

M8/M12 Connector

Fieldwireable Connectors

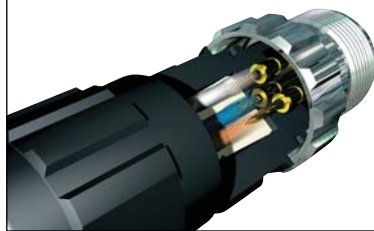
Reduction in wiring time

The man-hours can be decreased because no exclusive tools (such as solder, crimped terminal) are required. Also, the wire length can be adjusted at the site.

QUICKON-ONE ▶ P. 14



Piercecon® ▶ P. 15



Spring-cage Connection ▶ P. 13

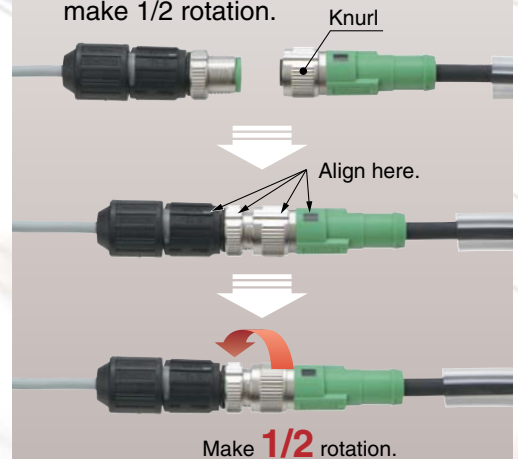


Conforming to IEC61076-2-101



SPEEDCON Reduction in wiring time

Just insert the connector and make 1/2 rotation.



IP67 (IEC60529)



Conforming to IEC60947-5-2

The coloring and number indication to the electrical connection makes less wrong wiring.

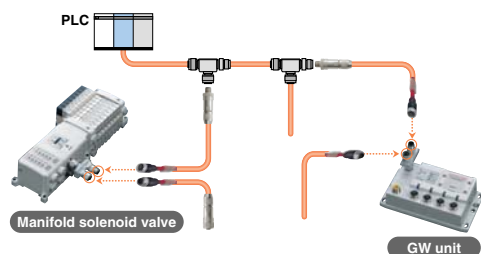


It provides the Fieldbus communication unit and input device applicable to

● Communication Cable/Connector ▶ P. 1 to P. 4

● It has a product lineup applicable to any communication standards.

The SMC Fieldbus (SI) Unit can be connected to the PLC (controller) and communication units of other manufacturers with cables with connectors and fieldwireable connectors (with shield) applicable to the standards of CC-Link, DeviceNet™, and PROFIBUS DP.



CC-Link

▶ P. 1

DeviceNet™

▶ P. 2

PROFIBUS

▶ P. 3

Communication cable

SPEEDCON



Socket (Female)

- 1 For CC-Link
- 5 For DeviceNet™
- 10 For PROFIBUS DP

SPEEDCON



Plug (Male)

- 2 For CC-Link
- 6 For DeviceNet™
- 11 For PROFIBUS DP

Fieldwireable communication connector

Plug (Male)

- 3 For CC-Link
- 7 For DeviceNet™
- 12 For PROFIBUS DP

Socket (Female)

- 4 For CC-Link
- 8 For DeviceNet™
- 13 For PROFIBUS DP

Terminal plug (Terminal resistor)

It is connected to the communication port of the communication unit connected at the end.



For DeviceNet™
(Plug)



For PROFIBUS DP
(Plug/B-coded)

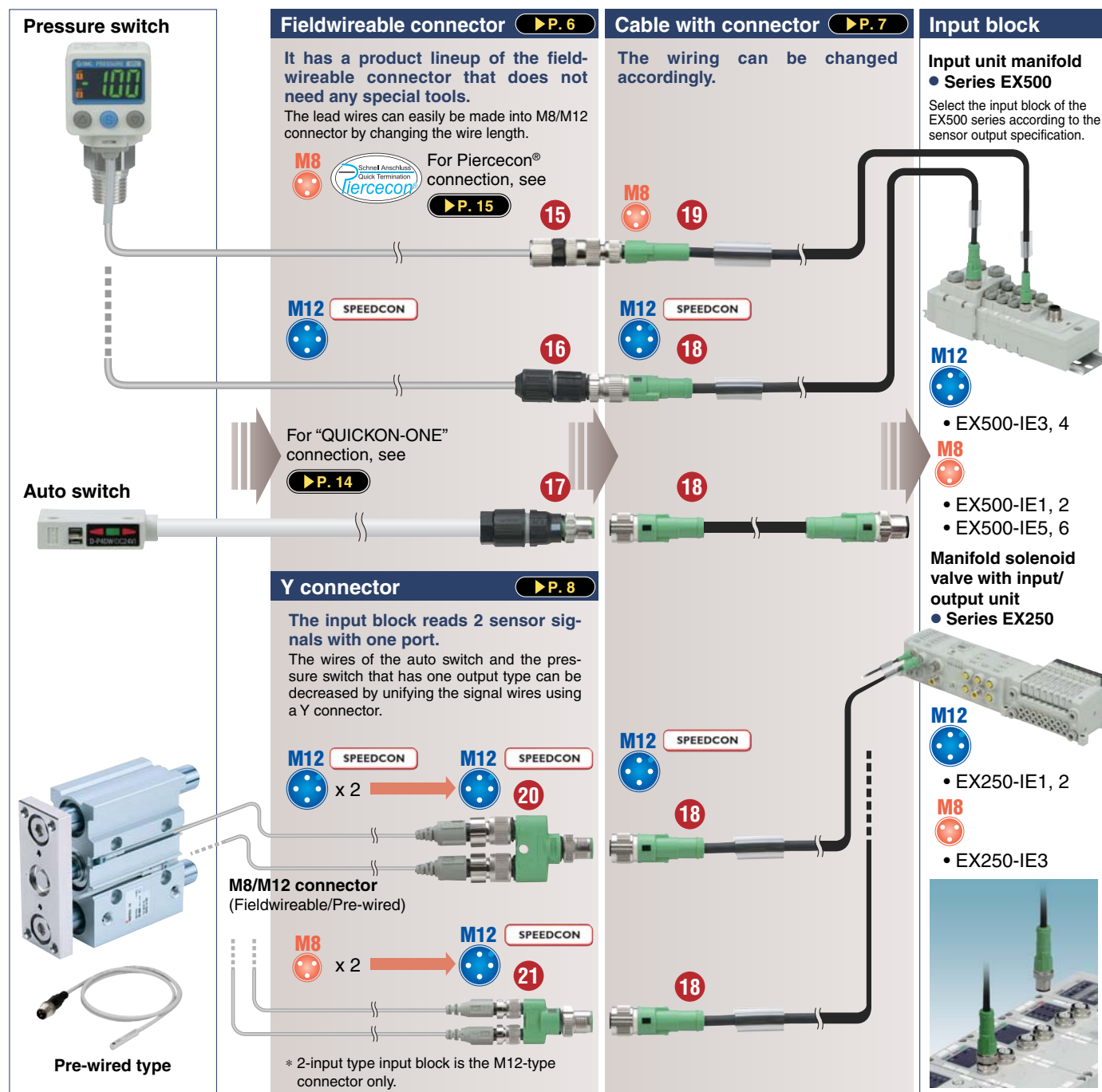
● Product Table

Description	Application	No.	SMC part no.	Name
Cable with connector	For Fieldbus communication	1	PCA-1567720	Communication cable for CC-Link (Socket)
		2	PCA-1567717	Communication cable for CC-Link (Plug)
		5	PCA-1557633	Communication cable for DeviceNet™ (Socket)
		6	PCA-1557646	Communication cable for DeviceNet™ (Plug)
		10	PCA-1557688	Communication cable for PROFIBUS DP (Socket/B-coded)
		11	PCA-1557691	Communication cable for PROFIBUS DP (Plug/B-coded)
Fieldwireable connector	For Fieldbus communication	3	PCA-1557617	Fieldwireable connector for CC-Link (Plug/Spring-caged)
		4	PCA-1557620	Fieldwireable connector for CC-Link (Socket/Spring-caged)
		7	PCA-1557659	Fieldwireable connector for DeviceNet™ (Plug/Spring-caged)
		8	PCA-1557662	Fieldwireable connector for DeviceNet™ (Socket/Spring-caged)
		12	PCA-1557701	Fieldwireable connector for PROFIBUS DP (Plug/B-coded/Spring-caged)
		13	PCA-1557714	Fieldwireable connector for PROFIBUS DP (Socket/B-coded/Spring-caged)
Terminal plug	For Fieldbus communication	9	PCA-1557675	Terminal resistor for DeviceNet™ (M12)
		14	PCA-1557727	Terminal resistor for PROFIBUS DP (M12/B-coded)

M8/M12 connector and the sensor/switch connected to them as a total system.

Between Sensor/Switch and Input Device ▶ P. 5 to P. 8

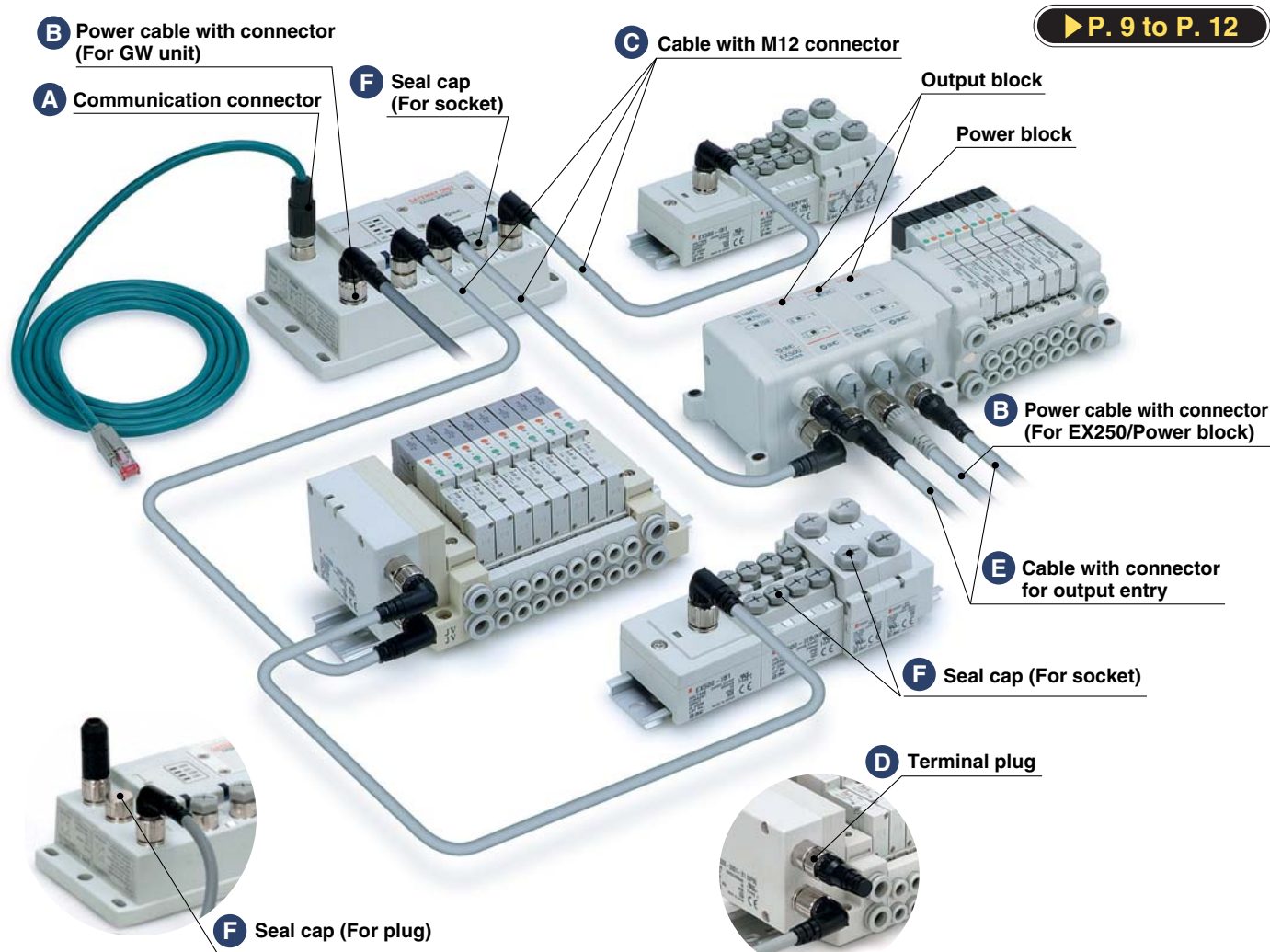
Connection between connectors and products



