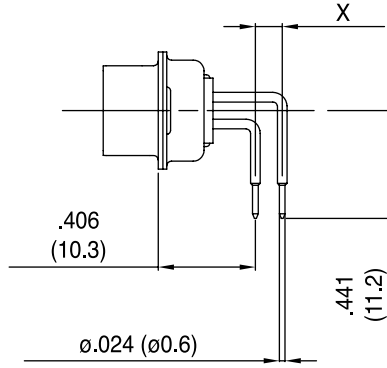


AM4B

50 contacts

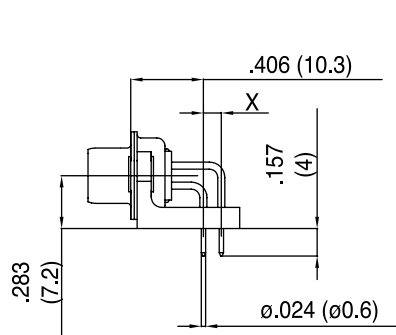


Without bracket

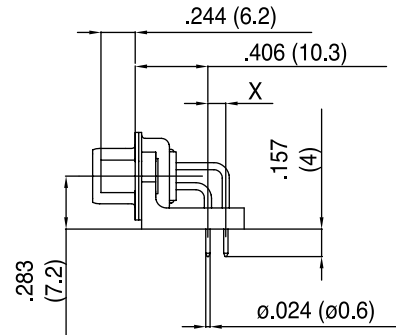


1AON : X= .100 (2.54)
1BON : X= .112 (2.84)

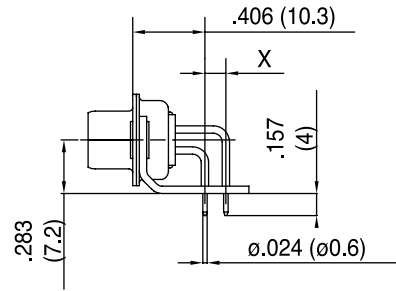
Plastic bracket



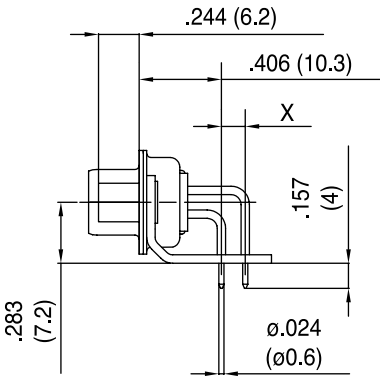
1APN : X= .100 (2.54)
1BPN : X= .112 (2.84)



1AUN : X= .100 (2.54)
1BUN : X= .112 (2.84)

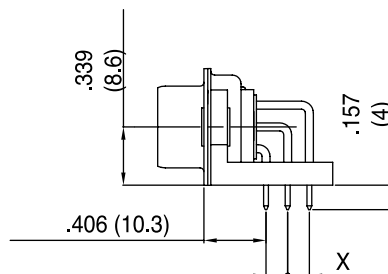


1AMN : X= .100 (2.54)
1BMN : X= .112 (2.84)



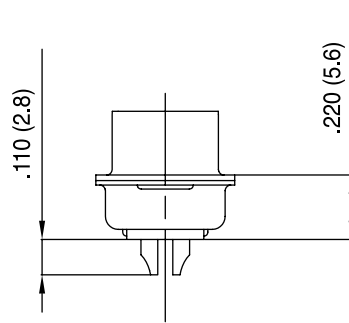
1ATN : X= .100 (2.54)
1BTN : X= .112 (2.84)

50 contacts

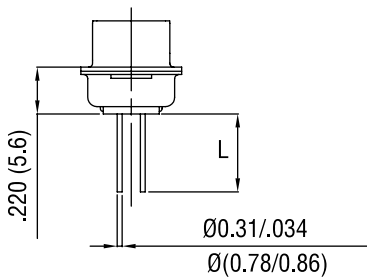


INCHES (MM)

Solder cup

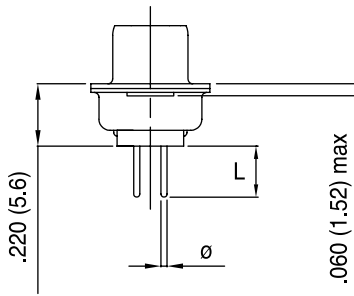


Wire Wrap



| Termination | Nb of wraps | L |
|-------------|-------------|------------|
| F179 | 2 | .378 (9.6) |
| F179A | 3 | .512 (13) |

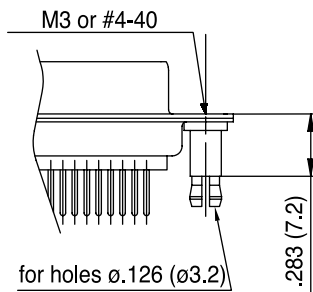
Straight PCB



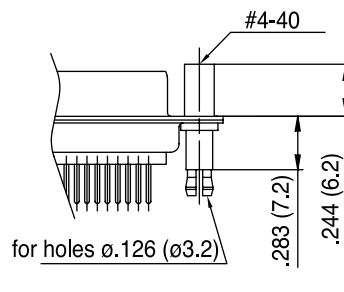
| Termination | Ø | L |
|-------------|-------------|------------|
| U | .024 (0.6) | .126 (3.2) |
| V | .040 (1.02) | .095 (2.4) |
| T | .024 (0.6) | .157 (4) |
| OL2 | .02 (0.6) | .217 (5.5) |

Grounding tabs

For straight termination



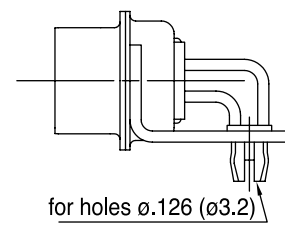
RM5



RM8

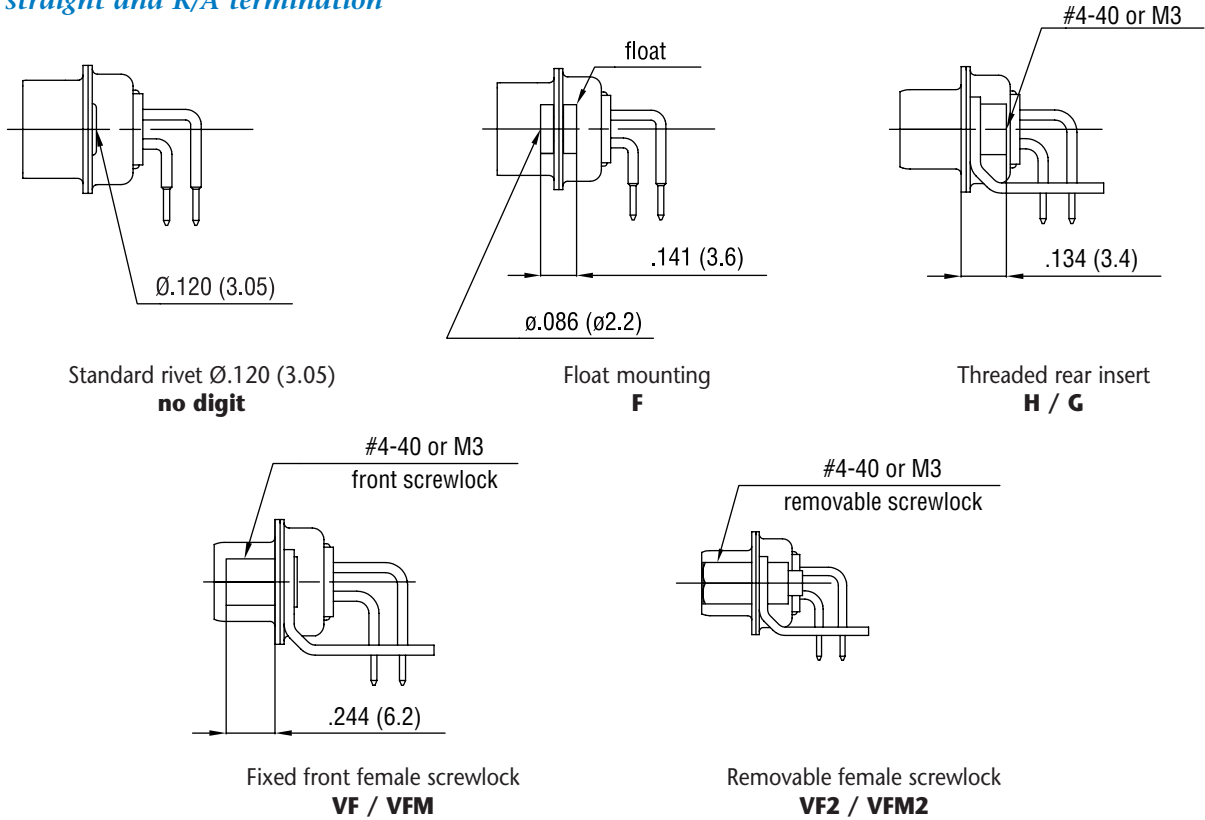
For R/A termination

FOR PCB .062 (1.6)

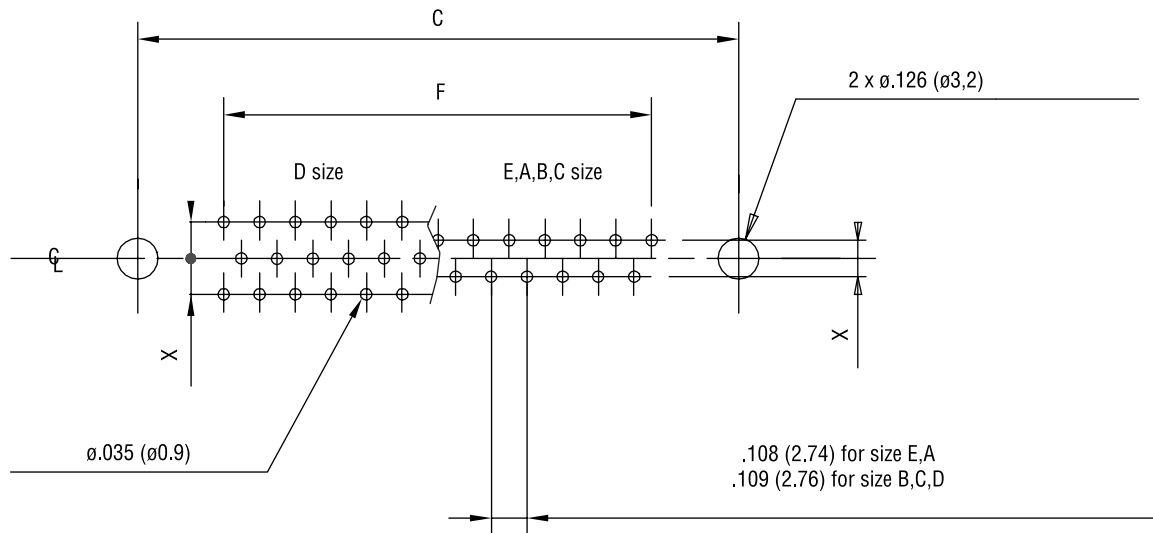


RM6

For straight and R/A termination



RECOMMENDED PCB LAYOUT



For straight PCB: X = .112 (2.84)
 For right angle PCB: MIL: X = .112 (2.84)
 European: X = .100 (2.54), .112 (2.84) in option

| | size E | size A | size B | size C | size D |
|---------------------------------------|--------------|--------------|---------------|---------------|--------------|
| C $\pm .004$ (0.1) | .984 (25) | 1.311 (33.3) | 1.85 (47) | 2.5 (63.5) | 2.406 (61.1) |
| F $\pm .002$ (0.05) | .431 (10.96) | .755 (19.18) | 1.304 (33.12) | 1.956 (49.68) | 1.74 (44.2) |

INCHES (MM)

ORDERING INFORMATION

XXXXX X X XX X XXXXX XXXX X

| | |
|------------------|--|
| 8µ" (0.2µm) | 17D: yellow chromated shell 77D: tinned shell for receptacle 717D: tinned shell + dimples for plug |
| 20µ" (0.5µm) | 17DF: yellow chromated shell 77DF: tinned shell for receptacle 717DF: tinned shell + dimples for plug |
| 30µ" (0.76µm) | 117DF: yellow chromated shell 177DF: tinned shell for receptacle 777DF: tinned shell + dimples for plug |

Shell size: E, A, B, C, D

Mounting Options:

- H rear insert 4-40
- G rear insert M3
- F float mounting
- no digit standard rivet .122 (ø 3.1)
- *H, G must also be used to specify the threading of RM5 grounding tabs.

Configuration: 09, 15, 25, 37, 50

Contact type:

- P pin
- S socket

For specific product

Grounding tabs:

- RM5 for straight PCB mounting*
- RM8 for straight PCB mounting + female lock
- RM6 for right angle PCB mounting
- VF front screwlock 4-40
- VFM front screwlock M3
- VF2 removable screwlock 4-40
- VF2M removable screwlock M3

Termination:

solder cup: no digit

Wire Wrap:

- F179 length .378 (9.6)
- F179A length .512 (13)

Straight PCB:

- U length .126 (3.2) tail ø.024 (ø0.6)
- V length .094 (2.4) tail ø.040 (ø1.02)
- T length .157 (4) tail ø.024 (ø0.6)
- OL2 length .216 (5.5) tail ø.024 (ø0.6)

Right Angle Connector:

- MIL footprint
- without bracket: C tail ø.040 (ø1.02)
 - A4 tail ø.024 (ø0.6)
- plastic bracket:
- AJ3 tail ø.040 (ø1.02)
 - AJ4 tail ø.024 (ø0.6)
- metal bracket:
- A tail ø.040 (ø1.02)
 - AM4 A ø.519 (13.2)
 - AZ4 A ø.453 (11.5)
 - AM4B footprint ø.590 (14.99)
- European footprint
- without bracket: 1AON X .100 (2.54)
 - 1BON X .112 (2.84)
- plastic bracket:
- 1APN X .100 (2.54)
 - 1BPN X .112 (2.84)
 - 1AUN X .100 (2.54)
 - 1BUN X .112 (2.84)
- metal bracket:
- 1AMN X .100 (2.54)
 - 1BMN X .112 (2.84)
 - 1ATN X .100 (2.54)
 - 1BTN X .112 (2.84)

Standard options

For special request, please consult factory

For Filtered D-Sub, see page 56.

Screw Termination

D-ST SERIES

SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|-----------|-------------------------------------|
| Shells | Steel Tin plated |
| Insulator | Glass filled thermoplastic, UL94V-0 |
| Contacts | Machined brass, full gold |

ELECTRICAL DATA

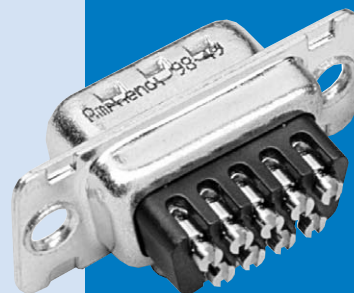
| | |
|-----------------------|----------------------|
| Current Rating | 7,5 A max. |
| Voltage Rating | 300 V RMS at 50 Hz |
| Withstanding Voltage | 1000 V RMS at 50 Hz |
| Insulation Resistance | > 5000 Ω at 500 V DC |
| Contact Resistance | < 5 Ω |

CLIMATIC DATA

| | |
|-----------------------|--|
| Operating Temperature | -67°F (-55°C) to +185°F (85°C), peak at 257°F (125°C) |
| Damp Heat | 21 days 219°F(104°C - 95% HR) |
| Salt Spray | 48 hours |

MECHANICAL DATA

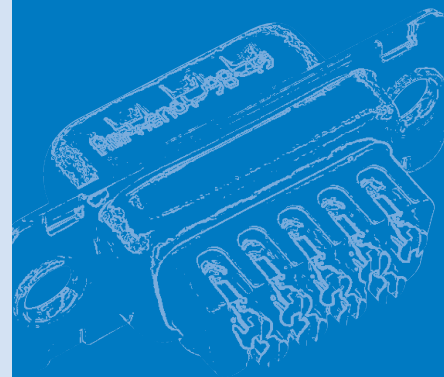
| | |
|---------------|---|
| Cable Type | Solid or stranded |
| Cable Gauge | 0,75 mm ² max. (AWG 18) - For bigger wire, please consult factory |
| Screw Torque | 0,05 mN max. |
| Mating Cycles | 100 (class II) or 500 (class I) |



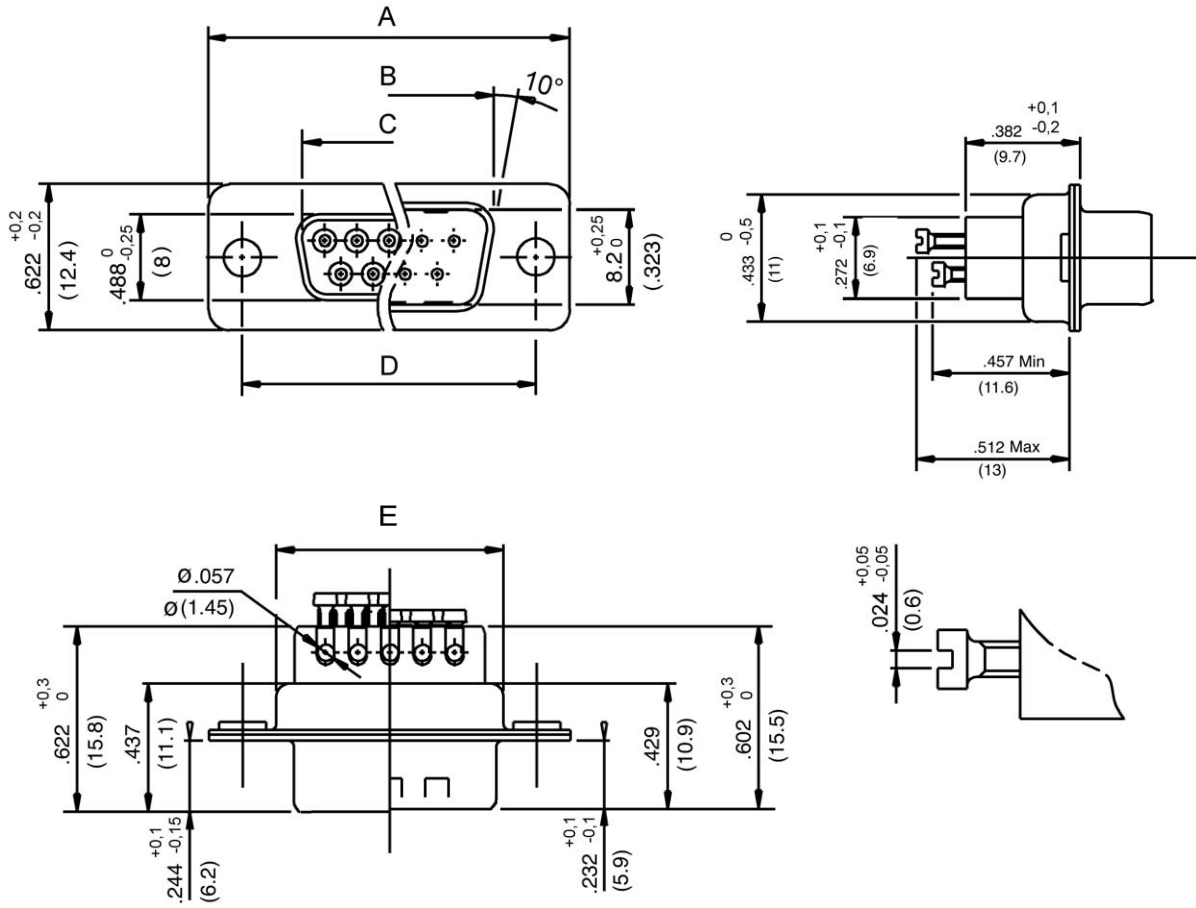
The Amphenol Screw Termination D-Sub series is especially designed for field applications.

