

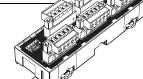
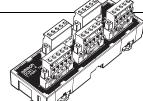
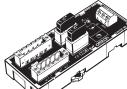
# Peripheral Devices

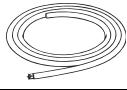
## General-purpose Peripheral Devices

### 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-TR4 Flat Connector Plug in the following applications. <ul style="list-style-type: none"> <li>Extending the trunk line</li> <li>T-branched the trunk line into branch lines</li> </ul>
Flat Connector Plug			Used alone in the following applications. <ul style="list-style-type: none"> <li>Connecting a DCN4-TM4 Terminating Resistor to the trunk line</li> </ul>
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 <sup>2</sup> x 2, 0.5 mm <sup>2</sup> 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)

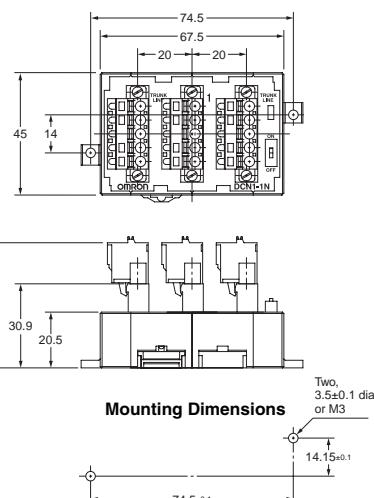
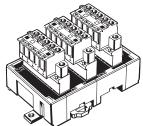
Rated current	Between main lines: 8 A (power supply line) and 2 A (signal line) Between main and branch lines: 3 A (power supply line) and 1 A (signal line)
Insulation resistance	100 MΩ min. (at 500 VDC)
Dielectric strength	500 VAC for 1 min, leakage current: 1 mA max.
Ambient operating temperature	0°C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

## Dimensions

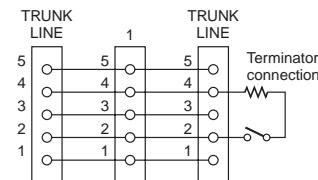
### ● General-purpose Models

#### T-branch Tap for 1 branch line

**DCN1-1NC**  
(With Three Branching Connectors)



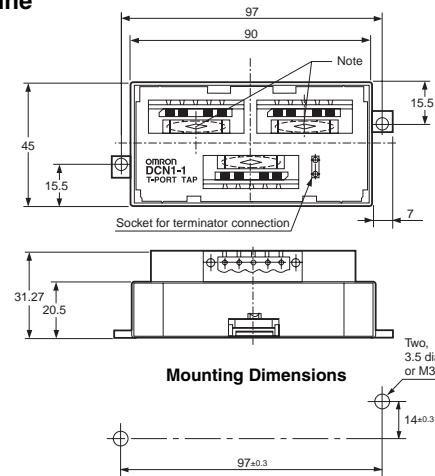
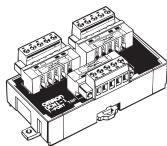
#### Internal Circuit



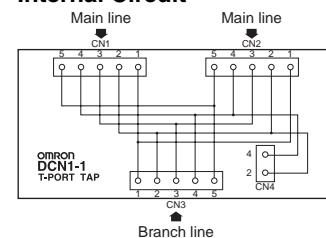
Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+

#### T-branch Tap for 1 branch line

**DCN1-1C**  
(With Three Branching Connectors)



#### Internal Circuit

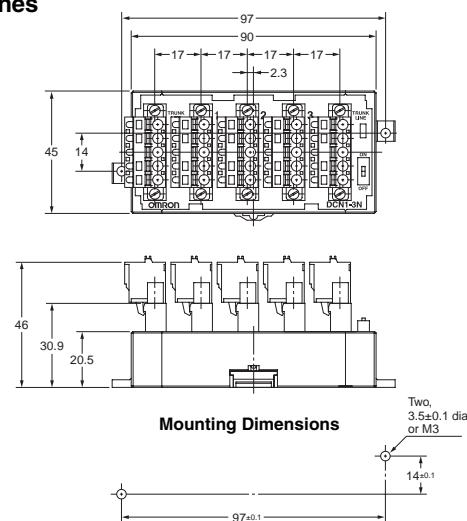
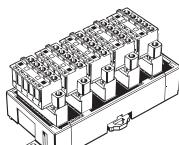


Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+

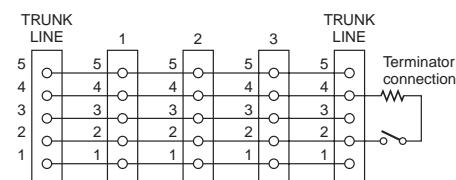
**Note:** When connecting a branch line to the main line, connect the main line to the connector marked with an asterisk because the resistance between the asterisks is minimal.

#### T-branch Tap for 3 branch lines

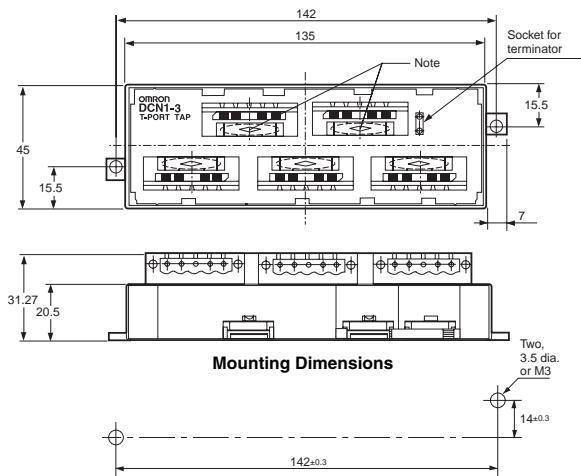
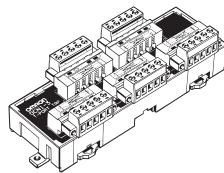
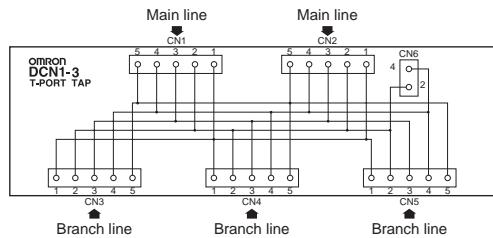
**DCN1-3NC**  
(With Five Branching Connectors)



