Connection Cables - Sensor and Signal

M8 A-coded Cable to Pigtail



Features

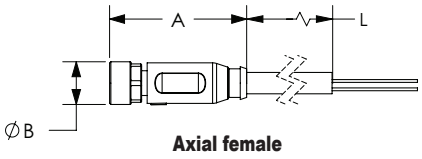
- Industry-standard axial and 90-degree M8 screw-lock connectors with open leads
- Cables listed can be used with patch cables
- 1.5m [4.9 ft], 2m [6.5 ft], 5m [16.4 ft], 7m [23 ft], and 10m [32.8 ft] cable lengths
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry
- PUR (polyurethane) jacketed cable for applications with exposure to oil and dynamic applications requiring more flexibility
- PP (polypropylene) wire insulation for low temperature applications

M8 A-coded Cable to Pigtail

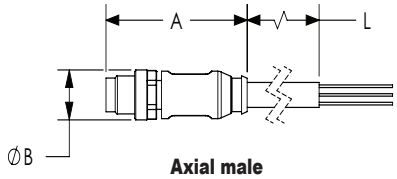
Part Number	Price	Number of Wires	Connector	Cable Jacket/ Wire Insulation Material	Jacket Color	Dimensions A (mm)	B (mm)	C (mm)	L m [ft]
CD08-0A-020-A1	$11.50		Axial female	PVC/PVC	Gray	32	10	–	2 [6.5]
CD08-0A-020-C1	$11.50		90-degree female			25	10	20	
CD08-0A-050-A1	$14.50		Axial female		Black	32	10	–	5 [16.4]
CD08-0A-050-C1	$14.50		90-degree female			25	10	20	
CD08-0C-050-A1-A	$14.50		Axial female	PUR/PP		32	10	–	
CD08-0C-050-C1-A	$14.50		90-degree female	PUR/PP		25	10	20	
CD08-0A-070-A1	$18.50		Axial female	PVC/PVC	Gray	32	10	–	7 [23]
CD08-0A-070-C1	$18.50		90-degree female			25	10	20	
7000-08001-0200200	$9.50		Axial male	PUR/PVC	Yellow	39	10	–	2 [6.5]
7000-08001-0300200	$10.50		Axial male	PUR/PP		39	10	–	
7000-08021-0300200	$10.50		90-degree male	PUR/PP		25	10	26	
7000-08001-0300500	$11.50		Axial male	PUR/PP		39	10	–	5 [16.4
7000-08021-0300500	$11.50	3	90-degree male	PUR/PP		25	10	26	
7000-08001-0301000	$20.00		Axial male	PUR/PP		39	10	–	10 [32.8]
7000-08021-0301000	$20.00		90-degree male	PUR/PP		25	10	26	
7000-08001-2100200	$7.75		Axial male	PVC/PVC	Gray	39	10	–	2 [6.5]
7000-08021-2100200	$7.75		90-degree male			25	10	26	
7000-08001-2100500	$9.00		Axial male			39	10	–	5 [16.4]
7000-08021-2100500	$9.00		90-degree male			25	10	26	
7000-08001-2101000	$14.50		Axial male			39	10	–	10 [32.8]
7000-08021-2101000	$14.50		90-degree male			25	10	26	
7000-08041-0300200	$10.50		Axial female	PUR/PP	Yellow	32	10	–	2 [6.5]
7000-08081-0300200	$10.50		90-degree female	PUR/PP		25	10	20	
7000-08041-0300500	$11.50		Axial female	PUR/PP		32	10	–	5 [16.4]
7000-08081-0300500	$11.50		90-degree female	PUR/PP		25	10	20	

Continued on next page.

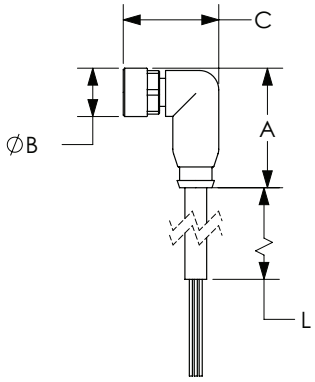
Dimensions



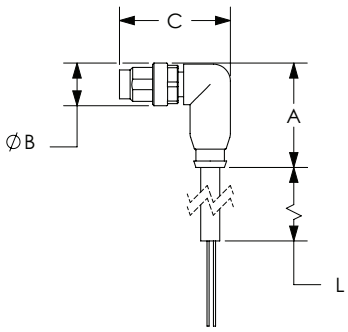
Axial female



Axial male



90-degree female



90-degree male

See our website: www.AutomationDirect.com for complete engineering drawings.