These new connectors permit easy wiring without any specific tool; only a standard electrician's screwdriver is required. Due to their reduced overall dimensions, these connectors are compatible with all standard hoods and accessories.

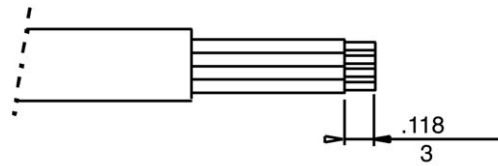
- Industry - control of speed variators and calculators.
- Houses and public buildings - control of heating, air conditioning, lighting, shutters and fire safety.
- Infrastructures - fluids control, motorway tolls and street lighting.



INCHES (MM)



Cable stripping



| SIZE | A $+0.10$ (0.25) -0.10 (0.25) | B 0 -0.08 (0.2) | C $+0.08$ (0.2) 0 | D $+0.04$ (0.1) -0.04 (0.1) | E $+0.04$ (0.1) -0.16 (0.4) |
|------|---------------------------------------|-------------------------|-------------------------|-------------------------------------|-------------------------------------|
| 9 | 1.209 (30.7) | .646 (16.4) | .661 (16.8) | .984 (25) | .370 (19.4) |
| 15 | 1.535 (39) | .976 (24.8) | .988 (25.1) | 1.311 (33.3) | 1.091 (27.7) |
| 25 | 2.083 (52.9) | 1.516 (38.5) | 1.528 (38.8) | 1.850 (47) | 1.630 (41.4) |
| 37 | 2.724 (69.2) | 2.161 (54.9) | 2.177 (55.3) | 2.500 (63.5) | 2.280 (57.9) |

ORDERING INFORMATION

717D - E09 - P - ST - 1

Class II: 77D Female connector
 717D Male connector, shells with dimples

Class I: 177D Female connector
 777D Male connector, shells with dimples

Size and number of contacts E09, A15, B25, C37

Type of contact: P Male
 S Female

Kit connector + hood option: (See following description)
 1 DPPK hood
 2 DSSK hood
 3 DTZK hood
 4 DVZK hood

Contact termination: ST Screw termination

PLASTIC HOODS



DPPK Straight cable entry

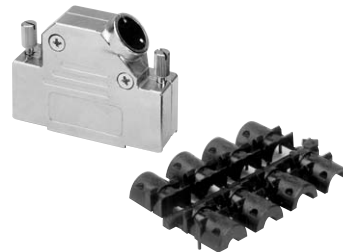


DSSK Angled cable entry

METALLIC HOODS



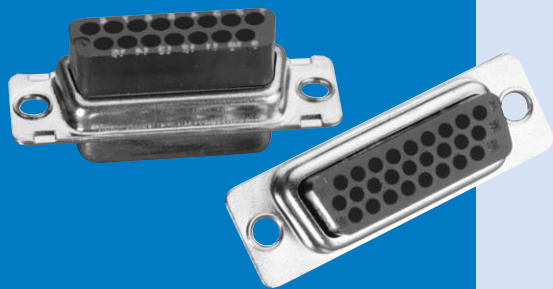
DTZK Straight cable entry



DVZK Angled cable entry

INCHES (MM)

RR-HR SERIES



Designed for high volume production, Amphenol's rear release crimp connector and contacts provide significant cost savings.

- EMI / RFI shell configuration.
- Removable, reusable contacts.
- Automatic and manual tooling available.

- Industrial
- Telecom
- Any industry standard I / O connections

Stamped And Formed Contacts Rear Release Crimp Connectors

- Standards:
- RR: UL File : E64911
 - HR: UL File : E149426
 - Connectors according to MIL C24308

SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|-------------|---|
| Shells | Steel yellow chromated over zinc or tinned steel with or without dimples on plug connector |
| Insulator | Black glass-filled thermoplastic, UL 94V-0 |
| Rear Insert | Brass, 118 μ " up to 197 μ " (3 μ m up to 5 μ m) tinned over nickel 78 μ " up to 118 μ " (2 μ m up to 3 μ m) |
| Screwlock | Brass, 236 μ " up to 394 μ " (6 μ m up to 10 μ m) tinned over nickel 78 μ " up to 118 μ " (2 μ m up to 3 μ m) |

| Contacts | Under plating | Crimp side |
|--------------------------------|-------------------------------|-------------------|
| 8 μ " (0.2 μ m) gold | 78 μ " (2 μ m) nickel | gold flash or tin |
| 20 μ " (0.5 μ m) gold | 78 μ " (2 μ m) nickel | gold flash or tin |
| 30 μ " (0.76 μ m) gold | 78 μ " (2 μ m) nickel | gold flash or tin |

ELECTRICAL DATA

| | |
|-----------------------|--|
| Current Rating | 5A |
| Voltage Rating | 500V AC/rms 50Hz |
| Withstanding Voltage | RR: 1000V AC/rms 50Hz for 1 minute HR: 1000V AC/rms 60Hz for 1 minute |
| Insulation Resistance | RR: 5000M Ω HR: 1000M Ω |
| Contact Resistance | 10m Ω max. |
| Wire Size | 20-28 AWG max. insulation out .05 (Ø1.27) |

CLIMATIC DATA

| | |
|-----------------------|---------------------------------|
| Operating Temperature | 67°F to 221°F (-55°C to +105°C) |
|-----------------------|---------------------------------|

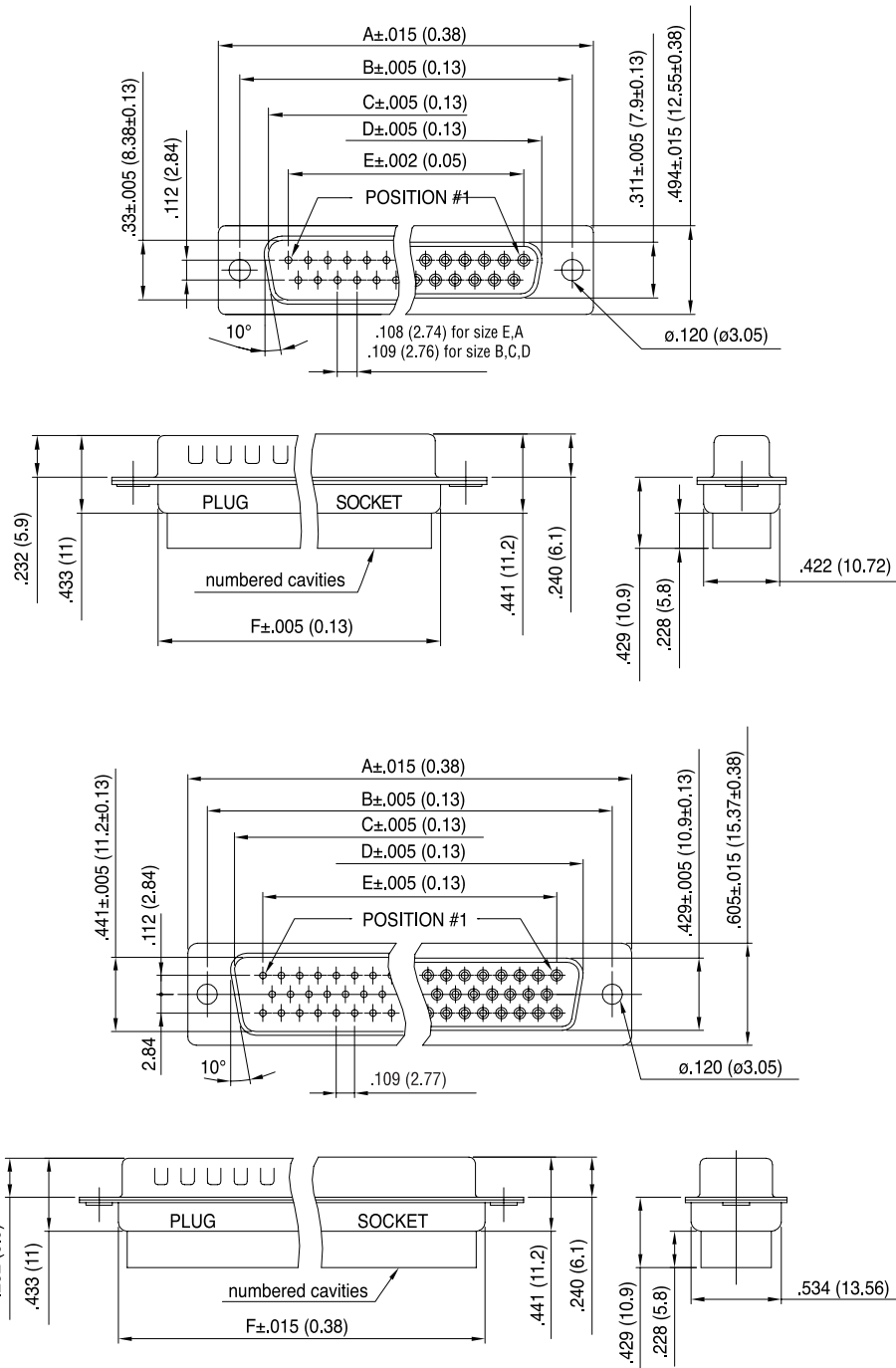
MECHANICAL DATA

Mating and Unmating Force

Unit: lb. (kg.)

| No. of Contacts | | Mate (max.) | | Unmate (min.) | |
|-----------------|-------------|---------------|---------------|---------------|-------------|
| RR | HR | RR | HR | RR | HR |
| 9 (size E) | 15 (size E) | 6.74 (3.05) | 8.42 (3.81) | 0.79 (0.36) | 1.14 (0.52) |
| 15 (size A) | 26 (size A) | 11.24 (5.09) | 13.16 (5.95) | 1.01 (0.46) | 2.32 (1.05) |
| 25 (size B) | 44 (size B) | 18.66 (8.44) | 20.46 (9.26) | 1.8 (0.81) | 3.02 (1.37) |
| 37 (size C) | 62 (size C) | 27.65 (12.51) | 29.78 (13.48) | 2.47 (1.1) | 3.88 (1.76) |
| 50 (size D) | 78 (size D) | 32.38 (14.65) | 34.96 (15.82) | 3.56 (1.6) | 4.46 (2.02) |

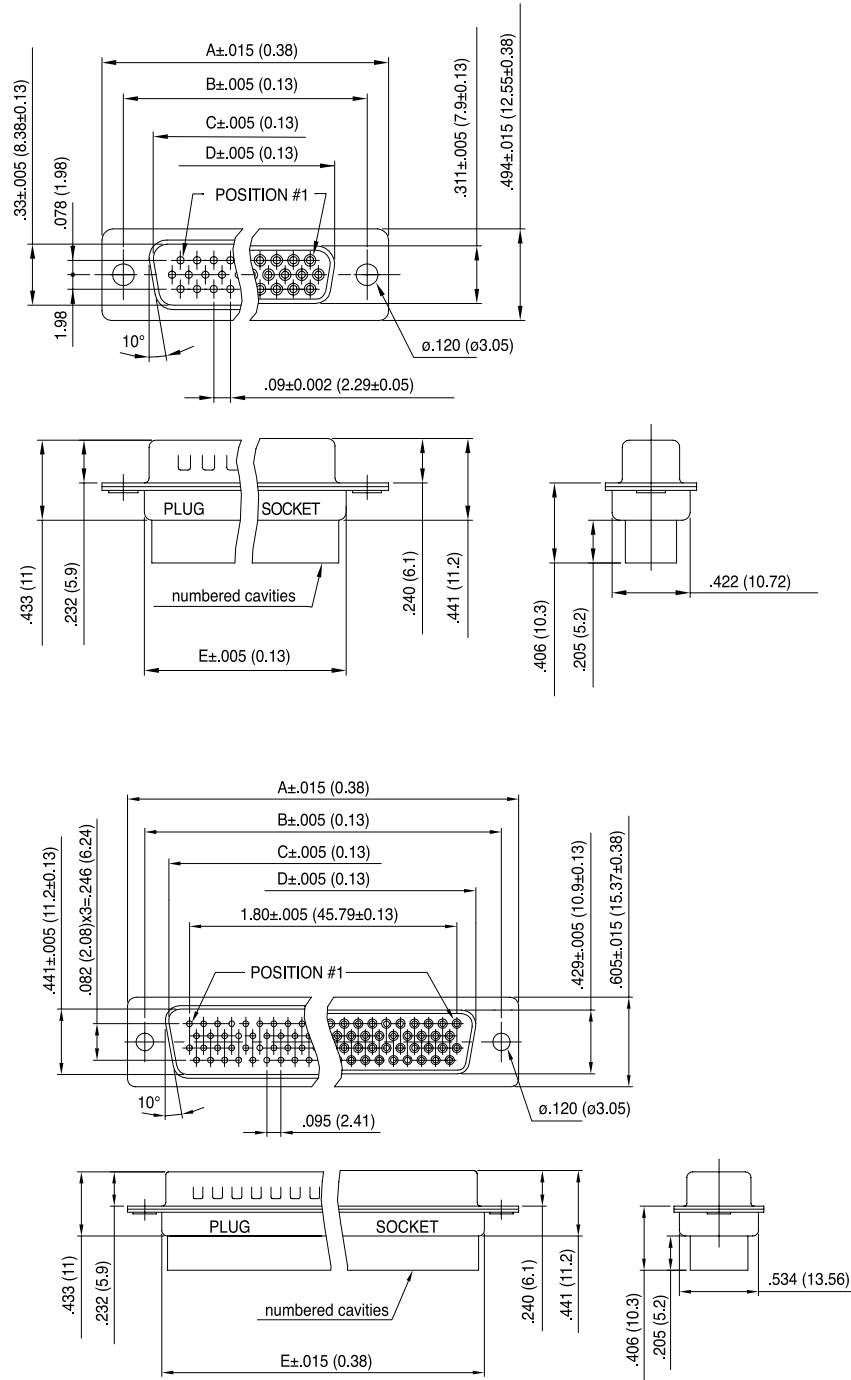
STANDARD DENSITY RR



| No. of Contacts | Dimensions | | | | | |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | A | B | C | D | E | F |
| 9 | 1.21 (30.84) | .98 (24.99) | .67 (16.92) | .64 (16.24) | .44 (11.09) | .76 (19.28) |
| 15 | 1.54 (39.24) | 1.31 (33.32) | .972 (24.7) | .97 (24.56) | .76 (19.39) | 1.08 (27.51) |
| 25 | 2.09 (53.04) | 1.85 (47.04) | 1.53 (38.96) | 1.51 (38.38) | 1.31 (33.24) | 1.63 (41.30) |
| 37 | 2.73 (69.32) | 2.50 (63.50) | 2.18 (55.3) | 2.16 (54.76) | 1.96 (49.86) | 2.27 (57.71) |
| 50 | 2.64 (67) | 2.41 (61.11) | 2.08 (52.86) | 2.06 (52.34) | 1.75 (44.32) | 2.18 (55.3) |

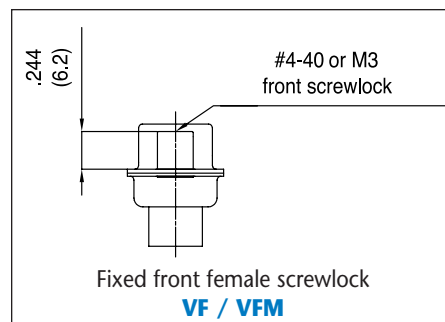
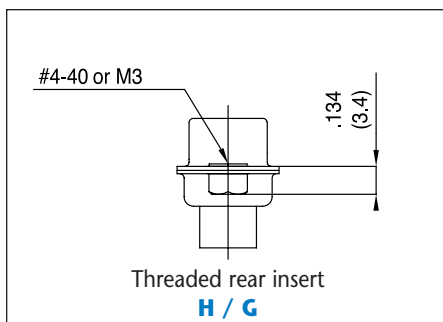
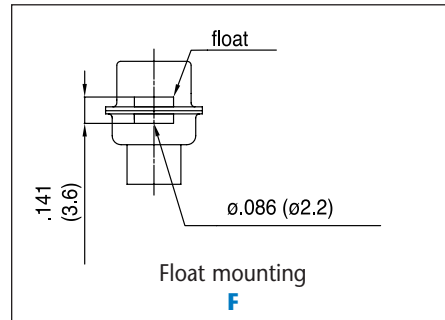
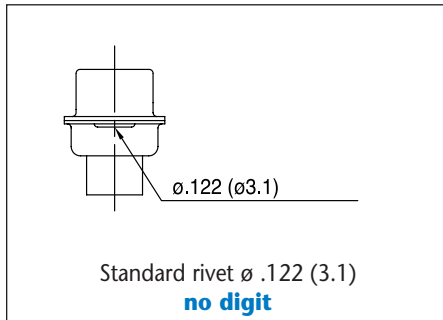
INCHES (MM)