#### Internal Circuit

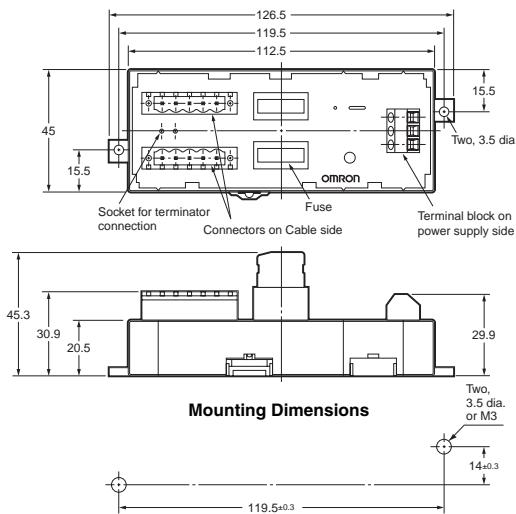
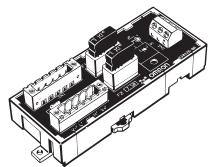
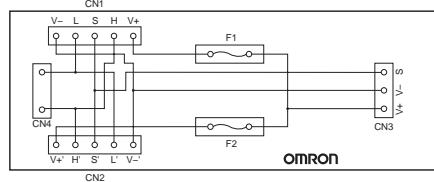


Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+

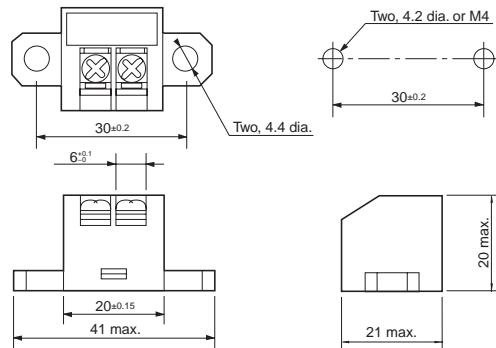
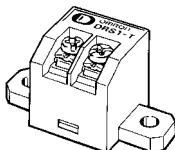
**T-branch Tap for 3 branch lines****DCN1-3C**  
**(With Five Branching Connectors)****Internal Circuit**

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 asterisked portion is minimal.

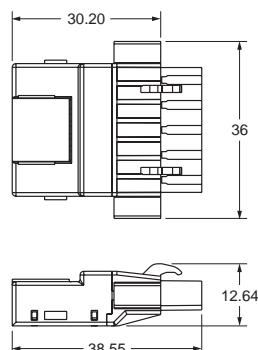
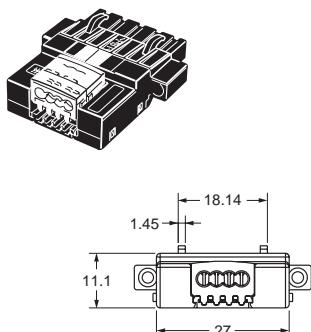
**Power Supply Tap****DCN1-1P**  
**(With Two Branching Connectors)****Internal Circuit**

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

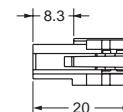
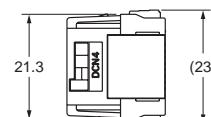
**DRS1-T****(Terminal-block Terminator)**

● Flat Cable

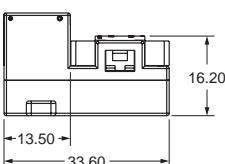
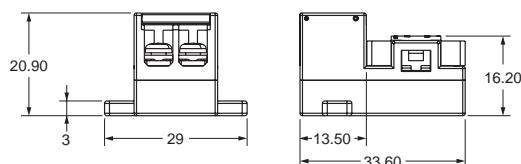
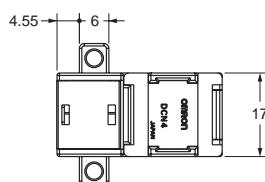
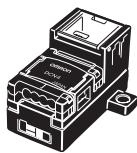
**Connector for Flat Cable**  
**DCN4-SF4D**



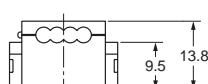
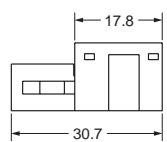
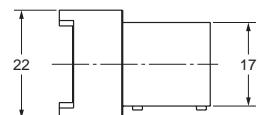
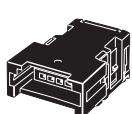
**Conversion Connector for Standard Thin Cable and Flat Cable**  
**DCN4-BR4D**



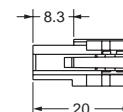
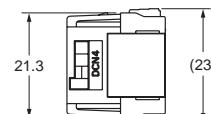
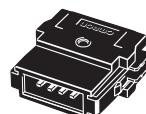
**Power Supply Terminal Block with Terminating Resistance for Flat Cable**  
**DCN4-TP4D**



**Flat Connector Socket**  
**DCN4-TR4**



**Flat Connector Plug**  
**DCN4-BR4**



## I/O Peripheral Devices

### ■ 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
	Semicover	XG5M-4035-N Corresponding to 28 to 26 AWG
	Hood Cover *	XG5S-2001
	XG5S-4022	

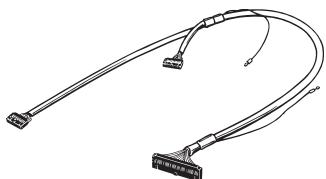
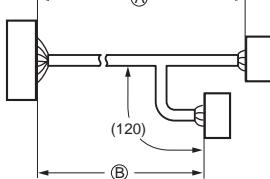
\* DeviceNet connectors for multi-drop wiring cannot be used with the Hood Cover.

