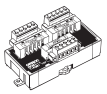
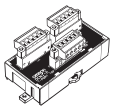
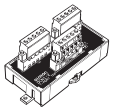
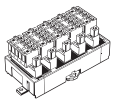
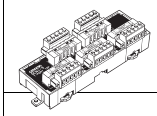
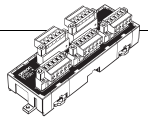
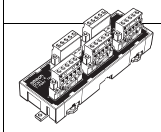
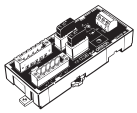
Peripheral Devices

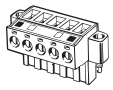
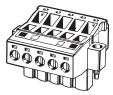
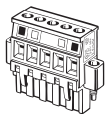
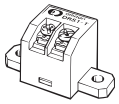
General-purpose Peripheral Devices

Peripheral Devices for DeviceNet Communications

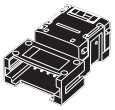
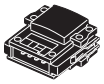
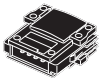
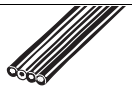
Ordering Information

● **General-purpose Models**

Product	Appearance	Model	Specifications	
T-branch Tap for 1 branch line		**DCN1-1NC**	Cable wiring direction: Toward top Cable lock direction: From top Connector screw direction: From top	Provided with 3 parallel connectors with clamps (XW4G-05C1-H1-D), standard terminating resistor
		**DCN1-1C**	Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From side	Provided with 3 parallel connectors with screws (XW4B-05C1-H1-D), standard terminating resistor
		**DCN1-2C**	Cable wiring direction: Toward top Cable screw direction: From side Connector screw direction: From top	
		**DCN1-2R**	Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From top	Provided with 3 orthogonal connectors with screws (XW4B-05C1-VIR-D), standard terminating resistor
T-branch Tap for 3 branch lines		**DCN1-3NC**	Cable wiring direction: Toward top Cable lock direction: From top Connector screw direction: From top	Provided with 5 parallel clamp connectors with screws (XW4G-05C1-H1-D), standard terminating resistor
		**DCN1-3C**	Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From side	Provided with 5 parallel connectors with screws (XW4B-05C1-H1-D), standard terminating resistor
		**DCN1-4C**	Cable wiring direction: Toward top Cable screw direction: From side Connector screw direction: From top	
		**DCN1-4R**	Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From top	Provided with 5 orthogonal clamp connectors with screws (XW4B-05C1-VIR-D), standard terminating resistor
Power Supply Tap		**DCN1-1P**	Tap provided with 2 connectors, standard terminating resistor, and fuse	

Product		Appearance	Model	Specifications
Connectors			**XW4G-05C1-H1-D**	Parallel clamp connector with screws Connector insertion and wiring both performed horizontally.
			XW4G-05C4-TF-D	Parallel multi-branching clamp connector with screws Connector insertion and wiring performed in same direction.
			**XW4B-05C1-H1-D**	Parallel connector with screws Connector insertion and wiring performed in same direction.
			XW4B-05C4-T-D	Parallel, screw-less, multi-branching connector Connector insertion and wiring performed in same direction.
			**XW4B-05C4-TF-D**	Parallel, multi-branching connector with screws Connector insertion and wiring performed in same direction.
			**XW4B-05C1-VIR-D**	Orthogonal connector with screws Connector insertion and wiring performed at a right angle.
DeviceNet Standard Cables	Thin Cables		**DCA1-5C10(-B)**	Outer diameter: 7.00 mm Length: 100 m DCA1-5C10-B: Cable color: Blue DCA1-5C10: Cable color: Gray
	Thick Cables		**DCA2-5C10(-B)**	Outer diameter: 11.6 mm Length: 100 m DCA2-5C10-B: Cable color: Blue DCA2-5C10: Cable color: Gray
Terminal-block Terminator			**DRS1-T**	Resistance of 121 Ω

● Peripheral Devices for Flat Cables

Product	Appearance	Model	Specifications
Connector for Flat Cable		**DCN4-SF4D**	Connector with lock screws for crimping flat cable
Conversion Connector for Standard Thin Cable and Flat Cable		**DCN4-BR4D**	Used as a set with a DCN4-TR4 when Thin Cable is branched on a branch line.
Power Supply Terminal Block with Terminating Resistance for Flat Cable		**DCN4-TP4D**	Can be used to supply communications power from terminals when Flat Cable is used.
Flat Connector Socket		**DCN4-TR4**	Used as a set with a DCN4-BR4 Flat Connector Plug in the following applications. • Extending the trunk line • T-branching the trunk line into branch lines
			Used alone in the following applications. • Connecting a DCN4-TM4 Terminating Resistor to the trunk line
Flat Connector Plug		**DCN4-BR4**	Used as a set with a DCN4-TR4 Flat Connector Socket in the following applications. • Extending the trunk line • T-branching the trunk line into branch lines
Terminating Resistor		**DCN4-TM4**	Connector terminating resistor for flat cable. Attached to the DCN4-TR4 Flat Connector Socket at the end of the trunk line.
Flat Cable		**DCA4-4F10**	Four-core flat cable (UL 2555) Length: 100 m Conductor diameters: 0.75 mm^2 x 2, 0.5 mm^2 x 2
Simple Manual Crimp Tool		**DWT-A01**	Crimping tool for DCN4-TR4 Flat Connector Socket or DCN4-BR4 Flat Connector Plug.

Specifications

● General-purpose Models (T-branch Taps)

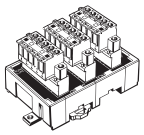
Rated current	Between main lines: 8 A (power supply line) and 2 A (signal line)
	Between main and branch lines: 3 A (power supply line) and 1 A (signal line)
Insulation resistance	100 MΩ min. (at 500 VDC)
Dielectric strength	500 VAC for 1 min, leakage current: 1 mA max.
Ambient operating temperature	0°C to 55°C

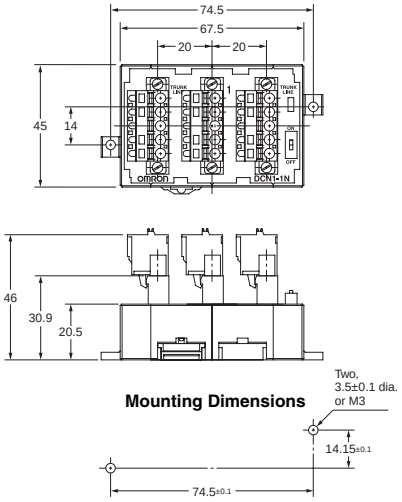
Dimensions

(Unit: mm)

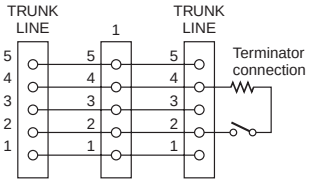
● General-purpose Models

T-branch Tap for 1 branch line DCN1-1NC (With Three Branching Connectors)



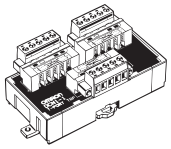


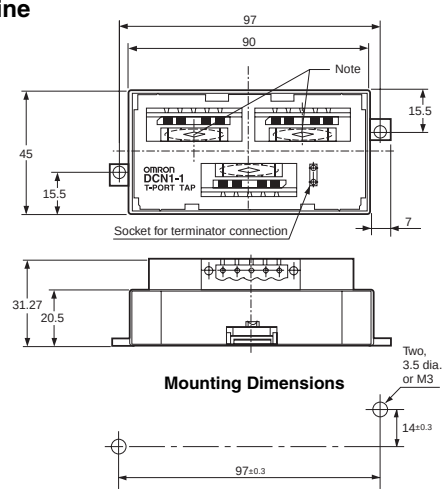
Internal Circuit



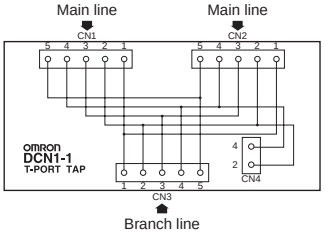
Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+

T-branch Tap for 1 branch line DCN1-1C (With Three Branching Connectors)





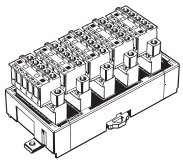
Internal Circuit

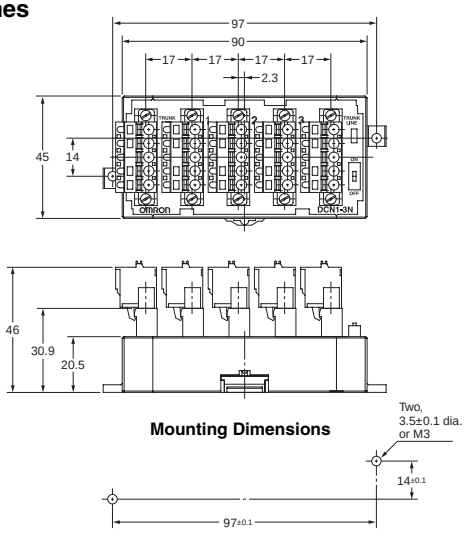


Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+

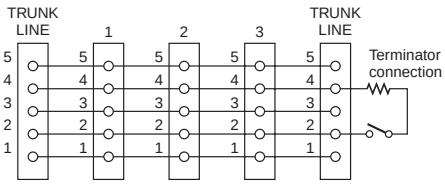
Note: When connecting a branch line to the main line, connect the main line to the connector marked with an asterisk because the resistance between the asterisks is minimal.