HIGH DENSITY HR

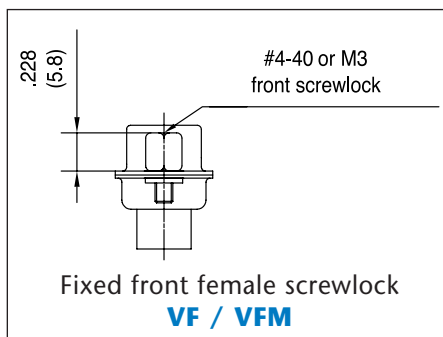
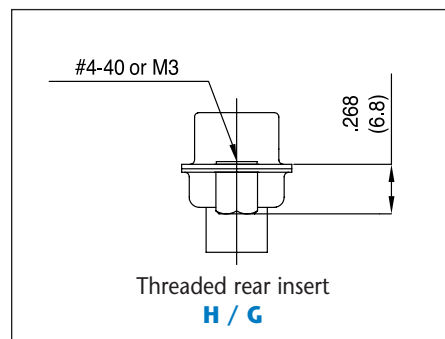
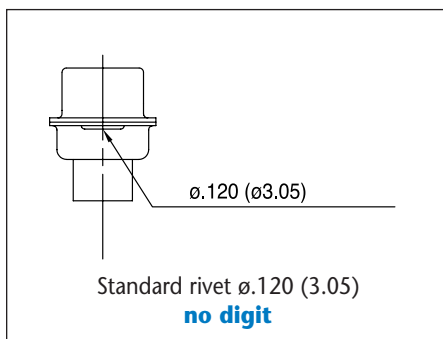


| No. of Contacts | Dimensions | | | | |
|-----------------|--------------|--------------|--------------|--------------|--------------|
| | A | B | C | D | E |
| 15 | 1.21 (30.84) | .98 (24.99) | .67 (16.92) | .64 (16.24) | .76 (19.28) |
| 26 | 1.54 (39.24) | 1.31 (33.32) | .972 (24.7) | .97 (24.56) | 1.08 (27.51) |
| 44 | 2.09 (53.04) | 1.85 (47.04) | 1.53 (38.96) | 1.51 (38.38) | 1.63 (41.30) |
| 62 | 2.73 (69.32) | 2.50 (63.50) | 2.18 (55.42) | 2.16 (54.76) | 2.27 (57.71) |
| 44 | 2.64 (67) | 2.41 (61.11) | 2.08 (52.86) | 2.06 (52.34) | 2.18 (55.3) |

PANEL MOUNTING OPTION



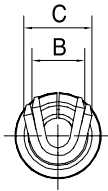
HIGH DENSITY



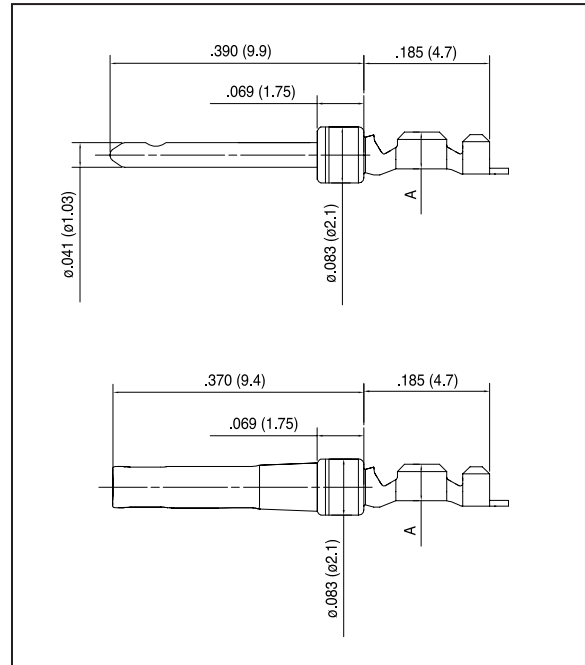
INCHES (MM)

CONTACTS

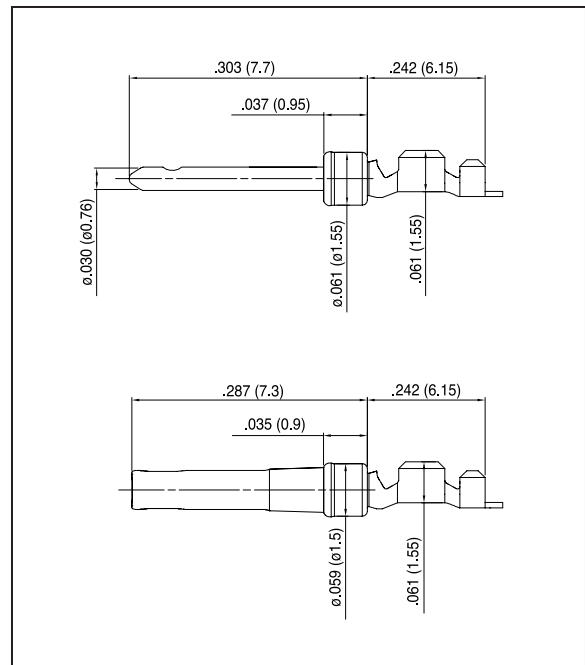
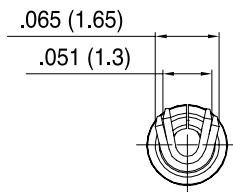
Standard density



| AWG | A | B | C |
|-------|------------|------------|------------|
| 20-24 | .071 (1.8) | .075 (1.9) | .098 (2.5) |
| 24-28 | .055 (1.4) | .059 (1.5) | .066 (1.7) |



High density



ORDERING INFORMATION - RR (STANDARD DENSITY)

Housings

XXX - RR - X - X - XX - X - XXX

117: yellow chromated shell
177: tinned shell for receptacle
777: tinned shell + dimples for plug

Shell Size: E, A, B, C, D

Rear Mounting Type :

- H** rear insert 4-40
- G** rear insert M3
- no digit** standard rivet ø.120 (3.05)
- F** float mounting

Front Mounting Type :

- VF** front screwlock 4-40
- VFM** front screwlock M3

Contact Type:

- P** pin
- S** socket

Configuration:

- 09, 15, 25, 37, 50

Contacts

17 - RR - XX - X - XX - XXX

Wire Size:

- D1:** 20 to 24 AWG
- D2:** 24 to 28 AWG

Contact Type:

- M** male
- F** female

Full Gold Plating:

- 01** 8µ*(0.2µm)
- 02** 20µ*(0.5µm)
- 04** 30µ*(0.76µm)

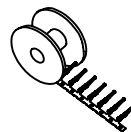
Selective Gold Plating:

- 11** 8µ*(0.2µm) Au
+ 78µ*(2µm) SnPb
- 12** 20µ*(0.5µm) Au
+ 78µ*(2µm) SnPb
- 14** 30µ*(0.76µm) Au
+ 78µ*(2µm) SnPb

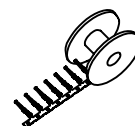
Packaging :

- 100** bulkpack unit (100 cts)
- 400** reel of 400 cts
- 2K** reel of 2000 cts
- 10K** reel of 10000 cts (right feed reel)
- 10G** reel of 10000 cts (left feed reel)

REEL WINDING DIRECTION



Left to right feed reel: **G**



Right to left feed reel: **K**

For special request, please consult factory

INCHES (MM)

ORDERING INFORMATION - HR (HIGH DENSITY)

Housings

XXX - HR - X - X - XX - X - XXX

117: yellow chromated shell
177: tinned shell for receptacle
777: tinned shell + dimples for plug

Shell Size: E, A, B, C, D

Rear Mounting type :
H rear insert 4-40
G rear insert M3
no digit standard rivet ø.120 (3.05)

Front Mounting Type :
VF front screwlock 4-40
VFM front screwlock M3

Contact Type:
P pin
S socket

Configuration:
 15, 26, 44, 62, 78

Contacts

17 - HR - D2 - X - XX - XXX

Wire Size:
24 to 28 AWG


Contact Type:
M male
F female

Full Gold Plating:
01 8µ* (0.2µm)
02 20µ* (0.5µm)
04 30µ* (0.76µm)

Selective Gold Plating:
11 8µ* (0.2µm) Au + 78µ* (2µm) SnPb
12 20µ* (0.5µm) Au + 78µ* (2µm) SnPb
14 30µ* (0.76µm) Au + 78µ* (2µm) SnPb

Packaging :
5K reel of 5000 cts (right feed reel)
5G reel of 5000 cts (left feed reel)
10K reel of 10000 cts (right feed reel)
10G reel of 10000 cts (left feed reel)

REEL WINDING DIRECTION



Left to right feed reel: **G** Right to left feed reel: **K**

For special request, please consult factory

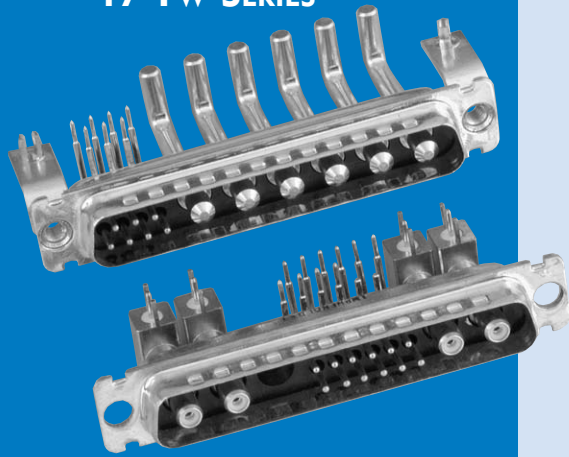
TOOLING FOR CRIMP CONTACTS

For standard density crimp contacts: 17RR series

- | | |
|---|-------------|
| • Contact insertion and removal tool | 17D 438 SP |
| • Hand crimp tool for single contacts AWG 20 to 28 | 17D 440 SP |
| • Hand crimp tool for reels of 400 contacts | FA 0000 762 |
| crimp dies: AWG 20 to 24 | FA 0000 104 |
| crimp dies: AWG 24 to 28 | FA 0000 102 |
| • Stripping box | FE 0400 |
| • Automatic crimp machine for reels of 2000 to 10000 contacts | 970 MC |
| crimp dies: AWG 20 to 24 | 968 MC |
| crimp dies: AWG 24 to 28 | 972 MC |

For high density crimp contacts: 17HR series

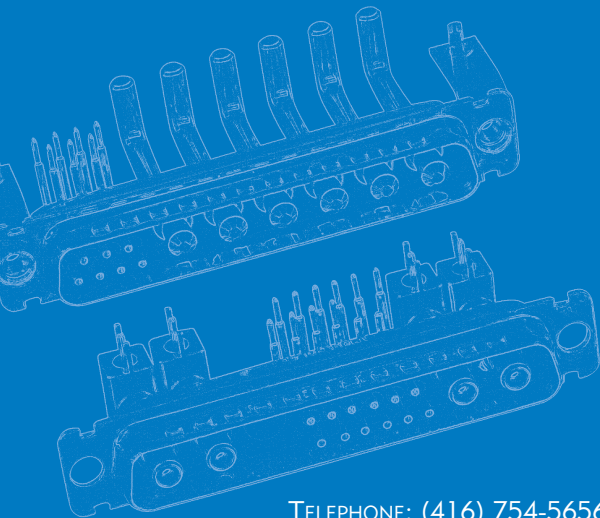
- | | |
|---|--------|
| • Automatic crimp machine for reels of 2000 to 10000 contacts | 970 MC |
| crimp dies: AWG 24 to 28 | 973 MC |



Amphenol's 17TW series hybrid D-Subminiature connectors are available with power, coax, high voltage and signal contacts assembled in the same connector body. These connectors are supplied with screw-machined contacts which are fixed in the insulator.

The board-mount product offering includes straight and right-angle terminations. The cable connectors are available in crimp and solder terminations. These connectors are compatible with the infra-red reflow soldering process. The 17TW series offers eighteen housing configurations in five shell sizes.

- Industrial
- Telecom
- Any industry standard I / O connections



SPECIFICATIONS:

MATERIALS AND PLATINGS

| | |
|-------------------------|---|
| Shells | Steel with tin plating or yellow chromate with or without grounding dimples High temperature black thermoplastic |
| Insulators | |
| Signal Contacts | |
| Female | Machined bronze |
| Male | Machined brass |
| Plating | 16µ"(40µm) or 30µ"(76µm) gold over 79µ"(1.97µm) nickel |
| Coax Contacts | |
| Female | Machined bronze |
| Male | Machined brass |
| Plating | Inner conductor: 16µ"(40µm) gold or 30µ"(76µm) gold over 79µ"(1.97µm) nickel Outer ring: 10µ"(25µm) gold over 79µ"(1.97µm) nickel Tinned. (Solder cup and crimp terminations are gold flash.) |
| Terminations | Tinned. (Solder cup and crimp terminations are gold flash.) |
| Power Contacts | |
| Female | Machined bronze |
| Male | Machined brass |
| Plating | Contacts: 16µ"(40µm) gold or 30µ"(76µm) gold over 79µ"(1.97µm) nickel |
| Terminations | Tinned. (Solder cup and crimp terminations are gold flash.) |
| Brackets | Steel with tin plating |
| Front Jackscrews | Brass with tin plating or yellow chromate |
| Rear Clinch Nuts | Brass with tin plating or yellow chromate |
| Boardlocks: | Bronze with tin plating |
| Stand-offs | Brass with tin plating |

ELECTRICAL DATA

| | |
|--|-------------------------------|
| Current Rating: Signal Contacts | 7.5 amps with 10 amp peaks |
| Power Contacts: PCB, Solder-Cup, Crimp | 10 to 40 amps |
| | 0.5 amps |
| Current Rating: Signal & Power Contacts | 300 VRMS at 50 Hz |
| Coax Contacts | 150 VRMS at 50 Hz |
| Coax Contacts Frequency range: | 0 -1 GHz |
| Attenuation: | 0.2 dB |
| V.S.W.R.: | 1.4 (+0.04/GHz) |
| Characteristic Impedance | 50 Ohms |
| Dielectric Withstanding Voltage | ≥ 1000V R.M.S. at 50Hz |
| Insulation Resistance | ≥ 5000 megaohms at 500 V D.C. |
| Contact Resistance | ≤5 milliohms |
| Shell Resistance (electrical grounding) | ≤1 milliohm |

CLIMATIC DATA

| | |
|--|--|
| Shell Resistance (electrical grounding) | ≤1 milliohm |
| Operating Temperature | 67°F (-55°C) to 311°F (+155°C) with peaks up to 356°F (180°C) |
| Damp Heat | 56 days 104°F (40°C) at 95% RH |
| Salt Spray | 48 hours |

MECHANICAL DATA

| | |
|---|---|
| Contact Retention Force in Dielectric Material | >40 N |
| Maximum Mating and Unmating Force | |
| with dimples | A size: 80 N B size: 100 N C size: 150 N D size: 180 N E size: 70 N |
| without dimples | A size: 50 N B size: 80 N C size: 120 N D size: 160 N E size: 30 N |
| Process Compatibility | IR - air convection: 500°F (260°C) for 20 seconds Soldering iron: 500°F (260°C) for 30 seconds |
| Mating Cycles | ≥ 200 (16µ"(41µm) gold) ≥ 500 (30µ"(76µm) gold) Blind Mating System Available upon request |
| Polarization | Available with locking accessories, consult factory |
| Derating Curves for Power Contacts: | see page 51 |
| Pull-out Force for Crimped Contacts: | see page 51 |
| Approvals: | UL - File number: E 64911 / CSA - File number: LR 57744 |
| Shell Dimensions: | See page 64 |

SHELLS AND CONTACT PLATING

CLASS I

30µ" (0.76µm) Au contacts gold plating
500 mating cycles

CLASS II


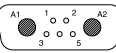
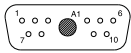
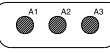
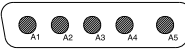
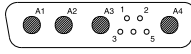
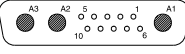
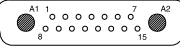
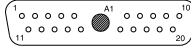
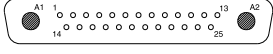
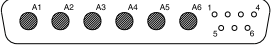
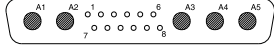
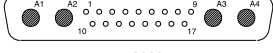
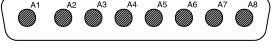
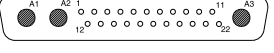
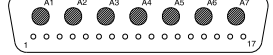
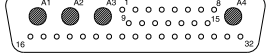
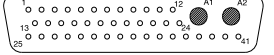
16µ" (0.4µm) Au contacts gold plating
200 mating cycles

| Types | Shells and plating |
|--------|--|
| 117 TW | Yellow chromated shell Male and female |
| 177 TW | Tin plated shell Female |
| 777 TW | Tin plated shell with dimples Male only NOTE: Tin plated shells standard |

| Types | Shells and plating |
|--------|--|
| 17 TW | Yellow chromated shell Male and female |
| 77 TW | Tin plated shell Female |
| 717 TW | Tin plated shell with dimples Male only NOTE: Tin plated shells standard |

HOUSING ARRANGEMENTS

Male front view

| | | | |
|---------------------------------------|---|---|--|
| Arrangement Shell size |  5W1 E |  7W2 A |  11W1 A |
| Arrangement Shell size |  3W3 A |  5W5 B |  9W4 B |
| Arrangement Shell size |  13W3 B |  17W2 B |  21W1 B |
| Arrangement Shell size |  27W2 C |  13W6 C |  17W5 C |
| Arrangement Shell size |  21WA4 C |  8W8 C |  25W3 C |
| Arrangement Shell size |  24W7 D |  36W4 D |  43W2 D |

ORDERING INFORMATION

XXX - X - XWX - X - XXXX - XX - XXXX - X

Contact & Shell Plating Prefix

| Contact Plating | Shell Plating | | |
|---------------------------------|-----------------|--------|-------------------|
| | Yellow Chromate | Tinned | Tinned & Indents* |
| 16µ(0.4µm) gold over nickel | 17TW | 77TW | 717TW |
| 30µ(0.76µm) gold over nickel | 117TW | 177TW | 777TW |

*plug only

Special Deviations

- High voltage contacts
- Fiberoptic contacts
- Consult factory

Board Mounting Options

(see page 40.)

- blank** .122 (3.10) mounting hole
- RM53** Snap-in standoff boardlock, M3 threaded on panel-mount side
- RM54** Snap-in standoff boardlock, 4 40 UNC 2B threaded on panel mount side
- RM83** Snap-in standoff boardlock with non-removable M3 threaded female screwlock on panel-mount side
- RM84** Snap-in standoff boardlock with non-removable 4-40 UNC 2B threaded female screwlock on panel-mount side

Shell Size Configuration
(see page 38.)

- E 5W1
- A 3W3
- A 7W2
- A 11W1
- B 5W5
- B 9W4
- B 13W3
- B 17W2
- B 21W1
- C 8W8
- C 13W6
- C 17W5
- C 21WA4
- C 25W3
- C 27W2
- D 24W7
- D 36W4
- D 43W2

(Consult factory for size D availability)

Panel Mounting Options

(see page 40.)

- blank** .122 (3.10) mounting hole
- 4F** 4-40 Front female screwlock
- 4R** 4-40 Rear screwlock
- 3F** M3 Front female screwlock
- 3R** M3 Rear screwlock
- A514** Blind mating system

Loaded Contacts

blank Solder-cup signal contacts only - (order pwr/coax contacts separately) (See pages 45-47.)