### Cable Models

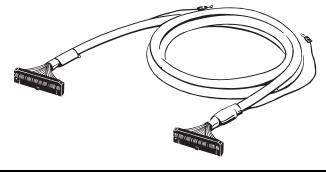
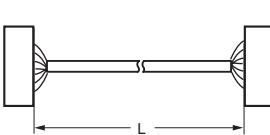
Type	Model	Connected device	Applicable models
Cable with Connectors (1:2)	G79-I□□-□□-D1	G7TC/G70D/G70A	DRT2-ID32ML
	G79-M□□-□□-D1		DRT2-MD32ML
	G79-O□□-□□-D1		DRT2-OD32ML/DRT1-OD32ML-1
	G79-I□□-□□-D2		DRT2-ID32ML-1
	G79-M□□-□□-D2		DRT2-MD32ML-1
Cable with Connector (1:1)	XW2Z-C□□K	--	All models
Cable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

### Applicable Cables with Connectors

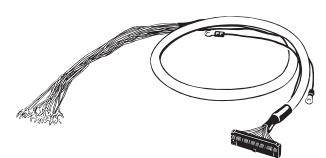
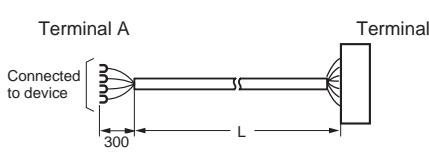
#### ● Cables with Connectors (1-to-2 Connection)/G79-□□-□-D□

Appearance	Cable length (mm)	Model		
		(A)	(B)	
	 (120) 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

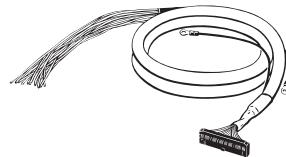
#### ● Cables with Connectors (1-to-1 Connection)/XW2Z-C□□K

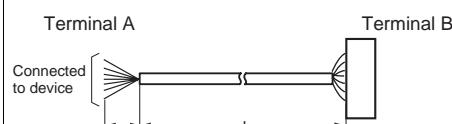
Appearance	Cable length (mm)	Model
	 L	XW2Z-C25K
		XW2Z-C50K

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

Appearance	Cable length (mm)	Model
	 Terminal A Connected to device 300 L Terminal B	G79-Y100C-D1
		G79-Y200C-D1
		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

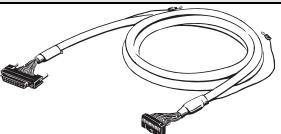
Type		Model	Remark	Connectable model
Molex connector	Crimped terminals	Housing	50-57-9403	Digital I/O Units GT1-ID16MX(-1)/GT1-OD16MX(-1)
		Chain terminal	16-02-0069	
		16-02-0086	Corresponding to 24 to 30 AWG	
		Loose terminal	16-02-0096	Analog I/O Units GT1-ID08MX/GT1-DA04MX
		16-02-0102	Corresponding to 22 to 24 AWG	
	Press-fit tool	57036-5000	Corresponding to 22 to 26 AWG	
		57037-5000	Corresponding to 24 to 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-□□C□	
Digital output, 32 points	XW2Z-□□□B	Digital I/O Units GT1-OD32ML(-1)
	G79-□□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			
		(A)	(B)	Input	Output
	1,000	750	1,000	G79-I100C-75	G79-O100C-75
	1,500	1,250	1,500	G79-I150C-125	G79-O150C-125
	2,000	1,750	2,000	G79-I200C-175	G79-O200C-175
	3,000	2,750	3,000	G79-I300C-275	G79-O300C-275
	5,000	4,750	5,000	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

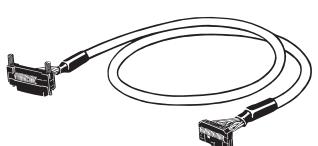
### Applicable Connector Terminal Conversion Units

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

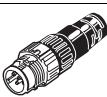
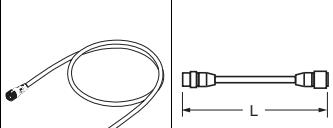
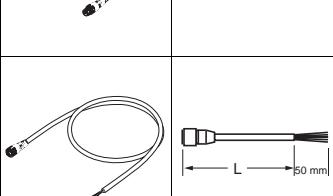
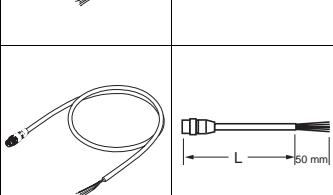
## Peripheral Devices for DeviceNet Communications

### Ordering Information

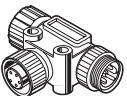
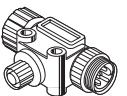
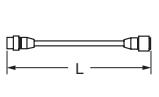
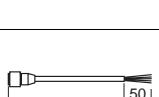
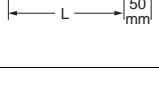
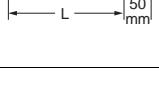
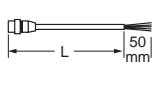
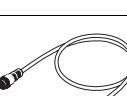
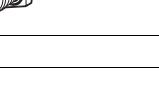
#### ● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

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
Cables with Sealed Connectors		DCA1-5CNC5W1 DCA1-5CN01W1 DCA1-5CN02W1 DCA1-5CN03W1 DCA1-5CN05W1 DCA1-5CN10W1	Length (L): 0.5 m Length (L): 1 m Length (L): 2 m Length (L): 3 m Length (L): 5 m Length (L): 10 m
		DCA1-5CNC5F1 DCA1-5CN01F1 DCA1-5CN02F1 DCA1-5CN03F1 DCA1-5CN05F1 DCA1-5CN10F1	Length (L): 0.5 m Length (L): 1 m Length (L): 2 m Length (L): 3 m Length (L): 5 m Length (L): 10 m
		DCA1-5CNC5H1 DCA1-5CN01H1 DCA1-5CN02H1 DCA1-5CN03H1 DCA1-5CN05H1 DCA1-5CN10H1	Length (L): 0.5 m Length (L): 1 m Length (L): 2 m Length (L): 3 m Length (L): 5 m Length (L): 10 m
		DCA1-5CNC5P1	Panel-mounting connector (socket) with 0.5-m cable
		XS2P-D522-2	Panel-mounting connector socket
		DCA1-5CNC5M1	Panel-mounting connector (plug) with 0.5-m cable
Shielded Panel-mounting Connectors (male)		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) 

