# imall

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# **Peripheral Devices**

# **General-purpose Peripheral Devices**

# **Peripheral Devices for DeviceNet Communications**

# **Ordering Information**

### • General-purpose Models

Product	Appearance	Model	Specifica	itions	
	North Control	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	
T-branch Tap for		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	
1 branch line	and the second s	DCN1-2C	Cable wiring direction: Toward top Cable screw direction: From side Connector screw direction: From top		
	and the second sec	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	
	and the second s	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	
T-branch Tap for		DCN1-3C	Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From side	Provided with 5 parallel connectors with screws	
3 branch lines	allar allar	DCN1-4C	Cable wiring direction: Toward top Cable screw direction: From side Connector screw direction: From top	(XW4B-05C1-H1-D), standard terminating resistor	
	A Carton Carton	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	State of the second sec	DCN1-1P	Tap provided with 2 connectors, standard	d terminating resistor, and fuse	

Produ	ct	Appearance	Model	Specifications	
			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.	
	Ť		XW4B-05C1-H1-D	Parallel connector with screws Connector insertion and wiring performed in same direction.	
Connectors		66006	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		XW4B-05C1-VIR-D	Orthogonal connector with screws Connector insertion and wiring performed at a right angle.		
DeviceNet	Thin Cables		DCA1-5C10(-B)	Outer diameter:       7.00 mm         Length:       100 m         DCA1-5C10-B:       Cable color: Blue         DCA1-5C10:       Cable color: Gray	
Standard Cables	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-bloc Terminator	k	a main	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 <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		

(Unit: mm)

# Dimensions

DCN1-1NC

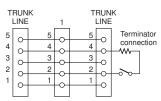
**Connectors**)

### General-purpose Models

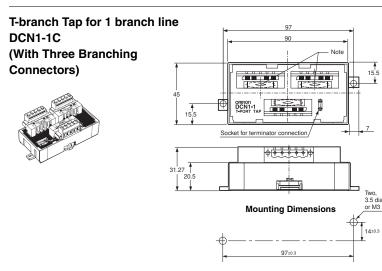
(With Three Branching

T-branch Tap for 1 branch line

### Internal Circuit



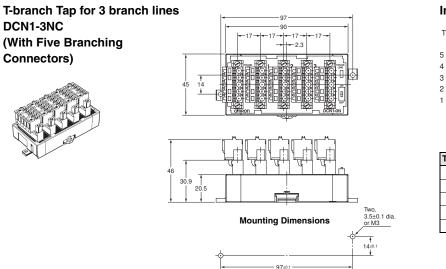
Terminal No.	Name
1	V-
2	CAN L
3	DRAIN
4	CAN H
5	V+



Internal Circuit Main line Main line

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

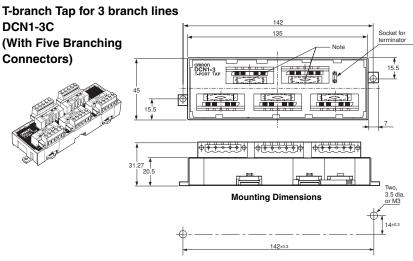
Note: When connecting a branch line to the main line, connect the main line to the connector marked with an asterisk because the resistance between the asterisks is minimal.

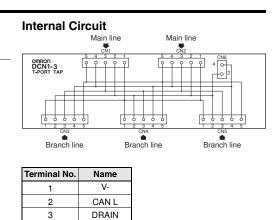


### **Internal Circuit**

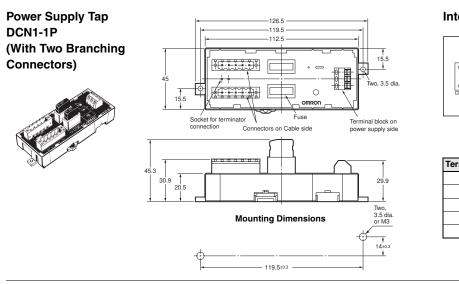
TRU LIN	1	2	3	TRUN LINE	
5 0 4 0 3 0 2 0 1 0		5 4 3 2 1 0	5 4 3 2 0 1 0	5 4 3 2 1 0	Terminator connection

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.