T-branch Tap for 3 branch lines DCN1-3NC (With Five Branching Connectors)



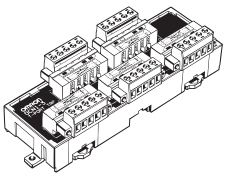


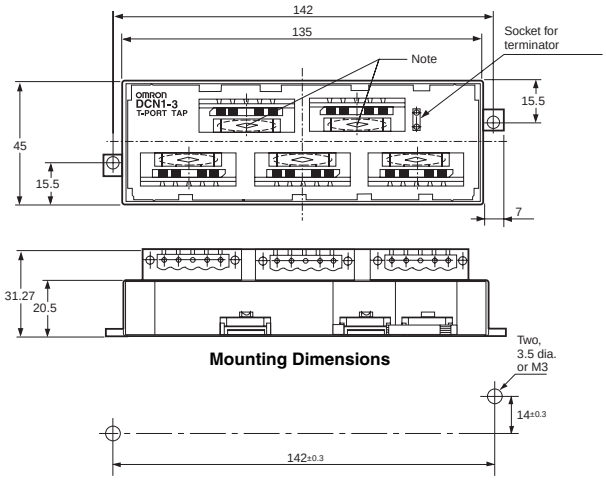
Internal Circuit



Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+

T-branch Tap for 3 branch lines DCN1-3C (With Five Branching Connectors)

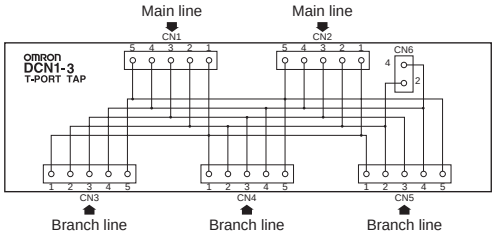




Mounting Dimensions

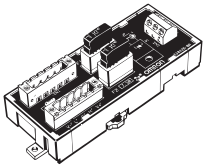
Note: When connecting a branch line to the main line, connect the main line to the connector marked with an asterisk because the resistance between the asterisked portion is minimal.

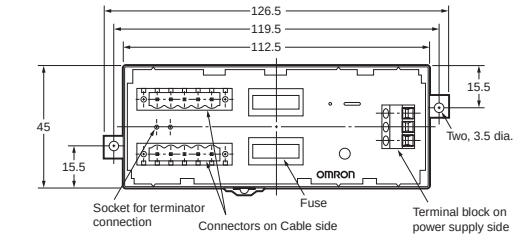
Internal Circuit

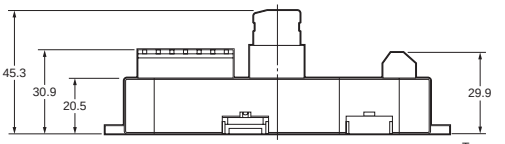


Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+

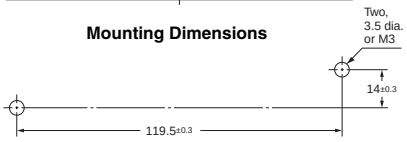
Power Supply Tap DCN1-1P (With Two Branching Connectors)



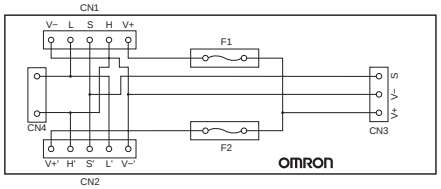




Mounting Dimensions

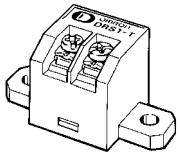


Internal Circuit

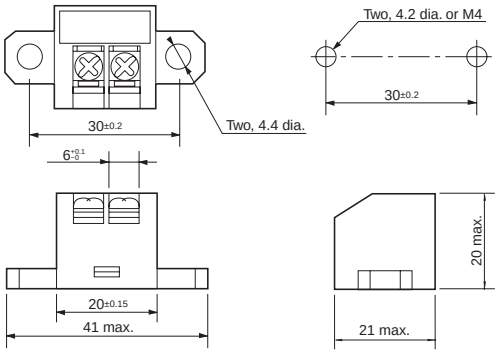


Terminal No.	Name
V-	V-
L	CAN L
S	DRAIN
H	CAN H
V+	V+

DRS1-T (Terminal-block Terminator)

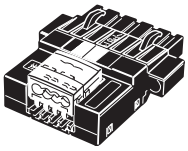


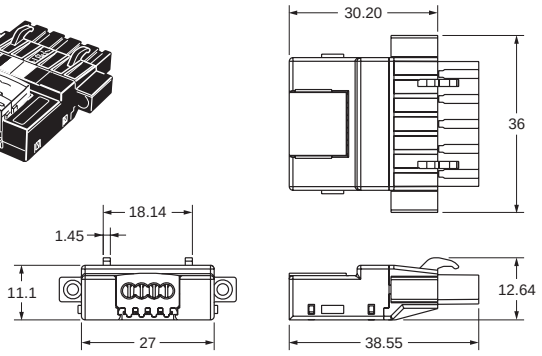
Mounting Dimensions



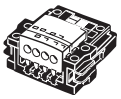
● Flat Cable

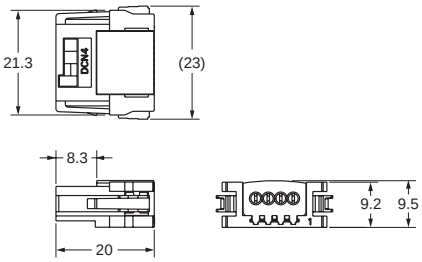
Connector for Flat Cable
DCN4-SF4D



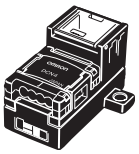


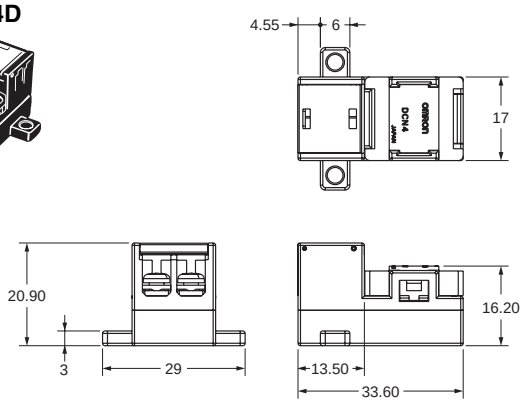
Conversion Connector for Standard Thin Cable and Flat Cable
DCN4-BR4D



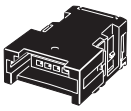


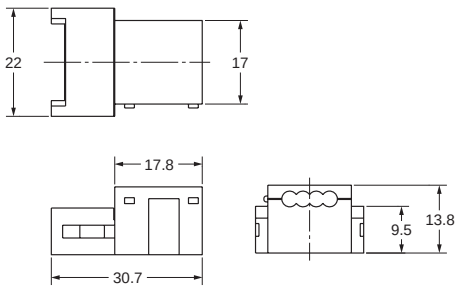
Power Supply Terminal Block with Terminating Resistance for Flat Cable
DCN4-TP4D



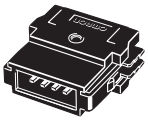


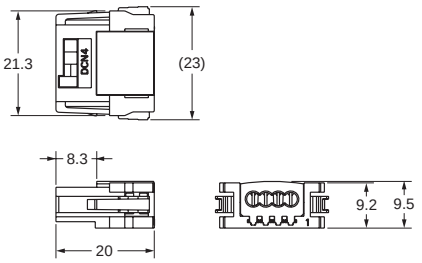
Flat Connector Socket
DCN4-TR4





Flat Connector Plug
DCN4-BR4





■ I/O Connectors for Connector Terminals

●MIL Connectors

Applicable Connectors

Type		Model	Remarks
Flat Cable Pressure-welded Connectors		**XG4M-4030-T**	
Pressure-welded Connectors with Loose Wires	Socket	**XG5M-4032-N**	Corresponding to 24 AWG
		XG5M-4035-N	Corresponding to 28 to 26 AWG
	Semicover	**XG5S-2001**	
	Hood Cover *	**XG5S-4022**	

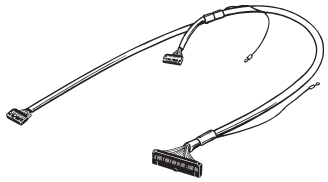
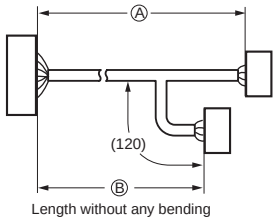
✻ DeviceNet connectors for multi-drop wiring cannot be used with the Hood Cover.