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 DCA1-5CS01W1 DCA1-5CS02W1 DCA1-5CS03W1 DCA1-5CS05W1 DCA1-5CS10W1	Length (L): 0.5 m Length (L): 1 m Length (L): 2 m Length (L): 3 m Length (L): 5 m Length (L): 10 m
		DCA1-5CSC5F1 DCA1-5CS01F1 DCA1-5CS02F1 DCA1-5CS03F1 DCA1-5CS05F1 DCA1-5CS10F1	Length (L): 0.5 m Length (L): 1 m Length (L): 2 m Length (L): 3 m Length (L): 5 m Length (L): 10 m
		DCA1-5CSC5H1 DCA1-5CS01H1 DCA1-5CS02H1 DCA1-5CS03H1 DCA1-5CS05H1 DCA1-5CS10H1	Length (L): 0.5 m Length (L): 1 m Length (L): 2 m Length (L): 3 m Length (L): 5 m 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
		DCA2-5CN02W1	Length (L): 2 m
		DCA2-5CN05W1	Length (L): 5 m
		DCA2-5CN10W1	Length (L): 10 m
		DCA2-5CN01F1	Length (L): 1 m
		DCA2-5CN02F1	Length (L): 2 m
		DCA2-5CN05F1	Length (L): 5 m
		DCA2-5CN10F1	Length (L): 10 m
		DCA2-5CN01H1	Length (L): 1 m
		DCA2-5CN02H1	Length (L): 2 m
		DCA2-5CN05H1	Length (L): 5 m
		DCA2-5CN10H1	Length (L): 10 m
		DCA1-5CN01W5	Length (L): 1 m
		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-□
<b>Rated current</b>	3 A			
<b>Rated voltage</b>	125 VDC			
<b>Contact resistance (connector)</b>	40 mΩ max. (at 20 mVDC max. and 100 mA max.)			
<b>Insulation resistance</b>	1,000 MΩ min. (at 500 VDC)			
<b>Dielectric strength (connector)</b>	1,500 VAC for 60 seconds (leakage current: 1 mA max.)			
<b>Ambient operating temperature</b>	-20°C to 65°C			
<b>Storage temperature range</b>	-25°C to 70°C			
<b>Degree of protection</b>	IEC IP67			
<b>Insertion durability</b>	200 times			
<b>Cable strength</b>	98 N for 15 s		--	
<b>Vibration resistance</b>	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/s <sup>2</sup> , 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
<b>Rated current</b>	3 A			
<b>Rated voltage</b>	125 VDC			
<b>Contact resistance (connector)</b>	40 mΩ max. (at 20 mVDC max. and 100 mA max.)			
<b>Insulation resistance</b>	1,000 MΩ min. (at 500 VDC)			
<b>Dielectric strength (connector)</b>	1,500 VAC for 60 seconds (leakage current: 1 mA max.)		1,000 VAC for 60 seconds	
<b>Ambient operating temperature</b>	-20°C to 65°C			
<b>Storage temperature range</b>	-25°C to 70°C			
<b>Degree of protection</b>	IEC IP67			
<b>Insertion durability</b>	200 times			
<b>Cable strength</b>	98 N for 15 s		--	
<b>Vibration resistance</b>	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/s <sup>2</sup> , whichever is smaller			
<b>Lock strength</b>	Pulling: 100 N/15 s, Rotating: 1 N·m/15 s			
<b>Lock force</b>	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
<b>Rated current</b>	8 A	3 A	8 A	3 A *	8 A		
<b>Rated voltage</b>	125 VDC						
<b>Contact resistance (connector)</b>	30 mΩ max. (at 20 mVDC max. and 100 mA max.)						
<b>Insulation resistance</b>	1,000 MΩ min. (at 500 VDC)						
<b>Dielectric strength (connector)</b>	1,500 VAC for 60 seconds (leakage current: 1 mA max.)						
<b>Ambient operating temperature</b>	-20°C to 65°C						
<b>Storage temperature range</b>	-25°C to 70°C						
<b>Degree of protection</b>	IEC IP67						
<b>Insertion durability</b>	200 times						
<b>Cable strength</b>	98 N for 15 s		--		98 N for 15 s	--	
<b>Vibration resistance</b>	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/s <sup>2</sup> , whichever is smaller						

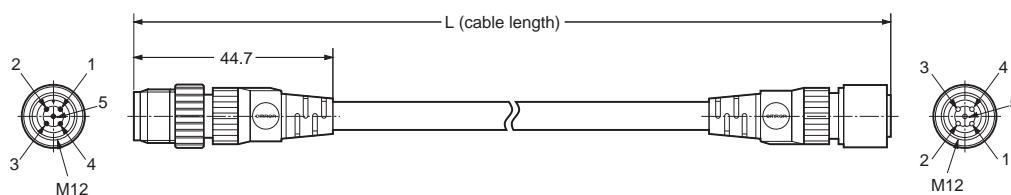
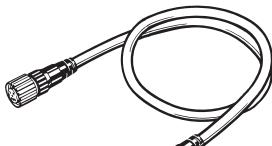
\* The rated current between thick wires is 8 A.