Product Table

Description	Application	No.	SMC part no.	Name
Cable with connector	For sensor	18	PCA-1557769	Cable with M12 connector (4 pins/3 m)
		19	PCA-1557772	Cable with M8 connector (3 pins/3 m)
Fieldwireable connector	For sensor	15	PCA-1557730	Fieldwireable connector (M8/3 pins/Plug/Piercecon® connection)
		16	PCA-1557743	Fieldwireable connector (M12/4 pins/Plug/QUICKON-ONE connection/SPEEDCON)
		17	PCA-1557756	Fieldwireable connector (M12/4 pins/Plug/QUICKON-ONE connection/SPEEDCON)
Y connector	For sensor	20	PCA-1557785	Y connector (2 x M12 (3 pins)-M12 (5 pins)/SPEEDCON)
		21	PCA-1557798	Y connector (2 x M8 (3 pins)-M12 (4 pins)/SPEEDCON)

Other M8/M12 Connector Accessories (EX500/EX250/EX9)



- | | | |
|--|---|---|
| <p>A Communication connector</p> <ul style="list-style-type: none"> • For AB RIO • For DeviceNet™ (With cable) • For EtherNet/IP™ (RJ45-M12, with cable) | <p>B Power cable with connector</p> <ul style="list-style-type: none"> • For GW unit (A-coded) • For EX250/Power block (B-coded) | <p>D Terminal plug (For EX500)</p> |
| | <p>C Cable with M12 connector (For EX500)</p> | <p>E Cable with connector for output entry</p> |
| | | <p>F Seal cap</p> <ul style="list-style-type: none"> • For plug • For socket |

Other M8/M12 Connector Accessories (EX500/EX250/EX9)

Description	Application	No.	SMC part no.	Name
Cable with connector	For Fieldbus communication	A	EX500-AC□□□-DN	Communication cable for DeviceNet™ (Socket)
			EX9-AC020EN-PSRJ	Communication cable for EtherNet/IP™ (M12 plug/D-coded-RJ45)
	For power supply	B	EX500-AC□□□-S	Power cable with connector (Socket/A-coded)
			EX9-AC□□□-1	Power cable with connector (Socket/B-coded)
	For EX500	C	EX500-AC□□□-SSPS	Cable with M12 connector (8 pins/Both straight)
			EX500-AC□□□-SAPA	Cable with M12 connector (8 pins/Both angle)
	For output entry	E	EX9-AC□□□-7	Cable with M12 connector (Plug/A-coded)
Fieldwireable connector	For Fieldbus communication	A	EX500-AC000-AB	Communication connector for Remote I/O (Socket)
Terminal plug	For EX500	D	EX500-AC000-S	Terminal plug (M12/8 pins)
Seal cap	For plug	F	EX500-AWTP	Seal cap (M12/For plug)
			EX9-AWES	Seal cap (M8/For socket)
			EX9-AWTS	Seal cap (M12/For socket)



I N D E X

○ Communication Cable/Connector

Example of Connection/Specifications

- CC-Link P.1
- DeviceNet™ P.2
- PROFIBUS DP P.3

Dimensions P.4

○ Between Sensor/Switch and Input Device

Example of Connection P.5

Specifications/Dimensions

- Fieldwireable connector P.6
- Cable with connector P.7
- Y connector P.8

○ Other Accessories

Example of Connection P.9

How to Order/Dimensions P.10

○ Assembly Procedure

Spring-cage connection P.13

QUICKON-ONE connection P.14

Piercecon® connection P.15

○ Compatibility between Sensors and Fieldwireable Connectors P.16

○ American Wire Gauge Conversion Table P.17

○ Safety Instructions/Precautions Back page 1

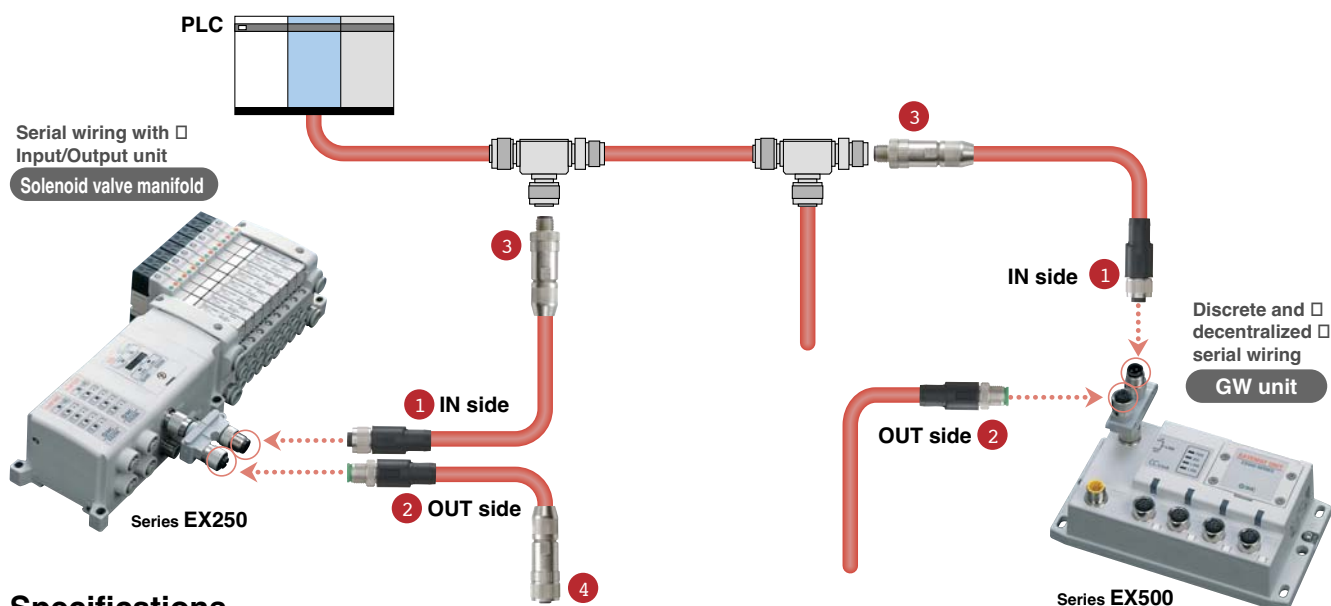
Communication Cable/Connector

M12



CC-Link

Example of Connection



Specifications

Description		Communication cable (With one side connector)		Fieldwireable connector	
Part no.		PCA-1567720	PCA-1567717	PCA-1557617	PCA-1557620
Product image					
Number of functional poles□		M12: 4 poles□			
Key type		A-coded (Normal key)			
Pin assignment		<p>Plug, A-coded (Viewed from the plug/socket side)</p> <p>Socket, A-coded</p> <p>1: SL□(Shield wire)□ 2: DB□ (White)□ 3: DG□ (Yellow)□ 4: DA□ (Blue)</p>			
Wiring specifications (Note)	Fixed cable length□	5 m□		—□	
	Cable O.D.□	7.7 ±0.3 mm□		Applicable□ cable	4□ to 8.0 mm□
	Wire gauge (Stranded wire cross section)	0.5 mm ² /AWG20□		0.14 to 0.5 mm ² /AWG26 to 20	
	Wire outer diameter (Including insulating material)	2.55 ±0.07 mm□		—□	
Rating/Performance	Connection type□	—□		Spring-cage connection□	
	Rated current□	□		4 A□	□
	Rated voltage□	250 V□		□	48 V□
	Contact resistance □	□		≤5 mΩ□	□
	Insulation resistance□	□		≥100 MΩ□	□
	Withstand voltage□	□		1.4 kV	□
	Ambient□ tempera- ture	Connector□	—25 to 90°C□	—40 to 85°C□	
		Cable	—20 to 60°C□	—□	
		Operating Fixed	—20 to 60°C□	—□	
	Protection class□	□		IP67 (Only with screw tightened)□	
	Allowable repeated insertion/withdrawal□	□		200	
	Cable retaining force□	150 N/15 sec.□		—□	
	Vibration resistance□	□		10 to 500 Hz/98 m/s ² □	
Material	Material of knurl□	Zinc for die casting□		□	Brass□
	Contact (Surface treatment)□	□		CuSn (Au plating (Ni plating))	
	Insulating material□	Thermoplastic polyurethane (TPU)□		Polyamide (PA6.6)□	
	Material of sheath	Polyvinyl chloride (PVC)		—□	
Weight (Mass)		Approx. 306 g	Approx. 308 g	Approx. 48 g	Approx. 53 g