Cable Models

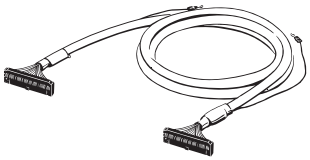
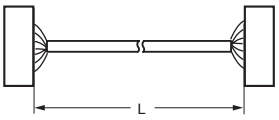
Type	Model	Connected device	Applicable models
Cable with Connectors (1:2)	**G79-I□□-□□-D1**	G7TC/G70D/G70A	DRT2-ID32ML
	G79-M□□-□□-D1		DRT2-MD32ML
	G79-O□□-□□-D1		DRT2-OD32ML/DRT1-OD32ML-1
	G79-I□□-□□-D2		DRT2-ID32ML-1
	G79-M□□-□□-D2		DRT2-MD32ML-1
Cable with Connector (1:1)	**XW2Z-C□□K**	--	All models
Cable with Loose Wires with Crimp Terminals	**G79-Y□00C-D1**		
Cable with Loose Wires	**G79-A□00C-D1**		

Applicable Cables with Connectors

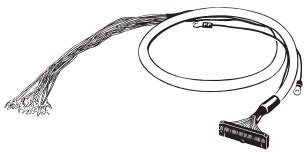
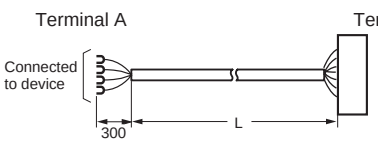
● Cables with Connectors (1-to-2 Connection)/G79-□□-□-D□

Appearance	Cable length (mm)			Model
		Ⓐ	Ⓑ	
	 Length without any bending	500	250	**G79-I50-25-D1**
		750	500	**G79-I75-50-D1**
		500	250	**G79-O50-25-D1**
		750	500	**G79-O75-50-D1**
		500	250	**G79-M50-25-D1**
		750	500	**G79-M75-50-D1**
		500	250	**G79-I50-25-D2**
		750	500	**G79-I75-50-D2**
		500	250	**G79-M50-25-D2**
		750	500	**G79-M75-50-D2**

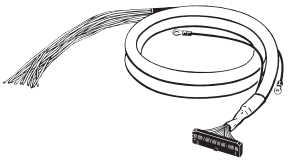
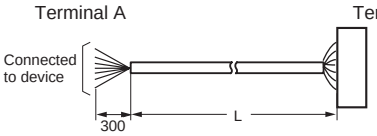
● Cables with Connectors (1-to-1 Connection)/XW2Z-C□□K

Appearance	Cable length (mm)		Model
		250	**XW2Z-C25K**
		500	**XW2Z-C50K**

● Cables with Crimp Terminals (at the End of Loose Wires)/G79-Y□C-D1

Appearance	Cable length (mm)		Model
		1,000	**G79-Y100C-D1**
		2,000	**G79-Y200C-D1**
		5,000	**G79-Y500C-D1**

● Cables with Loose Wires/G79-A□C

Appearance	Cable length (mm)		Model
		2,000	**G79-A200C-D1**
		5,000	**G79-A500C-D1**

■ I/O Connectors for MULTIPLE I/O TERMINALs

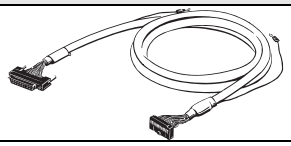
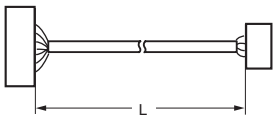
Applicable Connectors

Type			Model	Remark	Connectable model
Molex connector	Crimped terminals	Housing	**50-57-9403**		Digital I/O Units GT1-ID16MX(-1)/GT1-OD16MX(-1) Analog I/O Units GT1-AD08MX/GT1-DA04MX
		Chain terminal	**16-02-0069**	Corresponding to 24 to 30 AWG	
			16-02-0086	Corresponding to 22 to 24 AWG	
		Loose terminal	**16-02-0096**	Corresponding to 24 to 30 AWG	
			16-02-0102	Corresponding to 22 to 24 AWG	
		Press-fit tool	**57036-5000**	Corresponding to 22 to 26 AWG	
			57037-5000	Corresponding to 24to 30 AWG	
Fujitsu connector (16 points)	Soldered terminals		**FCN361J024-AU**		
	Pressure-welded terminals		**FCN367J024-AU/F**		
	Crimped terminals		**FCN363J024-AU**		
Fujitsu connector (32 points)	Soldered terminals		**FCN361J040-AU**		Digital I/O Units GT1-ID32ML(-1)/GT1-OD32ML(-1)
	Pressure-welded terminals		**FCN367J040-AU/F**		
	Crimped terminals		**FCN363J040-AU**		
OMRON D-sub connector	Pulg		**XM2A-2501**		Digital I/O Units GT1-ID16DS(-1)/GT1-OD16DS(-1)
	Hood		**XM2S-2513**	#4-40UNC inch screws	

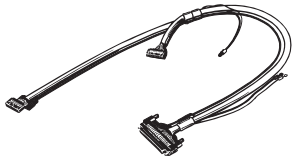
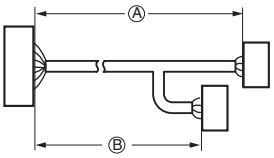
Applicable Cables with Connectors (Fujitsu Connectors)

I/O classification	Model	Connectable model
Digital input, 16 points	**XW2Z-□□□A**	Digital I/O Units GT1-ID16ML(-1)
	G79-□C	
Digital output, 16 points	**XW2Z-□□□A**	Digital I/O Units GT1-OD16ML(-1)
	G79-□C	
Digital input, 32 points	**XW2Z-□□□B**	Digital I/O Units GT1-ID32ML(-1)
	G79-I□C□	
Digital output, 32 points	**XW2Z-□□□B**	Digital I/O Units GT1-OD32ML(-1)
	G79-O□C□	

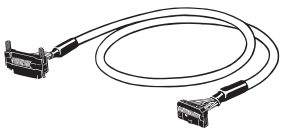
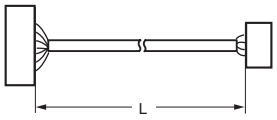
● Cables with Connectors (1-to1 Connection)/G79-□C
For Digital Input/Output (16 Points)

Appearance	Cable length (mm)		Model
		1,000	**G79-100C**
		1,500	**G79-150C**
		2,000	**G79-200C**
		3,000	**G79-300C**
		5,000	**G79-500C**

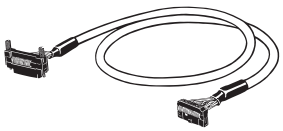
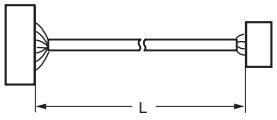
● Cables with Connectors (1-to-2 Connection)/G79-O□C-□, G79-I□C-□
For Digital Input/Output (32 Points)

Appearance	Cable length (mm)			Model	
		Ⓐ	Ⓑ	Input	Output
	 Length without any bending	1,000	750	**G79-I100C-75**	**G79-O100C-75**
		1,500	1,250	**G79-I150C-125**	**G79-O150C-125**
		2,000	1,750	**G79-I200C-175**	**G79-O200C-175**
		3,000	2,750	**G79-I300C-275**	**G79-O300C-275**
		5,000	4,750	**G79-I500C-475**	**G79-O500C-475**

For Digital Input/Output (16 Points)

Appearance	Cable length (mm)		Model
		500	**XW2Z-050A**
		1,000	**XW2Z-100A**
		1,500	**XW2Z-150A**
		2,000	**XW2Z-200A**
		3,000	**XW2Z-300A**
		5,000	**XW2Z-500A**

For Digital Input/Output (32 Points)

Appearance	Cable length (mm)		Model
		500	**XW2Z-050B**
		1,000	**XW2Z-100B**
		1,500	**XW2Z-150B**
		2,000	**XW2Z-200B**
		3,000	**XW2Z-300B**
		5,000	**XW2Z-500B**

■ I/O Connector for Programmable Slaves

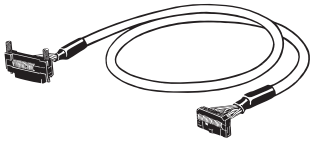
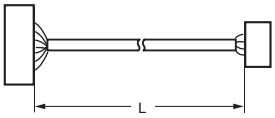
Applicable Connector Terminal Conversion Units

Applicable cable	Connected product	Remarks
XW2Z-□□□A	**XW2D-20G6**	Slim type (with M3 screw terminals)
	XW2B-20G4	Flat cable connectors (with M3 terminal screws for flat-blade screwdriver)

Applicable Cables with Connectors

● Cables with Connectors/XW2Z

For Digital Input/Output (16 Points)

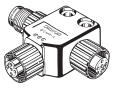
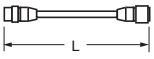
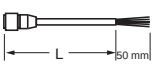
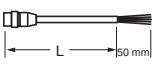
Appearance	Cable length (mm)		Model
		500	**XW2Z-050A**
		1,000	**XW2Z-100A**
		1,500	**XW2Z-150A**
		2,000	**XW2Z-200A**
		3,000	**XW2Z-300A**
		5,000	**XW2Z-500A**

Peripheral Devices for Environment-resistive Slaves

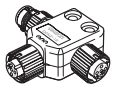
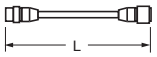
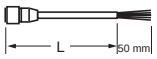
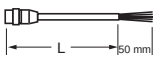
Peripheral Devices for DeviceNet Communications