- P3SY** 40 amp power and signal combination
- P2SY** 20 amp power and signal combination
- CSY** Coax and signal combination
- SY** Signal only
- P3Y** 40 amp power only (3W3, 5W5, 8W8)
- P2Y** 20 amp power only (3W3, 5W5, 8W8)
- CY** Coax only (3W3, 5W5, 8W8)

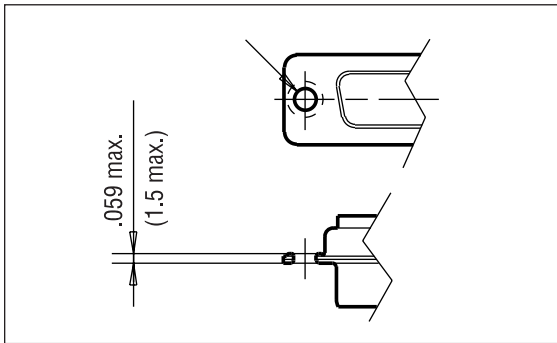
Board Mount Only

- | Code | Contact Type |
|------|-----------------|
| P | Pin (male) |
| S | Socket (female) |

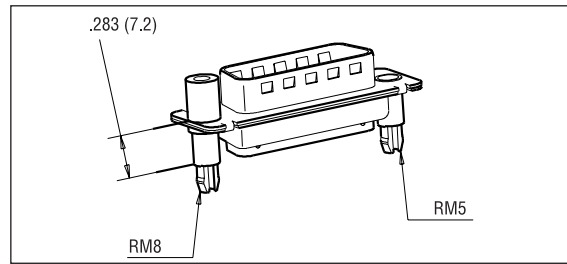
For Filtered Combo's, see page 56.

Straight version

Blank: .122 (3.10) dia. mounting hole

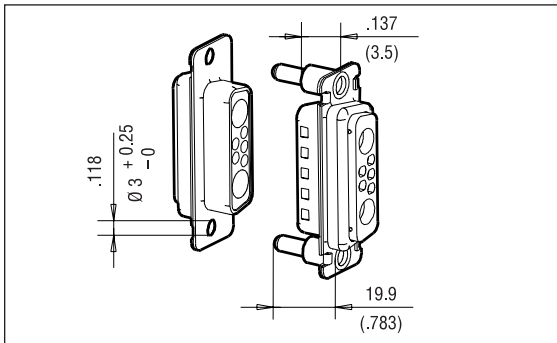


RM54: RM5 4.40 threaded
 RM53: RM5 M3 threaded

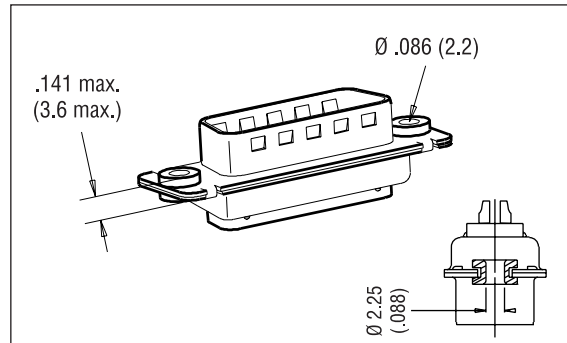


RM84: RM8 4.40 threaded
 RM83: RM8 M3 threaded

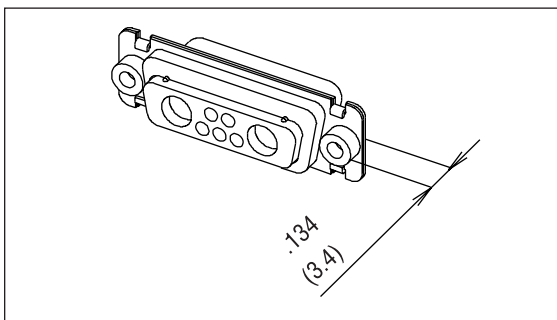
A514: blind mating system



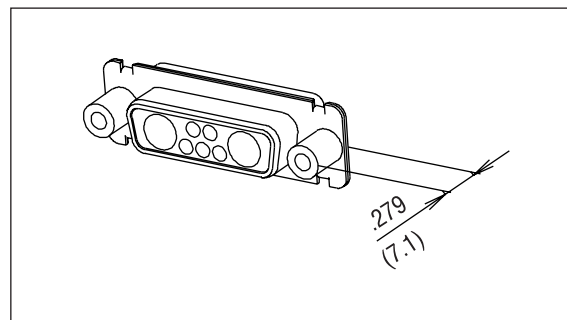
FM: float mounting system



4R: 4.40 rear nut
 3R: M3 rear nut

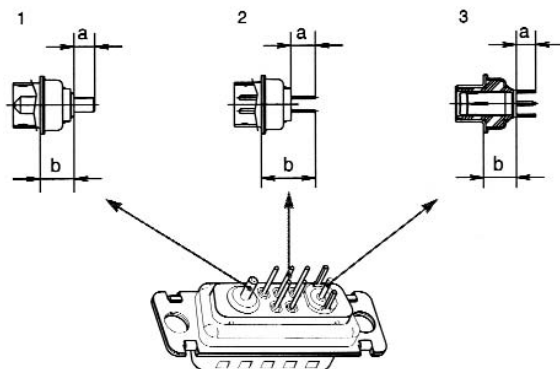


4F: 4.40 front female screwlock
 3F: M3 front female screwlock



Signal tail .0236 (0.6) dia.
 .063 (1.6) PCB
 For other PCB thickness: consult factory.

| Description | | Dimensions | |
|-----------------------------|---|-------------|--------------|
| | | a | b |
| Power .126 (3.20) tail dia. | 1 | .177 (4.50) | .283 (7.2) |
| Power .0787 (2.0) tail dia. | 1 | .177 (4.50) | .283 (7.2) |
| Shielded | 3 | .157 (4.00) | .283 (7.2) |
| Signal | 2 | .196 (5.00) | .453 (11.50) |



INCHES (MM)

RECOMMENDED BOARD LAYOUT (COMPONENT SIDE, MALE)

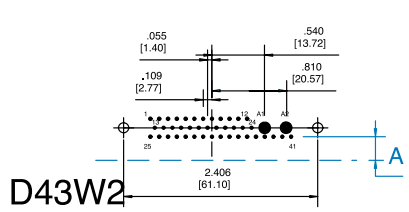
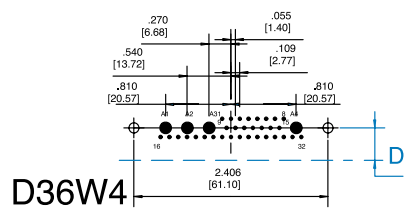
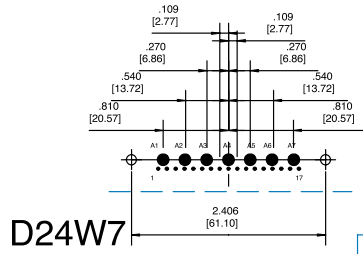
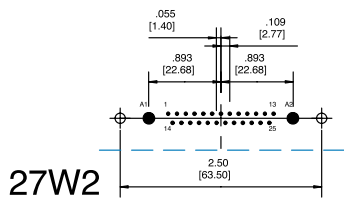
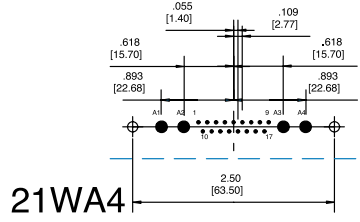
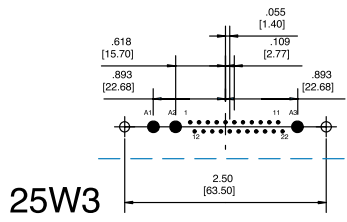
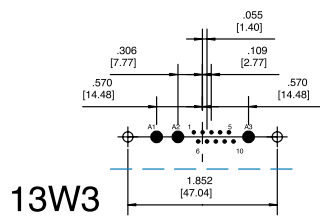
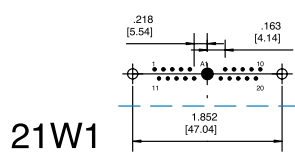
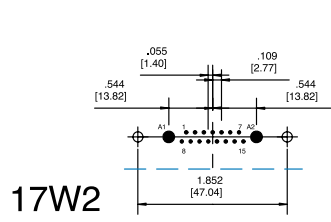
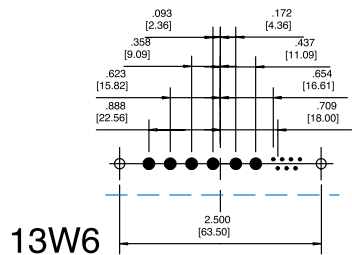
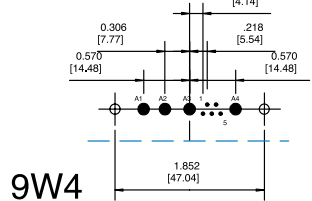
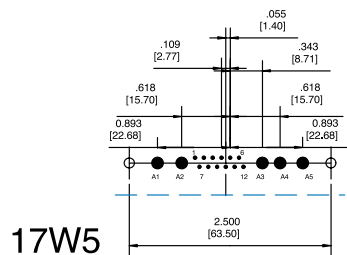
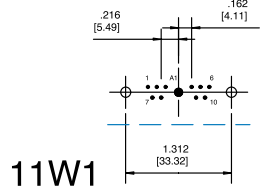
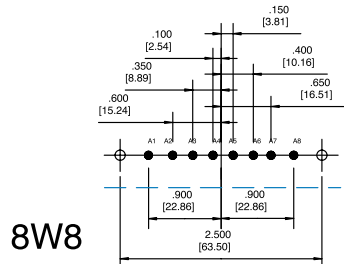
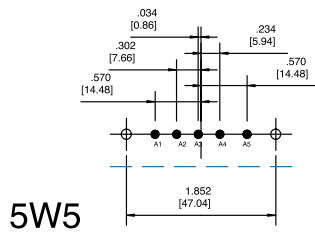
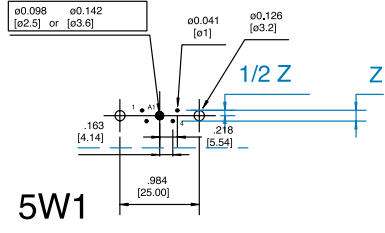
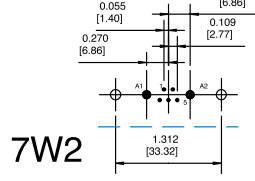
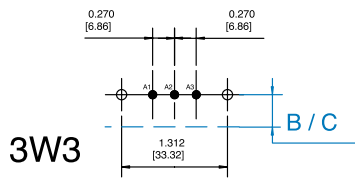
Straight .079 [2.00] and .126 [3.20] Power and Signal Contacts

P2Y P2SY
P3Y P3SY

Right Angle .079 [2.00] Power and Signal Contacts

EP2V EP2SV (European Footprint)
HP2V HP2SV (Mixed Footprint)
MP2V MP2SV (US Footprint)

--- Denotes right angle dimensions



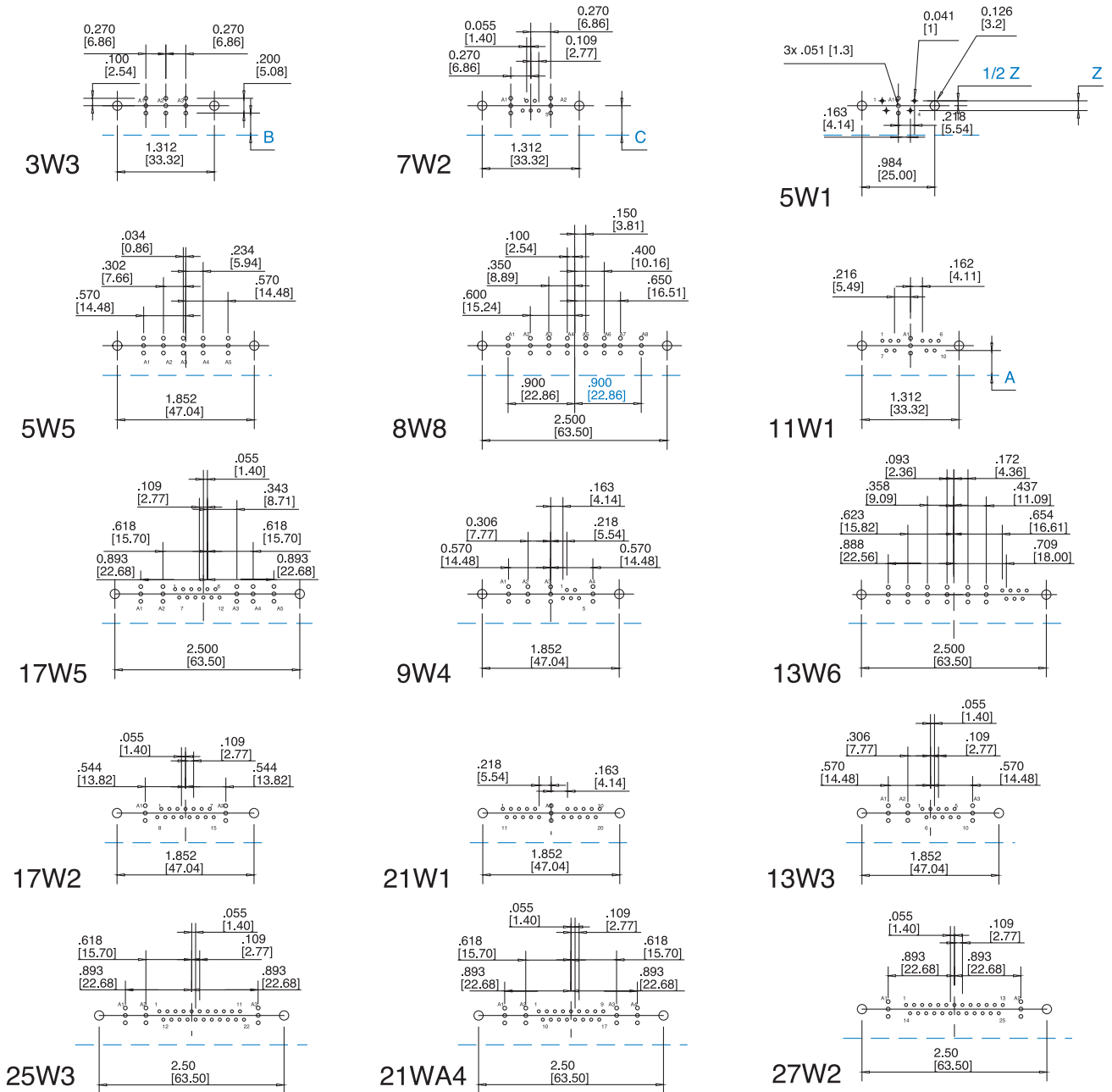
| | A | B/C | D | Z |
|----------------|-------------|--------------|--------------|-------------|
| EURO FOOTPRINT | .370 [9.40] | .420 [10.67] | .470 [11.94] | .100 [2.54] |
| US FOOTPRINT | .283 [7.20] | .339 [8.62] | .395 [10.40] | .112 [2.84] |
| MIX FOOTPRINT | .370 [9.40] | .420 [10.67] | .470 [11.94] | .100 [2.54] |

A = SIGNAL B = POWER C = BOARD LOCKS D = D SHELL BOARD LOCKS Z = PITCH

RECOMMENDED BOARD LAYOUT

Straight Coax and Signal Contacts
 CY CSY
 Right Angle Coax and Signal Contacts
 HCV HCSV (Mixed Footprint)
 MCV MCSV (US Footprint)

— — — Denotes right angle dimensions



| | A | B | C | Z |
|---------------|-------------|-------------|--------------|-------------|
| MIX FOOTPRINT | .370 [9.40] | .370 [9.40] | .420 [10.67] | .100 [2.54] |
| US FOOTPRINT | .283 [7.20] | .370 [9.40] | .339 [8.62] | .112 [2.84] |

A = SIGNAL B = POWER C = BOARD LOCKS Z = PITCH

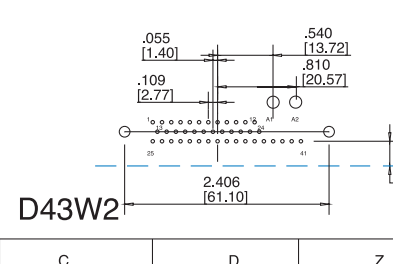
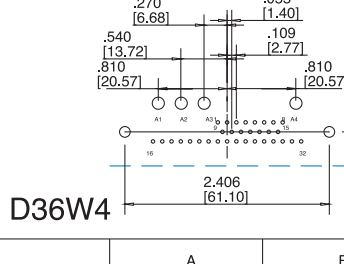
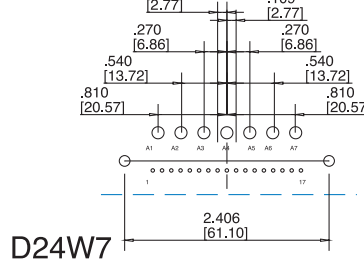
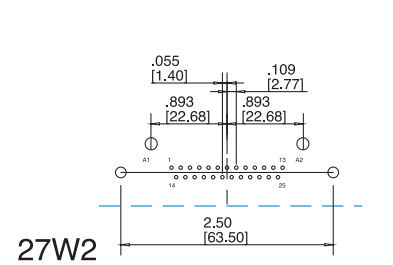
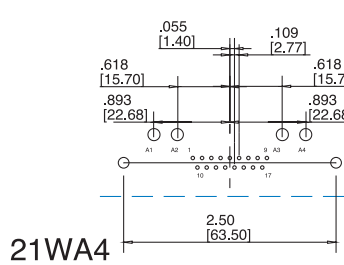
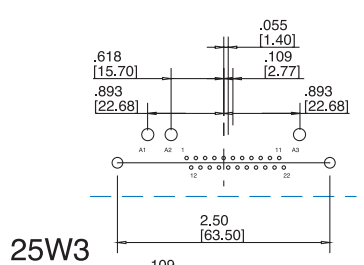
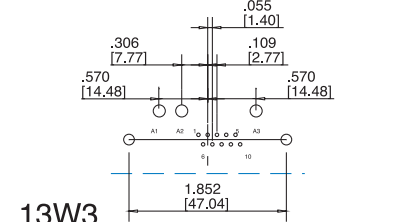
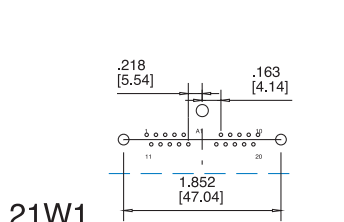
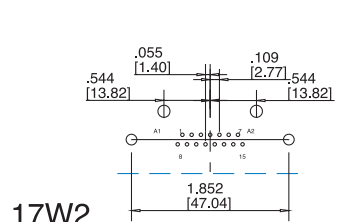
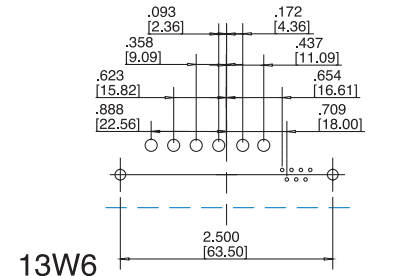
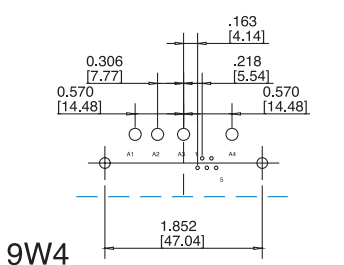
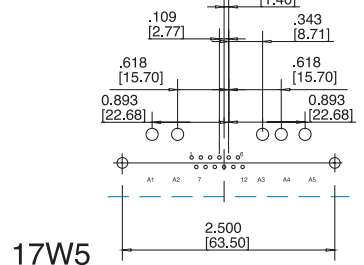
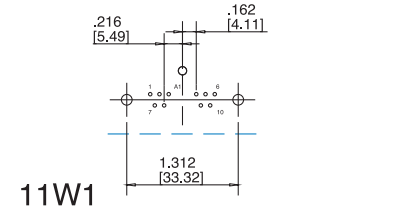
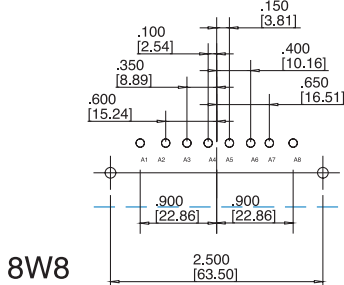
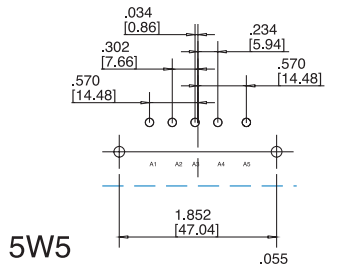
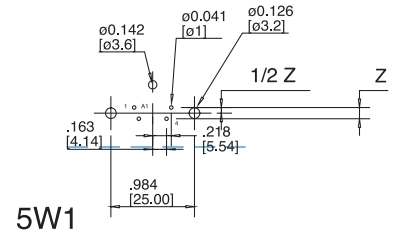
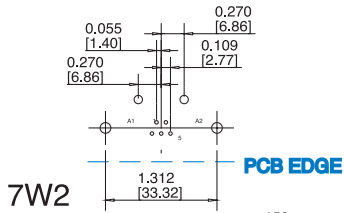
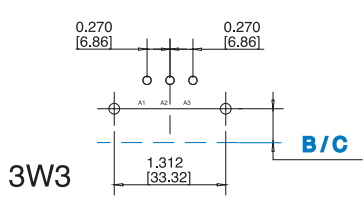
INCHES (MM)

