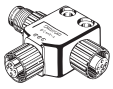
Peripheral Devices for Environment-resistive Slaves

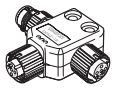
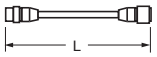
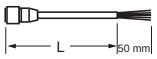
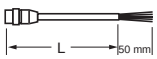
Peripheral Devices for DeviceNet Communications

Ordering Information

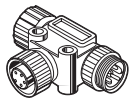
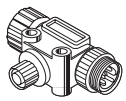
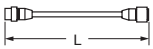
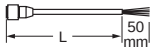
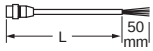
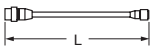
● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

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

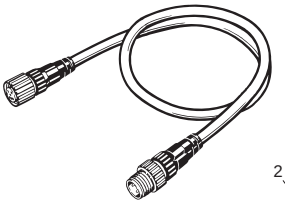
Type / Item	Connectors with Thick Cables DCA2-5CN□□□1	Connectors with Thin Cables DCA1-5CN□□W5	T-branch Connector DCN3-11	T-branch Connector DCN3-12	Connectors with Terminating Resistor DRS3-1	Panel Mounting Connector DCA2-5CNC5P1	Panel Mounting Connector XS4M-D521-1
Rated current	8 A	3 A	8 A	3 A ✻	8 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

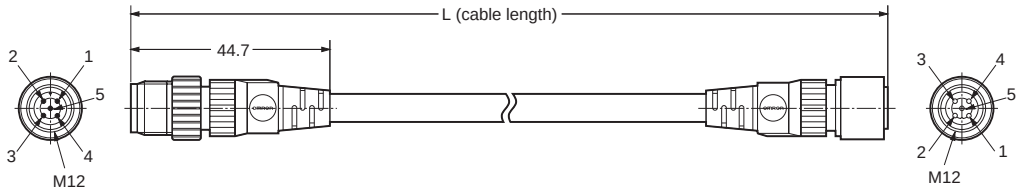
● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

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

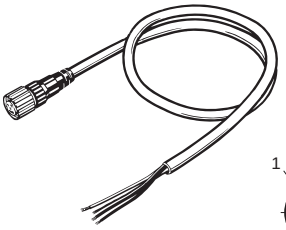


Wiring

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

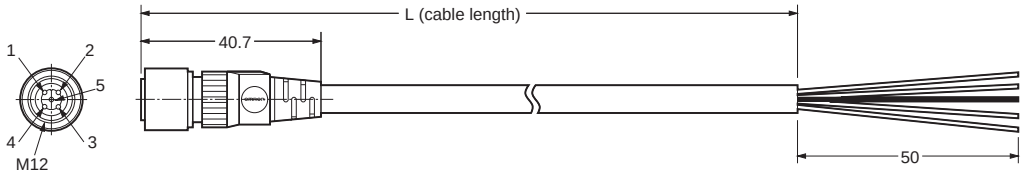


Cables with Connector on Single End (Socket)
DCA1-5CN□□F1

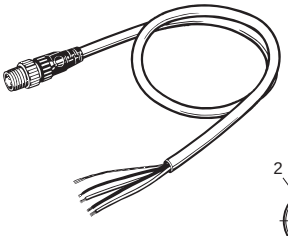


Wiring

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

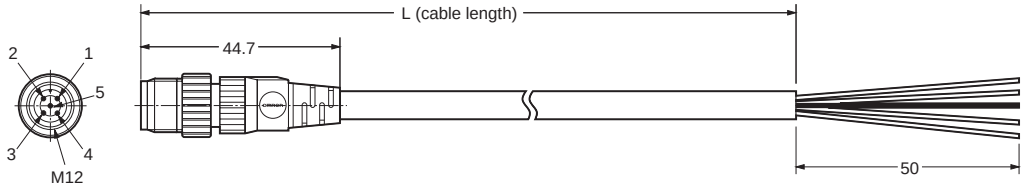


Cables with Connector on Single End (Plug)
DCA1-5CN□□H1

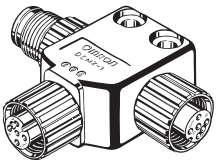


Wiring

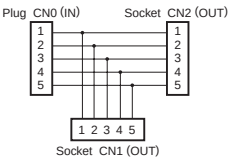
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