## Dimensions

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

#### Cables with Connectors on Both Ends

DCA1-5CN□□W1

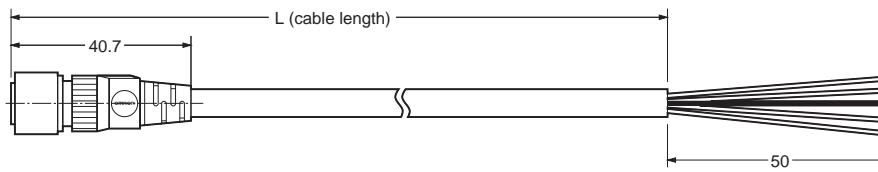


#### Wiring

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

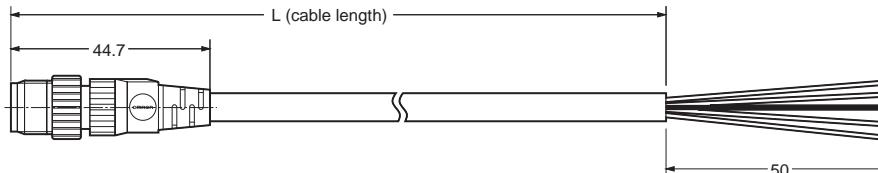
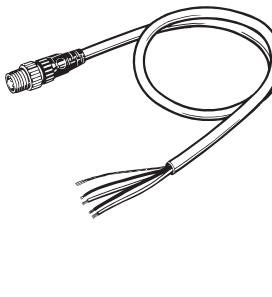


#### Wiring

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

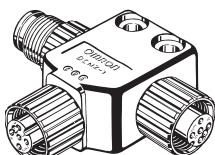


#### Wiring

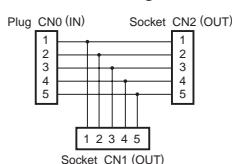
Terminal No.	Color	Name
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2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

#### T-branch Connector

DCN2-1

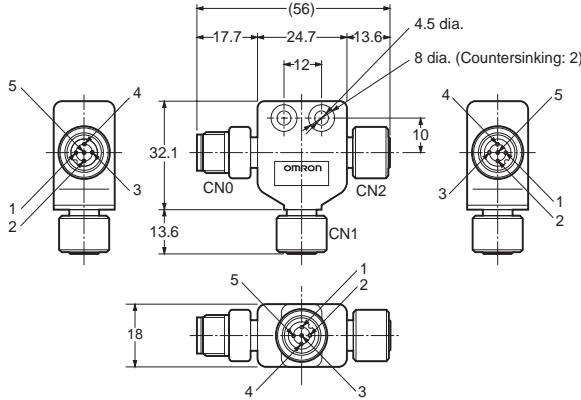


#### Connections Diagram



#### Wiring

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



#### Connectors with Terminating Resistance

DRS2-1 (Plug)

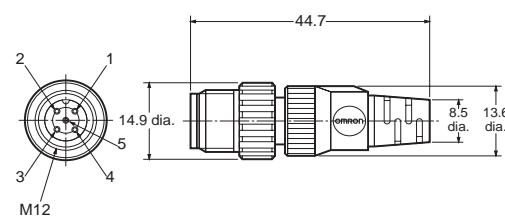
DRS2-2 (Socket)



#### Wiring

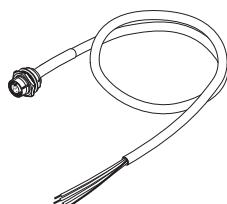
Terminal No.	Name
1	DRAIN : NC
2	V+ : NC
3	V- : NC
4	CAN H : $\leq 121 \Omega$
5	CAN L : $\leq 121 \Omega$

Note: Terminating resistance ( $121 \Omega$ ) is connected between terminals 4 and 5.



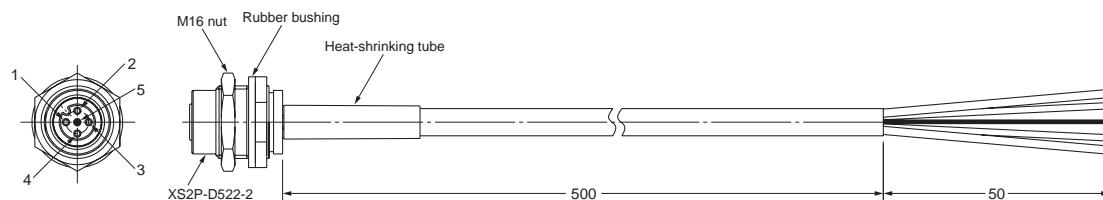
Note: The diagram shows the DRS2-1 (plug).

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

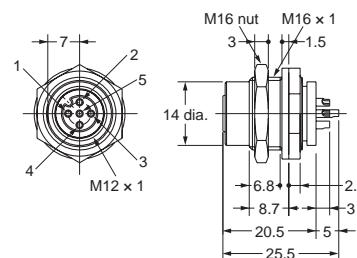


## Wiring

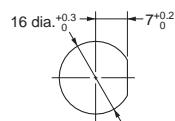
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



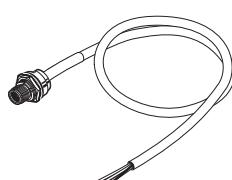
**Panel-mounting Connector (Socket), Solder-cup Terminals**  
**XS2P-D522-2**



## Panel Cutout Dimensions

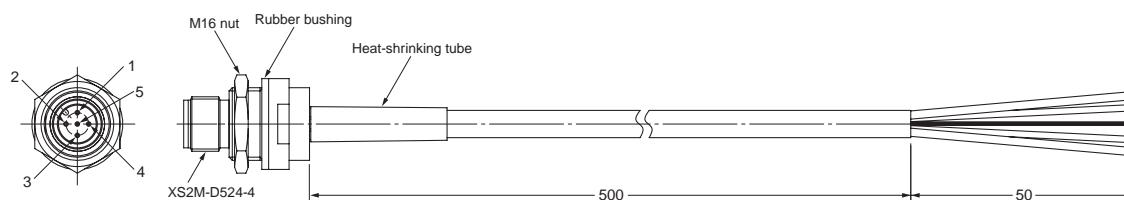


**Panel-mounting Connector (Plug) with 0.5 m Cable**  
**DCA1-5CNC5M1**

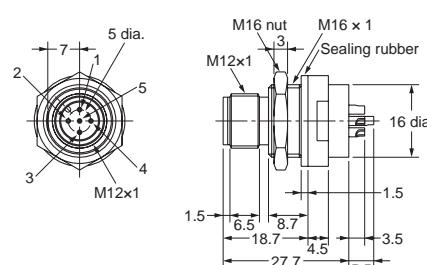


## Wiring

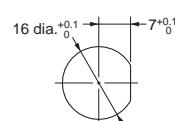
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