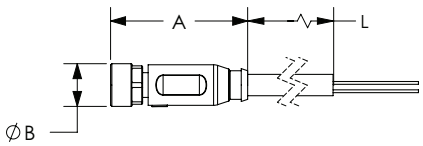
Connection Cables - Sensor and Signal

M8 A-coded Cable to Pigtail (continued)

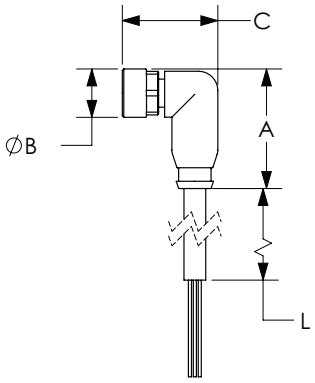
M8 A-coded Cable to Pigtail

Part Number	Price	Number of Wires	Connector	Cable Jacket/Wire Insulation Material	Jacket Color	Dimensions A (mm)	Dimensions B (mm)	Dimensions C (mm)	Dimensions L m [ft]
7000-08041-0300700	$15.50	3	Axial female	PUR/PP	Yellow	32	10	–	7 [22.9
7000-08081-0300700	$15.50		90-degree female			25	10	20	
7000-08041-2100500	$9.00		Axial female	PVC/PVC	Gray	32	10	–	5 [16.4]
7000-08081-2100500	$9.00		90-degree female			25	10	20	
7000-08061-0310200	$10.50	4	Axial female	PUR/PP	Yellow	32	10	–	2 [6.5]
7000-08101-0310200	$10.50		90-degree female	PUR/PP		25	10	20	
7000-08061-0310500	$13.50		Axial female	PUR/PP		32	10	–	5 [16.4]
7000-08101-0310500	$14.50		90-degree female	PUR/PP		25	10	20	
7000-08061-0311000	$21.00		Axial female	PUR/PP		32	10	–	10 [32.8]
7000-08101-0311000	$21.00		90-degree female	PUR/PP		25	10	20	
CD08-0G-020-A1	$12.00		Axial female	PVC/PVC	Black	32	10	–	2 [6.5]
CD08-0W-020-C1	$12.00		90-degree female			25	10	20	
CD08-0G-050-A1	$14.50		Axial female			32	10	–	5 [16.4]
CD08-0W-050-C1	$14.50		90-degree female			25	10	20	
CD08-0G-100-A1	$18.50		Axial female			32	10	–	10 [32.8]
CD08-0W-100-C1	$18.50		90-degree female			25	10	20	
7000-08061-2110200	$9.00		Axial female		Gray	32	10	–	2 [6.5]
7000-08101-2110200	$9.00		90-degree female			25	10	20	
7000-08061-2110500	$11.00		Axial female			32	10	–	5 [16.4]
7000-08101-2110500	$11.00		90-degree female			25	10	20	
7000-08061-2111000	$15.00		Axial female			32	10	–	10 [32.8]
7000-08101-2111000	$15.00		90-degree female			25	10	20	
7000-08941-6950150	$11.50	5	Axial female	PUR/PP	Black	34	10	–	1.5 [4.9]
7000-08951-6950150	$11.50		90-degree female			28	10	21	
7000-08941-6950500	$21.00		Axial female			34	10	–	5 [16.4]
7000-08951-6950500	$21.50		90-degree female			28	10	21	
7000-08941-6951000	$33.50		Axial female			34	10	–	10 [32.8]
7000-08951-6951000	$34.50		90-degree female			28	10	21	