T-branch Connector
DCN2-1

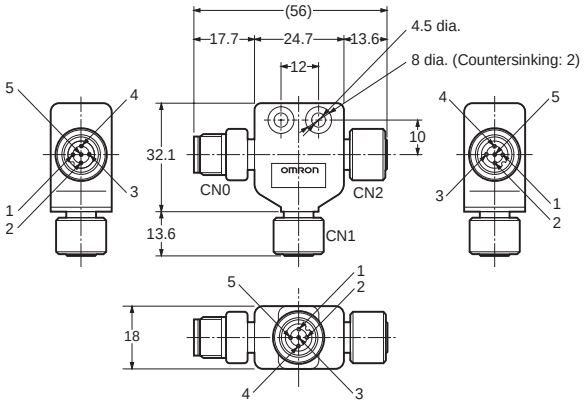


Connections Diagram



Wiring

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

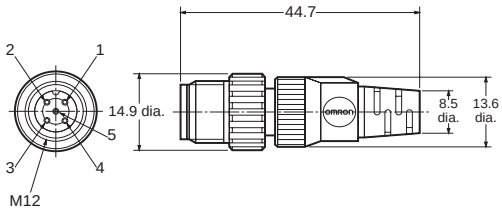


Connectors with Terminating Resistance
DRS2-1 (Plug)
DRS2-2 (Socket)

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.

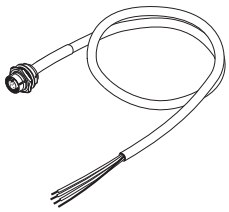


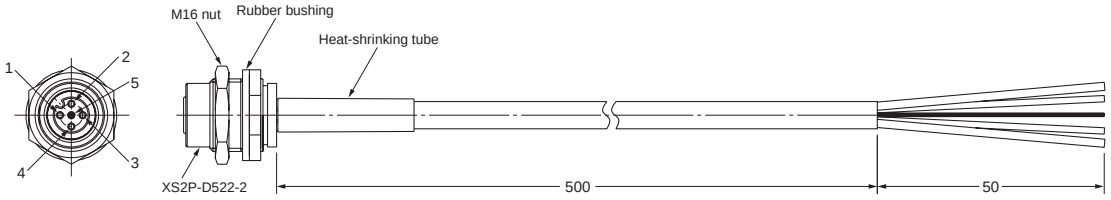
Note: The diagram shows the DRS2-1 (plug).

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

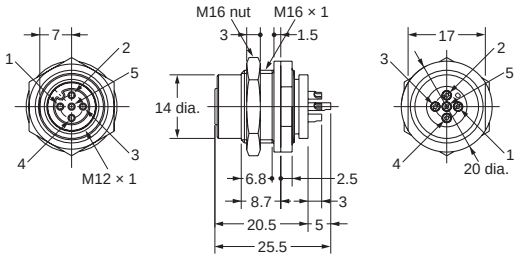
Wiring

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

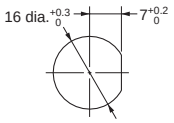




Panel-mounting Connector (Socket), Solder-cup Terminals
XS2P-D522-2



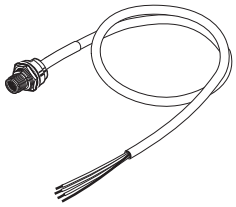
Panel Cutout Dimensions

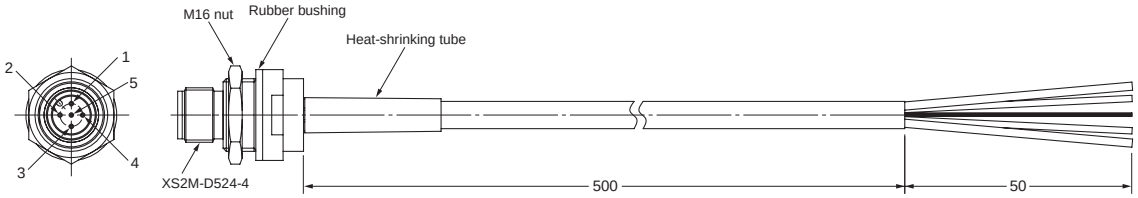


Panel-mounting Connector (Plug) with 0.5 m Cable
DCA1-5CNC5M1

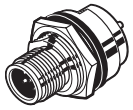
Wiring

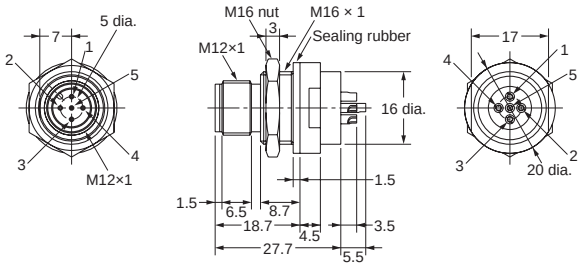
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