RECOMMENDED BOARD LAYOUT

Right Angle .126 [3.20] Power and Signal Contacts

EP3V EP3SV (European Footprint)
HP3V HP3SV (Mixed Footprint)
MP3V MP3SV (US Footprint)

--- Denotes right angle dimensions



| | A | B | C | D | Z |
|----------------|-------------|--------------|--------------|--------------|-------------|
| EURO FOOTPRINT | .370 [9.40] | .809 [20.56] | .420 [10.67] | .470 [11.94] | .100 [2.54] |
| US FOOTPRINT | .283 [7.20] | .809 [20.56] | .339 [8.62] | .395 [10.04] | .112 [2.84] |
| MIX FOOTPRINT | .370 [9.40] | .809 [20.56] | .420 [10.67] | .470 [11.94] | .100 [2.54] |

A = SIGNAL B = POWER C = BOARD LOCKS D = D SHELL BOARD LOCKS Z = PITCH

ORDERING INFORMATION

XXX - X - XWX - X - XXXX - XX - XXXX - X

Contact & Shell Plating Prefix

| Contact Plating | Shell Plating | | |
|---------------------------------|-----------------|--------|-------------------|
| | Yellow Chromate | Tinned | Tinned & Indents* |
| 16μ(0.4μm) gold over nickel | 17TW | 77TW | 717TW |
| 30μ(0.76μm) gold over nickel | 117TW | 177TW | 777TW |

*plug only

| Shell Size | Configuration (see page 38.) |
|------------|---------------------------------|
| E | 5W1 |
| A | 3W3 |
| A | 7W2 |
| A | 11W1 |
| B | 5W5 |
| B | 9W4 |
| B | 13W3 |
| B | 17W2 |
| B | 21W1 |
| C | 8W8 |
| C | 13W6 |
| C | 17W5 |
| C | 21WA4 |
| C | 25W3 |
| C | 27W2 |
| D | 24W7 |
| D | 36W4 |
| D | 43W2 |

(Consult factory for size D availability)

| Code | Contact Type |
|------|-----------------|
| P | Pin (male) |
| S | Socket (female) |

Special Deviations
High voltage contacts
Fiber Optic contacts
Consult factory

Board Mounting Options
(see page 48.)

- blank** .122 (3.10) mounting holes
in metal brackets
- RM6** Snap-in boardlocks mounted
on metal brackets

Panel Mounting Options
(see page 48.)

- blank** .122 (3.10) mounting hole
- 4F** 4-40 Front female screwlock
- 4R** 4-40 Rear screwlock
- 3F** M3 Front female screwlock
- 3R** M3 Rear screwlock
- A514** Blind mating system:

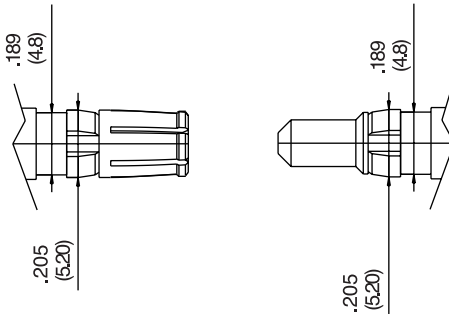
Loaded Contacts
(see page 48.)

- MP3SV** US footprint, 40 amp power and signal combination
- MP2SV** US footprint, 20 amp power and signal combination
- MCSV** US footprint, coax and signal combination
- MSV** US footprint, signal only
- MP3V** US footprint, 40 amp power only (3W3, 5W5, 8W8)
- MP2V** US footprint, 20 amp power only (3W3, 5W5, 8W8)
- MCV** US footprint, coax only (3W3, 5W5, 8W8)
- EP3SV** European footprint, 40 amp power and signal combination
- EP2SV** European footprint, 20 amp power and signal combination
- ESV** European footprint, signal only
- EP3V** European footprint, 40 amp power only (3W3, 5W5, 8W8)
- EP2V** European footprint, 20 amp power only (3W3, 5W5, 8W8)
- HP3SV** Mixed footprint, 40 amp power and signal combination
- HP2SV** Mixed footprint, 20 amp power and signal combination
- HCSV** Mixed footprint, coax and signal combination
- HSV** Mixed footprint, signal only
- HP3V** Mixed footprint, 40 amp power only (3W3, 5W5, 8W8)
- HP2V** Mixed footprint, 20 amp power only (3W3, 5W5, 8W8)
- HCV** Mixed footprint, coax only (3W3, 5W5, 8W8)

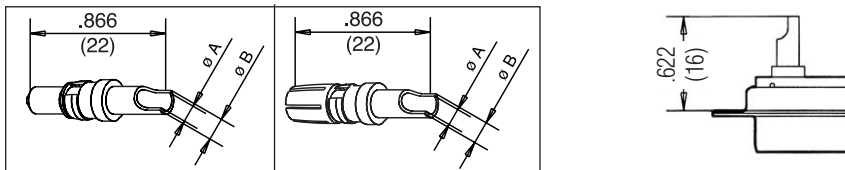
For Filtered Combo's, see page 56.

INCHES (MM)

High power contacts



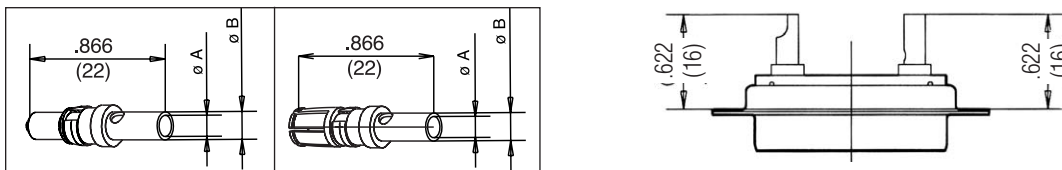
Solder cup version



| Plug | P/N | Socket | Current | Dimensions | |
|--------------|-----|--------------|---------------|-------------|-------------|
| | | | | A | B |
| 17DM 53745-8 | | 17DM 53744-7 | 10 to 20 Amp. | .071 (1.80) | .100 (2.55) |
| 17DM 53745-7 | | 17DM 53744-6 | 20 to 30 Amp. | .110 (2.80) | .145 (3.70) |
| 17DM 53745-1 | | 17DM 53744-1 | 30 to 40 Amp. | .189 (4.80) | .220 (5.60) |

Trim dimensions: .295 (7.5)

Crimp version

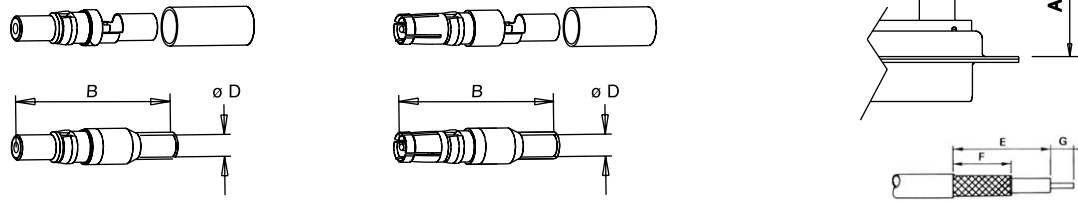


| Plug | P/N | Socket | Current | Dimensions | |
|----------------|-----|----------------|---------------|-------------|-------------|
| | | | | A | B |
| 17DM 53745-208 | | 17DM 53744-207 | 10 to 20 Amp. | .071 (1.80) | .100 (2.55) |
| 17DM 53745-207 | | 17DM 53744-206 | 20 to 30 Amp. | .110 (2.80) | .145 (3.70) |
| 17DM 53745-201 | | 17DM 53744-201 | 30 to 40 Amp. | .189 (4.80) | .220 (5.60) |

Trim dimensions: .295 (7.5)

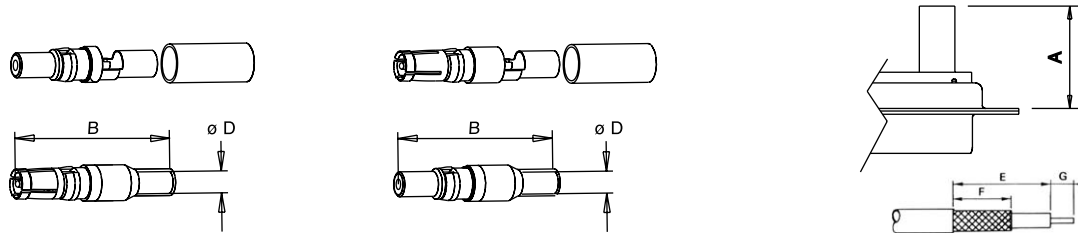
Straight shielded contacts

Crimp ferrule/Inner solder



| Type | P/N | Dimensions | | | Cable - RG | Trim dimensions | | |
|--------|--------------|-------------|-------------|------------|-----------------|-----------------|------------|----------|
| | | A Max. | B | D | | E | F | G |
| plug | 17DM 53740 | .740 (18.8) | .929 (23.6) | .039 (1.0) | 178 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| plug | 17DM 53740-1 | .740 (18.8) | .929 (23.6) | .066 (1.7) | 179 B/U 316 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| plug | 17DM 53740-3 | .846 (21.5) | .929 (23.6) | .110 (2.8) | 180 B/U | .374 (9.5) | .311 (7.9) | .078 (2) |
| plug | 17DM 53740-5 | .846 (21.5) | .929 (23.6) | .126 (3.2) | 58 C/U | .374 (9.5) | .311 (7.9) | .078 (2) |
| socket | 17DM 53742 | .740 (18.8) | .929 (23.6) | .039 (1.0) | 178 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| socket | 17DM 53742-1 | .740 (18.8) | .929 (23.6) | .066 (1.7) | 179 B/U 316 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| socket | 17DM 53742-3 | .846 (21.5) | .929 (23.6) | .110 (2.8) | 180 B/U | .374 (9.5) | .311 (7.9) | .078 (2) |
| socket | 17DM 53742-5 | .846 (21.5) | .929 (23.6) | .126 (3.2) | 58 C/U | .374 (9.5) | .311 (7.9) | .078 (2) |

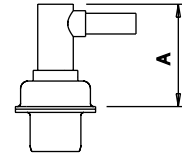
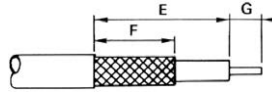
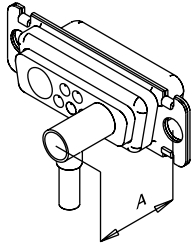
Ferrule and inner solder



| Type | P/N | Dimensions | | | Cable - RG | Trim dimensions | | |
|--------------|-----------------|-------------|--------------|------------|-----------------|-----------------|------------|----------|
| | | A Max. | B | D | | E | F | G |
| short plug | 17DM 53740-5000 | .669 (17.0) | .858 (21.8) | .039 (1.0) | 178 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| plug | 17DM 53740-5001 | .740 (18.8) | .929 (23.6) | .066 (1.7) | 179 B/U 316 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| plug | 17DM 53740-5002 | .846 (21.5) | 1.035 (26.3) | .110 (2.8) | 180 B/U | .374 (9.5) | .311 (7.9) | .078 (2) |
| plug | 17DM 53740-5005 | .846 (21.5) | 1.035 (26.3) | .126 (3.2) | 58 C/U | .374 (9.5) | .311 (7.9) | .078 (2) |
| plug | 17DM 53740-5008 | .740 (18.8) | .929 (23.6) | .039 (1.0) | 178 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| short socket | 17DM 53742-5000 | .669 (17.0) | .858 (21.8) | .039 (1.0) | 178 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| socket | 17DM 53742-5001 | .740 (18.8) | .929 (23.6) | .066 (1.7) | 179 B/U 316 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |
| socket | 17DM 53742-5002 | .846 (21.5) | 1.035 (26.3) | .110 (2.8) | 180 B/U | .374 (9.5) | .311 (7.9) | .078 (2) |
| socket | 17DM 53742-5004 | .846 (21.5) | 1.035 (26.3) | .126 (3.2) | 58 C/U | .374 (9.5) | .311 (7.9) | .078 (2) |
| socket | 17DM 53742-5006 | .740 (18.8) | .929 (23.6) | .039 (1.0) | 178 B/U | .311 (7.9) | .248 (6.3) | .078 (2) |

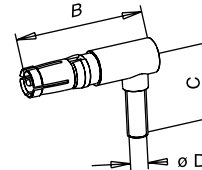
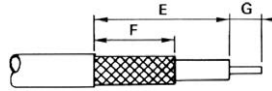
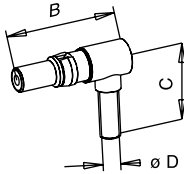
Right angled shielded contact

Crimp ferrule/Inner solder



| Type | P/N | Dimensions | | | | Cable - RG | Trim dimensions | | |
|--------|--------------|-------------|-------------|-------------|------------|-----------------|-----------------|------------|------------|
| | | A Max. | B | C | D | | E | F | G |
| plug | 17DM 53741 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .039 (1.0) | 178 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| plug | 17DM 53741-1 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .066 (1.7) | 179 B/U 316 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| plug | 17DM 53741-3 | .531 (13.5) | .732 (18.6) | .602 (15.3) | .110 (2.8) | 180 B/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |
| plug | 17DM 53741-4 | .531 (13.5) | .732 (18.6) | .602 (15.3) | .126 (3.2) | 58 C/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |
| socket | 17DM 53743-2 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .039 (1.0) | 178 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| socket | 17DM 53743-3 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .066 (1.7) | 179 B/U 316 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| socket | 17DM 53743-5 | .531 (13.5) | .732 (18.6) | .602 (15.3) | .110 (2.8) | 180 B/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |
| socket | 17DM 53743-6 | .531 (13.5) | .732 (18.6) | .602 (15.3) | .126 (3.2) | 58 C/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |

Ferrule and inner solder



| Type | P/N | Dimensions | | | | Cable - RG | Trim dimensions | | |
|--------|-----------------|-------------|-------------|-------------|------------|-----------------|-----------------|------------|------------|
| | | A Max. | B | C | D | | E | F | G |
| plug | 17DM 53741-5000 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .039 (1.0) | 178 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| plug | 17DM 53741-5001 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .066 (1.7) | 179 B/U 316 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| plug | 17DM 53741-5003 | .531 (13.5) | .732 (18.6) | 13.9 (.547) | .110 (2.8) | 180 B/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |
| plug | 17DM 53741-5004 | .531 (13.5) | .732 (18.6) | 13.9 (.547) | .126 (3.2) | 58 C/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |
| socket | 17DM 53743-5000 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .039 (1.0) | 178 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| socket | 17DM 53743-5001 | .531 (13.5) | .732 (18.6) | .492 (12.5) | .066 (1.7) | 179 B/U 316 B/U | .374 (9.5) | .232 (5.9) | .062 (1.6) |
| socket | 17DM 53743-5003 | .531 (13.5) | .732 (18.6) | 13.9 (.547) | .110 (2.8) | 180 B/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |
| socket | 17DM 53743-5004 | .531 (13.5) | .732 (18.6) | 13.9 (.547) | .126 (3.2) | 58 C/U | .421 (10.7) | .311 (7.9) | .094 (2.4) |

Crimping tool

Hand crimp tool

227-0944 (without dies) (M 22 520/5-01)



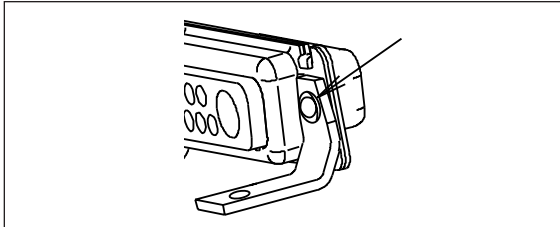
| RG cables | MIL reference | Amphenol P/N | dim. between 2 flat surface cavity | |
|------------|---------------|--------------|------------------------------------|-------------|
| | | | A | B |
| RG 58 C/U | M 22 520/5-05 | 227 1221-05 | .213 (5.41) | - |
| RG 178 B/U | M 22 520/5-03 | 227 1221-03 | - | .105 (2.67) |
| RG 179 B/U | M 22 520/5-03 | 227 1221-03 | .128 (3.25) | - |
| RG 180 B/U | M 22 520/5-05 | 227 1221-05 | - | .178 (4.52) |