Ordering Information

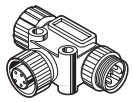
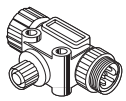
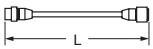
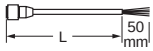
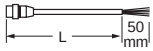
● **Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)**

Product	Appearance	Model	Specifications	
Sealed Assembling-type Connector (male)		**XS2G-D5S7**	For communications (plug)	
Sealed Assembling-type Connector (female)		**XS2C-D5S7**	For communications (socket)	
Sealed T-branch Connector		**DCN2-1**	For 1 branch line	
Sealed Connector with Terminating Resistor		**DRS2-1**	Plug	
		DRS2-2	Socket	
Cables with Sealed Connectors		**DCA1-5CNC5W1**	Length (L): 0.5 m	Cable with connectors on both ends
		DCA1-5CN01W1	Length (L): 1 m	
		DCA1-5CN02W1	Length (L): 2 m	
		DCA1-5CN03W1	Length (L): 3 m	
		DCA1-5CN05W1	Length (L): 5 m	
		DCA1-5CN10W1	Length (L): 10 m	
		**DCA1-5CNC5F1**	Length (L): 0.5 m	Cable with connector on one end (socket)
		DCA1-5CN01F1	Length (L): 1 m	
		DCA1-5CN02F1	Length (L): 2 m	
		DCA1-5CN03F1	Length (L): 3 m	
		DCA1-5CN05F1	Length (L): 5 m	
		DCA1-5CN10F1	Length (L): 10 m	
		**DCA1-5CNC5H1**	Length (L): 0.5 m	Cable with connector on one end (plug)
		DCA1-5CN01H1	Length (L): 1 m	
		DCA1-5CN02H1	Length (L): 2 m	
		DCA1-5CN03H1	Length (L): 3 m	
		DCA1-5CN05H1	Length (L): 5 m	
		DCA1-5CN10H1	Length (L): 10 m	
Shielded Panel-mounting Connectors (female)		**DCA1-5CNC5P1**	Panel-mounting connector (socket) with 0.5-m cable	
		XS2P-D522-2	Panel-mounting connector socket	
Shielded Panel-mounting Connectors (male)		**DCA1-5CNC5M1**	Panel-mounting connector (plug) with 0.5-m cable	
		XS2M-D524-4	Panel-mounting connector (plug) with solder-cup terminals	
Waterproof cover (for socket)		**XS2Z-22**	Used to cover an unused connector section	
Dust cover (for socket)		**XS2Z-15**		

● Environment-resistive Models (for Thin Wires and M12 Micro Connectors) Smartclick

Product	Appearance	Model	Specifications	
Sealed T-branch Connector		**DCN2-1S**	For 1 branch line	
Sealed Assembling type Connector (female)		**DRS2-1S**	Plug	
		DRS2-2S	Socket	
Connectors with Shielded Cables		**DCA1-5CSC5W1**	Length (L): 0.5 m	Cable with connectors on both ends
		DCA1-5CS01W1	Length (L): 1 m	
		DCA1-5CS02W1	Length (L): 2 m	
		DCA1-5CS03W1	Length (L): 3 m	
		DCA1-5CS05W1	Length (L): 5 m	
		DCA1-5CS10W1	Length (L): 10 m	
		**DCA1-5CSC5F1**	Length (L): 0.5 m	Cable with connector on one end (socket)
		DCA1-5CS01F1	Length (L): 1 m	
		DCA1-5CS02F1	Length (L): 2 m	
		DCA1-5CS03F1	Length (L): 3 m	
		DCA1-5CS05F1	Length (L): 5 m	
		DCA1-5CS10F1	Length (L): 10 m	
		**DCA1-5CSC5H1**	Length (L): 0.5 m	Cable with connector on one end (plug)
		DCA1-5CS01H1	Length (L): 1 m	
		DCA1-5CS02H1	Length (L): 2 m	
		DCA1-5CS03H1	Length (L): 3 m	
		DCA1-5CS05H1	Length (L): 5 m	
		DCA1-5CS10H1	Length (L): 10 m	
Shielded Branch Relay Box		**DCN2-S4C5H1**	4 ports, 0.5-m cable	
		DCN2-S8C5H1	8 ports, 0.5-m cable	

● Environment-resistive Models for Thick Wires with 7/8-16UN Mini Connectors

Product	Appearance	Model	Specifications	
Sealed T-branch Connector		**DCN3-11**	T-branch Connector	
		**DCN3-12**	T-branch Connector (Branch connector is M12.)	
Sealed Connector with Terminating Resistor		**DRS3-1**	Plug	
Cables with Sealed Connectors		**DCA2-5CN01W1**	Length (L): 1 m	Cable with connectors on both ends
		DCA2-5CN02W1	Length (L): 2 m	
		DCA2-5CN05W1	Length (L): 5 m	
		DCA2-5CN10W1	Length (L): 10 m	
		**DCA2-5CN01F1**	Length (L): 1 m	Cable with connector on one end (socket)
		DCA2-5CN02F1	Length (L): 2 m	
		DCA2-5CN05F1	Length (L): 5 m	
		DCA2-5CN10F1	Length (L): 10 m	
		**DCA2-5CN01H1**	Length (L): 1 m	Cable with connector on one end (plug)
		DCA2-5CN02H1	Length (L): 2 m	
		DCA2-5CN05H1	Length (L): 5 m	
		DCA2-5CN10H1	Length (L): 10 m	
		DCA1-5CN01W5	Length (L): 1 m	Cable with connectors on both ends Thin cable M12 socket
		DCA1-5CN02W5	Length (L): 2 m	
		DCA1-5CN05W5	Length (L): 5 m	
		DCA1-5CN10W5	Length (L): 10 m	
Panel-mounting Connector (female)		**DCA2-5CNC5P1**	Panel-mounting connector (socket) with 0.5-m cable	
Panel-mounting Connector (male)		**DCA2-5CNC5M1**	Panel-mounting connector (plug) with 0.5-m cable	
Panel-mounting Connector (male)		**XS4M-D521-1**	Panel-mounting connector (plug) DIP terminals	
Waterproof Cap (for Plug)	-	**XS4Z-11**	Used to cover an unused connector section.	
Waterproof Cap (for Socket)	-	**XS4Z-12**		

Specifications

● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

Type / Item	Connectors with Cables DCA1-5CN□□□1	T-branch Connector DCN2-1	Assembling-type Connector XS2□-D5S7	Connectors with Terminating Resistor DRS2-□
Rated current	3 A			
Rated voltage	125 VDC			
Contact resistance (connector)	40 mΩ max. (at 20 mVDC max. and 100 mA max.)			
Insulation resistance	1,000 MΩ min. (at 500 VDC)			
Dielectric strength (connector)	1,500 VAC for 60 seconds (leakage current: 1 mA max.)			
Ambient operating temperature	-20°C to 65°C			
Storage temperature range	-25°C to 70°C			
Degree of protection	IEC IP67			
Insertion durability	200 times			
Cable strength	98 N for 15 s	--		
Vibration resistance	No current interruptions of more than 1 μs while performing simple vibrations at either 10 to 500 Hz with 1.52-mm full amplitude or at acceleration 100 m/s², whichever is smaller			

● Environment-resistive Models (for Thin Wires and M12 Micro Connectors)

Type / Item	Connectors with Cables DCA1-5CS□□□1	T-branch Connector DCN2-1S	Connectors with Terminating Resistor DRS2-□S	Branch Relay Box DCN2-S□C5H
Rated current	3 A			
Rated voltage	125 VDC			
Contact resistance (connector)	40 mΩ max. (at 20 mVDC max. and 100 mA max.)			
Insulation resistance	1,000 MΩ min. (at 500 VDC)			
Dielectric strength (connector)	1,500 VAC for 60 seconds (leakage current: 1 mA max.)			1,000 VAC for 60 seconds
Ambient operating temperature	-20°C to 65°C			
Storage temperature range	-25°C to 70°C			
Degree of protection	IEC IP67			
Insertion durability	200 times			
Cable strength	98 N for 15 s	--		
Vibration resistance	No current interruptions of more than 1 μs while performing simple vibrations at either 10 to 500 Hz with 1.52-mm full amplitude or at acceleration 100 m/s², whichever is smaller			
Lock strength	Pulling: 100 N/15 s, Rotating: 1 N·m/15 s			
Lock force	0.1 to 0.25 N·m			

● Environment-resistive Models for Thick Wires with 7/8-16UN Mini Connectors

Type / Item	Connectors with Thick Cables DCA2-5CN□□□1	Connectors with Thin Cables DCA1-5CN□□W5	T-branch Connector DCN3-11	T-branch Connector DCN3-12	Connectors with Terminating Resistor DRS3-1	Panel Mounting Connector DCA2-5CNC5P1	Panel Mounting Connector XS4M-D521-1
Rated current	8 A	3 A	8 A	3 A ✻	8 A		
Rated voltage	125 VDC						
Contact resistance (connector)	30 mΩ max. (at 20 mVDC max. and 100 mA max.)						
Insulation resistance	1,000 MΩ min. (at 500 VDC)						
Dielectric strength (connector)	1,500 VAC for 60 seconds (leakage current: 1 mA max.)						
Ambient operating temperature	-20°C to 65°C						
Storage temperature range	-25°C to 70°C						
Degree of protection	IEC IP67						
Insertion durability	200 times						
Cable strength	98 N for 15 s		--			98 N for 15 s	--
Vibration resistance	No current interruptions of more than 1 μs while performing simple vibrations at either 10 to 500 Hz with 1.52-mm full amplitude or at acceleration 100 m/s², whichever is smaller						

✻ The rated current between thick wires is 8 A.