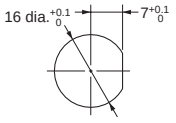


Panel-mounting Connector (Socket), Solder-cup Terminals
XS2M-D524-4





Panel Cutout Dimensions

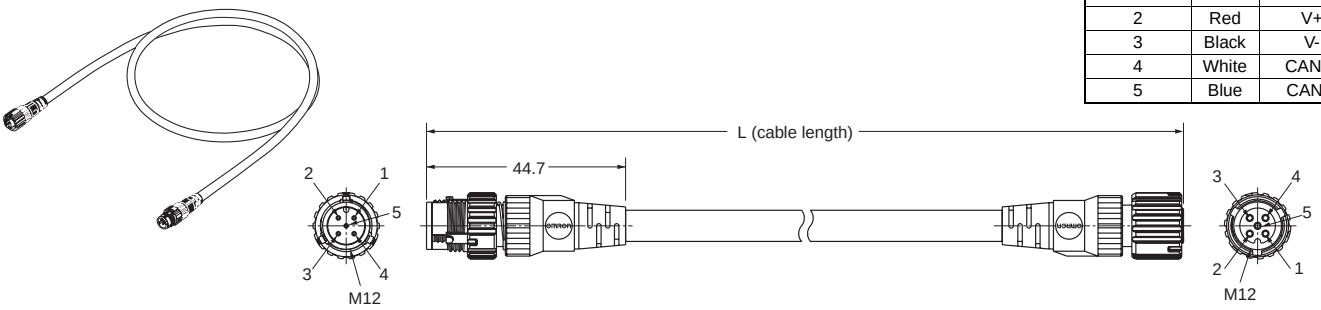


● Environment-resistive Models (for Thin Wires and M12 Micro Connectors)

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

Wiring

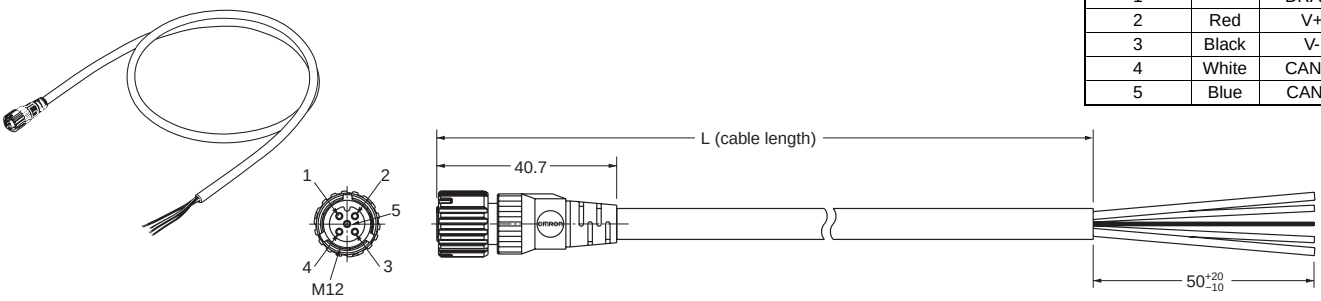
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