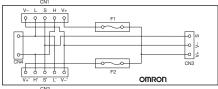
### Internal Circuit

4

5

CAN H

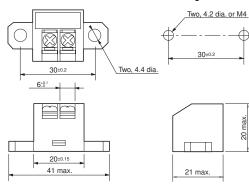
V+



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

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

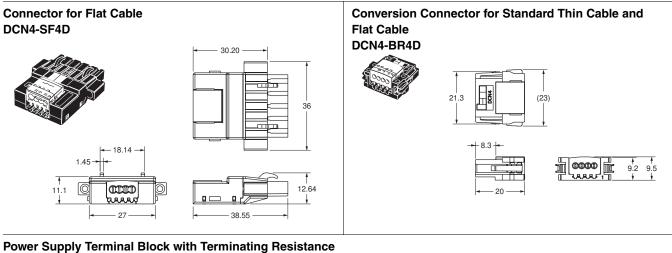




#### Mounting Dimensions

158 Peripheral Devices

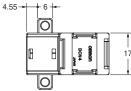
### Flat Cable

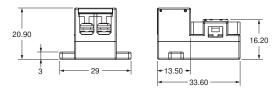


# for Flat Cable





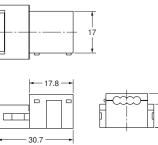




# Flat Connector Socket DCN4-TR4

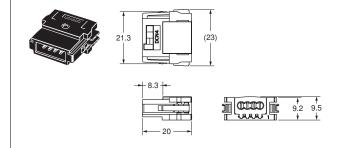
22





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### Flat Connector Plug DCN4-BR4



# I/O Connectors for Connector Terminals MIL Connectors Applicable Connectors

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

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

# **Cable Models**

Туре	Model	Connected device	Applicable models	
	G79-ICC-CC-D1		DRT2-ID32ML	
	G79-M□□-□□-D1		DRT2-MD32ML	
Cable with Connectors (1:2)	G79-000-00-D1	G7TC/G70D/G70A	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			
Cable with Loose Wires with Crimp Terminals	G79-Y□00C-D1		All models	
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	
Appearance		A	B	Widder
		500	250	G79-I50-25-D1
	<b>→</b> (A) →	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
- Andrews	(120)	500	250	G79-I50-25-D2
A CONTRACT OF A	• B	750	500	G79-I75-50-D2
	Length without any bending	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	
	Terminal A Terminal B	1,000	G79-Y100C-D1
	Connected to device	2,000	G79-Y200C-D1
		5,000	G79-Y500C-D1

# ● Cables with Loose Wires/G79-A□C

Appearance	Cable length (mm)	Model	
	Terminal A Terminal E	2,000	G79-A200C-D1
	to device	5,000	G79-A500C-D1

# ■ I/O Connectors for MULTIPLE I/O TERMINALs

# **Applicable Connectors**

Туре		Model	Remark	Connectable model	
		Housing	50-57-9403		
		Chain terminal	16-02-0069	Corresponding to 24 to 30 AWG	
		Chain terminal	16-02-0086	Corresponding to 22 to 24 AWG	Digital I/O Units GT1-ID16MX(-1)/GT1-OD16MX(-1)
Molex connector	Crimped terminals	Loose terminal	16-02-0096	Corresponding to 24 to 30 AWG	
		Loose terminal	16-02-0102	Corresponding to 22 to 24 AWG	Analog I/O Units GT1-AD08MX/GT1-DA04MX
		Press-fit tool	57036-5000	Corresponding to 22 to 26 AWG	GTT-AD08MA/GTT-DA04MA
		Press-III 1001	57037-5000	Corresponding to 24to 30 AWG	
	Soldered termin	als	FCN361J024-AU		
Fujitsu connector (16 points)	Pressure-welde	d terminals	FCN367J024-AU/F		
(To pointo)	Crimped termin	als	FCN363J024-AU		
	Soldered termin	als	FCN361J040-AU		
Fujitsu connector (32 points)	Pressure-welde	d terminals	FCN367J040-AU/F		Digital I/O Units     GT1-ID32ML(-1)/GT1-OD32ML(-1)
	Crimped terminals		FCN363J040-AU		
OMRON			XM2A-2501		Digital I/O Units
D-sub connector			XM2S-2513	#4-40UNC inch screws	GT1-ID16DS(-1)/GT1-OD16DS(-1)