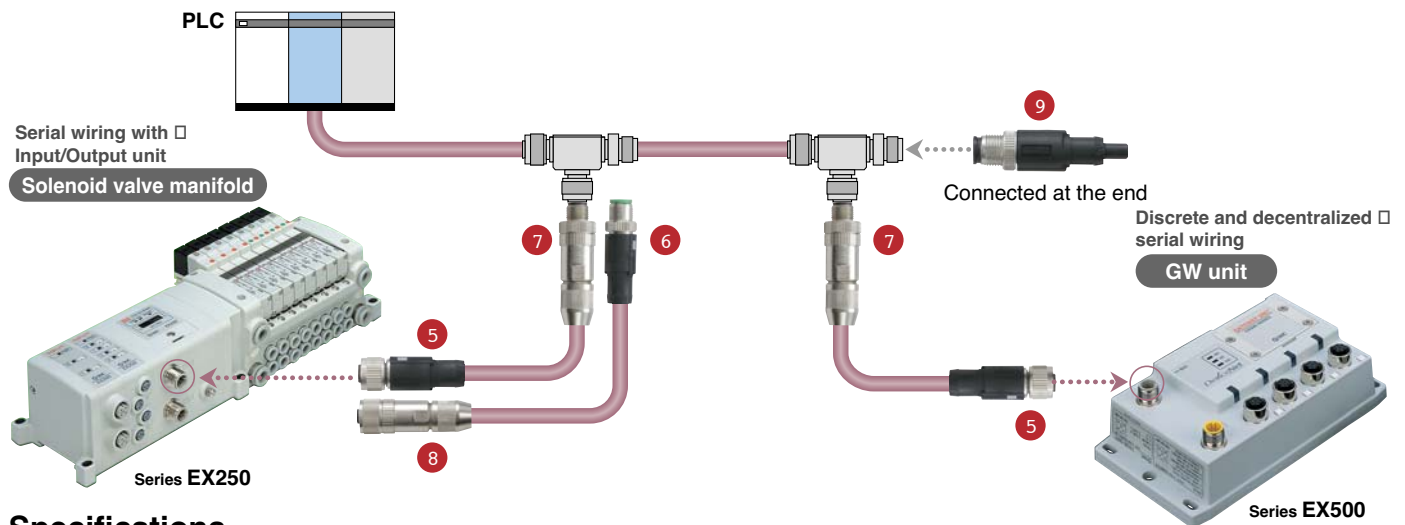
Note) The shaded parts show the specifications for the applicable cable. Adaptation for the connector may vary on account of the conductor construction of the electric wire.

Communication Cable/Connector






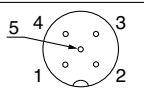
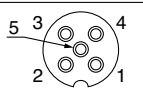

M12



Example of Connection



Specifications

Description			Communication cable (With one side connector)		Fieldwireable connector		Terminal plug		
Part no.			PCA-1557633	PCA-1557646	PCA-1557659	PCA-1557662	PCA-1557675		
Product image			<div><div>5</div><div>SPEEDCON</div><div></div><div>Socket</div></div>	<div><div>6</div><div>SPEEDCON</div><div></div><div>Plug</div></div>	<div><div>7</div><div></div><div>Plug</div></div>	<div><div>8</div><div></div><div>Socket</div></div>	<div><div>9</div><div></div><div>For DeviceNet™□ (Plug, A-coded)</div></div>		
Number of functional poles□			M12: 5 poles□						
Key type			A-coded (Normal key)						
Pin assignment			<div><div><div>54321</div><div></div><div>Plug, A-coded</div></div><div><div>53214</div><div></div><div>Socket, A-coded</div></div><div>(Viewed from the plug/socket side)</div></div>		<div>DeviceNet™ / CANopen</div> <div>1: DRAIN□</div> <div>2: V+□ (Red)□</div> <div>3: V-□ (Black)□</div> <div>4: CAN H□ (White)□</div> <div>5: CAN L□ (Blue)□</div>		<div>1: —□</div> <div>2: —□</div> <div>3: CAN GND□</div> <div>4: CAN H□</div> <div>5: CAN L□</div> <div></div>		
Wiring specifications <small>(Note)</small>	Fixed cable length□		5 m□		—□				
	Cable O.D.□		6.70 ±0.3 mm□		Applicable□ cable	4.0 to 8.0 mm□	—□		
	Wire gauge □ (Stranded wire □ cross section)	Power pair□	0.33 mm²/AWG22□			0.14 to 0.5 mm²/AWG26 to 20	—□		
		Data pair□	0.2 mm²/AWG24□		□				
	Wire outer diameter □ (Including insulating □ material)	Power pair□	1.4 ±0.05 mm□		—□		□		
		Data pair	2.05 ±0.10 mm□				□		
Connection type□			—□		Spring-cage connection□		—□		
Rating/Performance	Rated current□		□		4 A	□	□	—□	
	Rated voltage□		□		48 V□	□	□	□	
	Contact resistance □		□		≤5 mΩ□	□	□	□	
	Insulation resistance□		□		≥100 MΩ□	□	□	—□	
	Withstand voltage□		□		1.0 kV	□	□	—□	
	Ambient □ tempera- □ ture	Connector□	-25 to 90°C□		□		-40 to 85°C□	-25 to 90°C□	
		Cable	Operating□	-20 to 75°C□		□		□	□
			Fixed	-40 to 80°C□		□		□	□
	Protection class□			□		IP67 (Only with screw tightened)		□	
	Allowable repeated insertion/withdrawal□			□		200□		□	□
	Cable retaining force□			150 N/15 sec.□		□		□	—□
Vibration resistance□			□		10 to 500 Hz/98 m/s² □		□	□	
Material	Material of knurl□		Zinc for die casting□		□		Brass□	Zinc for die casting□	
	Contact (Surface treatment)□		□		CuSn (Au plating (Ni plating))□		□		
	Insulating material□		Thermoplastic polyurethane (TPU)□		Polyamide (PA6.6)		Thermoplastic polyurethane (TPU)□		
	Material of sheath		Polyurethane (PUR)		—□		□		
Weight (Mass)			Approx. 308 g	Approx. 306 g	Approx. 47 g	Approx. 53 g	Approx. 12 g		

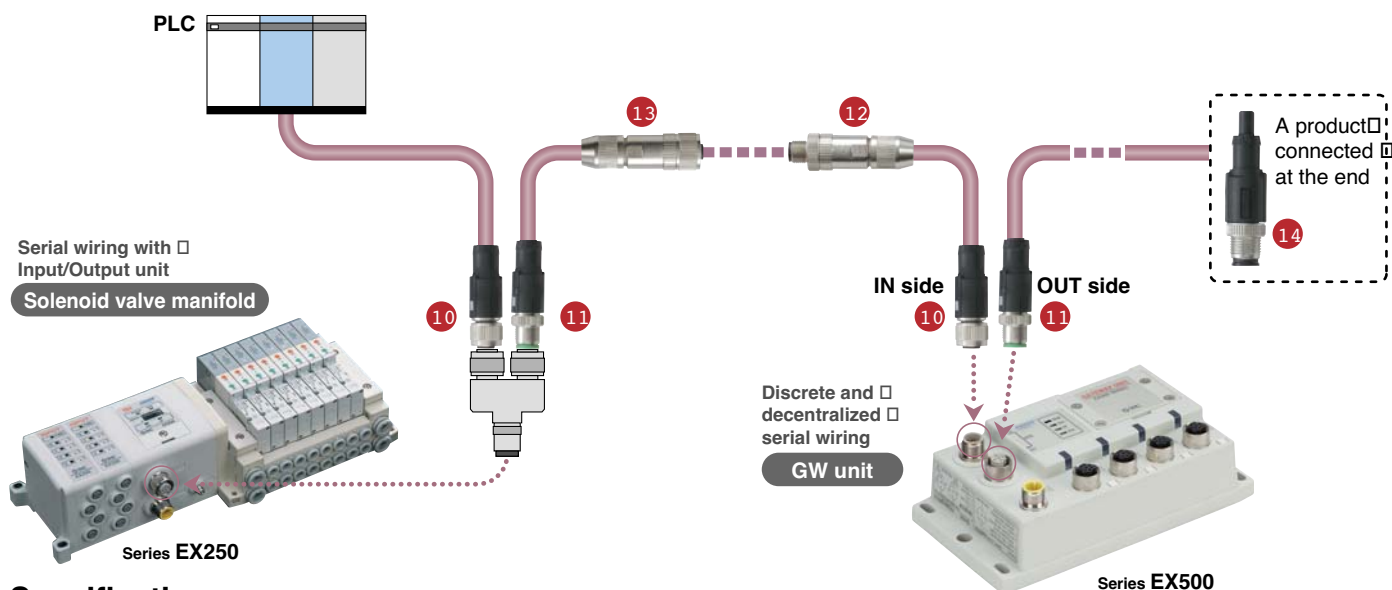
Note) The shaded parts show the specifications for the applicable cable. Adaptation for the connector may vary on account of the conductor construction of the electric wire.

Communication Cable/Connector






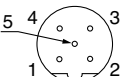
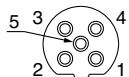
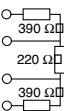
M12



Example of Connection



Specifications

Description		Communication cable (With one side connector)		Fieldwireable connector		Terminal plug	
Part no.		PCA-1557688	PCA-1557691	PCA-1557701	PCA-1557714	PCA-1557727	
Product image							
		Socket	Plug	Plug	Socket	For PROFIBUS DP (Plug, B-coded)	
Number of functional poles□		M12: 2 poles□		M12: 3 poles		M12: 4 poles	
Key type		□ B-coded (Reverse key)					
Pin assignment		 Plug, B-coded (Viewed from the plug/socket side)		 Plug, B-coded		1: —□ 2: A Line (Green)□ 3: —□ 4: B Line (Red)□ 5: —□ 1: VP□ 4: B Line□ 2: A Line□ 3: DGND□ 	
Wiring specifications <small>(Note)</small>	Fixed cable length□	5 m□		—□			
	Cable O.D.□	7.80 ±0.2 mm□		Applicable□ cable	4.0 to 8.0 mm□	—□	
	Wire gauge (Stranded wire cross section)	0.34 mm²/AWG22□			0.14 to 0.5 mm²/AWG26 to 20	—□	
	Wire outer diameter (Including insulating material)	2.55 ±0.07 mm□		—□ □			
Connection type□		—□		Spring-cage connection□		—□	
Rating/Performance	Rated current□	□ 4 A		□		—□	
	Rated voltage□	60 V□		48 V□ □		60 V□	
	Contact resistance □	□		≤5 mΩ□ □		□	
	Insulation resistance□	□		≥100 MΩ□ □		—□	
	Withstand voltage□	□		1.4 kV□ □		—□	
	Ambient temperature□	Connector□	–25 to 90°C□		□ –40 to 85°C□		–25 to 90°C□
	Operating temperature□	Cable	Operating□	–20 to 80°C□		□ —□ □	
			Fixed	–40 to 85°C□		□ □ —□ □	
	Protection class□		□		IP67□ (Only with screw tightened)□		□
	Allowable repeated insertion/withdrawal□		□		□ 200 □		□
Cable retaining force□		150 N/15 sec.□		□ —□		□	
Vibration resistance□		□		□10 to 500 Hz/98 m/s²□ □		□	
Material	Material of knurl□		Zinc for die casting□		□ Brass□		Zinc for die casting□
	Contact (Surface treatment)□		□		CuSn (Au plating (Ni plating))□		□
	Insulating material□		□		Polyamide (PA6.6) □		Thermoplastic polyurethane (TPU)□
	Material of sheath		Polyurethane (PUR)		—□		□
Weight (Mass)		Approx. 343 g	Approx. 356 g	Approx. 48 g	Approx. 54 g	Approx. 12 g	

Note) The shaded parts show the specifications for the applicable cable. Adaptation for the connector may vary on account of the conductor construction of the electric wire.