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

Wiring

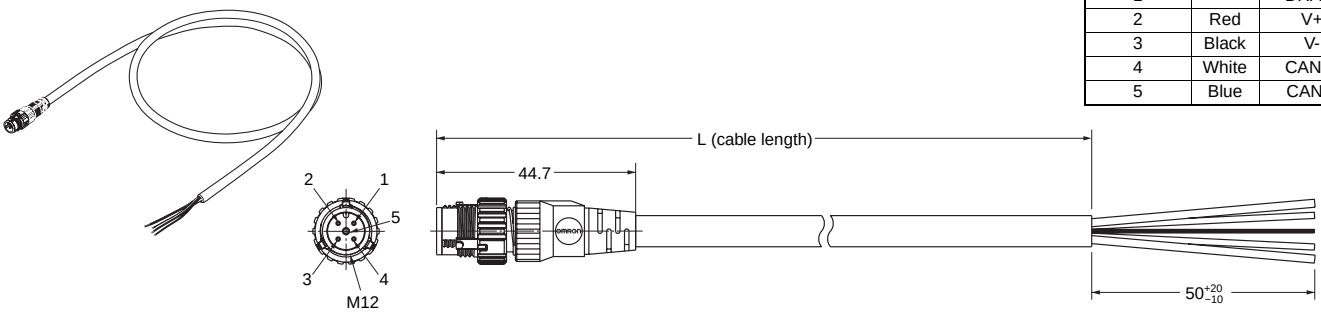
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



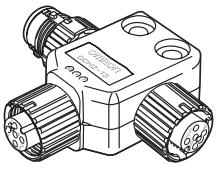
Cables with Connector on Single End (Plug)
DCA1-5CS□□H1

Wiring

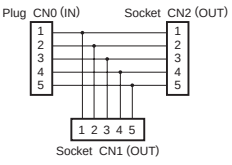
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L



T-branch Connector
DCN2-1S

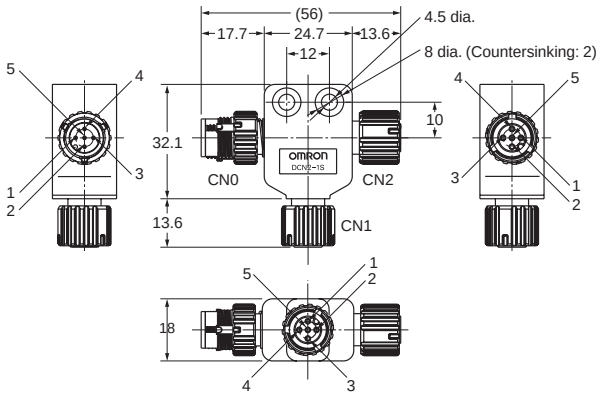


Connections Diagram

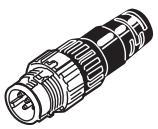


Wiring

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



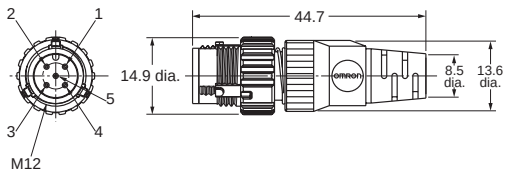
Connectors with Terminating Resistance
DRS2-1S (Plug)
DRS2-2S (Socket)



Wiring

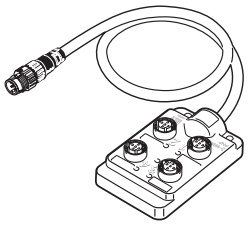
Terminal No.	Name
1	DRAIN : NC
2	V+ : NC
3	V- : NC
4	CAN H : 121 Ω
5	CAN L : 121 Ω

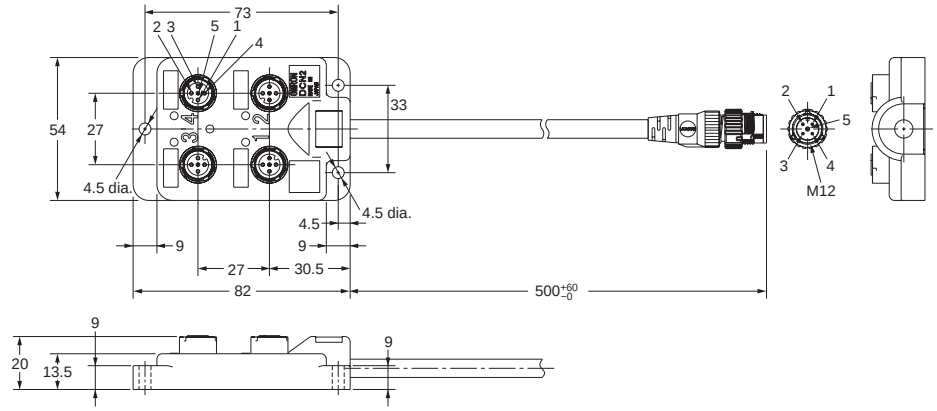
Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.