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



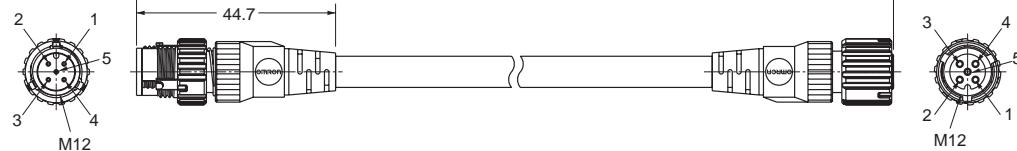
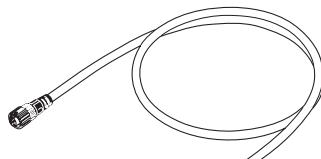
## Panel Cutout Dimensions



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

#### Cables with Connectors on Both Ends

DCA1-5CS□□W1

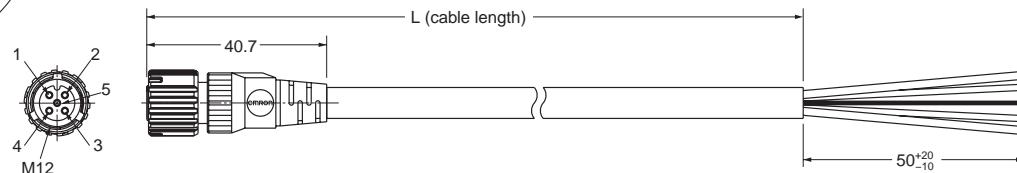
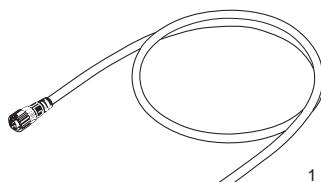


#### Wiring

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

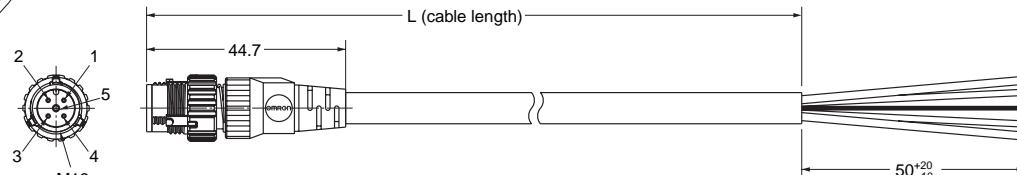
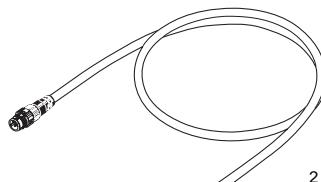


#### Wiring

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

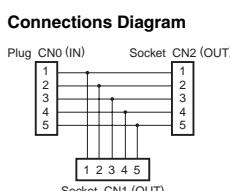
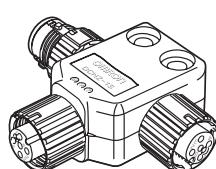


#### Wiring

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

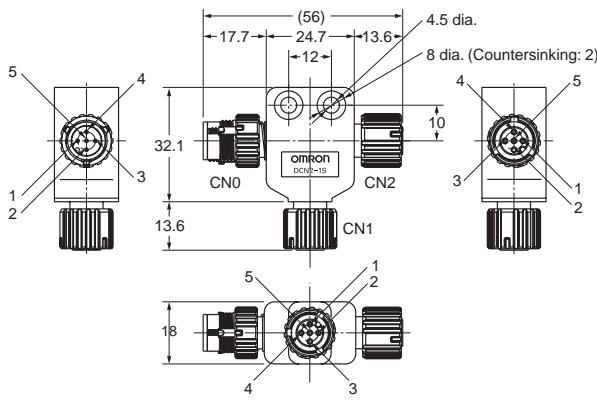
#### T-branch Connector

DCN2-1S



#### Wiring

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



#### Connectors with Terminating Resistance

DRS2-1S (Plug)

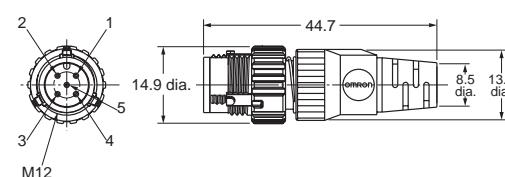
DRS2-2S (Socket)



#### Wiring

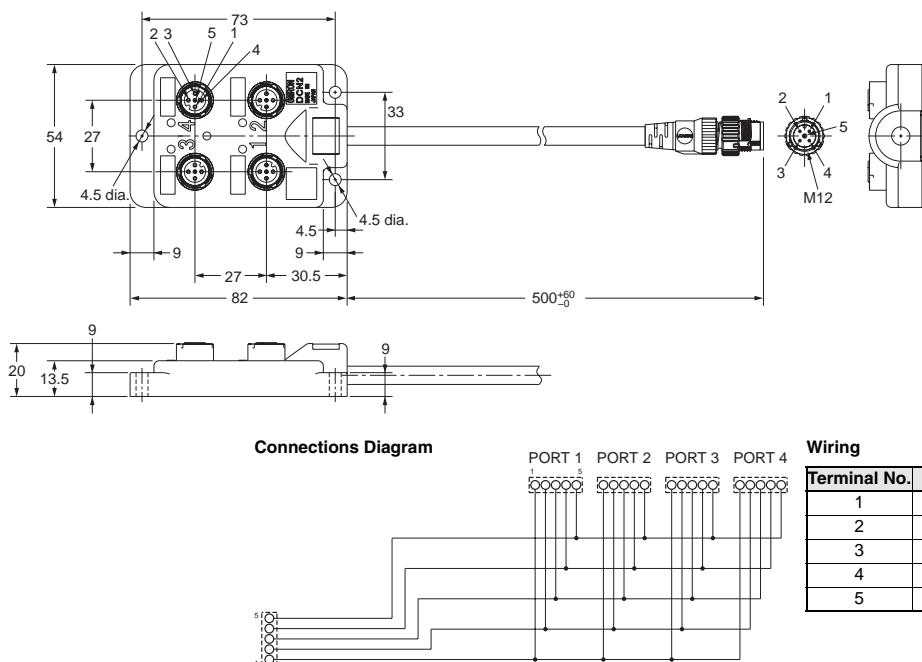
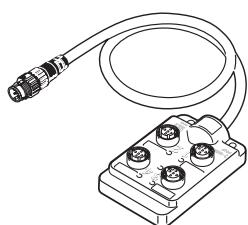
Terminal No.	Name
1	DRAIN : NC
2	V+ : NC
3	V- : NC
4	CAN H : $\geq 121\Omega$
5	CAN L : $\geq 121\Omega$

Note: Terminating resistance ( $121\Omega$ ) is connected between terminals 4 and 5.