Communication Cable/Connector

Dimensions

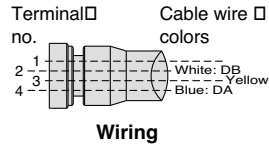
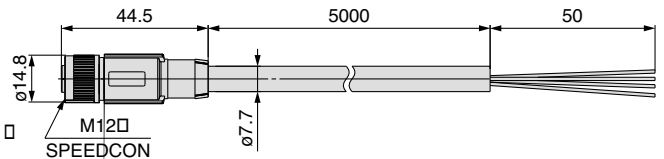
Communication cable (With one side connector)



- 1 PCA-1567720□
For CC-Link□
(Socket)



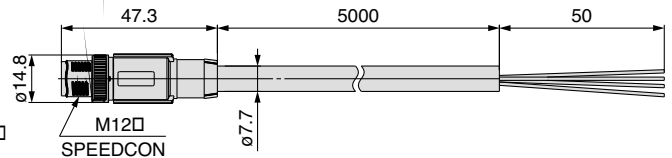
Socket connector pin assignment □
A-coded (Normal key)



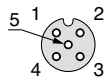
- 2 PCA-1567717□
For CC-Link□
(Plug)



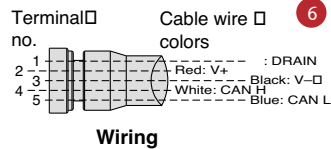
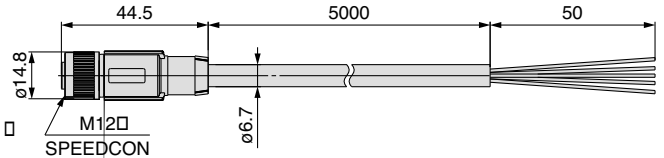
Plug connector pin assignment □
A-coded (Normal key)



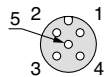
- 5 PCA-1557633□
For DeviceNet™□
(Socket)



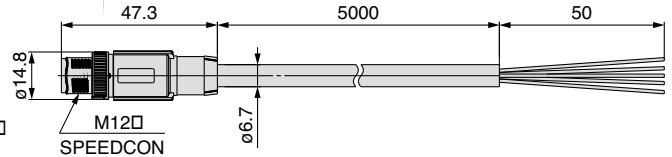
Socket connector pin assignment □
A-coded (Normal key)



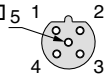
- 6 PCA-1557646□
For DeviceNet™□
(Plug)



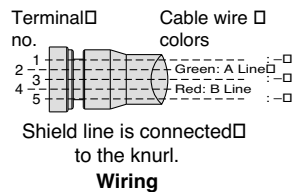
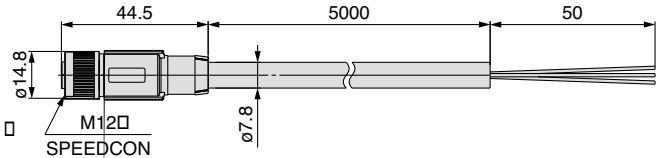
Plug connector pin assignment □
A-coded (Normal key)



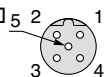
- 10 PCA-1557688□
For PROFIBUS DP□
(Socket)



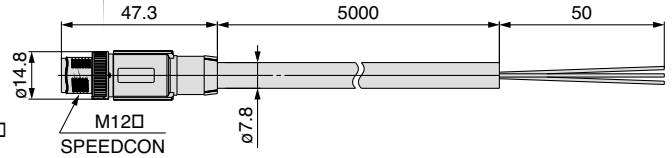
Socket connector pin assignment □
B-coded (Reverse key)



- 11 PCA-1557691□
For PROFIBUS DP□
(Plug)



Plug connector pin assignment □
B-coded (Reverse key)



Fieldwireable connector Refer to page 13 for details on assembly.

Plug

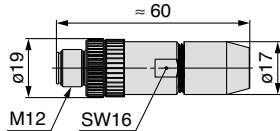
- 3 PCA-1557617□ For CC-Link
7 PCA-1557659□ For DeviceNet™
12 PCA-1557701□ For PROFIBUS DP



A-coded□
(Normal key)



B-coded□
(Reverse key)



Socket

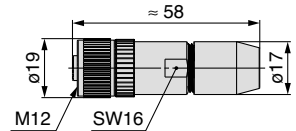
- 4 PCA-1557620□ For CC-Link
8 PCA-1557662□ For DeviceNet™
13 PCA-1557714□ For PROFIBUS DP



A-coded□
(Normal key)



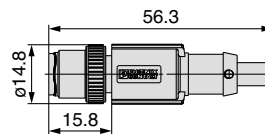
B-coded□
(Reverse key)



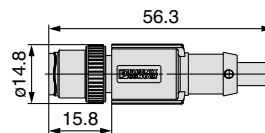
Terminal plug



- 9 PCA-1557675□
Terminal resistor□
for DeviceNet™



- 14 PCA-1557727□
Terminal resistor□
for PROFIBUS DP



Between Sensor/Switch and Input Device




Example of Connection

		Cable with connector	Input block
1 Sensor with pre-wired connector Direct connection between connectors			Input unit manifold • Series EX500
2 Sensor with lead wire entry Lead wire → M8/M12 connector conversion	Fieldwireable connector ▶ P. 6 For connection, see ▶ P. 14 “QUICKON-ONE” connection For connection, see ▶ P. 15		Input unit manifold • EX500-IE3, 4
3 Auto switch with pre-wired connector	Y connector ▶ P. 8 x 2 → x 2 →		Manifold solenoid valve with input unit • Series EX250
4 Auto switch with lead wire entry Lead wire → M8/M12 connector conversion	Fieldwireable connector ▶ P. 6 For connection, see ▶ P. 14 “QUICKON-ONE” connection 		Input unit manifold • EX250-IE1, 2

Between Sensor/Switch and Input Device

Fieldwireable Connector

Specifications

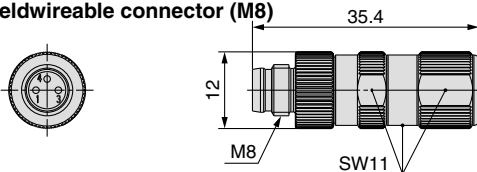
Part no.		PCA-1557730	PCA-1557743	PCA-1557756			
Product image/Pin assignment		<div><div>15</div><div>M8</div><div></div></div>	<div><div>16</div><div>M12</div><div><div>SPEEDCON</div><div></div></div></div>	<div><div>17</div><div>M12</div><div><div>SPEEDCON</div><div></div></div></div>			
Number of functional poles		M8: 3 poles	M12: 4 poles				
Key type		—	A-coded (Normal key)				
Wiring specifications (ref)	Applicable cable	Cable O.D.	3.0 to 5.0 mm	3.5 to 6.0 mm	4.0 to 8.0 mm		
		Wire gauge (Stranded wire cross section)	0.14 to 0.25 mm²/AWG26 to 24 0.25 to 0.34 mm²/AWG24 to 22	0.14 to 0.34 mm²/AWG26 to 22	0.34 to 0.75 mm²/AWG22 to 18		
		Core wire diameter (Including insulating material)	1.0 to 1.6 mm	0.7 to 1.3 mm	1.3 to 2.5 mm		
Rating/Performance	Connection type	Piercecon® connection				QUICKON-ONE connection	
	Rated current	4 A					
	Rated voltage	60 V		250 V			
	Contact resistance	≤5 mΩ					
	Insulation resistance	≥100 MΩ					
	Withstand voltage	1.0 kV		1.4 kV			
	Ambient temperature	−40 to 85°C		−25 to 80°C			
	Protection class	IP67 (Only with screw tightened)					
	Allowable repeated insertion/withdrawal	100		200			
	Allowable number of repeated connection between conductors of the same cross section	10					
Vibration resistance	10 to 500 Hz/98 m/s²						
Material	Material of knurl	Brass		Zinc for die casting			
	Contact (Surface treatment)	CuZn (Au plating (Ni plating))					
	Insulating material	Polyamide (PA6.6)					
Weight (Mass)		Approx. 14 g		Approx. 13 g		Approx. 15 g	

Note) The shaded parts show the specifications for the applicable cable. Adaptation for the connector may vary on account of the conductor construction of the electric wire.

Dimensions

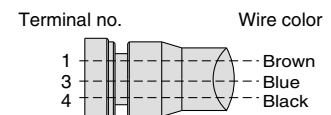
15 PCA-1557730

Fieldwireable connector (M8)



Refer to page 15 for details on assembly.

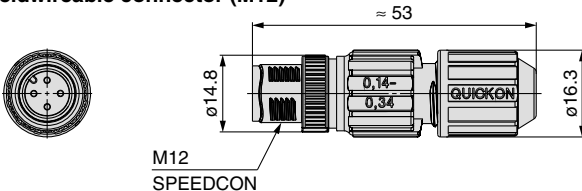
Plug connector
pin assignment



Wiring

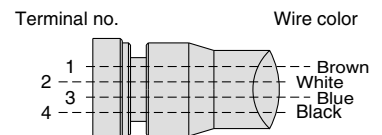
16 PCA-1557743

Fieldwireable connector (M12)



Refer to page 14 for details on assembly.

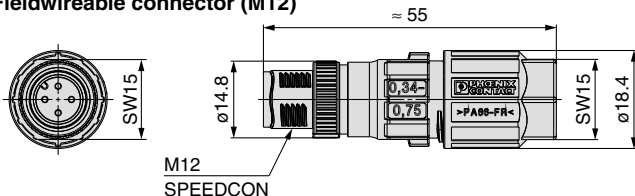
Plug connector
pin assignment
A-coded (Normal key)



Wiring

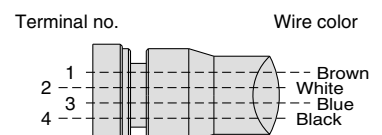
17 PCA-1557756

Fieldwireable connector (M12)



Refer to page 14 for details on assembly.