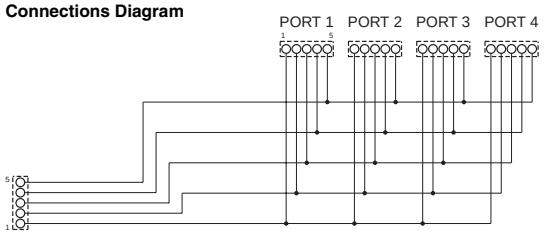
Note: The diagram shows the DRS2-1 (plug).

Shielded Branch Relay Box with Four Ports
DCN2-S4C5H1





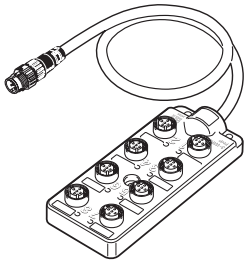
Connections Diagram

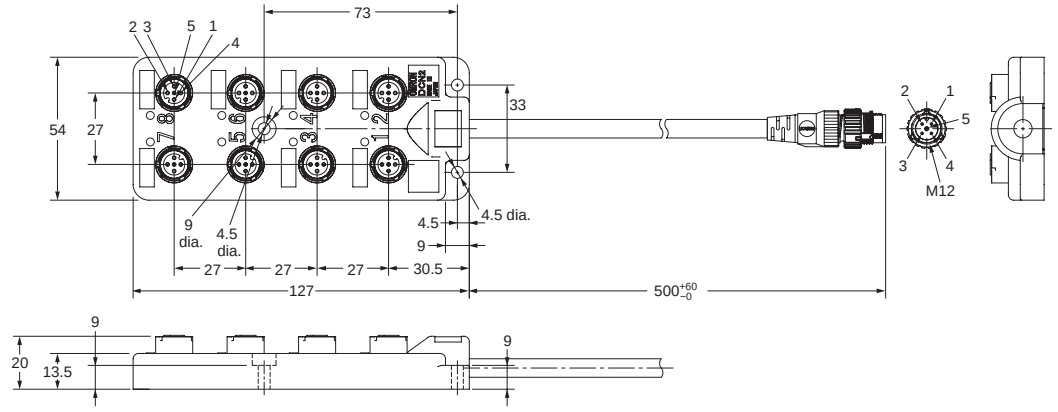


Wiring

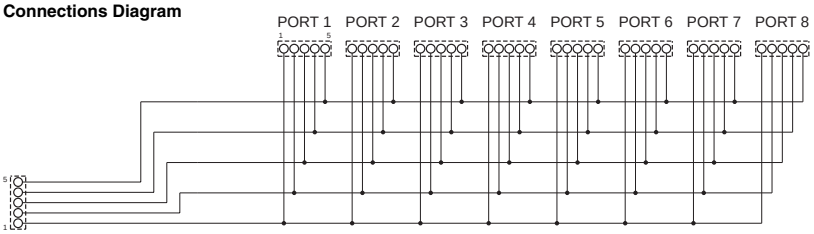
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

Shielded Branch Relay Box with Eight Ports
DCN2-S8C5H1





Connections Diagram

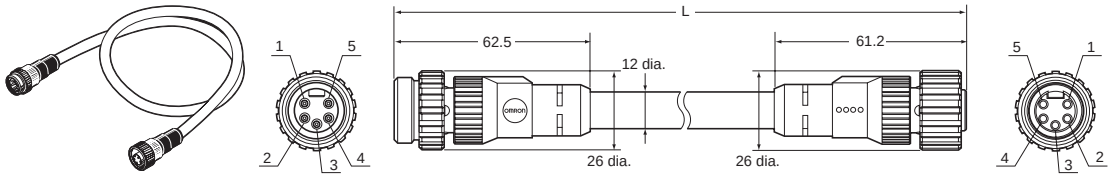


Wiring

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

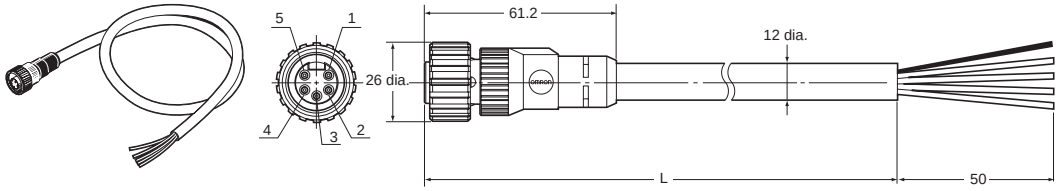
Thick Cable with Connectors on Both Ends (5 Conductors for Communications)
DCA2-5CN□□W1