# Applicable Cables with Connectors (Fujitsu Connectors)

I/O classification	Model	Connectable model
Digital input, 16 points	XW2Z-□□□A	Digital I/O Units
Digital input, 10 points	G79-□C	GT1-ID16ML(-1)
Digital output, 16 points	XW2Z-□□□A	Digital I/O Units
Digital output, 16 points	G79-□C	GT1-OD16ML(-1)
Digital input, 32 points	XW2Z-□□□B	Digital I/O Units
Digital input, 32 points	G79-I□C□	GT1-ID32ML(-1)
Digital output, 32 points	XW2Z-□□□B	Digital I/O Units
Digital output, 52 points	G79-0□C□	GT1-OD32ML(-1)

### ● 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
and the second	L	5,000	G79-500C

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

Annooron oo	Cable length (mm)		Model		
Appearance		A	B	Input	Output
		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
and the second sec		3,000	2,750	G79-I300C-275	G79-O300C-275
	Length without any bending	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				
and the second sec		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
and the second sec		3,000	XW2Z-300B
		5,000	XW2Z-500B

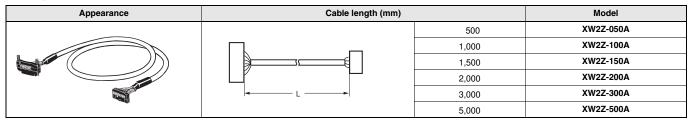
# ■ I/O Connector for Programmable Slaves

# **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)



# **Peripheral Devices for Environment-resistive Slaves**

# **Peripheral Devices for DeviceNet Communications**

# **Ordering Information**

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

Product	Арреа	arance	Model		Specifications	
Sealed Assembling-type Connector (male)			XS2G-D5S7	For communications (p	lug)	
Sealed Assembling-type Connector (female)			XS2C-D5S7	For communications (se	ocket)	
Sealed T-branch Connector			DCN2-1	For 1 branch line		
Sealed Connector with			DRS2-1	Plug		
Terminating Resistor			DRS2-2	Socket		
			DCA1-5CNC5W1	Length (L): 0.5 m		
			DCA1-5CN01W1	Length (L): 1 m		
			DCA1-5CN02W1	Length (L): 2 m	Cable with connectors on both ends	
		L→	DCA1-5CN03W1	Length (L): 3 m		
	all the second s		DCA1-5CN05W1	Length (L): 5 m		
			DCA1-5CN10W1	Length (L): 10 m		
			DCA1-5CNC5F1	Length (L): 0.5 m		
				DCA1-5CN01F1	Length (L): 1 m	
Cables with Sealed				DCA1-5CN02F1	Length (L): 2 m	Cable with connector on one end (socket)
Connectors			L► 50 mm	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		
			DCA1-5CN01H1	Length (L): 1 m		
				DCA1-5CN02H1	Length (L): 2 m	Cable with connector on one end (plug)
		L► <sub>50 mm</sub>	DCA1-5CN03H1	Length (L): 3 m		
			DCA1-5CN05H1	Length (L): 5 m		
			DCA1-5CN10H1	Length (L): 10 m		
Shielded Panel-mounting Connectors (female)	<b>a</b> (		DCA1-5CNC5P1	Panel-mounting connect	ctor (socket) with 0.5-m cable	
	6	<b>P</b>	XS2P-D522-2	Panel-mounting connect	ctor socket	
Shielded Panel-mounting Connectors (male)			DCA1-5CNC5M1	Panel-mounting connect	ctor (plug) with 0.5-m cable	
		Ð	XS2M-D524-4	Panel-mounting connect	ctor (plug) with solder-cup terminals	
Waterproof cover (for socket)	Ő		XS2Z-22	Used to cover an unuse	ed connector section	
Dust cover (for socket)			XS2Z-15	Used to cover an unused connector section		