Plug connector
pin assignment
A-coded (Normal key)





Wiring

Between Sensor/Switch and Input Device

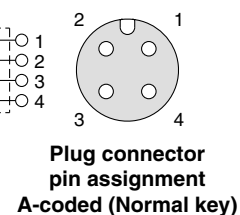
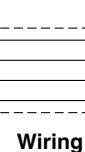
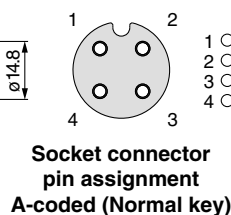
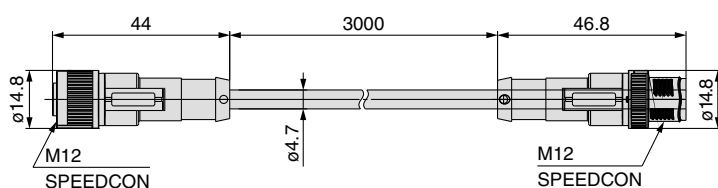
Cable with Connector

Specifications

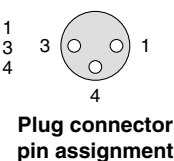
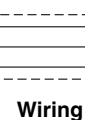
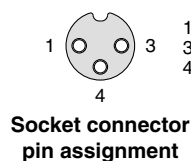
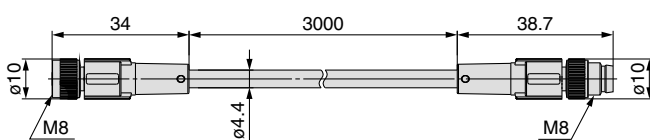
Part no.	PCA-1557769	PCA-1557772
Product image		
Number of functional poles	M12: 4 poles	M8: 3 poles
Key type	A-coded (Normal key)	—
Wiring specifications	Fixed cable length	3 m
	Cable O.D.	4.4 ±0.15 mm
	Wire gauge (Stranded wire cross section)	0.34 mm²/AWG22
Rating/Performance	Rated current	4 A
	Rated voltage	250 V
	Contact resistance	≤5 mΩ
	Insulation resistance	≥100 MΩ
	Withstand voltage	1.4 kV
	Ambient temperature	Connector: -25 to 90°C Cable: -5 to 80°C Operating Fixed: -40 to 80°C
	Protection class	IP67 (Only with screw tightened)
	Allowable repeated insertion/withdrawal	200
	Cable retaining force	150 N/15 sec.
	Vibration resistance	10 to 500 Hz/98 m/s²
Material	Material of knurl	Zinc for die casting
	Contact (Surface treatment)	CuSn (Au plating (Ni plating))
	Insulating material	Thermoplastic polyurethane (TPU)
	Material of sheath	Polyurethane Black (PUR Black)
Weight (Mass)	Approx. 111 g	Approx. 80 g

Dimensions

18 PCA-1557769 Cable with M12 connector (4 poles)



19 PCA-1557772 Cable with M8 connector (3 poles)



Between Sensor/Switch and Input Device

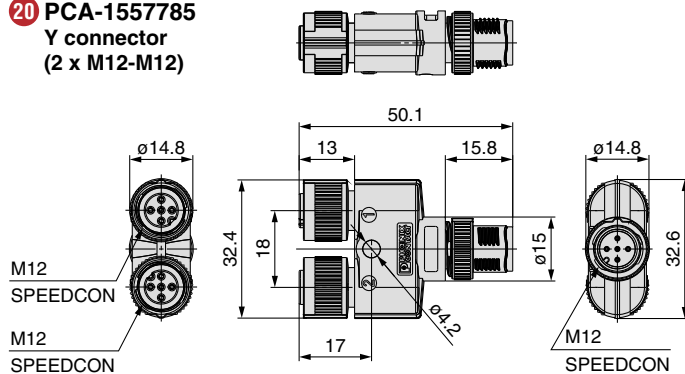
Y Connector

Specifications

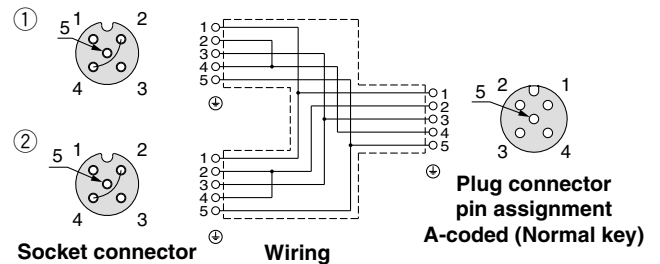
Part no.	PCA-1557785	PCA-1557798
Product image		
Number of functional poles	2 x M12: 4 poles + PE – M12: 4 poles + PE	2 x M8: 3 poles – M12: 4 poles
Key type	A-coded (Normal key)	
Rating/Performance	Rated current	4 A
	Rated voltage	60 V
	Contact resistance	≤5 mΩ
	Insulation resistance	≥100 MΩ
	Withstand voltage	1.0 kV
	Ambient temperature	–25 to 90°C
	Protection class	IP67 (Only with screw tightened)
	Allowable repeated insertion/withdrawal	200
	Vibration resistance	10 to 500 Hz/98 m/s ²
Material	Material of knurl	Zinc for die casting
	Contact (Surface treatment)	CuZn (Au plating (Ni plating))
	Insulating material	Thermoplastic polyurethane (TPU)
Weight (Mass)	Approx. 29 g	Approx. 13 g

Dimensions

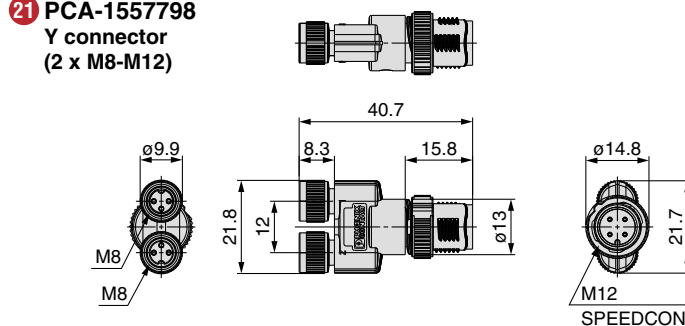
20 PCA-1557785 Y connector (2 x M12-M12)



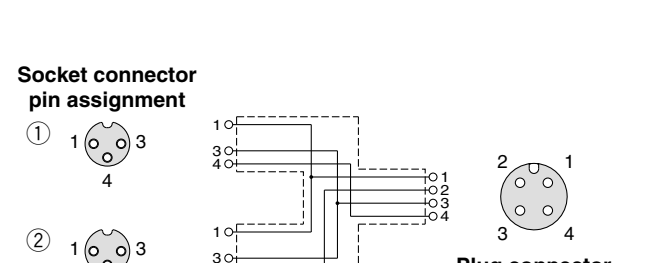
Socket connector pin assignment A-coded (Normal key)



21 PCA-1557798 Y connector (2 x M8-M12)



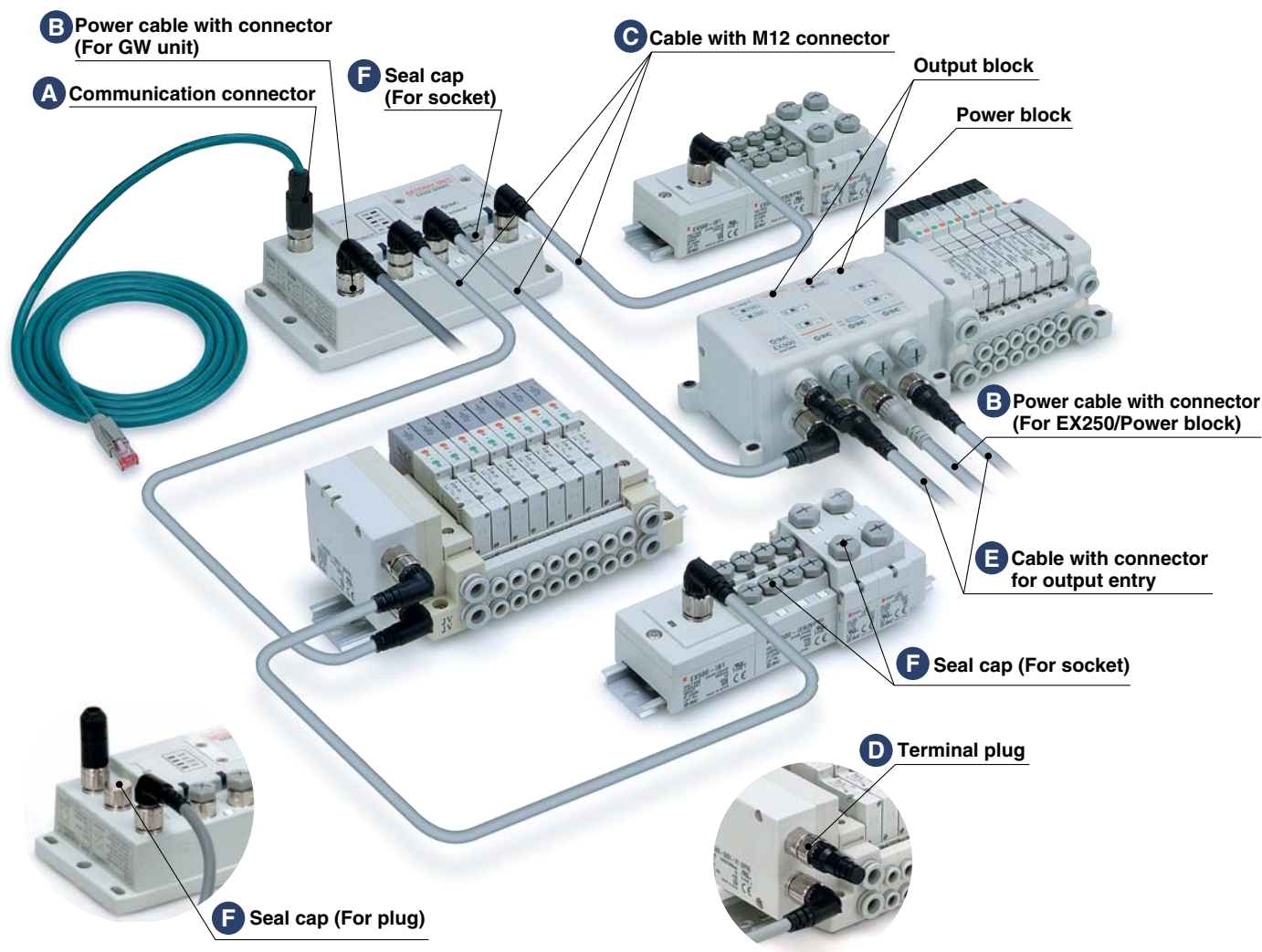
Socket connector pin assignment A-coded (Normal key)



Connection image

Other Accessories

M8/M12 Connector Accessories (EX500/EX250/EX9)

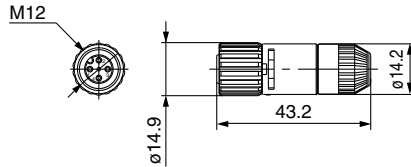


- | | | |
|--|--|---|
| <p>A Communication connector</p> <ul style="list-style-type: none"> • For AB RIO • For DeviceNet™ (with cable) • For EtherNet/IP™ (RJ45-M12, with cable) | <p>C Cable with M12 connector (For EX500)</p> | <p>E Cable with connector for output entry</p> |
| <p>B Power cable with connector</p> <ul style="list-style-type: none"> • For GW unit (A-coded) • For EX250/Power block (B-coded) | <p>D Terminal plug (For EX500)</p> | <p>F Seal cap</p> <ul style="list-style-type: none"> • For plug • For socket |

A Communication connector

For Remote I/O (AB RIO)

EX500-AC000-AB



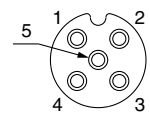
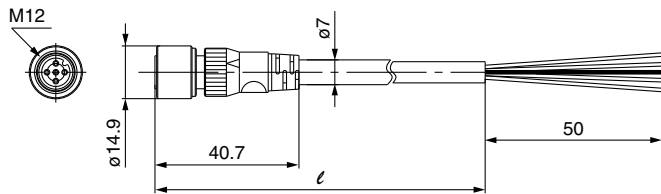
Applicable cable size
ø6 (ø5 to ø6)

For DeviceNet™

EX500-AC050-DN

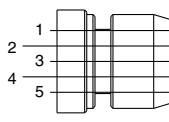
Cable length (ℓ)

010	1000 [mm]
050	5000 [mm]



Socket connector pin arrangement

Terminal no.