Dimensions



Axial female



90-degree female

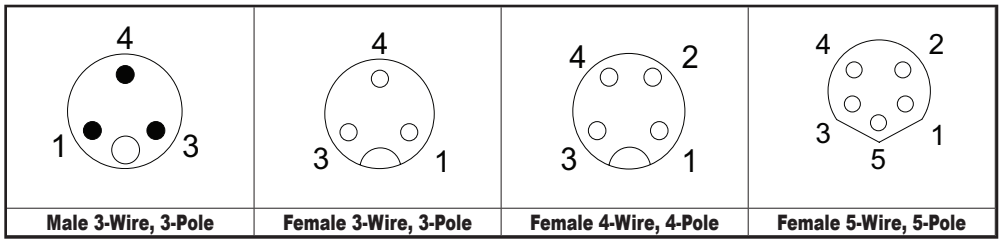
See our website: www.AutomationDirect.com for complete engineering drawings.

Connection Cables - Sensor and Signal

M8 A-coded Cable to Pigtail Specifications					
Model	***CD08 Series***		***7000 Series***		
Type	3-Wire, 3-Pole	4-Wire, 4-Pole	3-Wire, 3-Pole	4-Wire, 4-Pole	5-Wire, 5-Pole
Max Voltage	50VAC / 60VDC				30 VAC/VDC
Max Voltage - UL Rating	N/A		30 VAC/VDC		
Max Current Per Contact	4A				3A
Protection Degree	IP65 / IP66K / IP67				IP67
Nut Material	Male threads are nickel plated brass; female threads are nickel plated die cast zinc				
Cable Jacket/Wire Insulation Material	PUR-PVC/PVC, PVC/PVC, PUR/PVC, or PUR/PP				PUR/PP
Contacts Material	Copper Alloy				
Tightening Torque	≤ 0.4 N·m [≤ 0.34 ft-lb]				
Conductors Cross Section	0.25 mm² [24AWG]				
Ø Outer Cable For PUR/PVC or PVC/PVC or PUR-PVC/PVC	3-Wire 4.5 mm [0.18 in] / 4-Wire 4.8 mm [0.19 in]				
Ø Outer Cable For PUR/PP	3-Wire 4.1 mm [0.16 in] / 4-Wire 4.5 mm [0.18 in]				5- Wire 4.7 mm [0.19 in]
Temperature Range - Stationary Use	PUR-PVC/PVC, PVC/PVC and PUR/PVC -30 to 80°C [-22 to 176°F]; PUR/PP -40 to 80°C [-40 to 176°F]				
Temperature Range - Flexible Use	PUR-PVC/PVC, PVC/PVC and PUR/PVC -5 to 80C [23 to 176F]; PUR/PP -25 to 80°C [-13 to 176°F]				
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter				
Approvals*	CE, cCSAus		cULus, CE, UKCA, cCSAus		cURus

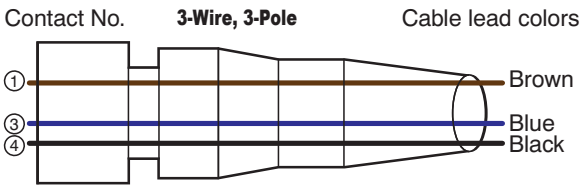
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

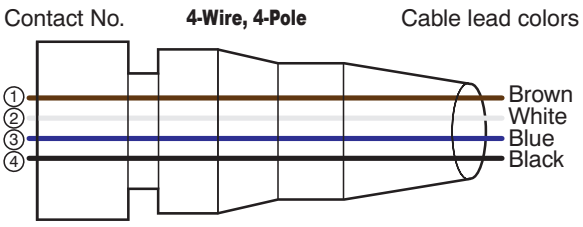
Contact Diagrams

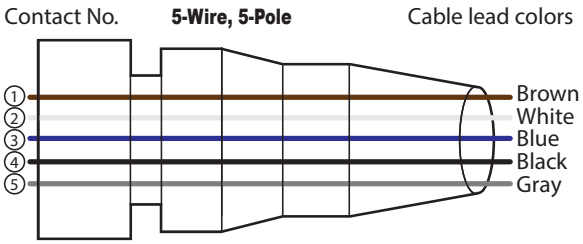


Male 3-Wire, 3-Pole	Female 3-Wire, 3-Pole	Female 4-Wire, 4-Pole	Female 5-Wire, 5-Pole