Product	Appe	arance	Model		Specifications		
Sealed T-branch Connector			DCN2-1S	For 1 branch line			
Sealed Assembling type		<b>N</b>	DRS2-1S	Plug			
Connector (female)	S)		DRS2-2S	Socket			
			DCA1-5CSC5W1	Length (L): 0.5 m			
			DCA1-5CS01W1	Length (L): 1 m			
			DCA1-5CS02W1	Length (L): 2 m	Cable with connectors on both ends		
	•*	L	DCA1-5CS03W1	Length (L): 3 m			
	۵ĩ <sup></sup>		DCA1-5CS05W1	Length (L): 5 m			
			DCA1-5CS10W1	Length (L): 10 m			
			DCA1-5CSC5F1	Length (L): 0.5 m			
					DCA1-5CS01F1	Length (L): 1 m	
Connectors with Shielded			DCA1-5CS02F1	Length (L): 2 m	Cable with connector on one end (socket		
Cables		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			
				DCA1-5CS01H1	Length (L): 1 m		
				DCA1-5CS02H1	Length (L): 2 m	Cable with connector on one end (plug)	
		L	DCA1-5CS03H1	Length (L): 3 m	Cable with connector on one end (plug)		
			DCA1-5CS05H1	Length (L): 5 m			
			DCA1-5CS10H1	Length (L): 10 m			
	ar (		DCN2-S4C5H1	4 ports, 0.5-m cable			
Shielded Branch Relay Box		DCN2-S8C5H1	8 ports, 0.5-m cable				

Product	Арреа	arance	Model		Specifications			
Sealed T-branch Connector			DCN3-11	T-branch Connector				
			DCN3-12	T-branch Connector (I	T-branch Connector (Branch connector is M12.)			
Sealed Connector with Terminating Resistor			DRS3-1	Plug	Plug			
	(		DCA2-5CN01W1	Length (L): 1 m				
			DCA2-5CN02W1	Length (L): 2 m	Cable with connectors on both and			
		L	DCA2-5CN05W1	Length (L): 5 m	Cable with connectors on both ends			
	0 h		DCA2-5CN10W1	Length (L): 10 m				
	82		DCA2-5CN01F1	Length (L): 1 m				
			DCA2-5CN02F1	Length (L): 2 m	Cable with connector on one end (socket)			
			DCA2-5CN05F1	Length (L): 5 m	Gable with connector on one end (socker)			
Cables with Sealed			DCA2-5CN10F1	Length (L): 10 m				
Connectors	01	[]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]	DCA2-5CN01H1	Length (L): 1 m				
			DCA2-5CN02H1	Length (L): 2 m	Cable with connector on one end (plug)			
			DCA2-5CN05H1	Length (L): 5 m				
			DCA2-5CN10H1	Length (L): 10 m				
	<b>5</b> 70 <b>5</b> 70		DCA1-5CN01W5	Length (L): 1 m				
			DCA1-5CN02W5	Length (L): 2 m	Cable with connectors on both ends Thin cable			
			DCA1-5CN05W5	Length (L): 5 m	M12 socket			
			DCA1-5CN10W5	Length (L): 10 m				
Panel-mounting Connector (female)	ap (		DCA2-5CNC5P1	Panel-mounting conne	Panel-mounting connector (socket) with 0.5-m cable			
Panel-mounting Connector (male)	and (		DCA2-5CNC5M1	Panel-mounting conne	ector (plug) with 0.5-m cable			
Panel-mounting Connector (male)	Ó		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					

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

# Specifications

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

Type Item	Connectors with Cables DCA1-5CN	T-branch Connector DCN2-1	Assembling-type Connector XS2□-D5S7	Connectors with Terminating Resistor DRS2-□					
Rated current	3 A								
Rated voltage	125 VDC	125 VDC							
Contact resistance (connector)	40 m $\Omega$ max. (at 20 mVDC max. and	0 m $\Omega$ max. (at 20 mVDC max. and 100 mA max.)							
Insulation resistance	1,000 $M\Omega$ min. (at 500 VDC)	,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 100 m/s <sup>2</sup> , whichever is smaller	n 1 $\mu$ s while performing simple vibratio	ns at either 10 to 500 Hz with 1.52-m	m full amplitude or at acceleration					