Wiring

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

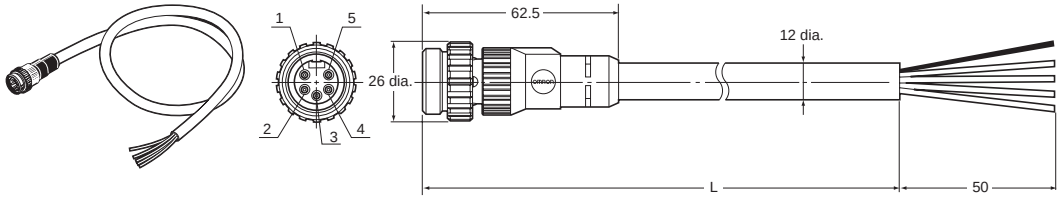
Thick Cable with Connector Socket on One End (5 Conductors for Communications)
DCA2-5CN□□F1



Wiring

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

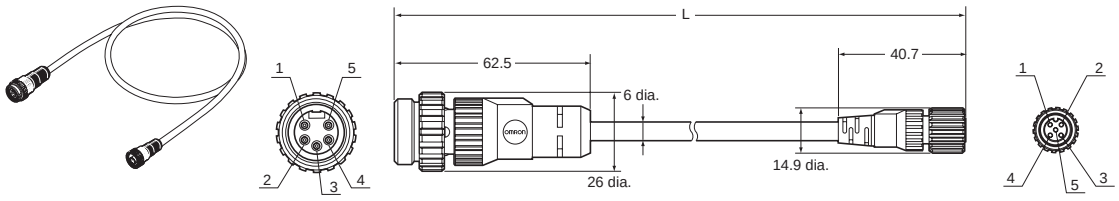
Thick Cable with Connector Plug on One End (5 Conductors for Communications)
DCA2-5CN□□H1



Wiring

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

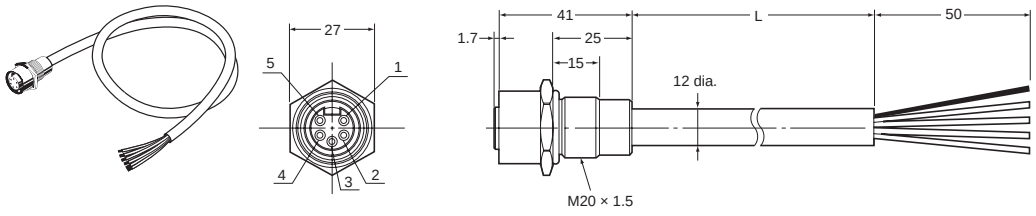
Thin Cable with Connectors on Both Ends (5 Conductors for Communications)
DCA1-5CN□□W5



Wiring

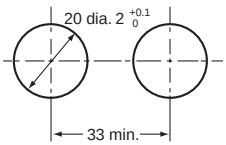
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

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.