MOUNTING OPTIONS

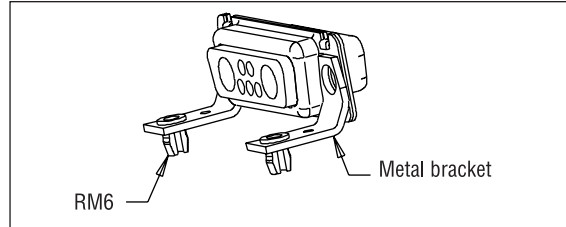
Right angle version

Connectors come equipped with metal brackets

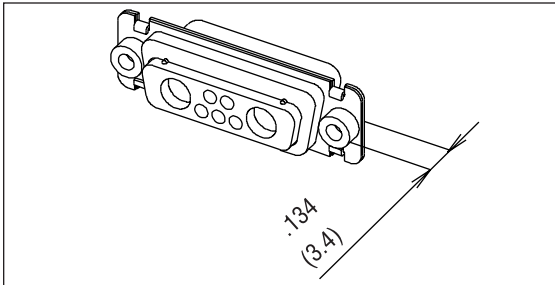
Blank: .122 (3.10) dia mounting hole



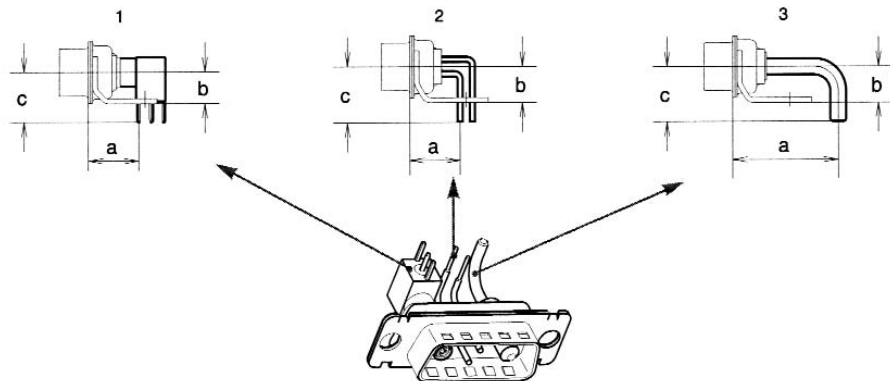
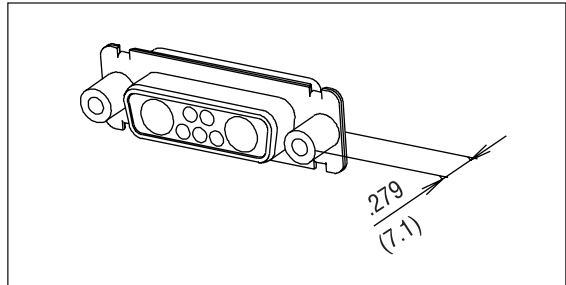
RM6: metal brackets + boardlock



4R: 4.40 rear nut
3R: M3 rear nut



4F: 4.40 front female screwlock
3F: M3 front female screwlock



CONTACT DIMENSIONS

Signal tail .0236 (0.6) dia.
.063 (1.6) PCB
For other PCB thickness: consult factory.

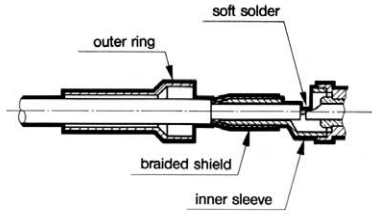
| Description | Drawing | Europe HE 5 pattern = European height European footprint pitch between 2 rows: .100 (2.54) | | | Mix Mixed pattern = MIL height European footprint pitch between 2 rows: .100 (2.54) | | | MIL MIL height MIL footprint pitch between 2 rows: .112 (2.84) | | |
|-----------------------------|---------|--|----------------|-----------------|---|----------------|-----------------|--|----------------|-----------------|
| | | a | b | c | a | b | c | a | b | c |
| Shielded | 1 | - | - | - | .406 (10.30) | .248 (6.30) | .394 (10.00) | .406 (10.30) | .248 (6.30) | .394 (10.00) |
| Signal | 2 | .406 (10.30) | .283 (7.20) | .441 (11.20) | .406 (10.30) | .248 (6.30) | .374 (9.50) | .319 (8.10) | .248 (6.30) | .374 (9.50) |
| Power .0787 (2.0) tail dia. | 3 | .456 (11.57) | .283 (7.20) | .413 (10.50) | .456 (11.57) | .248 (6.30) | .374 (9.50) | .375 (9.52) | .248 (6.30) | .374 (9.50) |
| Power .126 (3.2) tail dia. | 3 | .845 (21.46) | .283 (7.20) | .413 (10.50) | .845 (21.46) | .248 (6.30) | .374 (9.50) | .845 (21.46) | .248 (6.30) | .374 (9.50) |

NOTE: Dimensions above correspond to sizes E to C. Consult factory for size D connectors. Connector comes equipped with contacts and brackets.

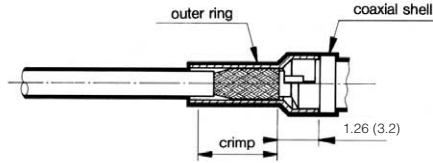
INCHES (MM)

Cabling instructions for shielded contacts

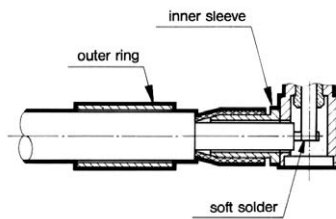
Straight crimp shielded contacts:



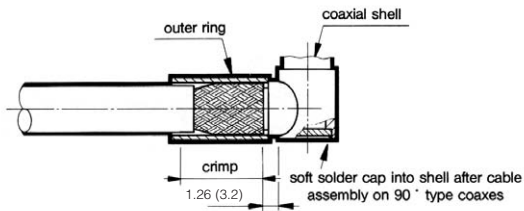
**inner solder contact
outer crimp contact**



Right angle crimp shielded contacts:



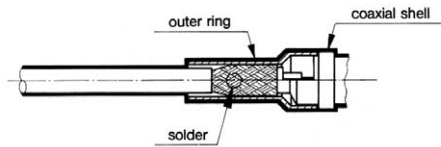
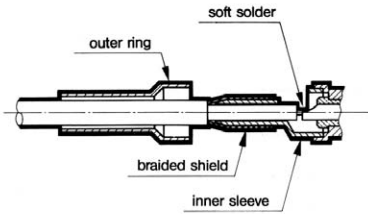
**inner solder contact
outer crimp contact**



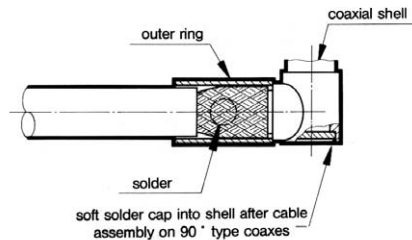
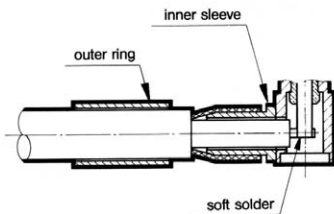
ASSEMBLY METHOD

1. Slide the outer ring over the cable jacket.
Trim the cable according to the recommended dimensions.
2. Insert the cable dielectric and the center conductor inside the inner sleeve.
3. Solder the central conductor to the shielded center contacts.
4. Slide the outer ring towards the inner sleeve and recover the braid.
5. Using crimp hand tool equipped with the appropriate dies, crimp in the area defined.

Solder straight shielded contacts

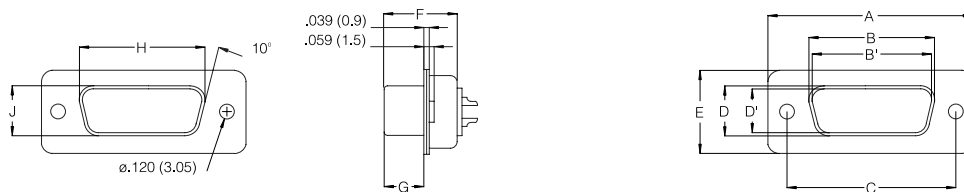


Solder right angle shielded contacts



ASSEMBLY METHOD

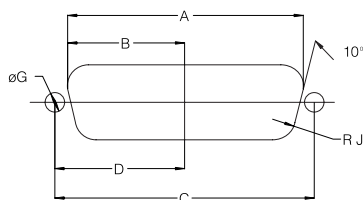
1. Slide the outer ring over the cable jacket.
Trim the cable according to the recommended dimensions.
2. Insert the cable dielectric and the center conductor inside the inner sleeve.
3. Solder the central conductor to the shielded center contacts.
4. Slide the outer ring towards the inner sleeve and recover the braid.
5. Solder by introducing metal through the outer ring hole.



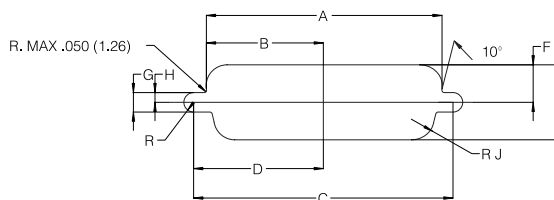
| Shell Size | Contact P: Pin S: Socket | A ±.010 (±0.25) | B 0/- .008 (0/-0.20) | B' +.008/0 (+0.20/0) | C ±.004 (±0.10) | D 0/- .010 (0/-0.25) | D' +.010/0 (+0.25/0) | E ±.008 (±0.20) | F +.002/- .008 (+0.05/-0.20) | F' +.004/- .008 (+0.10/-0.20) | G +.004/.008 (+0.10/-0.20) | G' ±.004 (±0.10) | H +.004/- .016 (+0.10/-0.40) | J 0/- .020 (0/-0.50) |
|------------|--------------------------------|-----------------------|----------------------------|----------------------------|-----------------------|----------------------------|----------------------------|-----------------------|------------------------------------|-------------------------------------|----------------------------------|------------------------|------------------------------------|----------------------------|
| E | P | 1.209 (30.7) | | .661 (16.8) | .984 (25.0) | | .323 (8.2) | .488 (12.4) | | .429 (10.9) | | .232 (5.9) | .764 (19.4) | .433 (11.0) |
| | S | | .646 (16.4) | | | .315 (8.0) | | .437 (11.1) | | .244 (6.2) | | | | |
| A | P | 1.535 (39.0) | | .988 (25.1) | 1.311 (33.3) | | .323 (8.2) | .488 (12.4) | | .429 (10.9) | | .232 (5.9) | 1.091 (27.7) | .433 (11.0) |
| | S | | .976 (24.8) | | | .315 (8.0) | | .437 (11.1) | | .244 (6.2) | | | | |
| B | P | 2.083 (52.9) | | 1.528 (38.8) | 1.850 (47.0) | | .323 (8.2) | .488 (12.4) | | .433 (11.0) | | .228 (5.8) | 1.630 (41.4) | .433 (11.0) |
| | S | | 1.513 (38.5) | | | .315 (8.0) | | .437 (11.1) | | .244 (6.2) | | | | |
| C | P | 2.724 (69.2) | | 2.177 (55.3) | 2.500 (63.5) | | .323 (8.2) | .488 (12.4) | | .433 (11.0) | | .228 (5.8) | 2.280 (57.9) | .433 (11.0) |
| | S | | 2.161 (54.9) | | | .315 (8.0) | | .437 (11.1) | | .244 (6.2) | | | | |
| D | P | 2.630 (66.8) | | 2.075 (52.7) | 2.406 (61.1) | | .433 (11.0) | .598 (15.2) | | .433 (11.0) | | .228 (5.8) | 2.185 (55.5) | .543 (13.8) |
| | S | | 2.067 (52.5) | | | .429 (10.9) | | .437 (11.1) | | .244 (6.2) | | | | |

Panel Cutouts

Optimal cutout for rear mounting



Standard cutout

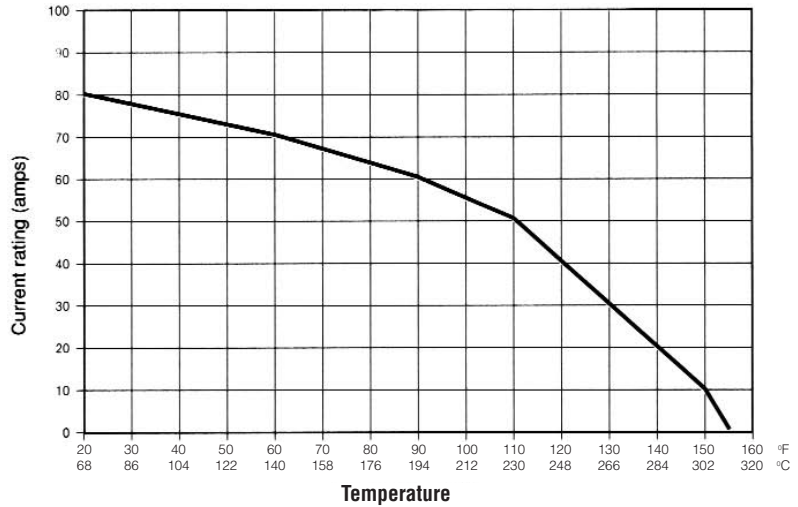


| Shell Size | Mounting Method | A ±.008 (±0.20) | B ±.008 (±0.20) | C ±.008 (±0.20) | D ±.008 (±0.20) | E ±.008 (±0.20) | F ±.008 (±0.20) | G ±.008 (±0.20) | H ±.008 (±0.20) | J ±.008 (±0.20) |
|------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| E | Front | .874 (22.2) | .437 (11.1) | .984 (25.0) | .492 (12.5) | .512 (13.0) | .256 (6.5) | .118 (3.0) | .059 (1.5) | .083 (2.1) |
| | Rear | .807 (20.5) | .402 (10.2) | | | .449 (11.4) | .224 (5.7) | | | .134 (3.4) |
| A | Front | 1.201 (30.5) | .602 (15.3) | 1.311 (33.3) | .657 (16.7) | .512 (13.0) | .256 (6.5) | .118 (3.0) | .059 (1.5) | .083 (2.1) |
| | Rear | 1.134 (28.8) | .567 (14.4) | | | .449 (11.4) | .224 (5.7) | | | .134 (3.4) |
| B | Front | 1.744 (44.3) | .870 (22.1) | 1.850 (47.0) | .925 (23.5) | .512 (13.0) | .256 (6.5) | .118 (3.0) | .059 (1.5) | .083 (2.1) |
| | Rear | 1.673 (42.5) | .839 (21.3) | | | .449 (11.4) | .224 (5.7) | | | .134 (3.4) |
| C | Front | 2.390 (60.7) | 1.197 (30.4) | 2.500 (63.5) | 1.248 (31.7) | .512 (13.0) | .256 (6.5) | .118 (3.0) | .059 (1.5) | .083 (2.1) |
| | Rear | 2.327 (59.1) | 1.161 (29.5) | | | .449 (11.4) | .224 (5.7) | | | .134 (3.4) |
| D | Front | 2.295 (58.3) | 1.150 (29.2) | 2.406 (61.1) | 1.205 (30.6) | .622 (15.8) | .311 (7.9) | .118 (3.0) | .059 (1.5) | .083 (2.1) |
| | Rear | 2.217 (56.3) | 1.110 (28.2) | | | .555 (14.1) | .280 (7.1) | | | .134 (3.4) |

INCHES (MM)

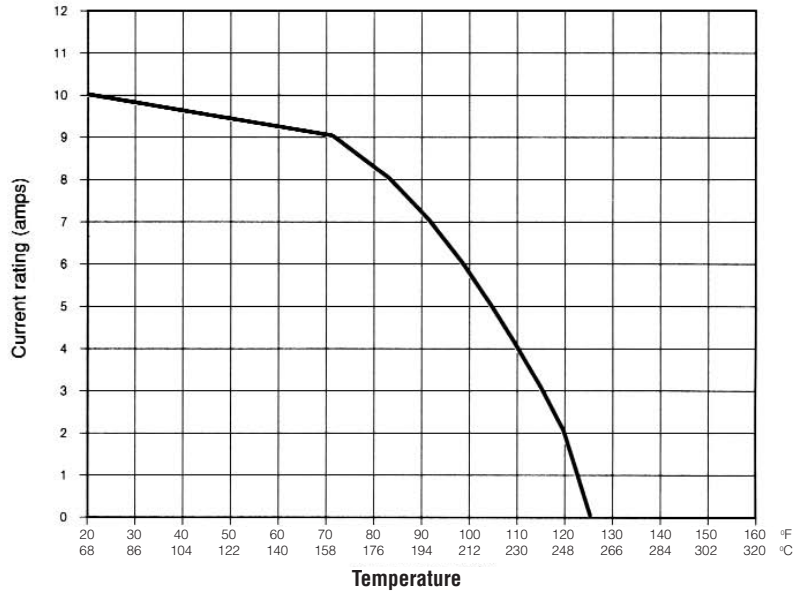
**DERATING CURVE FOR HIGH POWER CONTACTS (Size 8)
CURRENT RATING AND OPERATING TEMPERATURE**

Tested according to C E I 512-3, test 5b

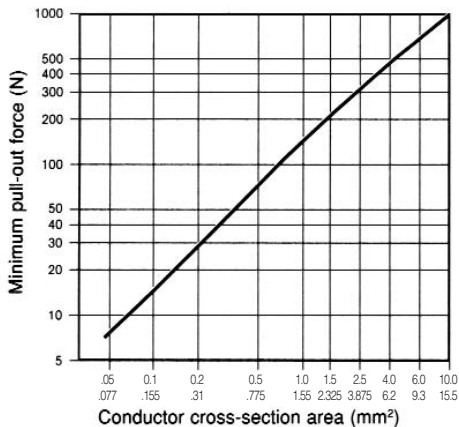


**DERATING CURVE FOR SIGNAL CONTACTS (Size 20)
CURRENT RATING AND OPERATING TEMPERATURE**

Tested according to C E I 512-3, test 5b



WIRE RETENTION FORCE ON CRIMP CONTACTS



BREAKDOWN VOLTAGE

The following chart indicates the voltage rating (AC - Vrms - 50 Hz) and breakdown voltage for an operating temperature of 77°F (25°C) under 50% relative humidity.