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

Туре	Connectors with Cables	T-branch Connector	Connectors with Terminating Resistor	Branch Relay Box					
Item	DCA1-5CS	DCN2-1S	DRS2-□S	DCN2-S⊟C5H					
Rated current	3 A								
Rated voltage	125 VDC	125 VDC							
Contact resistance (connector)	40 m $\Omega$ 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 of	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/s <sup>2</sup> , 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

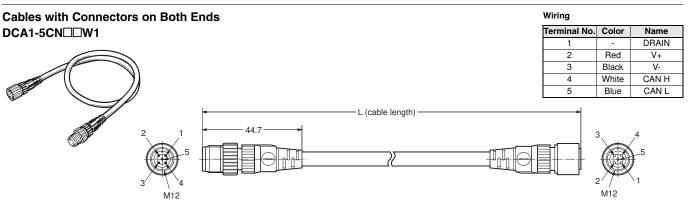
Type Item	Connectors with Thick Cables DCA2-5CN	Connectors with Thin Cables DCA1-5CN□□W5	T-branch Connector DCN3-11	T-branch Connector DCN3-12	Connectors with Terminating Resistor DRS3-1	Panel Mounting Connector DCA2-5CNC5P1	Panel Mounting Connector XS4M-D521-1
Rated current	8 A	3 A	8 A	3 A *	8 A		
Rated voltage	125 VDC	•					
Contact resistance (connector)	$30 \text{ m}\Omega$ max. (at 20 mVDC max. and 100 mA max.)						
Insulation resistance	1,000 MΩ min. (at 50	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	-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 interruption m/s <sup>2</sup> , whichever is sr		while performing sim	ple vibrations at eith	ner 10 to 500 Hz with 1.52	-mm full amplitude or	at acceleration 100

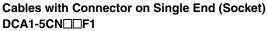
\* The rated current between thick wires is 8 A.

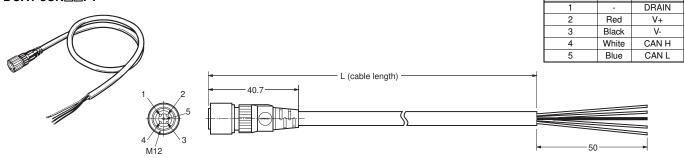
Name

# **Dimensions**

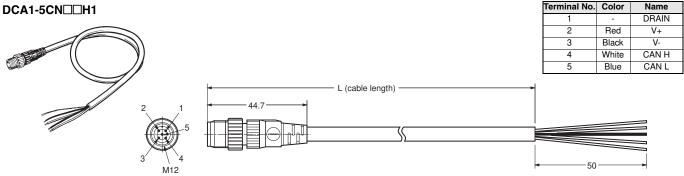
### • Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)





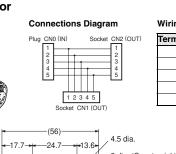


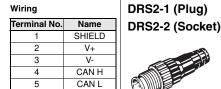
# Cables with Connector on Single End (Plug)

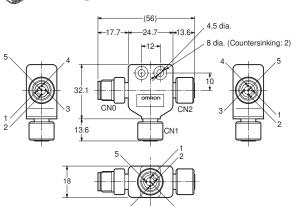


### **T-branch Connector DCN2-1**









#### **Connectors with Terminating Resistance** DRS2-1 (Plug) Wiring



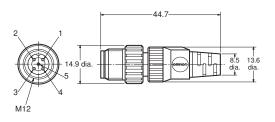
Terminal No.		Name
1	DRAIN	: NC
2	V+	: NC
3	V-	: NC
4	CAN H	: 121 Ω
5	CAN L	:

Wiring

Wiring

Terminal No. Color

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

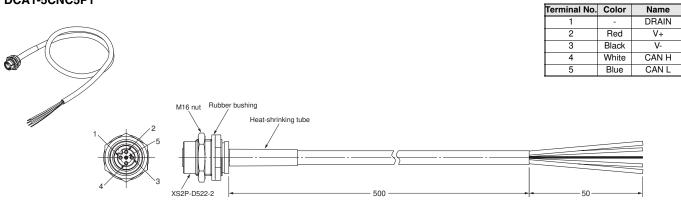


Note: The diagram shows the DRS2-1 (plug).