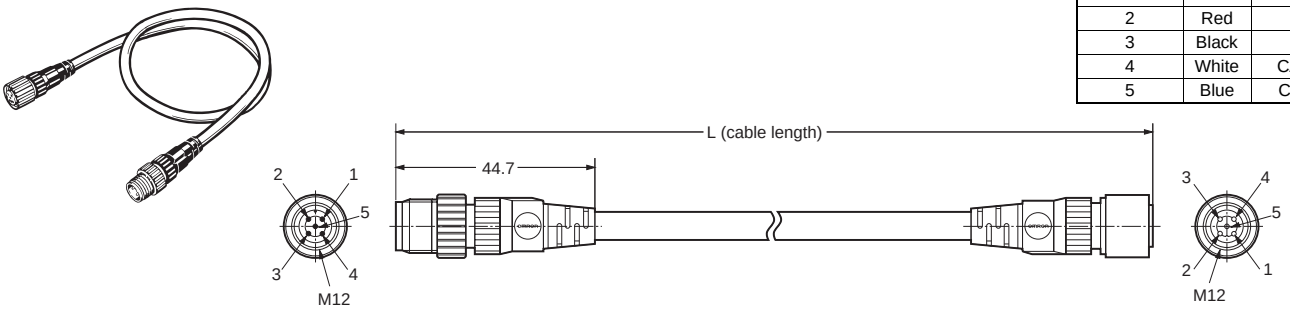
Dimensions

● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

Cables with Connectors on Both Ends
DCA1-5CN□□W1

Wiring

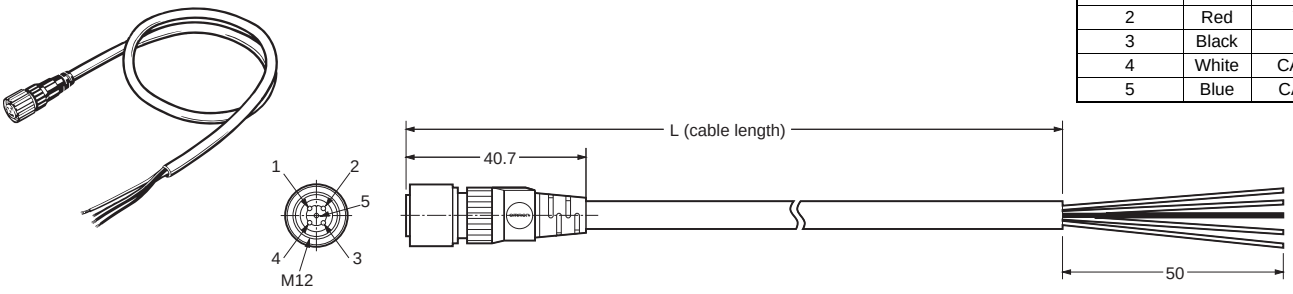
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



Cables with Connector on Single End (Socket)
DCA1-5CN□□F1

Wiring

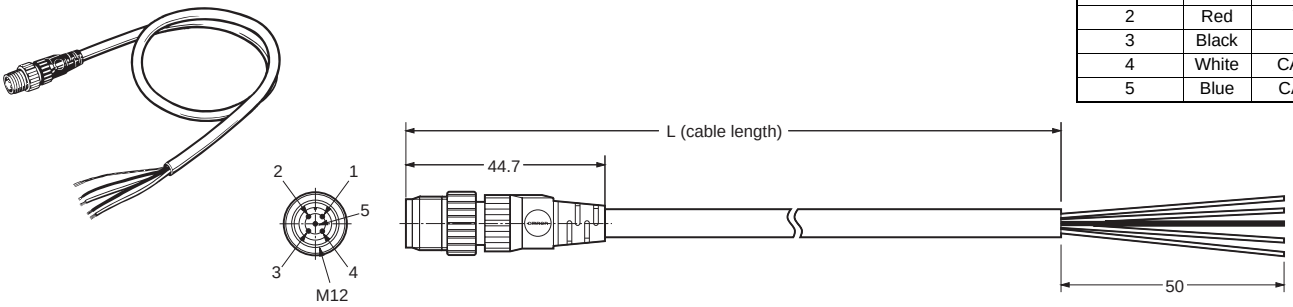
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



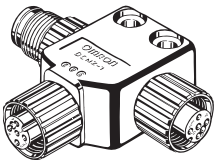
Cables with Connector on Single End (Plug)
DCA1-5CN□□H1

Wiring

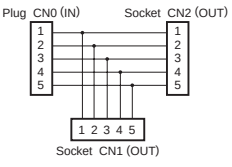
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



T-branch Connector
DCN2-1

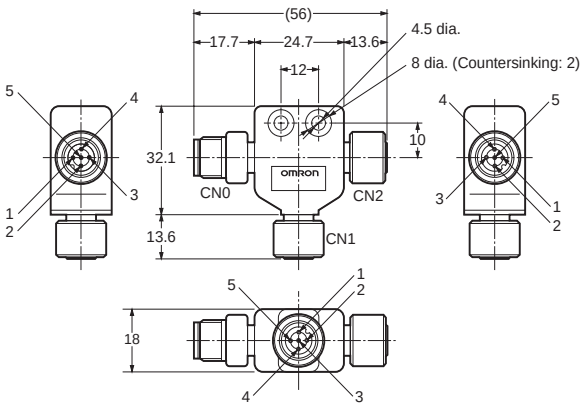


Connections Diagram



Wiring

Terminal No.	Name
1	SHIELD
2	V+
3	V-
4	CAN H
5	CAN L

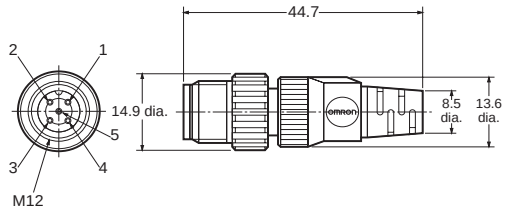


Connectors with Terminating Resistance
DRS2-1 (Plug)
DRS2-2 (Socket)

Wiring

Terminal No.	Name
1	DRAIN : NC
2	V+ : NC
3	V- : NC
4	CAN H : 121 Ω
5	CAN L : 121 Ω

Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.

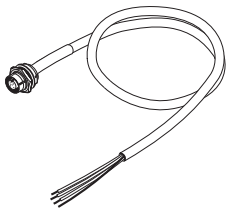


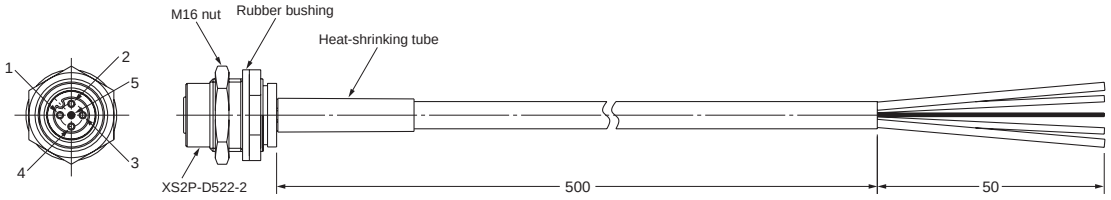
Note: The diagram shows the DRS2-1 (plug).