Wiring Diagrams







MURR ELEKTRONIK
stay connected

Field Wireable Connectors - Sensor and Signal

M8 A-coded Insulation Displacement Connector (IDC)



7000-08331-0000000

Features

- IDC (insulation displacement connection) allows quick termination without stripping conductors
- Various cable gauges and diameters accepted
- IP67 rated once properly assembled

M8 A-coded Insulation Displacement Connector (IDC) Selector Table

Part Number	Price	Number of Wires, Pins	Connection Type	Conductor Size	Outside Cable Ø	Drawing Link
7000-08331-0000000	$14.00	3-Wire, 3-Pin	Axial male with male threads	26–22 AWG [0.14–0.34 mm²]	2.5–5.1 mm [0.098–0.20 in]	PDF
7000-08371-0000000	$14.00	3-Wire, 3-Pin	Axial female with female threads			PDF
7000-08351-0000000	$14.00	4-Wire, 4-Pin	Axial male with male threads			PDF
7000-08391-0000000	$15.50	4-Wire, 4-Pin	Axial female with female threads			PDF

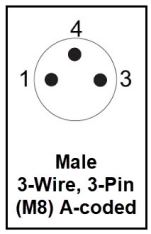
M8 A-coded Insulation Displacement Connector (IDC) Specifications

Coding	A-coded	
Model	08331, 08371	08351, 08391
Max Voltage	32 VAC/VDC	
Max Current per Contact	4A	
Temperature Range	-25 to 85°C [-13 to 185°F]	
Protection Degree	IP67	
Housing Material	Polyamide (PA	
Locking Material	Zinc die-cast, nickel-plated	
Weight	0.03 oz [0.85 g]	0.04 oz [1.13 g]
Approvals*	cURus	

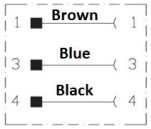
*** To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

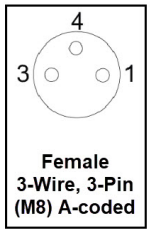
Pin Assignments

LEGEND
■ MALE PIN ON CONNECTOR
○ FEMALE PIN ON CONNECTOR
(FIELD CONNECTION TERMINAL

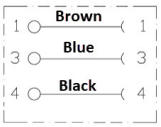


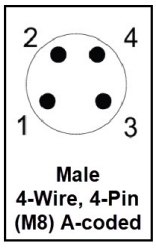
Male
3-Wire, 3-Pin
(M8) A-coded



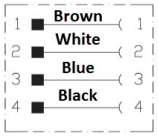


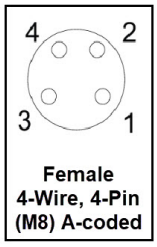
Female
3-Wire, 3-Pin
(M8) A-coded



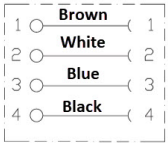


Male
4-Wire, 4-Pin
(M8) A-coded





Female
4-Wire, 4-Pin
(M8) A-coded



Connection Cables - Sensor and Signal

M12 A-coded Cable to Pigtail



Features

- Industry standard axial and 90-degree M12 screw-lock connectors with open leads
- Cables listed can be used with patch cables
- 2m [6.5 ft], 3m [9.8 ft], 5m [16.4 ft], 7m [22.9 ft], 10m [32.8 ft] and 15m [49.2 ft] cable lengths
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry
- PUR (polyurethane) jacketed cable for applications with exposure to oil and dynamic applications requiring more flexibility
- PP (polypropylene) wire insulation for low temperature applications
- TPE (thermoplastic elastomer) wire insulation for applications requiring high flexibility