Wiring

Core wire colors

: DRAIN
Red: V+
Black: V-
White: CAN H
Blue: CAN L

For EtherNet/IP™

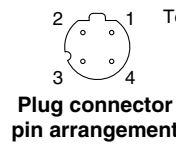
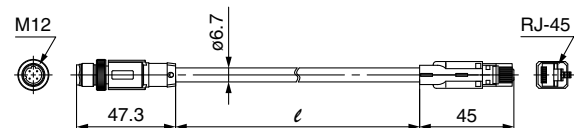
EX9-AC020-EN-PSRJ

Cable length (ℓ)

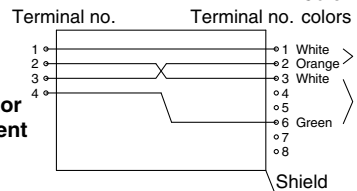
020	2000 [mm]
-----	-----------

Connector specification

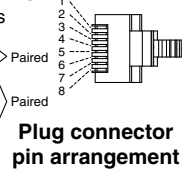
PSRJ M12 plug (Straight) ⇔ RJ-45 connector



Plug connector pin arrangement



Wiring (Straight cable)



Plug connector pin arrangement

B Power cable with connector (For GW unit (A-coded))

EX500-AP050-S

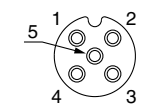
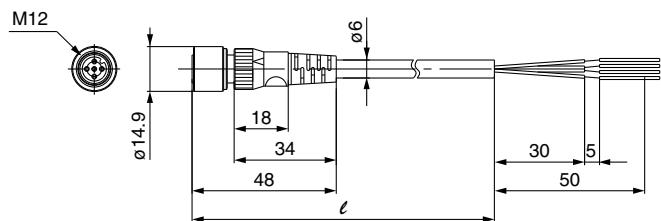
Cable length (ℓ)

010	1000 [mm]
050	5000 [mm]

Connector specification

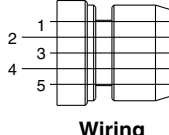
S	Straight
A	Angle

Straight connector type



Socket connector pin arrangement

Terminal no.

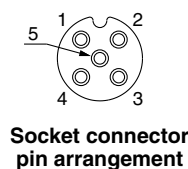
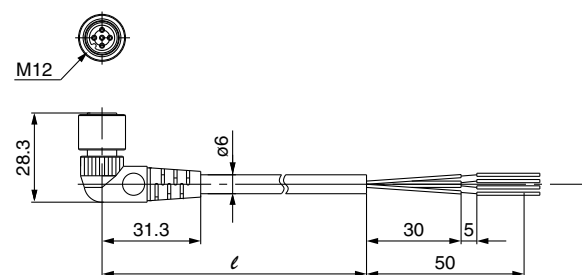


Wiring

Core wire colors

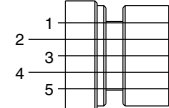
Brown
White
Blue
Black
Gray

Angle connector type



Socket connector pin arrangement

Terminal no.



Wiring

Core wire colors

Brown
White
Blue
Black
Gray

Other Accessories

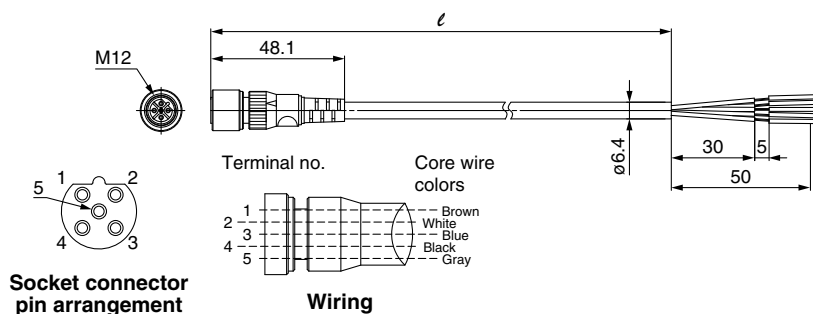
M8/M12 Connector Accessories (EX500/EX250/EX9)

B Power cable with connector (For EX250/Power block (B-coded))

EX9 – AC 050 – 1

Cable length (ℓ)

010	1000 [mm]
030	3000 [mm]
050	5000 [mm]



C Cable with M12 connector

EX500 – AC 030 – SSPS

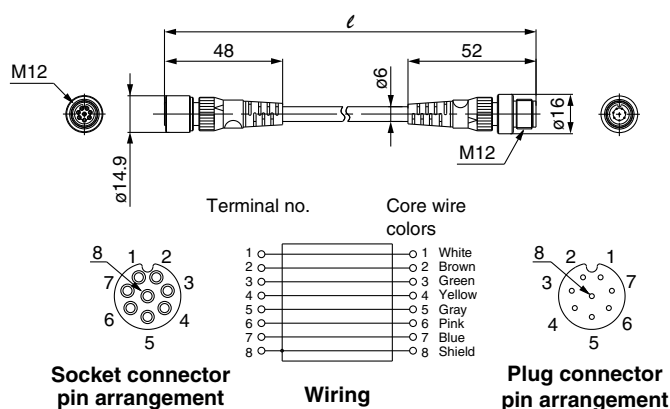
Cable length (ℓ)

003	300 [mm]
005	500 [mm]
010	1000 [mm]
030	3000 [mm]
050	5000 [mm]

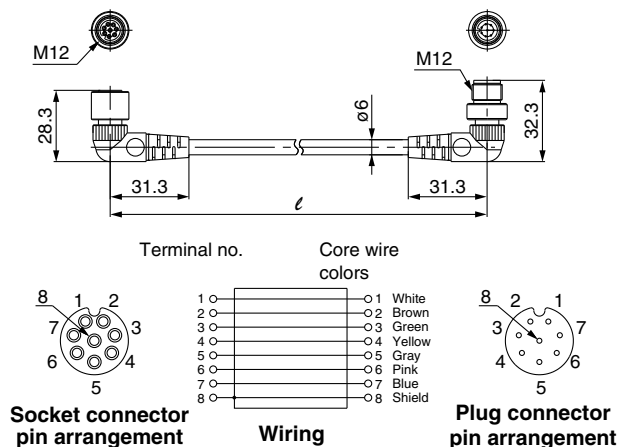
Connector specification

SSPS	Socket side: Straight, Plug side: Straight
SAPA	Socket side: Angle, Plug side: Angle

Straight connector type



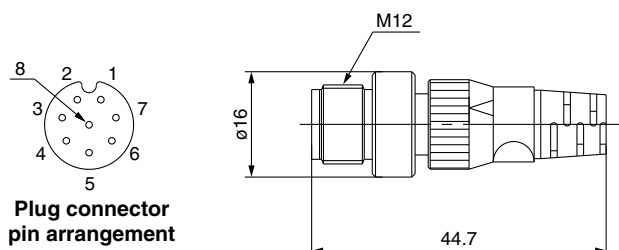
Angle connector type



D Terminal plug

This is used where an input unit manifold (input unit/input block) is not being used.
(If a terminal plug is not used, the GW unit's COM LED will not light up.)

EX500 – AC000 – S

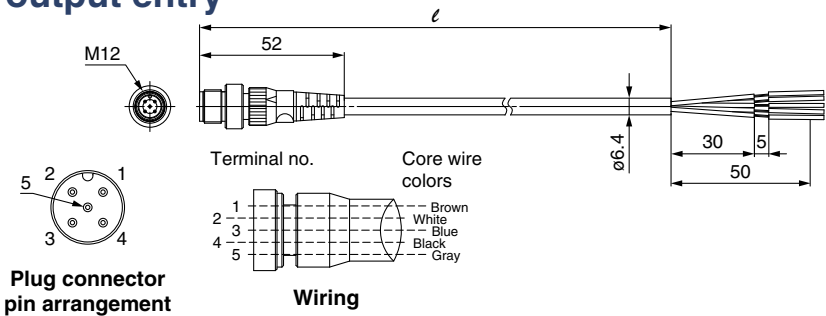


E Cable with connector for output entry

EX9 – AC 030 – 7

Cable length (ℓ)

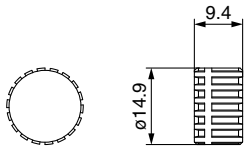
010	1000 [mm]
030	3000 [mm]



F Seal cap: M12 connector (For plug)

Use this on ports that are not being used for a M12 connector (plug).
Use of this waterproof cap maintains the integrity of the enclosure.
Note) Tighten the waterproof cap with the prescribed tightening torque. (For M12: 0.1 N·m)

EX500 – AWTP



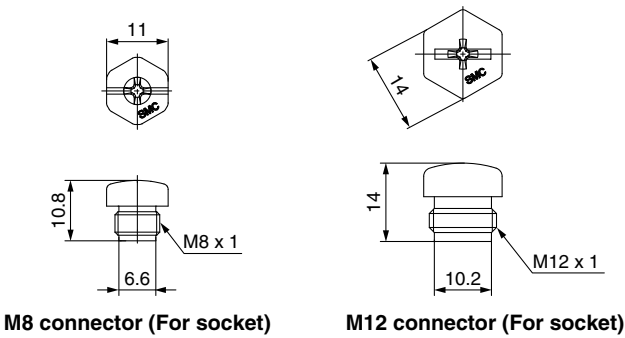
F Seal cap: M8, M12 connector (For socket)/Accessories

Use this on ports that are not being used for a M8, M12 connector (socket).
Use of this waterproof cap maintains the integrity of the enclosure.
(Waterproof cap is packed together with each unit.)
Note) Tighten the waterproof cap with the prescribed tightening torque. (For M8: 0.05 N·m, For M12: 0.1 N·m)

EX9 – AW

Connector type

ES	M8 connector (For socket, 10 pcs.)
TS	M12 connector (For socket, 10 pcs.)