Panel-mounting Connector (Socket) with 0.5 m Cable
DCA1-5CNC5P1

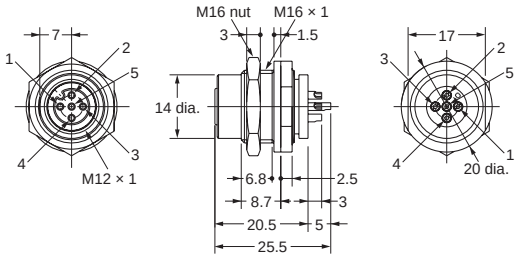
Wiring

Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

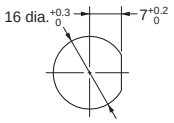




Panel-mounting Connector (Socket), Solder-cup Terminals
XS2P-D522-2



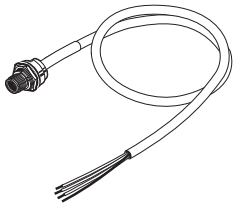
Panel Cutout Dimensions

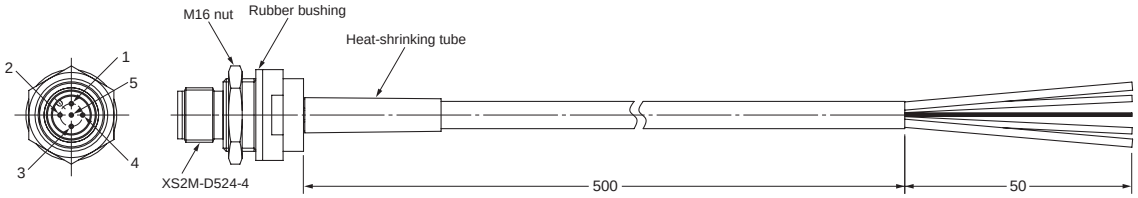


Panel-mounting Connector (Plug) with 0.5 m Cable
DCA1-5CNC5M1

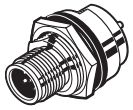
Wiring

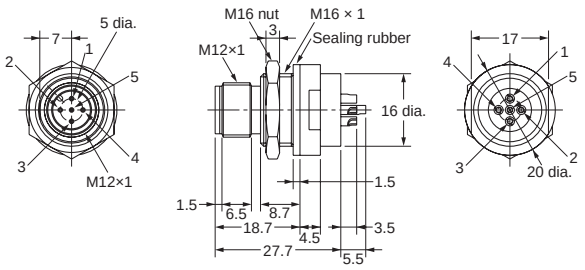
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



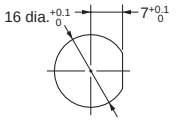


Panel-mounting Connector (Socket), Solder-cup Terminals
XS2M-D524-4





Panel Cutout Dimensions

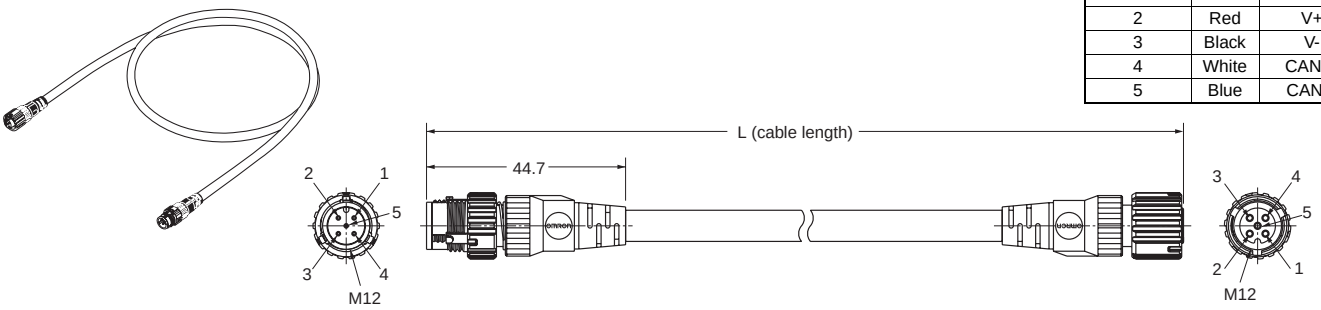


● Environment-resistive Models (for Thin Wires and M12 Micro Connectors)

Cables with Connectors on Both Ends
DCA1-5CS□□W1

Wiring

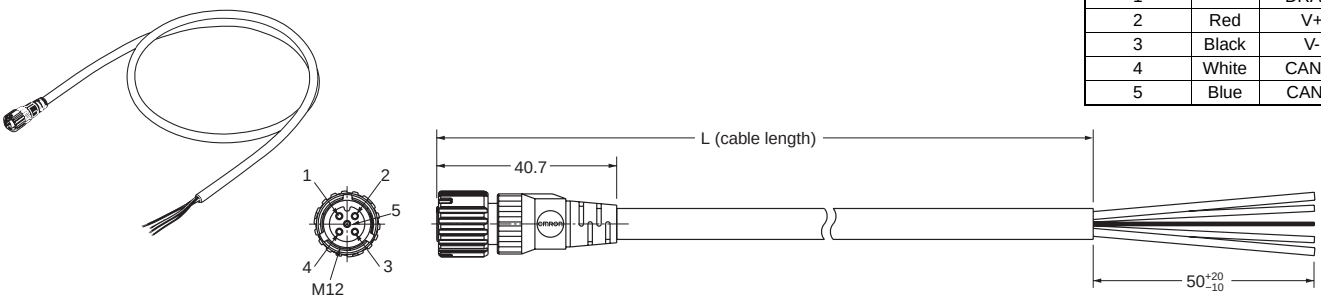
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



Cables with Connector on Single End (Socket)
DCA1-5CS□□F1

Wiring

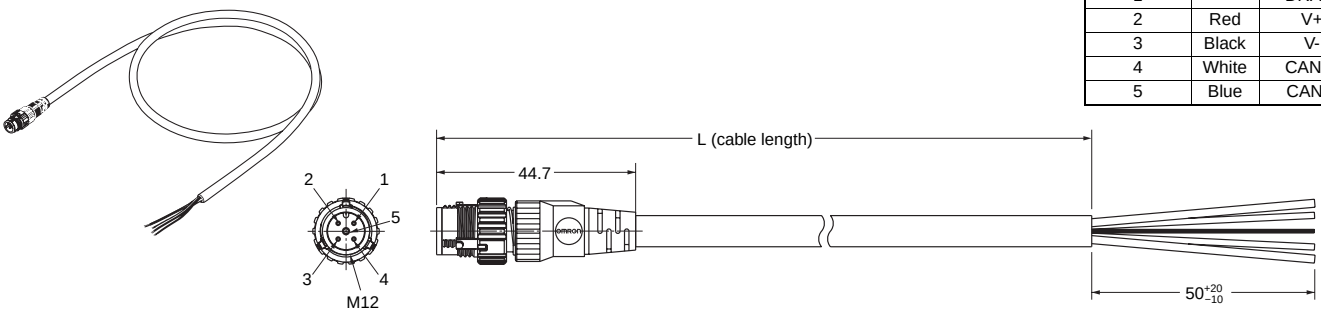
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



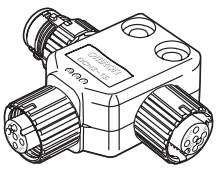
Cables with Connector on Single End (Plug)
DCA1-5CS□□H1

Wiring

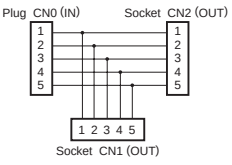
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



T-branch Connector
DCN2-1S

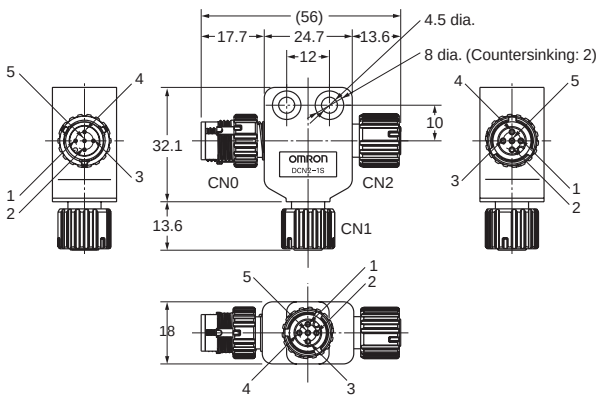


Connections Diagram

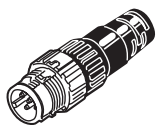


Wiring

Terminal No.	Name
1	SHIELD
2	V+
3	V-
4	CAN H
5	CAN L



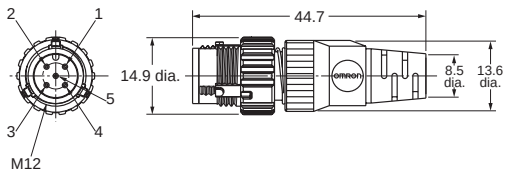
Connectors with Terminating Resistance
DRS2-1S (Plug)
DRS2-2S (Socket)



Wiring

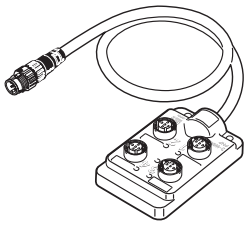
Terminal No.	Name
1	DRAIN : NC
2	V+ : NC
3	V- : NC
4	CAN H : 121 Ω
5	CAN L : 121 Ω

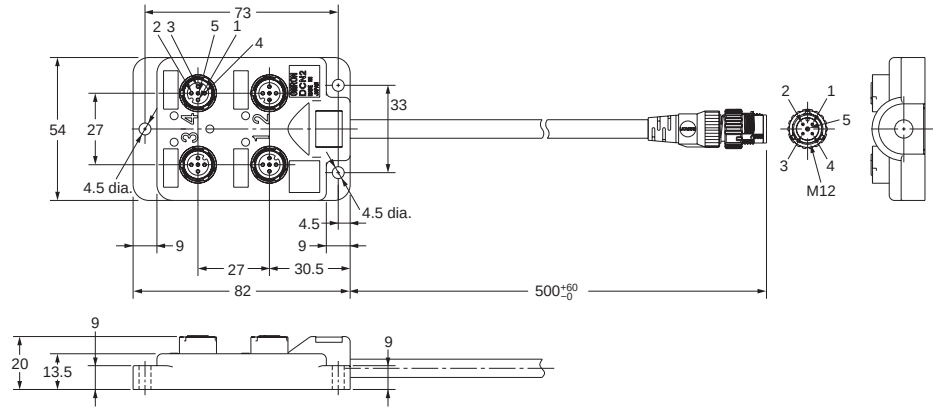
Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.