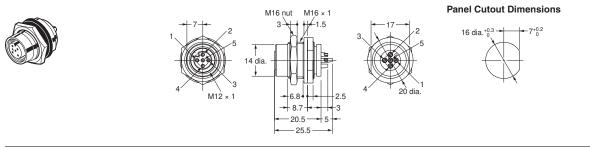
Wiring

Wiring

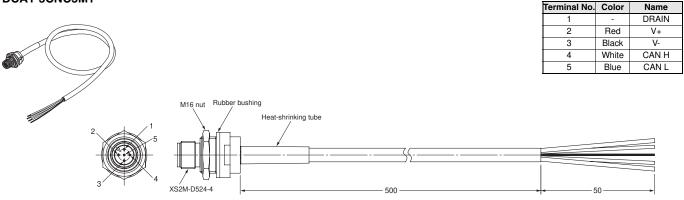
# Panel-mounting Connector (Socket) with 0.5 m Cable DCA1-5CNC5P1



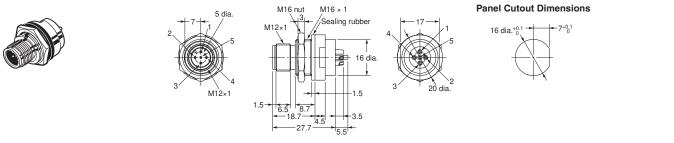
# Panel-mounting Connector (Socket), Solder-cup Terminals XS2P-D522-2



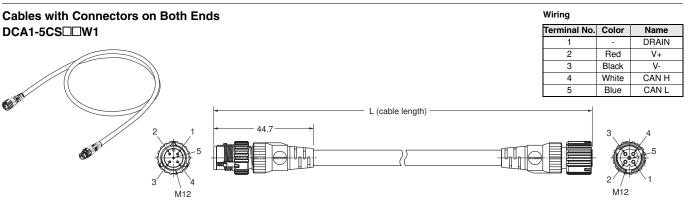
# Panel-mounting Connector (Plug) with 0.5 m Cable DCA1-5CNC5M1

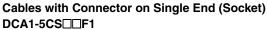


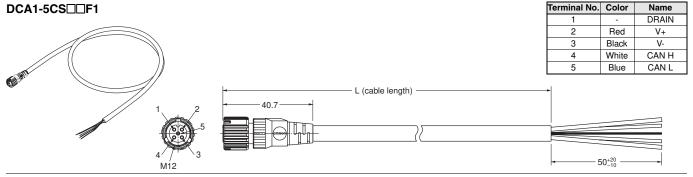
# Panel-mounting Connector (Socket), Solder-cup Terminals XS2M-D524-4

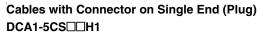


### • Environment-resistive Models (for Thin Wires and M12 Micro Connectors)

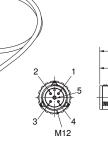










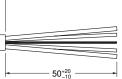


L (cable length)	-
<u>}</u>	

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

Wiring

Wiring



#### **T-branch Connector** DCN2-1S **Connections Diagram** Wiring Plua CN0 (IN) Socket CN2 (OUT) Terminal No. Name DRS2-2S (Socket) SHIELD V+ 2 3 V-CAN H 4 12345 5 CAN L Socket CN1 (OUT) (56) 4.5 dia. 17.7 <del>-</del>13.6 24.7 8 dia. (Countersinking: 2) -12-10 32.1 CN0 13.6 ŧ