Assembly Procedure

Spring-cage Connection

Corresponding Model

● Plug



- For CC-Link
3 PCA-1557617
- For DeviceNet™
7 PCA-1557659
- For PROFIBUS DP
12 PCA-1557701

● Socket



- For CC-Link
4 PCA-1557620
- For DeviceNet™
8 PCA-1557662
- For PROFIBUS DP
13 PCA-1557714

Features

- M12 connector corresponding to shield connecting
- Save wiring time approx. 40% compared to screw and solder connection.
- Color-coded wire connection part allows easy wiring and prevents miswiring.
- Easy shield treatment



Structure image of wiring



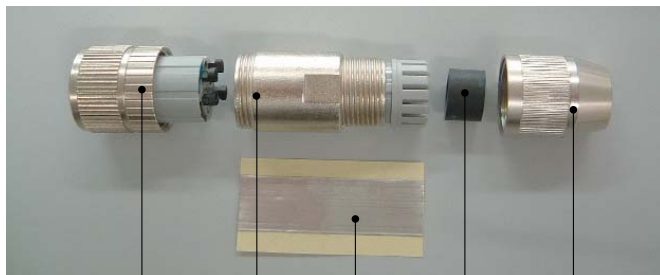
Structure image of shield wiring

Things to Prepare

- Stripper for cable sheath
(Recommendation: Phoenix Contact KAMES MULTI (1209075))
- Stripper for wire sheath
(Recommendation: Phoenix Contact QUICK WIREFOX2.5 (1206667))
- (Small) Nippers for cutting shield

Product Construction

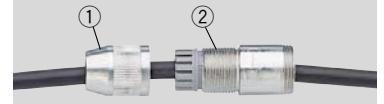
Check the contents when opening the package.



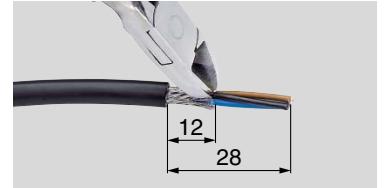
Body I Body II Shield foil Gasket Cap

Assembly Procedure

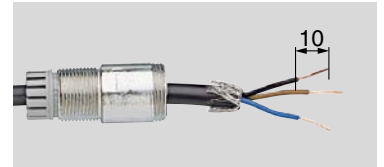
- 1** Slide Cap ① and Body II ② over the cable.



- 2** Strip the cable sheath over a length of **approx. 28 mm** for straight connector. Trim the braided shield to a length of **approx. 12 mm**.



- 3** Fold back the braided shield over the cable sheath. Strip **approx. 10 mm** off the single wires. If necessary, crimp suitable ferrules to the end of each wire.

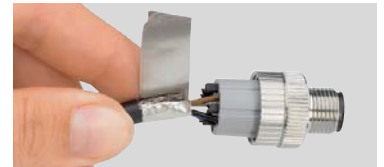


- 4** Connect the wire into Body I.
In case of stranded wire, press the black button and open the connection part and insert the wire. In case of wire with ferrule, insert directly without pressing the black button.



The color coding is previously printed on the connection part according to the wire color.

- 5** Fold the braided shield back again. Apply the attached adhesive shield foil around the braided shield.



- 6** Pull Body II up to Body I. Screw Body II into Body I.



- 7** Attach Cap on Body II. Tightening torque: 2.7 to 3.3 N·m



Check if the connector has no loosening by pulling the cable lightly.

⚠ Caution

- Do not use it besides an original purpose.
- This connector may only be operated when under no load.
- The work by the wet hand causes the electric shock.
- Never perform the repair.

QUICKON-ONE Connection

Corresponding Model

SPEEDCON



Features

- Quick connection M12 connector with IDC technique
- Save wiring time approx. 80% compared to screw and solder connection.
- The connection is possible by 1/2 turn with SPEEDCON technique.



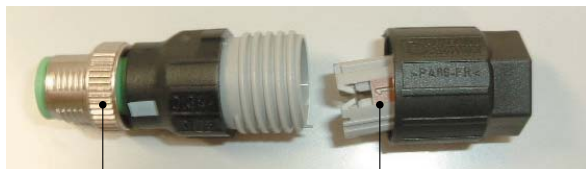
Structure image of wiring

Things to Prepare

- Stripper for cable sheath
(Recommendation: Phoenix Contact CYCLOPS (1204481))
- (Small) Nippers for cutting wire

Product Construction

Check the contents when opening the package.



Body

Union nut

Construction of Union nut

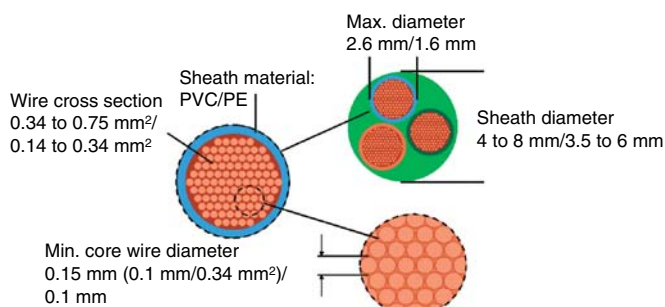


Splice ring

Seal

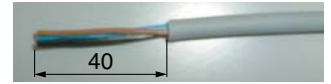
Cable gland

Construction of Cable



Assembly Procedure

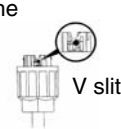
- 1 Strip the cable sheath.
(approx. 40 mm)



- 2 Slide the cable onto
Union nut.
Insert the cable sheath
to the stopper inside the
Splice ring.



- 3 Insert the wires into the
marked core entry of
Splice ring.
Splice ring is colored
with respective wire
color of sensor.



- 4 Cut off the projecting
wire ends flush by
nippers, etc.



Recommended
cutting plane



- 5 Meet the mark ▲ on
Body and mark “←” on
Union nut.
Then, combine each
others.



- 6 Screw up each others.
Tightening torque:
0.14 to 0.34 mm² ...
0.72 to 0.88 N·m
0.34 to 0.75 mm² ...
1.08 to 1.32 N·m



- 7 Finish



Check if the connector has no loosening by pulling the cable lightly.

⚠ Caution

- Connection between cables (with the same material and the same cross section) is 10 times at max.
- PVC or PE is suitable for sheath material, however fluoro resin is not suitable for sheath material.
- Only for flexible cable, not for solid cable.
- When you remove the cable, pull the cable. However, if you remove the Cable gland, cable and the Splice ring remain to the body.
- When you connect the cable again, screw the Splice ring approx. two turns into the Cable gland before using.
- When you connect the cable again, cut and strip the cable.
- Do not use it besides an original purpose.
- QUICKON-ONE may only be operated when under no load.
- The work by the wet hand causes the electric shock.
- Never perform the repair.

Assembly Procedure

Piercecon® Connection

Corresponding Model



15 PCA-1557730



Features

- Quick connection M8 connector with Piercecon® technique
- Save wiring time approx. 70% compared to screw and solder connection.
- Very small construction of a fieldwireable M8 connector



Structure image of wiring

Things to Prepare

- Stripper for cable sheath
(Recommendation: Phoenix Contact CYCLOPS (1204481))
- (Small) Nippers for cutting wire

Product Construction

Check the contents when opening the package.



Body I Body II Cable guide Pressure hull Cap

Included 2 Cable guides.

White ... 0.25 to 0.34 mm² (AWG24 to 22)

Min. wire outer dia. 1.3 mm

Black ... 0.14 to 0.25 mm² (AWG26 to 24)

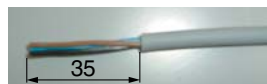
Min. wire outer dia. 1.0 mm



Use either one of Cable guides according to the wire.

Assembly Procedure

- 1 Strip the cable sheath.
(approx. 35 mm)

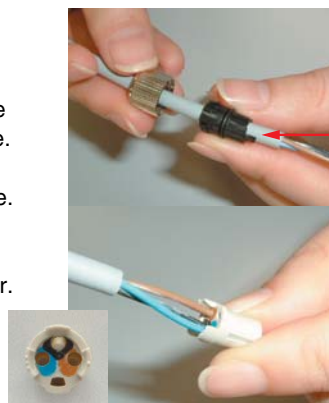


- 2 Slide Cap and Pressure hull over the cable.

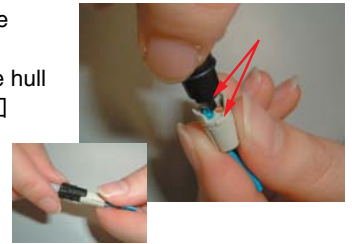
Keep the direction of Pressure hull (arrow) to the wire side.

- 3 Slide the wire into Cable guide.

Cable guide is colored with respective wire color of sensor.



- 4 Push Pressure hull into Cable guide.
Meet the position of Pressure hull (arrow) and Cable guide (arrow).



- 5 Combine 4 and Body II.

Meet the position of mark ▲ on Body II, Cable guide and Pressure hull (arrow).



- 6 Screw Cap into Body II.
Screw up each others.
Tightening torque: 1.08 to 1.32 N·m



- 7 Cut off the projecting wires by nippers.

Shape the cross sections.



- 8 Screw Body I into Body II.

Meet the position of mark ▲ on Body II and Body I.



- 9 Tighten without gap between Body I and Body II.

Tightening torque: 1.08 to 1.32 N·m

Check if the connector has no loosening by pulling the cable lightly.



- 10 Finish



⚠ Caution

- Connection between cables (with the same material and the same cross section) is 10 times at max.
- Only for flexible cable, not for solid cable.
- When you connect the cable again, cut and strip the cable.
- Do not use it besides an original purpose.
- Piercecon® may only be operated when under no load.
- The work by the wet hand causes the electric shock.
- Never perform the repair.
- Piercecon® is a registered trademark of by CONINVERS GmbH.

Compatibility between Sensors and Fieldwireable Connectors

●: Applicable

▲: Applicable, but number of electric wire cores is limited. (Number of sensor lead wire cores is larger than the number of connector pins.)