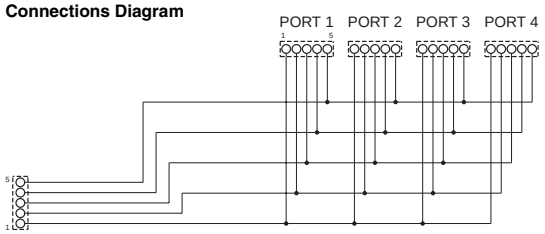
Note: The diagram shows the DRS2-1 (plug).

Shielded Branch Relay Box with Four Ports
DCN2-S4C5H1





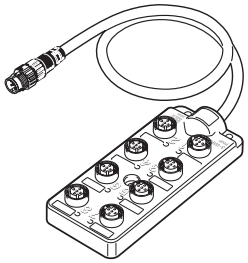
Connections Diagram

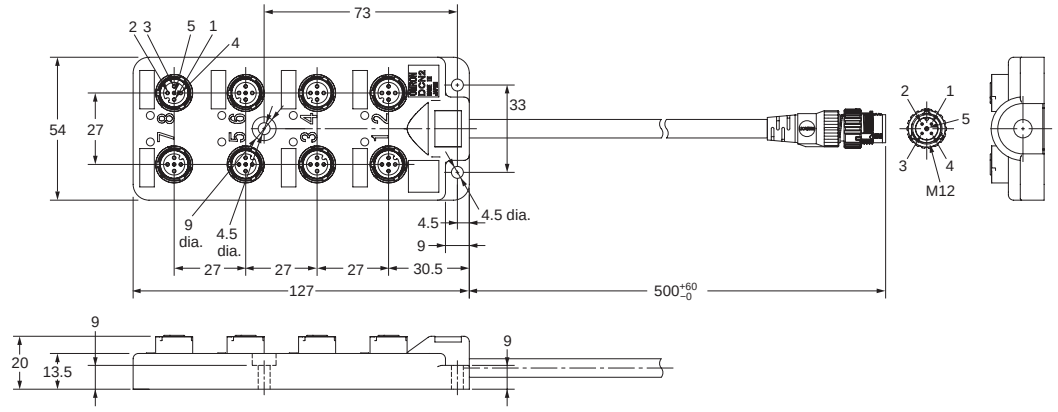


Wiring

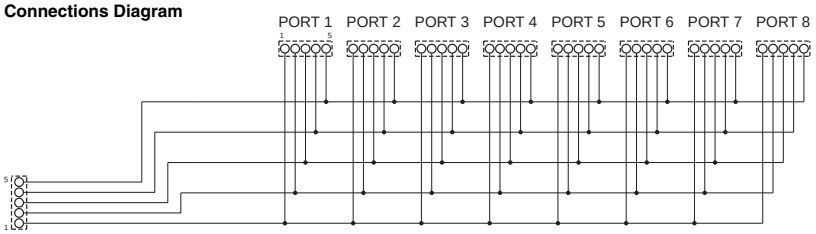
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

Shielded Branch Relay Box with Eight Ports
DCN2-S8C5H1





Connections Diagram

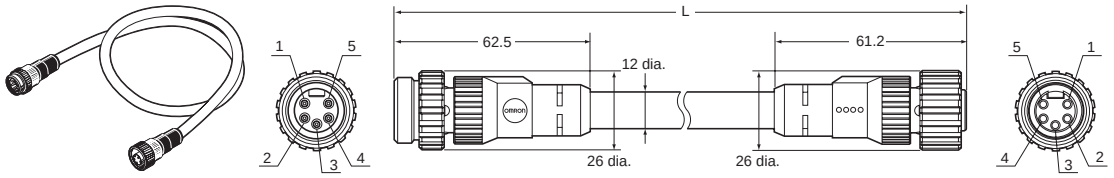


Wiring

Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

● Environment-resistive Models for Thick Wires with 7/8-16UN Mini Connectors

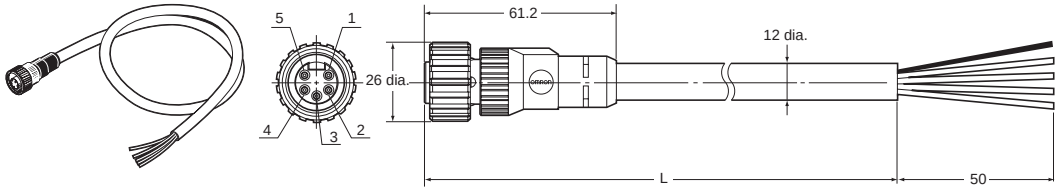
Thick Cable with Connectors on Both Ends (5 Conductors for Communications)
DCA2-5CN□□W1



Wiring

Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

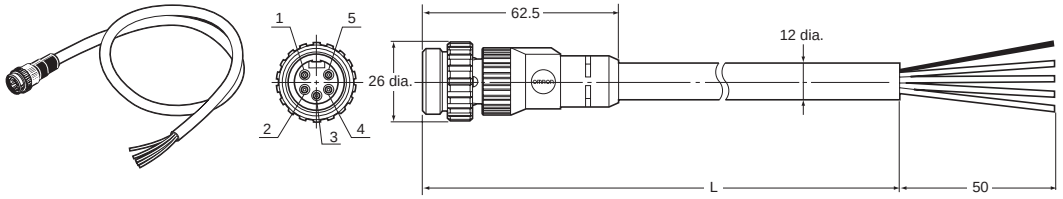
Thick Cable with Connector Socket on One End (5 Conductors for Communications)
DCA2-5CN□□F1



Wiring

Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

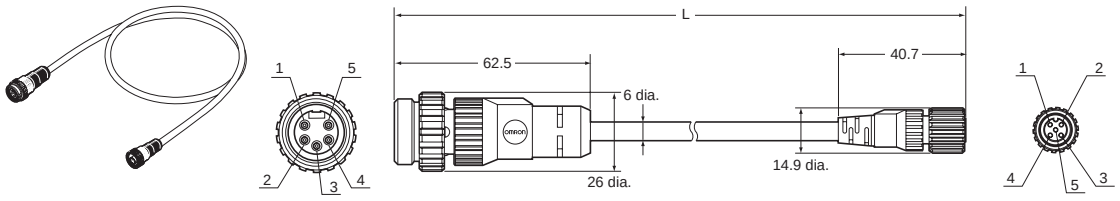
Thick Cable with Connector Plug on One End (5 Conductors for Communications)
DCA2-5CN□□H1



Wiring

Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

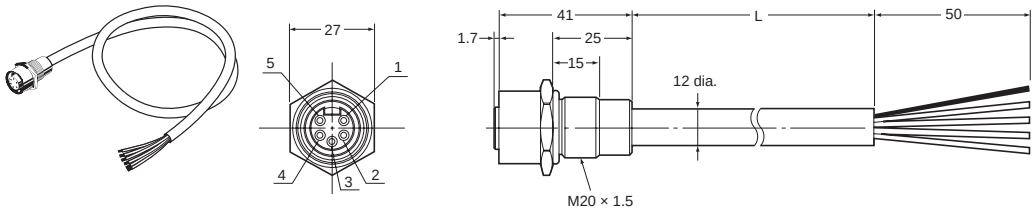
Thin Cable with Connectors on Both Ends (5 Conductors for Communications)
DCA1-5CN□□W5



Wiring

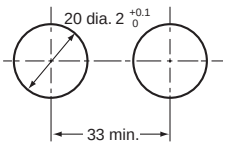
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

Thin Cable with Panel-mounting Connector Socket on One End (5 Conductors for Communications)
DCA2-5CNC5P1



Note: A rubber seal and nut for panel mounting are included.

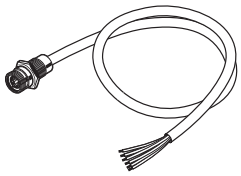
Panel Cutout Dimensions

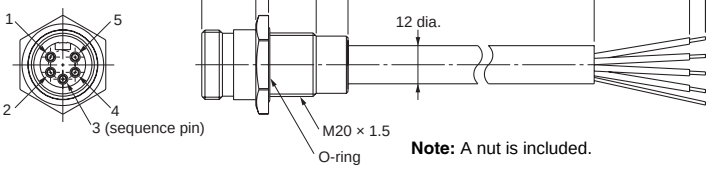


Wiring

Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

Panel-mounting Connector (Plug) with 0.5 m Cable
DCA2-5CNC5M1



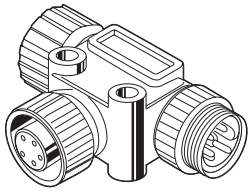


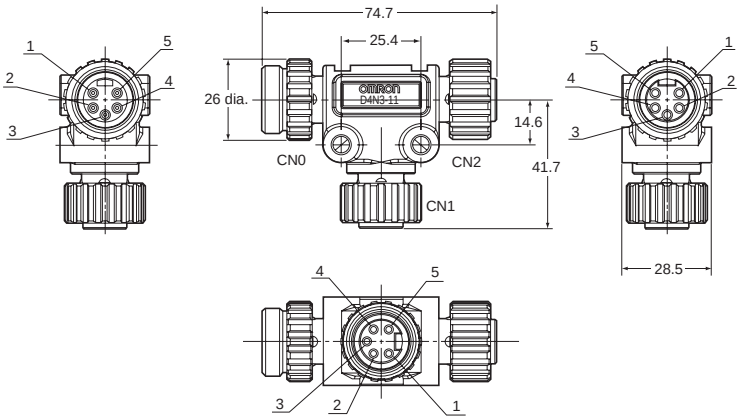
Note: A nut is included.