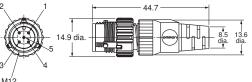
44.7

#### **Connectors with Terminating Resistance** DRS2-1S (Plug) Wiring



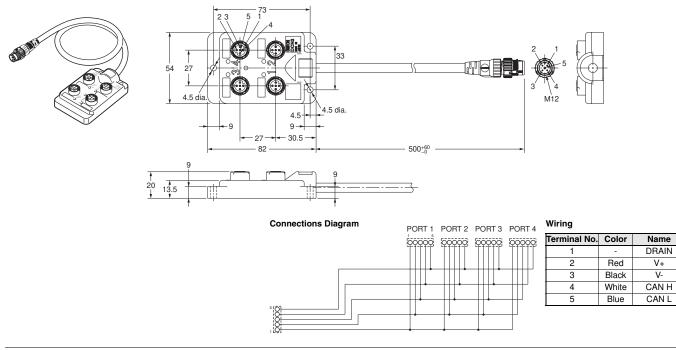
Winnig		
Terminal No.		Name
1	DRAIN	: NC
2	V+	: NC
3	V-	: NC
4	CAN H	: 121 Ω
F	CANL	

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

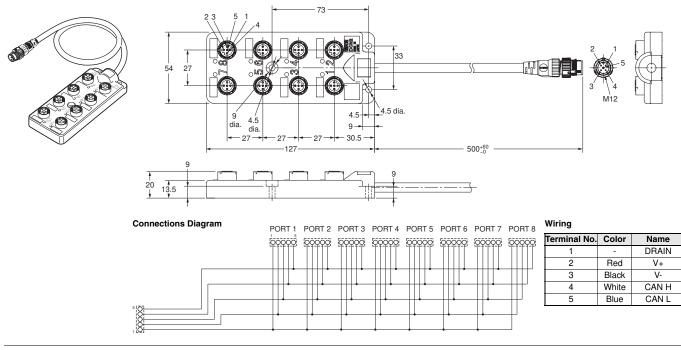


Note: The diagram shows the DRS2-1 (plug).

# Shielded Branch Relay Box with Four Ports DCN2-S4C5H1

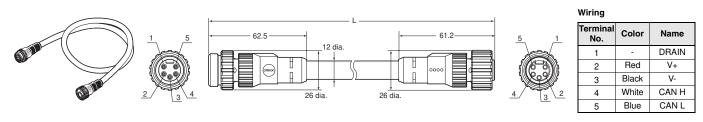


# Shielded Branch Relay Box with Eight Ports DCN2-S8C5H1

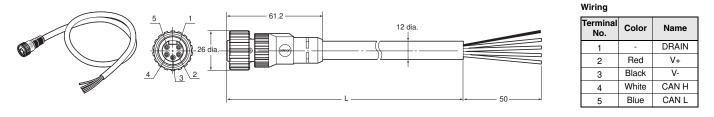


### • Environment-resistive Models for Thick Wires with 7/8-16UN Mini Connectors

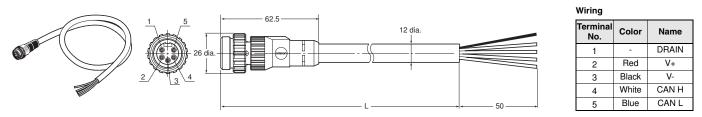
Thick Cable with Connectors on Both Ends (5 Conductors for Communications) DCA2-5CN



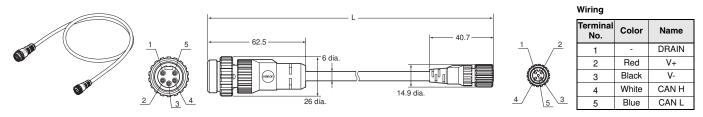
# Thick Cable with Connector Socket on One End (5 Conductors for Communications) DCA2-5CN□□F1



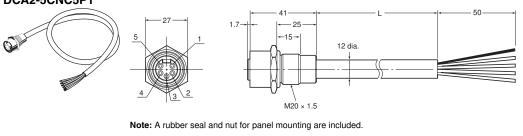
# Thick Cable with Connector Plug on One End (5 Conductors for Communications) DCA2-5CN