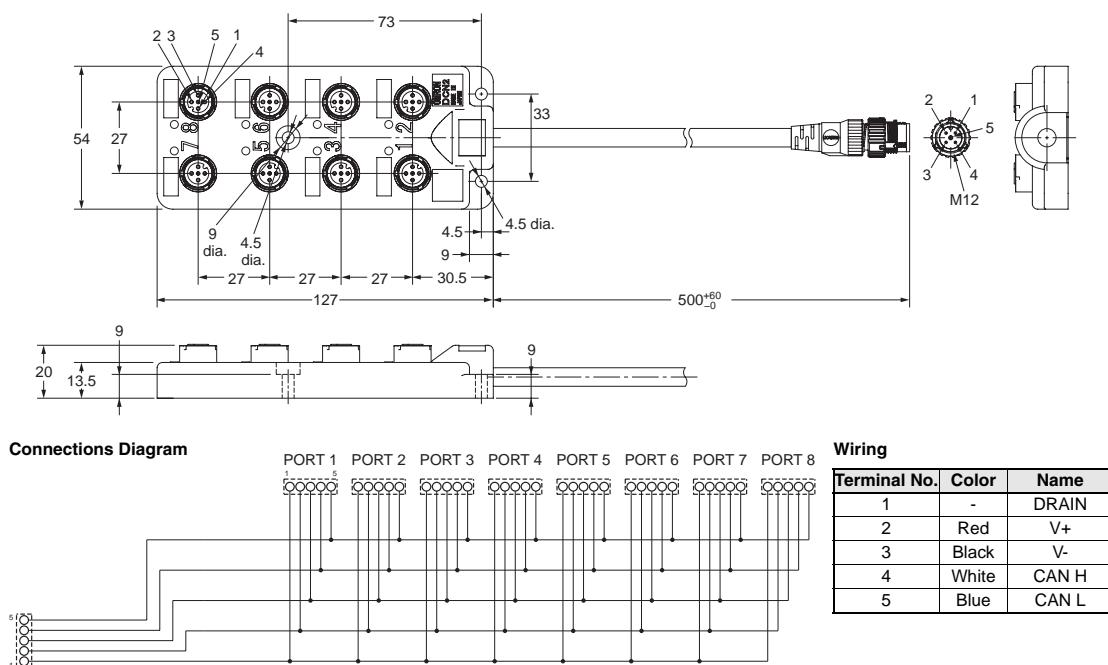
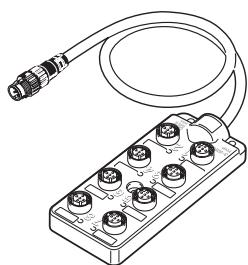


Note: The diagram shows the DRS2-1 (plug).

**Shielded Branch Relay Box with Four Ports**  
DCN2-S4C5H1



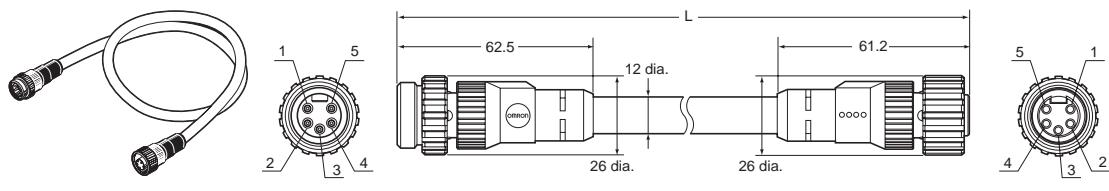
**Shielded Branch Relay Box with Eight Ports**  
DCN2-S8C5H1