Wiring

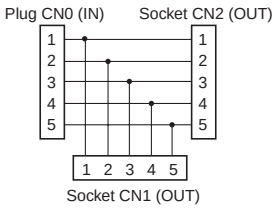
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

T-branch Connector (5 Conductors for Communications, Thick Wire Branch Line)
DCN3-11





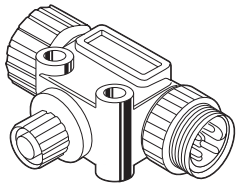
Connections Diagram

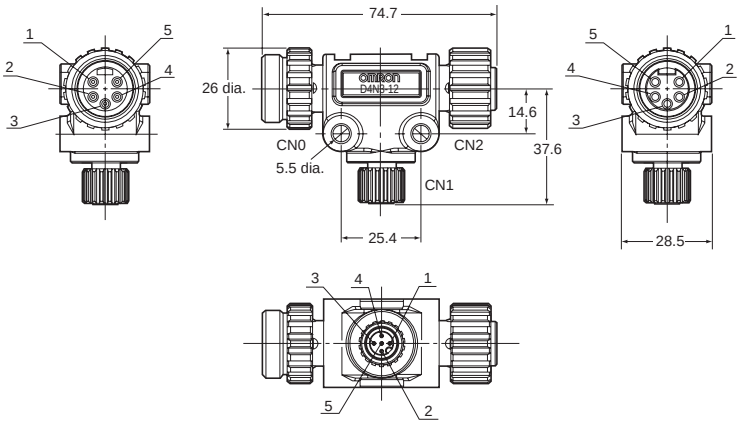


Wiring

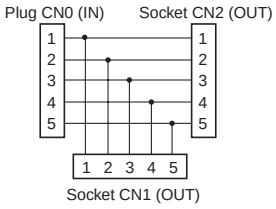
Terminal No.	Name
1	DRAIN
2	V+
3	V-
4	CAN H
5	CAN L

T-branch Connector (5 Conductors for Communications, Thin Wire Branch Line)
DCN3-12





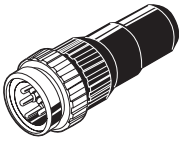
Connections Diagram



Wiring

Terminal No.	Name
1	DRAIN
2	V+
3	V-
4	CAN H
5	CAN L

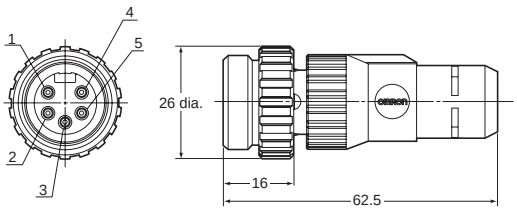
Connector (Plug) with Terminating Resistance
DRS3-1



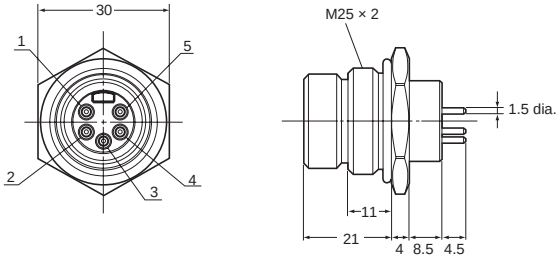
Wiring

Terminal No.	Name
1	DRAIN : NC
2	V+ : NC
3	V- : NC
4	CAN H : 121 Ω
5	CAN L : 121 Ω

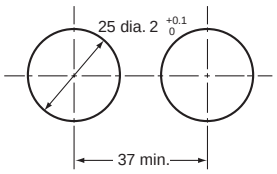
Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.



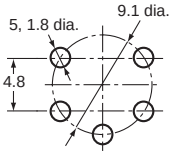
Panel-mounting Connector (5 Pins for Communications)
XS4M-D521-1



Panel Cutout Dimensions



PCB Processing Dimensions

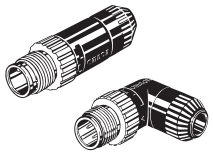


Note: A rubber seal and nut for panel mounting are included.

I/O Peripheral Devices

Applicable Connectors

● Assembly Connector Plugs for M12 Microconnectors

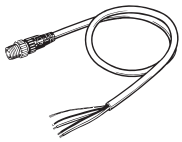
Appearance	Applicable cable diameter (mm)	Cable direction	Number of poles	Connection method		
				Crimping	Soldering	Screws
	For 6 dia. (5 to 6 dia.)	Straight	4	XS2G-D4C1	XS2G-D421	XS2G-D4S1
		L-shaped		--	XS2G-D422	XS2G-D4S2
	For 5 dia. (4 to 5 dia.)	Straight		XS2G-D4C3	XS2G-D423	XS2G-D4S3
		L-shaped		--	XS2G-D424	XS2G-D4S4
	For 3 dia. (3 to 4 dia.)	Straight		XS2G-D4C5	XS2G-D425	XS2G-D4S5
		L-shaped		--	XS2G-D426	XS2G-D4S6
	For 7 dia. (6 to 7 dia.)	Straight		--	--	XS2G-D4S9
	For 8 dia. (7 to 8 dia.)					XS2G-D4S7

Applicable Cables with Connectors

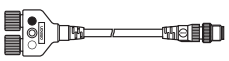
● Cables with Connector (Socket/Plug) on Both Ends (M12 Microconnectors for Power Supply and I/O)

Appearance	Cable direction	Number of core wires	Cable length (m)	Standard cable	Robot (earthquake-resistant) cable
	Straight/Straight	4	1	XS2W-D421-C81-A	XS2W-D421-C81-R
			2	XS2W-D421-D81-A	XS2W-D421-D81-R
			5	XS2W-D421-G81-A	XS2W-D421-G81-R
	L-shaped/L-shaped		2	XS2W-D422-D81-A	--
			5	XS2W-D422-G81-A	
	Straight/L-shaped		2	XS2W-D423-D81-A	
			5	XS2W-D423-G81-A	
	L-shaped/Straight		2	XS2W-D424-D81-A	
			5	XS2W-D424-G81-A	

● Cables with connector plug on One End (M12 Microconnectors for I/O)

Appearance	Cable direction	Number of core wires	Cable length (m)	Standard cable
	Straight	3	0.3	XS2H-D421-AC0-A
		4		XS2H-D421-A80-A
		3	1	XS2H-D421-CC0-A
		4		XS2H-D421-C80-A

● Plugs and Sockets on Y-shaped Joints (M12 Microconnectors for I/O)

Appearance	Cable	Connector	DC models	
			Cable length (m)	Model
	With cable	Connectors on both ends	0.5	XS2R-D426-B11-F
			1	XS2R-D426-C11-F
			2	XS2R-D426-D11-F
			3	XS2R-D426-E11-F
		Connector on one end	2	XS2R-D426-D10-F
			5	XS2R-D426-G10-F
	Without cable	Connectors on both ends	--	XS2R-D426-1

Note: Use is supported only for Environment-resistive Terminals (DRT2-□D16C(L)(-1)).

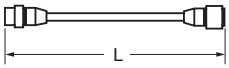
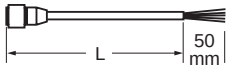
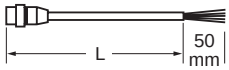
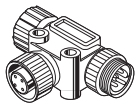
● Connector Cover for M12 Microconnectors

Appearance	Product	Model	Application
	Waterproof cover (socket)	XS2Z-22	For covering unused I/O connectors

Power Supply Peripheral Devices

Applicable Cables with Connectors

● **Power Supply Connectors (7/8-16UN Miniconnectors)**

Appearance	Product	Cable length L (mm)	Model
		1	**XS4W-D421-101-A**
		2	**XS4W-D421-102-A**
		5	**XS4W-D421-105-A**
		10	**XS4W-D421-110-A**
		1	**XS4F-D421-101-A**
		2	**XS4F-D421-102-A**
		5	**XS4F-D421-105-A**
		10	**XS4F-D421-110-A**
		1	**XS4H-D421-101-A**
		2	**XS4H-D421-102-A**
		5	**XS4H-D421-105-A**
		10	**XS4H-D421-110-A**
	T-branch Connector	--	**XS4R-D424-5**
	Panel mounting connector socket Cable: 50 cm	--	**XS4P-D421-1C5-A**
	Panel mounting connector plug DIP terminals	--	**XS4M-D421-1**
-	Waterproofing Cap for Plug	--	**XS4Z-11**
-	Waterproofing Cap for Socket	--	**XS4Z-12**

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