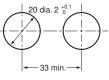
# Thin Cable with Connectors on Both Ends (5 Conductors for Communications) DCA1-5CN



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



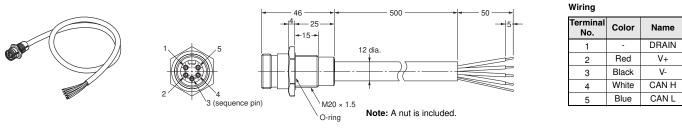
#### Panel Cutout Dimensions



# Wiring

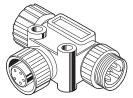
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L
-		

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

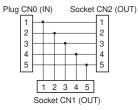


2

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



**Connections Diagram** 



 Wiring

 Terminal No.
 Name

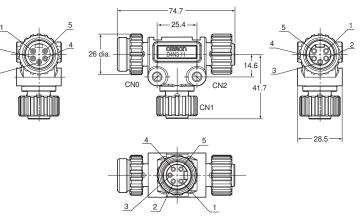
 1
 DRAIN

 2
 V+

 3
 V 

 4
 CAN H

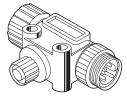
 5
 CAN L



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

w

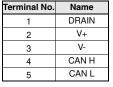
DCN3-12

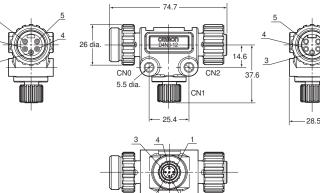


**Connections Diagram** 

Plug CN0 (IN) Socket	CN2 (OUT)
	2
3	3
	14
1 2 3 4 5	
Socket CN1 (OUT	Γ)

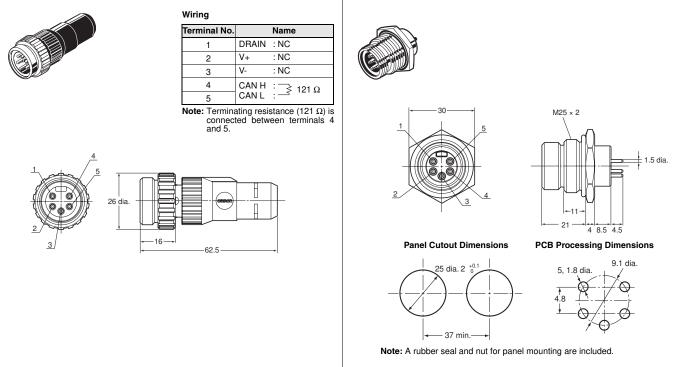
/iring	
--------	--





Panel-mounting Connector (5 Pins for Communications)

# Connector (Plug) with Terminating Resistance DRS3-1



XS4M-D521-1

# I/O Peripheral Devices

# **Applicable Connectors**

### Assembly Connector Plugs for M12 Microconnectors

<b>A</b> nnooron oo	Applicable cable diameter (mm)	Cable direction	Number of poles	Connection method		
Appearance				Crimping	Soldering	Screws
	For 6 dia.	Straight		XS2G-D4C1	XS2G-D421	XS2G-D4S1
	(5 to 6 dia.)	L-shaped			XS2G-D422	XS2G-D4S2
	For 5 dia. (4 to 5 dia.)	Straight	1	XS2G-D4C3	XS2G-D423	XS2G-D4S3
		L-shaped	Ī		XS2G-D424	XS2G-D4S4
E Handle	For 3 dia. (3 to 4 dia.)	Straight	4	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.)	Straight		-		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	
Appearance	Cable	Connector	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
0.11		1	XS4W-D421-101-A
		2	XS4W-D421-102-A
	← L	5	XS4W-D421-105-A
O DE		10	XS4W-D421-110-A
		1	XS4F-D421-101-A
		2	XS4F-D421-102-A
	L   50   mm	5	XS4F-D421-105-A
		10	XS4F-D421-110-A
		1	XS4H-D421-101-A
		2	XS4H-D421-102-A
	L 20   50	5	XS4H-D421-105-A
		10	XS4H-D421-110-A
	T-branch Connector		XS4R-D424-5
01 <b>D</b>	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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