Voltages are applied to male and female connectors mated or unmated.

| Contact Types | Sea Level | | 19,685 (6,000 m) | | 68,898 (21,000 m) | |
|---------------|------------|--------|------------------|--------|-------------------|-------|
| | Excitation | Test | Excitation | Test | Excitation | Test |
| Coax | 1300 V | 900 V | 900 V | 600 V | 400 V | 300 V |
| Power | 1500 V | 1000 V | 1000 V | 600 V | 500 V | 300 V |
| Voltage | 3800 V | 2800 V | 2300 V | 1700 V | 650 V | 450 V |

Digital Video Interface

SPECIFICATIONS

MATERIALS

| | |
|-------------------------|--|
| Shell | Zinc Alloy #3, Finish: 100µ"(2.54µm) min. of nickel |
| Boardlock | SPCC, 100µ"(2.54µm) min. of tin/lead |
| Insulator | P.B.T., 30% glass-filled, UL94V-0 rated |
| Hex Screwlock | Brass, 50µ"(1.27µm) min. of nickel |
| Contact | Phosphor bronze C521 OR-H per QQ-B-750 |
| Mating Area | Selective gold, including gold flash, 10µ"(0.25µm) of gold, 15µ"(0.4µm) of gold and 30µ"(0.76µm) of gold |
| Termination Area | 100µ"(2.54µm) min. of tin-lead |
| Underplate | 50µ"(1.27µm) min. nickel |
| Ground Blade | Phosphor bronze C5191 R-H |

MECHANICAL SPECIFICATION

Mating and Unmating Force

| | |
|----------------|--|
| Mating force | 9.92 lb. (4.5 kg.) per connector maximum |
| Unmating force | 2.20 lb. (1 kg.) minimum, 8.82 lb. (4 kg.) maximum per connector |

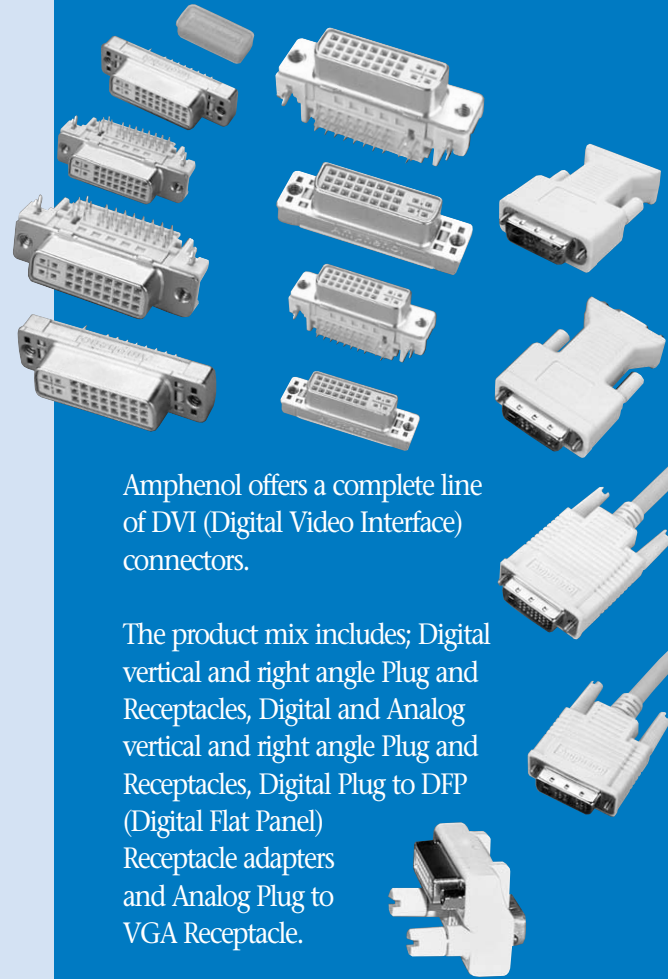
Mechanical Shock

| | |
|-----------|---|
| Condition | EIA-364-27, condition A. (Specified pulse). No discontinuity at 1µs or longer (each contact) when continuity is tested per EIA-364-46. |
|-----------|---|

Durability

| | |
|-----------|--|
| Condition | EIA-364-09, mated and unmated connectors for 100 cycles at a rate of 100 +/-50 cycles per hour. There shall be no physical damage and shall meet requirements of subsequent tests. |
|-----------|--|

CONNECTORS



Amphenol offers a complete line of DVI (Digital Video Interface) connectors.

The product mix includes; Digital vertical and right angle Plug and Receptacles, Digital and Analog vertical and right angle Plug and Receptacles, Digital Plug to DFP (Digital Flat Panel) Receptacle adapters and Analog Plug to VGA Receptacle.

G12 - X - X - X - X - X - X

| | |
|--|---|
| <p>DVI Connectors Digital Video Interface, PCB Mount & Receptacle</p> <p>Connector Style A: Right Angle PCB Mount B: Straight PCB Mount</p> <p>Signal Interface Option 1: Analog & Digital 2: Digital only</p> <p>Contact Finish 0: Gold Flash 2: 20µ" (0.51µm) Gold 1: 10µ" (0.25µm) Gold 3: 30µ" (0.76µm) Gold</p> | <p>Variation Code Blank: Standard</p> <p>Flange Mount Options 0: Without Hex Screwlock 1: With #4-40UNC Hex Screwlock Bulk-packed 2: With #4-40UNC Hex Screwlock Installed</p> <p>Board Mount Option 1: Arrowhead Boardlock (For Straight PCB Mount Versions only) 2: Grounding Posts and Locators 3: Arrowhead Boardlock (ø 0.075" (1.93) and locators 4: Arrowhead Boardlock (ø 0.124" (3.17) and locators</p> |
|--|---|

G12C - X - X - X - X

| | |
|--|---|
| <p>DVI Connectors Digital Video Interface, Cable Mount Plug</p> <p>Signal Interface Option 1: Analog & Digital, 24 Position 2: Analog & Digital, 18 Position 3: Analog 12 Position 4: Digital 24 Position 5: Digital 18 Position</p> | <p>Variation Code Blank: Standard 1: With EMI shield Can (GT27C010) 2: With EMI shield Can (GT27C010) Screw (GT127C008)</p> <p>Front: Shell Finish 1: Nickel Plated 2: Tin Plated</p> <p>Contact Finish 0: Gold Flash 2: 10µ" (0.25µm) Gold 4: 30µ" (0.76µm) Gold 1: 5µ" (0.13µm) Gold 3: 20µ" (0.51µm) Gold</p> |
|--|---|

SD308



For Sea, Air or Land, these connectors are SEALED! Amphenol's SD308 Sealed D-Subminiature Connectors are available in the full range of standard density and hi-density insert arrangements, pin and socket contacts. These connectors are supplied with fixed screw machine contacts and are available in Solder Cup, Straight PCB, and Right Angle PCB terminations.

- Ruggedized Computers and Peripheral Equipment
- Industrial Controllers
- 21st Century Soldier
- Ideal For Retrofit Applications Or Late Design-In

Sealed D-Sub Connectors

SPECIFICATIONS:

PRODUCT FEATURES

- One piece machined Aluminum Shell
- Gold Plated Screw Machine Contacts
- Hi Grade Thermoplastic Inserts -67°F to +257°F (-55°C to +125°C)
- Integrated Blind Panel Mounts
- Supplied with Conductive Panel Seal Gasket

MATERIALS AND PLATINGS

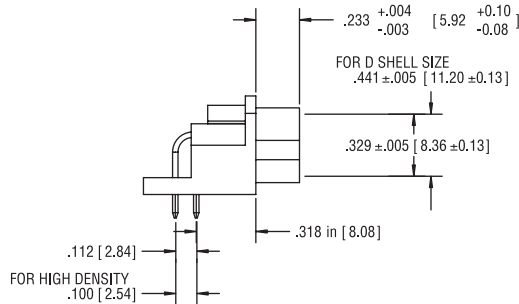
| | |
|-----------------|---|
| Shells | Machined aluminum alloy, tin plated |
| Inserts | High temperature resistant polyethersulfone per mil-p-46185 |
| Contacts | Copper alloy, 20µ" (0.51µm) gold plated over nickel. |
| Seal | Silicone elastomer with nickel plated graphite flake |

ELECTRICAL DATA

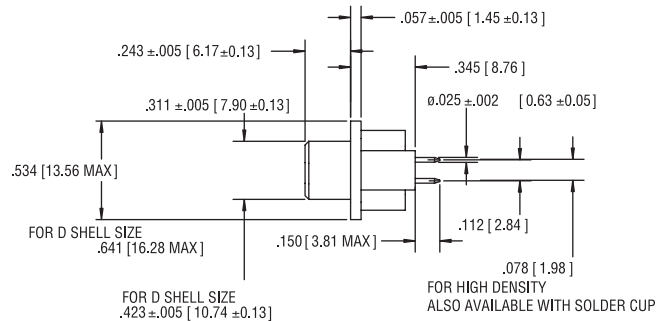
| | |
|------------------------------|-------------------------------------|
| Current Rating | 5A |
| Insulation Resistance | 5 GIGOHM @ 500 VDC |
| Working Voltage | 120 VAC |
| D.W.V. | 1,000 VAC pin to pin & pin to shell |

CLIMATIC DATA

| | |
|------------------------------|-----------------------------------|
| Operating Temperature | -67°F to +257°F (-55°C to +125°C) |
|------------------------------|-----------------------------------|



PLUG - SIDE VIEW



RECEPTACLE - SIDE VIEW

SD308 - E09 - S - A - 1 - 000

Series Designation

Shell Size & Number Of Contacts

STD Density E09, A15, B25, C37, D50
HIGH Density E15, A26, B44, C62, D78, 6106

Contact Type

S=Socket Contact P= Pin Contact

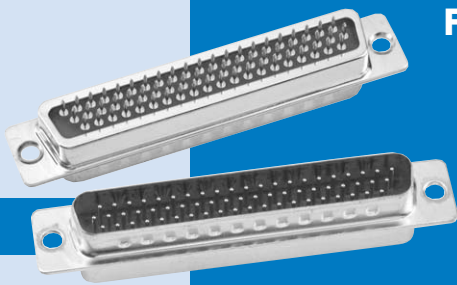
000 = Standard part
other deviations as required

Mounting Type

1 = 4-40 Blind Nut
2 = 4-40 Blind Nut with R/A Mounting Bracket

Termination Style

A = Right Angle pcb B = Vertical pcb
C = Solder Cup



SPECIFICATIONS:

DESCRIPTION

- Hi reliability filtering in multi row arrangements
- Stamped and Formed shells
- Screw Machine Contacts and Hi Reliability inserts
- Available in all Hi-Density insert patterns

MATERIALS AND PLATINGS

| | |
|------------------|--|
| Shells | Stamped steel shell, tin plated |
| Inserts | High temperature resistant polyethersulfone per MIL-P-46185 |
| Contacts | Machined copper alloy, 20µ" (0.51µm) gold plated over nickel |
| Capacitor | Barium titanate ceramic array |

ELECTRICAL DATA

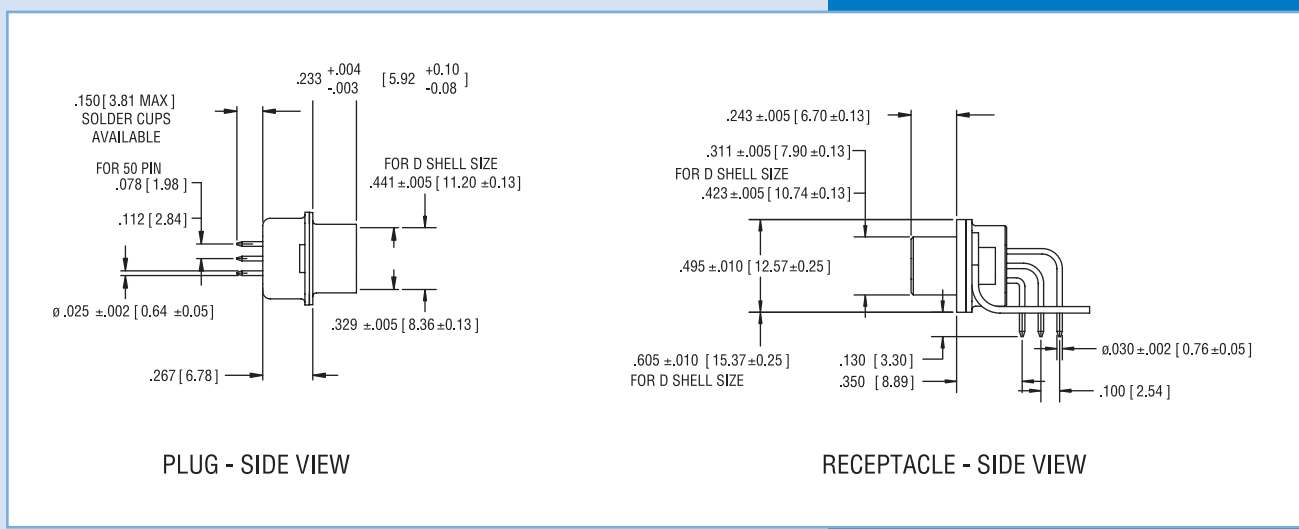
| | |
|------------------------------|-----------------------------------|
| Current Rating | 5 A |
| Insulation Resistance | 5 GIGOHM @ 500 VDC |
| Working Voltage | 200 VDC |
| D.W.V. | 500 VDC pin to pin & pin to shell |
| Capacitance | +/- 20% (see P/N description) |

CLIMATIC DATA

| | |
|------------------------------|-----------------------------------|
| Operating Temperature | -67°F to +257°F (-55°C to +125°C) |
|------------------------------|-----------------------------------|

For 50 position and all high density versions. Amphenol's FD308 Filtered D-Subminiature connectors are available in the full range of hi-density insert arrangements, pin and socket contacts, plus the 50 position standard density. These connectors are supplied with fixed screw machine contacts and are available in Straight and Right Angle PCB terminations and Solder Cup.

- Computers and Peripheral Equipment
- Avionics Systems Ideal For Retrofit Applications Or Late Design-In



FD308 - B44 - S - A - 1 - A2 - 000

| | | |
|--|-------|--|
| Series Designation | FD308 | 000 = Standard part other deviations as required |
| Size & Number Of Contacts | B44 | Capacitance Code |
| STD Density E09, A15, B25, C37, D50 | | A2 = 200 PF 02 = 2000 PF |
| High Density E15, A26, B44, C62, D78, 6104 | | A4 = 400 PF 05 = 5000 PF |
| Contact Type | S | 01 = 1000 PF |
| S = Socket Contact P = Pin Contact | | Mounting Type |
| Termination Style | A | 1 = 4-40 Clinch Nut |
| A = Right Angle pcb | | 2 = Ø.120 (3.05) Hole |
| B = Vertical pcb | | 3 = R/A Mounting Bracket |
| C = Solder Cup | | 4 = 4-40 Clinch Nut with R/A Mounting Bracket |

ORDERING INFORMATION - IDC

FCC17 - E09 - S - W - 4 - 8 - 0 - G

Series Designation

Size and Configuration

15 & 25 Size Consult Factory.

Connector Type

S: Socket P: Pin Consult Factory.

Termination Type

W: IDC *

Mounting

2: .120 (3.05) Diameter Through Hole
4: 4-40 Threaded Inserts
6: M3 Threaded Inserts

Special

G: 50 Micro Inches Gold

Modifier

0: Standard Product
x: Special or Custom Versions

Capacitance Value

| | |
|-----------|--------------|
| D: 50 pF | 5: 1,000 pF |
| 0: 180 pF | E: 2,200 pF |
| F: 330 pF | 9: 5,600 pF |
| 1: 470 pF | 8: 47,000 pF |
| 4: 820 pF | |

Other Capacitance values available.
Consult Factory.

ORDERING INFORMATION - FILTERED PRESS FIT

FCC17 - B25 - S - R - 4 - 8 - 0 - G

Series Designation

Size and Configuration *

Connector Type

S: Socket P: Pin Consult Factory.

Termination Type

R: Press Fit

Mounting

| | |
|--------------------------------------|-------------------------------------|
| 2: .120 (3.05) Diameter Through Hole | 5: 4-40 Threaded Standoff |
| 3: 4-40 Self Locking Threaded Insert | 6: M3 Threaded Inserts |
| 4: 4-40 Threaded Inserts | E: Code 4 with 4-40 Hex Jack Socket |

Special

G: 50 Micro Inches Gold

Modifier

0: Standard Product
x: Special or Custom Versions

Capacitance Value

| | |
|-----------|--------------|
| D: 50 pF | 5: 1,000 pF |
| 0: 180 pF | E: 2,200 pF |
| F: 330 pF | 9: 5,600 pF |
| 1: 470 pF | 8: 47,000 pF |
| 4: 820 pF | |

Other Capacitance values available.
Consult Factory.