● 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

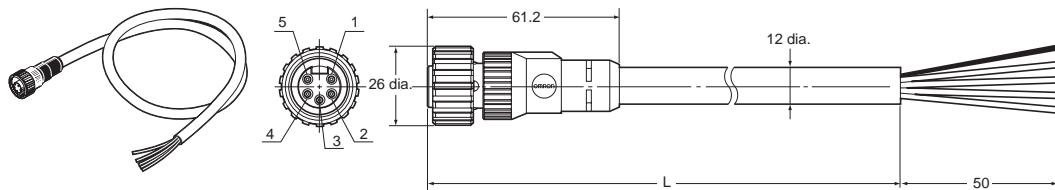


Wiring

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

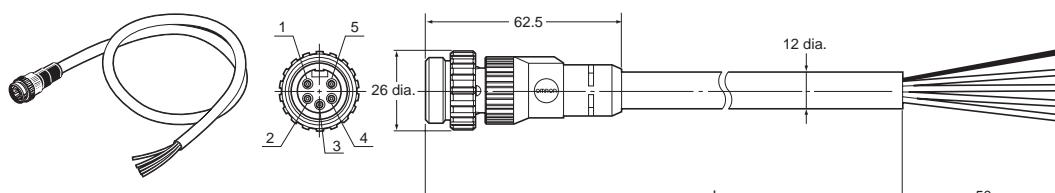


Wiring

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

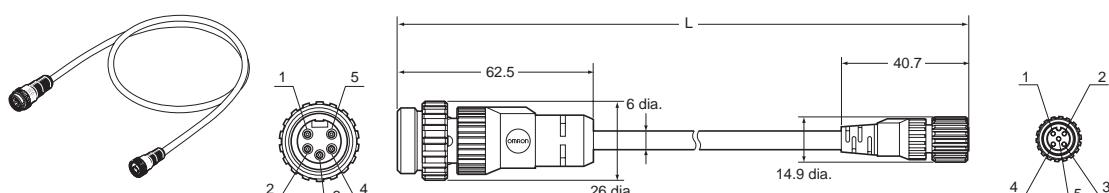


Wiring

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



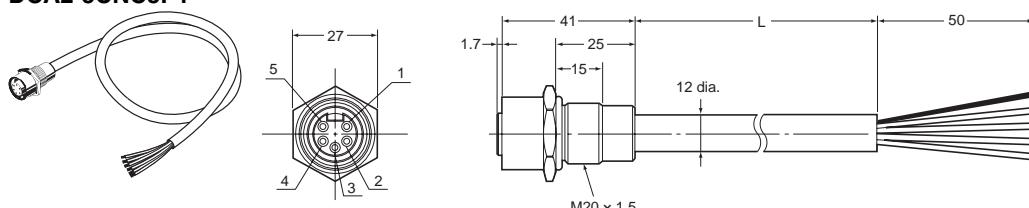
Wiring

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



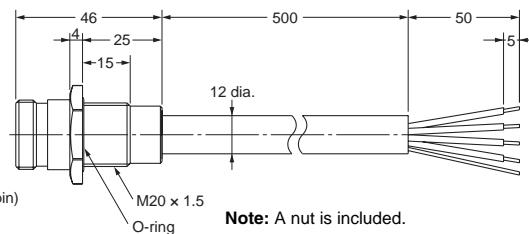
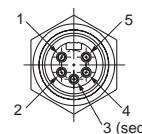
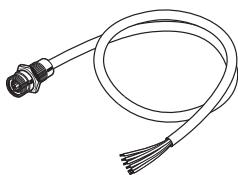
Panel Cutout Dimensions



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**



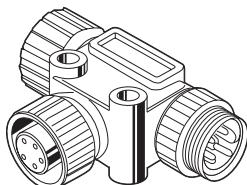
Note: A nut is included.

**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**



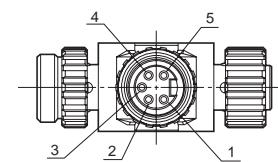
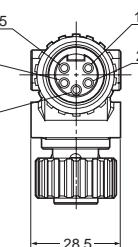
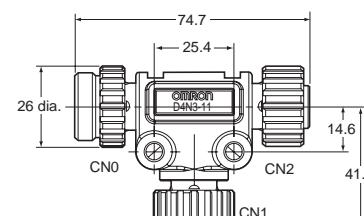
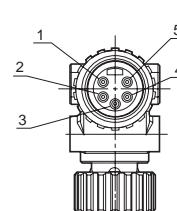
**Connections Diagram**

Plug CN0 (IN)	Socket CN2 (OUT)
1	1
2	2
3	3
4	4
5	5

Socket CN1 (OUT)

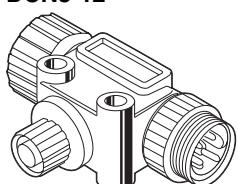
**Wiring**

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**



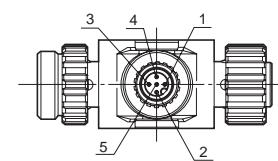
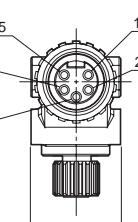
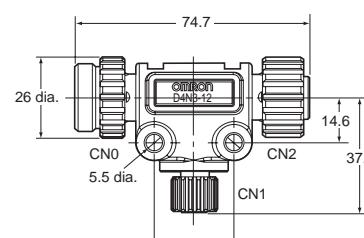
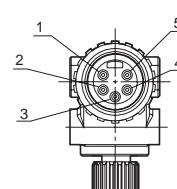
**Connections Diagram**

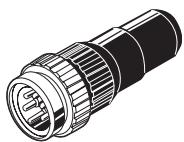
Plug CN0 (IN)	Socket CN2 (OUT)
1	1
2	2
3	3
4	4
5	5

Socket CN1 (OUT)

**Wiring**

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

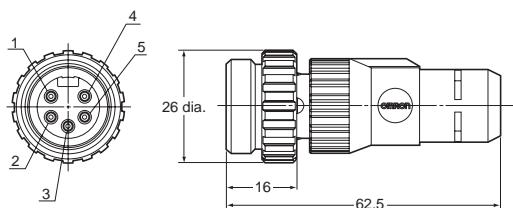
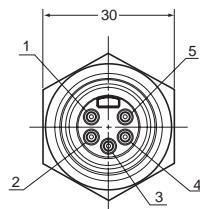


**Connector (Plug) with Terminating Resistance**  
**DRS3-1**


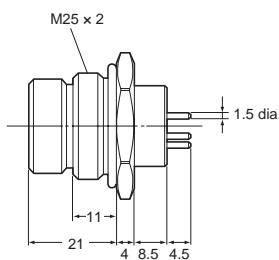
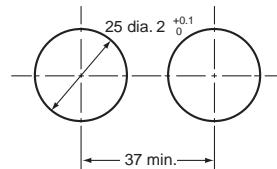
## Wiring

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

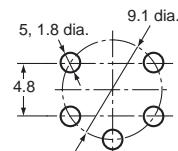
**Note:** Terminating resistance ( $121\ \Omega$ ) is connected between terminals 4 and 5.


**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

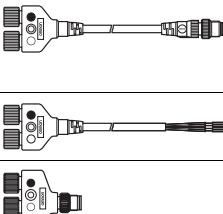
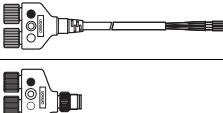
#### ● Cables with Connector (Socket/Plug) on Both Ends (M12 Microconnectors for Power Supply and I/O)

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		
			2	XS2W-D423-D81-A		
	Straight/L-shaped		5	XS2W-D423-G81-A		
			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)).

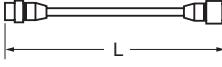
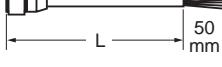
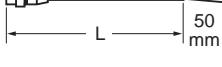
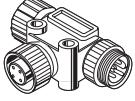
#### ● Connector Cover for M12 Microconnectors

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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