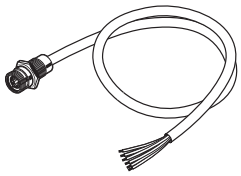
Panel Cutout Dimensions

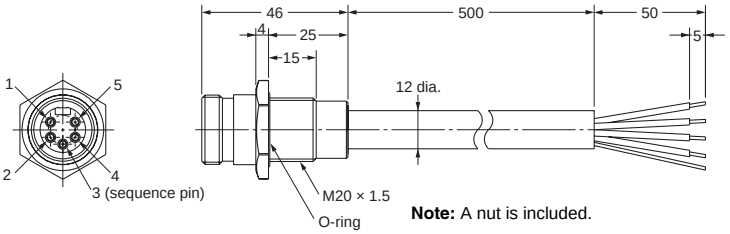


Wiring

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



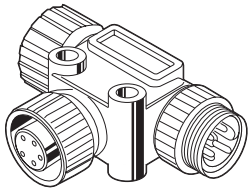


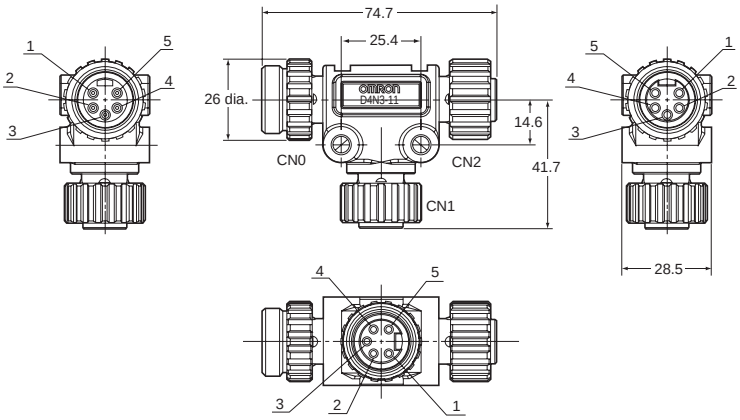
Note: A nut is included.

Wiring

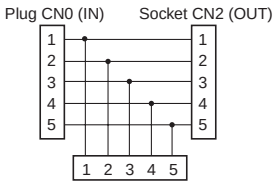
Terminal No.	Color	Name
1	-	DRAIN
2	Red	V+
3	Black	V-
4	White	CAN H
5	Blue	CAN L

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





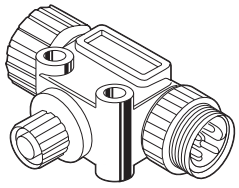
Connections Diagram

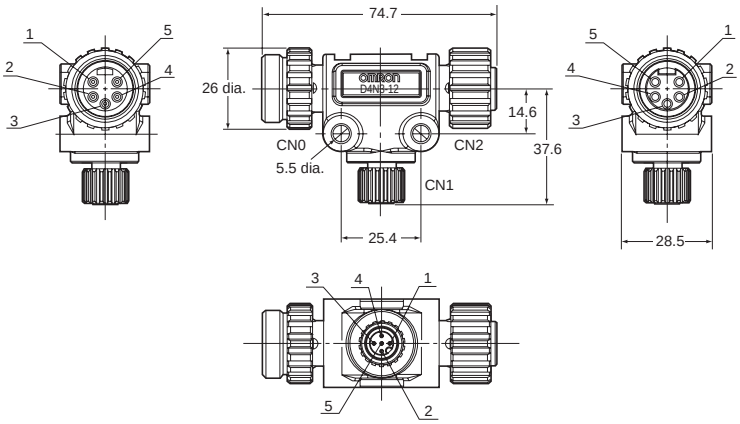


Wiring

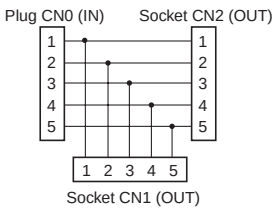
Terminal No.	Name
1	DRAIN
2	V+
3	V-
4	CAN H
5	CAN L

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





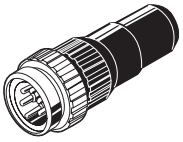
Connections Diagram



Wiring

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

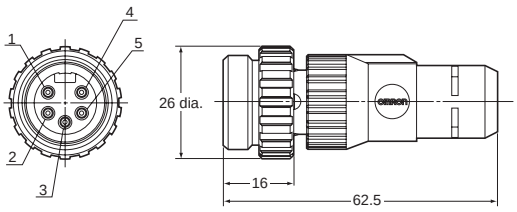
Connector (Plug) with Terminating Resistance
DRS3-1



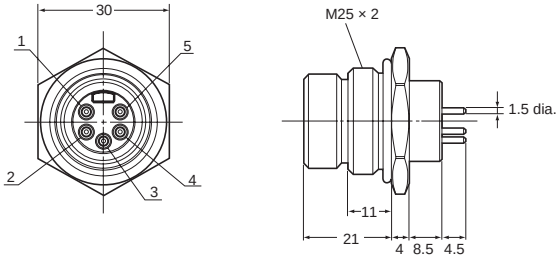
Wiring

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

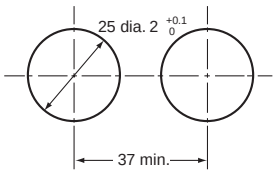
Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.



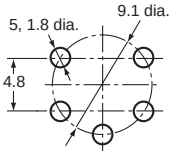
Panel-mounting Connector (5 Pins for Communications)
XS4M-D521-1



Panel Cutout Dimensions



PCB Processing Dimensions



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

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