△: Connectable, but may not correspond to IP65/67 depending on installation method. X: Non-conformance

Auto Switch

Model	Cable part no.	Number of cores	Applicable connector			Cable specifications								Note
			M8	M12		Sheath		Insulator		Conductor				
			15	16	17	O.D.	Material	O.D.	Material	Nominal cross section	Stranding	O.D.	Material	
D-P4DW□	Integrated type	2	✕	✕	●	ø6	Oil resistant vinyl	ø1.9	Flame-retardant semi-rigid PVC	0.5 mm ²	100 pcs./0.08 mm	ø0.9	Tin plating annealed copper bunch stranded wire	
D-M9BA□ D-M9BAV□	Integrated type	2	●	△	✕	2.7 x 3.2	Oil resistant vinyl	ø0.9	Cross-linked semi-rigid PVC	0.15 mm ²	77 pcs./0.05 mm	ø0.5	Tin plating copper and silver alloy wire	
D-M9NA□ D-M9PA□ D-M9NAV□ D-M9PAV□	Integrated type	3	●	△	✕	2.7 x 3.2	Oil resistant vinyl	ø0.9	Cross-linked semi-rigid PVC	0.15 mm ²	77 pcs./0.05 mm	ø0.5	Tin plating copper and silver alloy wire	
D-M9B□ D-M9BV□ D-M9BW□ D-M9BWV□	Integrated type	2	●	△	✕	2.7 x 3.2	Oil resistant vinyl	ø0.9	Semi-rigid PVC	0.15 mm ²	77 pcs./0.05 mm	ø0.5	Tin plating copper and silver alloy wire	
D-M9N□ D-M9P□ D-M9NV□ D-M9PV□ D-M9NW□ D-M9PW□ D-M9NWV□ D-M9PWV□	Integrated type	3	●	△	✕	2.7 x 3.2	Oil resistant vinyl	ø0.9	Semi-rigid PVC	0.15 mm ²	77 pcs./0.05 mm	ø0.5	Tin plating copper and silver alloy wire	

Pressure Switch

Model	Cable part no.	Number of cores	Applicable connector			Cable specifications								Note
			M8	M12		Sheath		Insulator		Conductor				
			15	16	17	O.D.	Material	O.D.	Material	Nominal cross section	Stranding	O.D.	Material	
Z/ISE30-□	ZS-27-A-□	3	●	●	✕	ø3.4	Oil resistant vinyl	ø1.12	Cross-linked PVC	0.20 mm ² (AWG25)	40 pcs./0.08 mm	ø0.58	Annealed copper wire	UL2130
ISE35-□	ZS-32-A-□	3	●	●	✕	ø3.4	Oil resistant vinyl	ø1.12	Cross-linked PVC	0.20 mm ² (AWG25)	40 pcs./0.08 mm	ø0.58	Annealed copper wire	UL2130
Z/ISE40□-□ Z/ISE50□-□ Z/ISE60□-□	Integrated type	5	▲	▲	✕	ø3.5	Oil resistant vinyl	ø0.97	Irradiated cross-linked PVC	0.15 mm ² (AWG28)	30 pcs./0.08 mm	ø0.51	Tin plating annealed copper wire	
ISE70/75(H)-□	ZS-31-B	4	▲	●	✕	ø4.0	Oil resistant vinyl	ø1.14	Irradiated cross-linked PVC	0.30 mm ² (AWG23)	60 pcs./0.08 mm	ø0.72	Tin plating copper alloy wire	Straight
	ZS-31-C		▲	●	✕									Angle
Z/ISE80□-□	Integrated type	5	▲	▲	✕	ø3.5	Oil resistant vinyl	ø0.95 ±0.10	Heat-resistance PVC	0.15 mm ² (AWG26)	30 pcs./0.08 mm	ø0.51	Annealed copper wire	UL20379
		4	▲	●	✕									
		3	●	●	✕									
ISA2-□	ISA-8-A	4	✕	✕	●	ø6.0	Oil resistant vinyl	ø1.72	Irradiated cross-linked PVC	0.53 mm ² (AWG21)	21 pcs./0.18 mm	ø0.9	Tin plating copper alloy wire	Straight
	ISA-8-B		✕	✕	●									Angle

Flow Switch

Model	Cable part no.	Number of cores	Applicable connector			Cable specifications								Note
			M8	M12		Sheath		Insulator		Conductor				
			15	16	17	O.D.	Material	O.D.	Material	Nominal cross section	Stranding	O.D.	Material	
PF2A7□ PF2W7□	ZS-37-A	4	▲	●	✕	ø4.0	Oil resistant vinyl	ø1.14	Irradiated cross-linked PVC	AWG23	60 pcs./0.08 mm	ø0.72	Tin plating copper alloy wire	Straight
	ZS-37-B		▲	●	✕									Angle
PFM7□	ZS-33-D	4	▲	●	✕	ø3.5	Oil resistant vinyl	ø1.00	Cross-linked PVC	AWG26	28 pcs./0.08 mm	ø0.50	Annealed copper wire	

Note) Information on cable specifications is based on specification sheets supplied by the manufacturer.

American Wire Gauge Conversion Table

This table shows to change American wire gauge (AWG) into a diameter.

The wire material is indicated as AWG (American wire gauge) in the documentations overseas.

Use the following table for conversion into diameter.

Wire size (AWG)	Diameter (mm)	Cross section (mm ²)	Wire size (AWG)	Diameter (mm)	Cross section (mm ²)	Wire size (AWG)	Diameter (mm)	Cross section (mm ²)
1	7.348	42.3846	17	1.151	1.0400	33	0.18	0.0254
2	6.543	33.6065	18	1.024	0.8231	34	0.16	0.0201
3	5.827	26.6538	19	0.912	0.6529	35	0.142	0.0158
4	5.189	21.1367	20	0.813	0.5189	36	0.127	0.0127
5	4.62	16.7554	21	0.724	0.4115	37	0.114	0.0102
6	4.115	13.2926	22	0.643	0.3246	38	0.102	0.0082
7	3.665	10.5443	23	0.574	0.2586	39	0.089	0.0062
8	3.264	8.3632	24	0.511	0.2050	40	0.079	0.0049
9	2.906	6.6292	25	0.455	0.1625	41	0.071	0.0040
10	2.588	5.2577	26	0.404	0.1281	42	0.064	0.0032
11	2.304	4.1671	27	0.361	0.1023	43	0.056	0.0025
12	2.052	3.3054	28	0.32	0.0804	44	0.051	0.0020
13	1.829	2.6260	29	0.287	0.0647	45	0.045	0.0016
14	1.628	2.0806	30	0.254	0.0506	46	0.04	0.0013
15	1.45	1.6505	31	0.226	0.0401			
16	1.29	1.3063	32	0.203	0.0323			



Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of “**Caution,**” “**Warning**” or “**Danger.**” They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC), Japan Industrial Standards (JIS)*¹⁾ and other safety regulations*²⁾.

* 1) ISO 4414: Pneumatic fluid power – General rules relating to systems.

ISO 4413: Hydraulic fluid power – General rules relating to systems.

IEC 60204-1: Safety of machinery – Electrical equipment of machines. (Part 1: General requirements)

ISO 10218-1992: Manipulating industrial robots -Safety.

JIS B 8370: General rules for pneumatic equipment.


JIS B 8361: General rules for hydraulic equipment.


JIS B 9960-1: Safety of machinery – Electrical equipment of machines. (Part 1: General requirements)


JIS B 8433-1993: Manipulating industrial robots - Safety.

etc.

* 2) Labor Safety and Sanitation Law, etc.

 **Caution:** Operator error could result in injury or equipment damage.

 **Warning:** Operator error could result in serious injury or loss of life.

 **Danger :** In extreme conditions, there is a possibility of serious injury or loss of life.

Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalog information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

3. Do not service or attempt to remove product and machinery/equipment until safety is confirmed.

1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.

2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.

3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

4. Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.

1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.

2. Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalog.

3. An application which could have negative effects on people, property, or animals requiring special safety analysis.

4. Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.



Safety Instructions

Caution

The product is provided for use in manufacturing industries.

The product herein described is basically provided for peaceful use in manufacturing industries.

If considering using the product in other industries, consult SMC beforehand and exchange specifications or a contract if necessary. If anything is unclear, contact your nearest sales branch.

Limited Warranty and Disclaimer/Compliance Requirements

The product used is subject to the following “Limited Warranty and Disclaimer” and “Compliance Requirements”. Read and accept them before using the product.

Limited Warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered.*3)

Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.

2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided.

This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.

3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalog for the particular products.

* 3) Vacuum pads are excluded from this 1 year warranty.

A vacuum pad is a consumable part, so it is warranted for a year after it is delivered.

Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

Compliance Requirements

When the product is exported, strictly follow the laws required by the Ministry of Economy, Trade and Industry (Foreign Exchange and Foreign Trade Control Law).



Cable/Connector Accessories Precautions

Be sure to read this before handling.

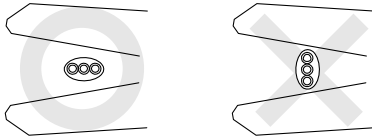
Wiring

⚠ Caution

1. Do not lay the wires while they are energized. It may give you an electric shock.
2. It should be cabled according to the connection diagram.
3. Check if it can be connected when using a sensor or switch.
4. When the cable sheath is stripped, confirm the stripping direction.

(For SMC switches with oblong cables)

The insulator may be split or damaged depending on the direction.



Tightening of Screw

⚠ Caution

1. It cannot maintain the enclosure (IP6○) or the screws may be loosened if they are not tightened sufficiently.
2. Check that they are tightened enough at appropriate intervals during the operation.

Connection and Disconnection of Connector

⚠ Caution

1. Be sure to turn the power off when connecting and disconnecting the connectors.
2. Do not touch surface of the engagement with wet hands.
3. Do not pull the cable out by holding the cable.
4. Note the key direction.
Especially for the SPEEDCON specifications, match the protrusion of the knurl (bracket) and the mark at the mold for insertion so that the SPEEDCON function can be maintained.
5. When engaging the connectors, insert the connectors enough until all the engagement surfaces can be hidden and tighten the screws not to damage the thread ridges.

Handling of Cable with Connector

⚠ Caution

1. Avoid repeatedly bending or stretching the cable and applying a heavy object or force to it.
2. Set up the cables to the place where they cannot be stepped on in order to prevent them being broken or damage to the connectors.

Install a protective cover in case it is used in the place stated above.

3. Do not pull the connector or cable unnecessarily. It may damage the connectors or break the cables.
4. Do not bend the cable at the root of the connector when installed.

Back page 3

Handling of Fieldwireable Connector

⚠ Caution

Common Precautions

1. Follow "Assembly Procedure" provided by SMC. If not, it may not maintain IP65/67.
2. Do not use it besides an original purpose.
3. This connector may only be operated when under no load.
4. The work by the wet hand causes the electric shock.
5. Never perform the repair.

Spring-cage Connection

1. Do not use it besides an original purpose.
2. This connector may only be operated when under no load.
3. The work by the wet hand causes the electric shock.
4. Never perform the repair.

QUICKON-ONE Connection

1. Connection between cables (with the same material and the same cross section) is 10 times at max.
2. PVC or PE is suitable for sheath material, however fluoro resin is not suitable for sheath material.
3. Only for flexible cable, not for solid cable.
4. When you remove the cable, pull the cable. However, if you remove the Cable gland, cable and the Splice ring remain to the body.

When you connect the cable again, screw the Splice ring approx. two turns into the Cable gland before using.

5. When you connect the cable again, cut and strip the cable.

Piercecon® Connection

1. Connection between cables (with the same material and the same cross section) is 10 times at max.
2. Only for flexible cable, not for solid cable.
3. If you connect the cable again, cut and strip the cable.

Operating Environment

⚠ Caution

1. Do not use in the atmosphere and environment over the rated specifications.
2. Do not use in the environment of corrosive gas or liquid splash.
3. Do not use in an environment where oil and chemicals are used.

Maintenance

⚠ Caution

1. Perform periodic inspection.

Record of changes

B edition	* Correction of "Specifications" due to clerical errors.	MX
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SMC Corporation

Akihabara UDX 15F,
4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-0021, JAPAN
Phone: 03-5207-8249 Fax: 03-5298-5362
URL <http://www.smcworld.com>
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