ORDERING INFORMATION - STACKED D-SUB

FCC17 - 2 - BP - BS - 4 - 5 - 5 - X

Series Designation

Vertical Mounting Dimension Between Connectors

1 = .625 (15.88)
2 = .750 (19.05)

Upper Connector Configuration (Size and Style)

| | |
|---------------|---------------|
| EP: 9 pin | BP: 25 pin |
| ES: 9 socket | BS: 25 socket |
| AP: 15 pin | CP: 37 pin |
| AS: 15 socket | CS: 37 socket |

Lower Connector Configuration

(Size and Style) same as Upper Connector Configuration

Mounting

2: .120 (3.05) Diameter Through Hole on Flanges
4: 4-40 Threaded Inserts on Flanges
E: 4-40 Hex Jack Sockets (supplied loose)

Modifier

0: Standard Product
x: Special or Custom Versions

Lower Connector Filter Capacitance
same as Upper Connector Filter Capacitance Designation

Upper Connector Filter Capacitance

| | |
|-----------|--------------|
| D: 50 pF | 5: 1,000 pF |
| 0: 180 pF | E: 2,200 pF |
| F: 330 pF | 7: 1,200 pF |
| 1: 470 pF | 9: 5,600 pF |
| 4: 820 pF | 8: 47,000 pF |

* For Additional Mounting Options and Filter Capacitance - Consult Factory

ORDERING INFORMATION - D-SUB

FCC17 - B25 - S - C - 4 - 4 - 0 - G

Series Designation

Size

E09, A15, B25, C37

Connector type

A - Adapter P - Pin S - Socket

Termination Type

A - Right Angle PC Tail, .318 (8.08) Footprint
 B - Right Angle PC Tail, .405 (10.29) Footprint
 C - Right Angle PC Tail, .590 (14.99) Footprint
 D - Pin/Socket Adapter
 E - Vertical Mount PC Tail
 M - Solder Cup
 N - Vertical Mount PC Tail - Long Body

Mounting options*

- A: 4-40 Threaded PC Tail Standoffs with Boardlock, Vertical Mount Only
- E: 4-40 Hex Jack Sockets (supplied loose)
- F: 4-40 Round Fixed Jack Sockets
- 2: .120 (3.05) diameter Through hole
- 3: Self-Locking 4-40 Threaded Inserts
- 4: 4-40 Threaded Inserts (Standard)
- 5: 4-40 Threaded Stand-Offs, Vertical Mount
- 6: M3 Threaded inserts

* For Additional Mounting Options and Filter Capacitance - Consult Factory

Specials

- No Digit: Standard 15µ" (0.38µm) gold
- G: 50µ" (1.27µm) gold
- K: 30µ" (0.76µm) gold
- L: Standard Connector with added ferrite block

Modifier

- 0 = Standard Product (Boardlocks on Right Angle D-Subs)
- B = Metal Mounting Brackets, for Right Angle D-Subs
- D = .315 (8.00) to Boardlock for .590 (14.99) footprint
- E = Plastic Bracket - No Boardlock
- F = No Boardlock, No plastic or metal Bracket - Alignment Strip Only
- X = Specials or Custom Versions

Filter Capacitance (pF)*

| | |
|-----------|--------------|
| D: 50 pF | 5: 1,000 pF |
| B: 100 pF | 7: 1,200 pF |
| 0: 180 pF | E: 2,200 pF |
| F: 330 pF | 9: 5,600 pF |
| 1: 470 pF | 8: 47,000 pF |
| 4: 820 pF | |

ORDERING INFORMATION - COMBO D-SUB

FCC17 - A - 3W3 - P - M - 4 - 5 - 0 - G

Series Designation

Shell Size

A, B, C, D, E

Arrangement

Connector type

A = Adapter, P = Pin, S = Socket

Termination type

- D = Pin/Socket Adapter
- E = Power PC Tail - 40A - .126 (3.20) Dia., .175 (4.44) Lg.
- K = Power Solder Cup - 10A - Wire Size 16
- L = Power Solder Cup - 20A - Wire Size 12
- M = Power Solder Cup - 40A - Wire Size 8
- R = Power Press Fit - 20A - .145 (3.68) Lg. - .126 (3.20) Dia. Hole

Mounting Options

- 2 = .120 (3.05) dia. mounting holes
- 3 = 4-40 Threads Self locking
- 4 = 4-40 Threads
- 5 = 4-40 Standoffs - PC tail only
- 6 = M3 Threads
- E = 4-40 Hex Jack Sockets (supplied loose)

* For Additional Mounting Options and Filter Capacitance - Consult Factory

Plating Option

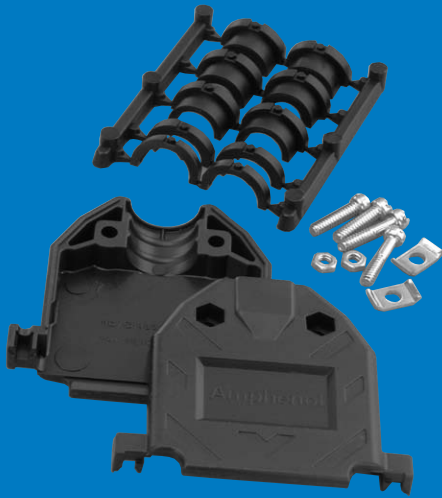
- Blank = Standard 30µ" (0.76µm) gold
- G = 50µ" (1.27µm) gold

Modifier

- 0 = Standard
- X = Specials or Custom versions (Consult Factory)

Filter Capacitance (pF)

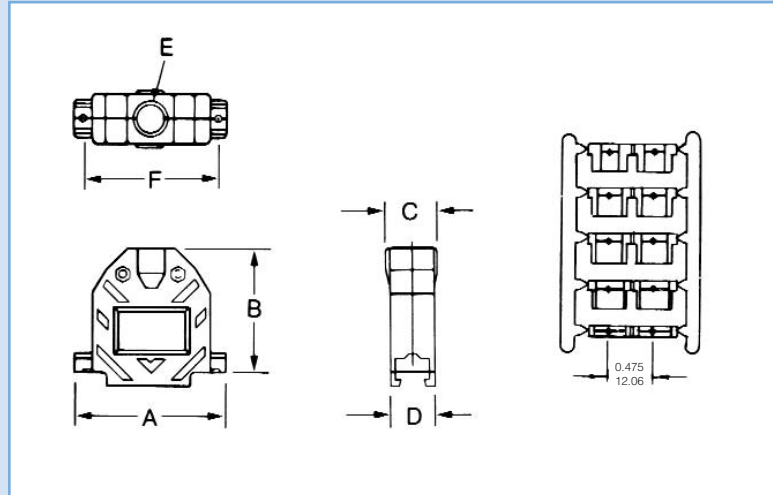
| | |
|-----------|-------------|
| D: 50 pF | 5: 1000 pF |
| B: 100 pF | 7: 1200 pF |
| o: 180 pF | E: 2200 pF |
| f: 330 pF | 9: 5600 pF |
| l: 470 pF | 8: 47000 pF |
| 4: 820 pF | |



Amphenol's black plastic backshell accommodates most standard and high-density D-Subminiature connectors and is appropriate for most cable assemblies. This version is economical and highly durable. The split-grommet insert provides cable strain relief while making it easy to assemble.

SPECIFICATIONS:

Housing Material: Styrene (UL 94 VO)
Grommet Material: Polypropylene
Mounting Hardware: Steel, clear zinc finish



DIMENSIONS AND ORDERING INFORMATION

| Shell Size | Standard # of Contacts | Hi-Density # of Contacts | Part # | Dimensions | | | | | | Cable Diameter Range | |
|------------|------------------------|--------------------------|-----------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|
| | | | | A | B | C | D | E | F | Minimum | Maximum |
| E | 9 | 15 | 17-1724-1 | 1.217 (30.91) | 1.547 (39.29) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 0.984 (24.99) | 0.210 (5.33) | 0.350 (8.89) |
| A | 15 | 26 | 17-1725-1 | 1.545 (39.24) | 1.505 (38.23) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 1.312 (33.32) | 0.210 (5.33) | 0.350 (8.89) |
| B | 25 | 44 | 17-1726-1 | 2.090 (53.08) | 1.655 (42.04) | 0.710 (18.03) | 0.640 (16.26) | 0.522 (13.26) | 1.857 (47.17) | 0.230 (5.84) | 0.450 (11.43) |
| C | 37 | 62 | 17-1727-1 | 2.734 (69.44) | 1.830 (46.48) | 0.906 (23.01) | 0.640 (16.26) | 0.726 (18.44) | 2.500 (63.50) | 0.350 (8.89) | 0.640 (16.26) |
| D | 50 | 78 | 17-1728-1 | 2.645 (67.18) | 1.855 (47.12) | 0.940 (23.88) | 0.770 (19.56) | 0.726 (18.44) | 2.406 (61.11) | 0.350 (8.89) | 0.640 (16.26) |

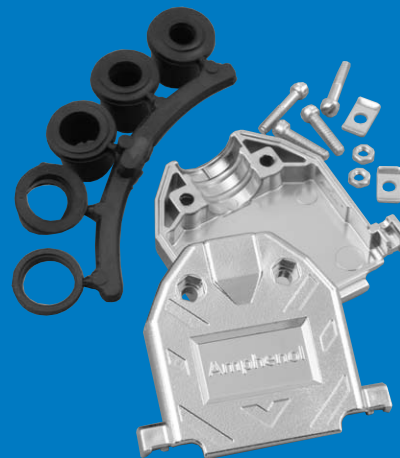
Plated Plastic Backshell

SPECIFICATIONS:

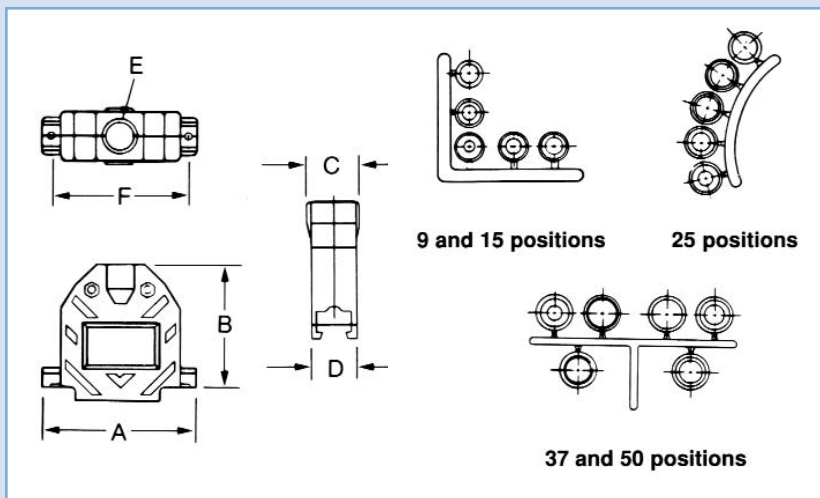
| | |
|---------------------------|--------------------------|
| Housing Material: | ABS Polymer |
| Plating: | Nickel over copper |
| Grommet Material: | PVC (UL 94 VO) |
| Mounting Hardware: | Steel, clear zinc finish |

ASSEMBLY INSTRUCTIONS

1. Select the tightest insert that will fit over the cable and thread the cable through it, placing the end with the smaller O.D. (the end without the washer) towards the connector.
2. Cut the jacket, fold the shielding back over the outside of the insert and cut it just short of the washer.
3. Install jackscrews and connector.
4. Place the washer in the outermost depression in the exit area of the hood and screw the cover closed.



Amphenol's plated plastic backshell accommodates most standard and high-density D-Subminiature connectors and is appropriate for cable assemblies requiring compliance to FCC 20780. This version is highly durable and provides EMI/RFI protection. The rubber grommet compression insert forces the cable's shielding against the inside of the cable exit area, assuring shielding.

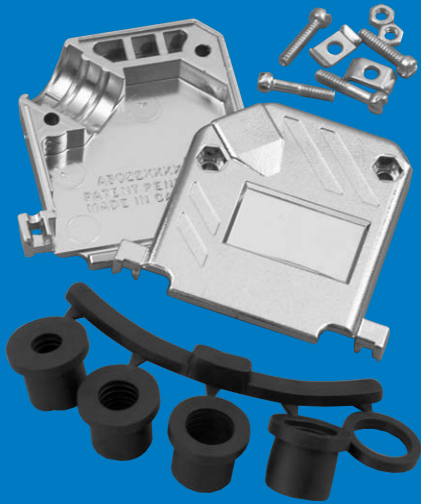


DIMENSIONS AND ORDERING INFORMATION

| Shell Size | Standard # of Contacts | Hi-Density # of Contacts | Part # | Dimensions | | | | | | Cable Diameter Range | |
|------------|------------------------|--------------------------|-----------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|
| | | | | A | B | C | D | E | F | Minimum | Maximum |
| E | 9 | 15 | 17-1724-2 | 1.217 (30.91) | 1.547 (39.29) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 0.984 (24.99) | 0.210 (5.33) | 0.320 (8.13) |
| A | 15 | 26 | 17-1725-2 | 1.545 (39.24) | 1.505 (38.23) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 1.312 (33.32) | 0.210 (5.33) | 0.320 (8.13) |
| B | 25 | 44 | 17-1726-2 | 2.000 (50.8) | 1.655 (42.04) | 0.710 (18.03) | 0.640 (16.26) | 0.522 (13.26) | 1.857 (47.17) | 0.230 (5.84) | 0.450 (11.43) |
| C | 37 | 62 | 17-1727-2 | 2.730 (69.34) | 1.830 (46.48) | 0.906 (23.01) | 0.640 (16.26) | 0.726 (18.44) | 2.500 (63.50) | 0.350 (8.89) | 0.650 (16.51) |
| D | 50 | 78 | 17-1728-2 | 2.645 (67.18) | 1.855 (47.12) | 0.940 (23.88) | 0.440 (11.18) | 0.726 (18.44) | 2.406 (61.11) | 0.350 (8.89) | 0.650 (16.51) |

INCHES (MM)

ACCESSORIES



Amphenol's plated plastic backshell accommodates most standard and high-density D-Subminiature connectors and is appropriate for cable assemblies requiring compliance to FCC 20780. This version is highly durable and provides EMI/RFI protection. The rubber grommet compression insert forces the cable's shielding against the inside of the cable exit area, assuring shielding. The 45° cable exit helps save space behind equipment.

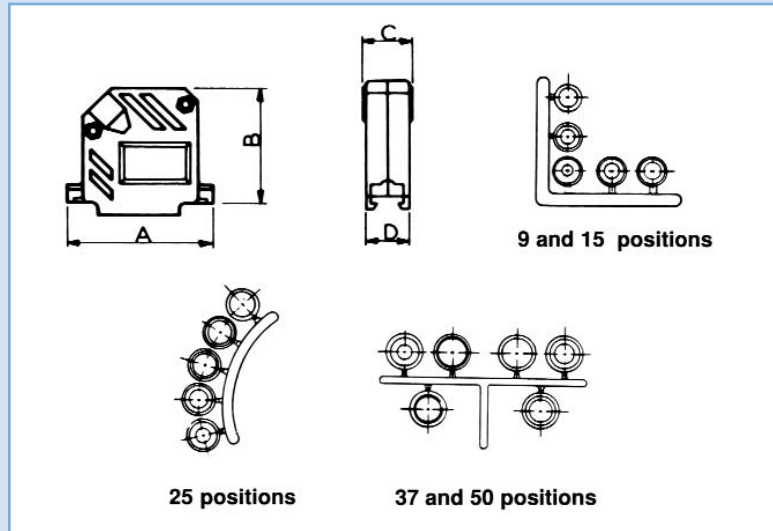
45° Plated Plastic Backshell

SPECIFICATIONS:

| | |
|---------------------------|--------------------------|
| Housing Material: | ABS Polymer |
| Plating: | Nickel over copper |
| Grommet Material: | PVC (UL 94 VO) |
| Mounting Hardware: | Steel, clear zinc finish |

ASSEMBLY INSTRUCTIONS

1. Select the tightest insert that will fit over the cable and thread the cable through it, placing the end with the smaller O.D. (the end without the washer) towards the connector.
2. Cut the jacket, fold the shielding back over the outside of the insert and cut it just short of the washer.
3. Install jackscrews and connector.
4. Place the washer in the outermost depression in the exit area of the hood and screw the cover closed.



DIMENSIONS AND ORDERING INFORMATION

| Shell Size | Standard # of Contacts | Hi-Density # of Contacts | Part # | Dimensions | | | | | | Cable Diameter Range | |
|------------|------------------------|--------------------------|-----------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|
| | | | | A | B | C | D | E | F | Minimum | Maximum |
| E | 9 | 15 | 17-1824-2 | 1.217 (30.91) | 1.430 (36.32) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 0.984 (24.99) | 0.210 (5.33) | 0.320 (8.13) |
| A | 15 | 26 | 17-1825-2 | 1.545 (39.24) | 1.568 (39.83) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 1.312 (33.32) | 0.210 (5.33) | 0.320 (8.13) |
| B | 25 | 44 | 17-1826-2 | 2.090 (53.09) | 1.735 (44.07) | 0.710 (18.03) | 0.640 (16.26) | 0.522 (13.26) | 1.857 (47.17) | 0.230 (5.84) | 0.450 (11.43) |
| C | 37 | 62 | 17-1827-2 | 2.734 (69.44) | 1.976 (50.19) | 0.906 (23.01) | 0.640 (16.26) | 0.726 (18.44) | 2.500 (63.5) | 0.350 (8.89) | 0.650 (16.51) |

Two-Piece Die Cast Shielded Backshells

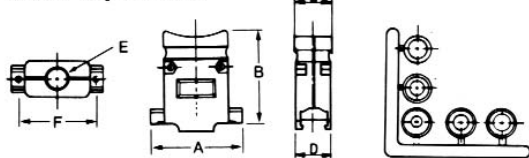
SPECIFICATIONS:

| | |
|--------------------|--------------------------|
| Housing Material: | Die cast zinc |
| Grommet Material: | PVC (UL 94 VO) |
| Mounting Hardware: | Steel, clear zinc finish |

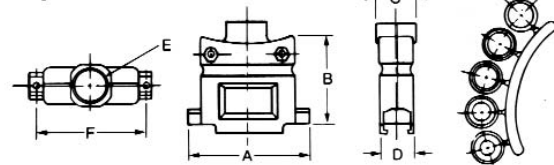
ASSEMBLY INSTRUCTIONS

1. Select the tightest insert that will fit over the cable and thread the cable through it, placing the end with the smaller O.D. (the end without the washer) towards the connector.
2. Cut the jacket, fold the shielding back over the outside of the insert and cut it just short of the washer.
3. Install jackscrews and connector.
4. Place the washer in the outermost depression in the exit area of the hood and screw the cover closed.

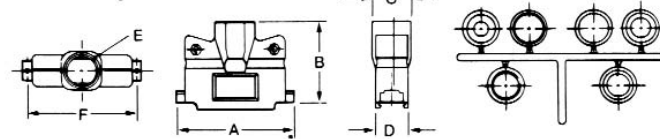
9 and 15 positions



25 positions



37 and 50 positions

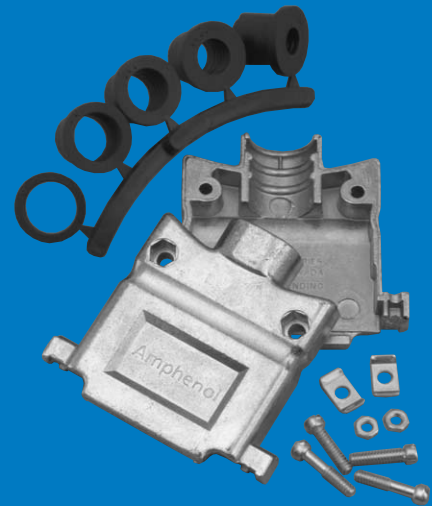


DIMENSIONS AND ORDERING INFORMATION

| Shell Size | Standard # of Contacts | Hi-Density # of Contacts | Part # | Dimensions | | | | | | Cable Diameter Range | |
|------------|------------------------|--------------------------|------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|
| | | | | A | B | C | D | E | F | Minimum | Maximum |
| E | 9 | 15 | 17-1657-09 | 1.217 (30.91) | 1.430 (36.32) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 0.984 (24.99) | 0.210 (5.33) | 0.320 (8.13) |
| A | 15 | 26 | 17-1657-15 | 1.545 (39.24) | 1.568 (39.83) | 0.640 (16.26) | 0.640 (16.26) | 0.400 (10.16) | 1.312 (33.32) | 0.210 (5.33) | 0.320 (8.13) |
| B | 25 | 44 | 17-1657-25 | 2.090 (53.09) | 1.735 (44.07) | 0.710 (18.03) | 0.640 (16.26) | 0.522 (13.26) | 1.857 (47.17) | 0.230 (5.84) | 0.450 (11.43) |
| C | 37 | 62 | 17-1657-37 | 2.734 (69.44) | 1.976 (50.19) | 0.906 (23.01) | 0.640 (16.26) | 0.726 (18.44) | 2.500 (63.5) | 0.350 (8.89) | 0.640 (16.26) |

INCHES (MM)

ACCESSORIES



Amphenol's metal backshell accommodates most standard and high-density D-Subminiature connectors and is appropriate for cable assemblies requiring compliance to FCC 20780. This version is highly durable and provides EMI/RFI protection. The rubber grommet compression insert forces the cable's shielding against the inside of the cable exit area, assuring shielding.

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

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А