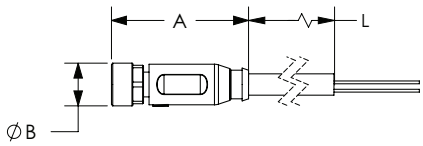
M12 A-coded Cable to Pigtail

Part Number	Price	Number of Wires	Connector	Cable Jacket/Wire Insulation Material	Jacket Color	Dimensions A (mm)	Dimensions B (mm)	Dimensions C (mm)	Dimensions L (m [ft])
CD12M-0B-050-A1*	$14.50	3	Axial female	PVC/PVC	Black	38	15	–	5 [16.4]
CD12M-0B-050-C1*	$14.50		90-degree female			39	15	28	
CD12M-0D-050-A1-A*	$16.50		Axial female	PUR/PP		38	15	–	
CD12M-0D-050-C1-A*	$16.50		90-degree female	PUR/PP		39	15	28	
7000-12181-2130500*	$9.00		Axial female	PVC/PVC	Gray	38	15	–	
7000-12321-2130500*	$9.00		90-degree female			39	15	28	
7000-12181-0330500*	$13.50		Axial female	PUR/PP	Yellow	38	15	–	
7000-12321-0330500*	$13.50		90-degree female	PUR/PP		39	15	28	
CD12L-0B-020-A0	$11.50	4	Axial female	PVC/PVC	Gray	38	15	–	2 [6.5]
CD12L-0B-020-C0	$11.50		90-degree female			39	15	28	
CD12M-0B-070-A1	$18.50		Axial female			38	15	–	7 [22.9]
CD12M-0B-070-C1	$18.50		90-degree female			39	15	28	
7000-12221-0340200	$10.50		Axial female	PUR/PP	Yellow	38	15	–	2 [6.5]
7000-12341-0340200	$10.50		90-degree female	PUR/PP		39	15	28	
7000-12221-0340700	$18.50		Axial female	PUR/PP		38	15	–	7 [22.9]
7000-12341-0340700	$18.50		90-degree female	PUR/PP		39	15	28	
7000-12221-0341000	$23.00		Axial female	PUR/PP		38	15	–	10 [32.8]
7000-12341-0341000	$23.00		90-degree female	PUR/PP		39	15	29	
7000-12221-0341500	$31.00		Axial female	PUR/PP		38	15	–	15 [49.2]
7000-12341-0341500	$31.00		90-degree female	PUR/PP		39	15	29	
7000-12221-2141000	$22.00		Axial female	PVC/PVC	Gray	38	15	–	10 [32.8]
7000-12341-2141000	$22.00		90-degree female			39	15	29	
7000-12221-2141500	$28.00		Axial female			38	15	–	15 [49.2]
7000-12341-2141500	$28.00		90-degree female			39	15	29	

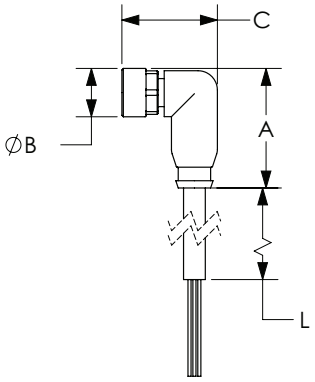
* **Note: Do not use with sensors that require 4-wires cables.**

Continued on next page.

Dimensions



Axial female



90-degree female

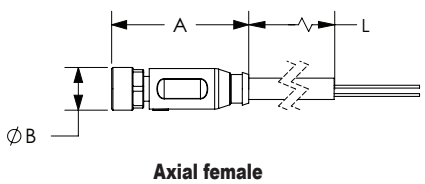
See our website: www.AutomationDirect.com for complete engineering drawings.

Connection Cables - Sensor and Signal

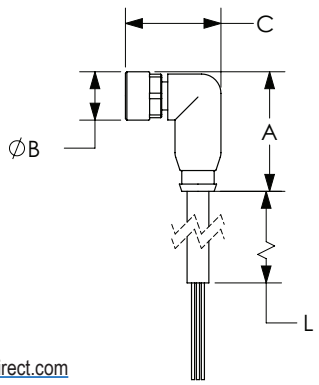
M12 A-coded Cable to Pigtail (continued)

M12 A-coded Cable to Pigtail										
Part Number	Price	Number of Wires	Connector	Cable Jacket/Wire Insulation Material	Jacket Color	Dimensions				
						A	B	C	L	
						mm			m [ft]	
7000-12241-0350300	$14.50	5	Axial female	PUR/PP	Yellow	38	15	–	3 [9.8]	
7000-12361-0350300	$14.50		90-degree female	PUR/PP		39	15	28		
7000-12241-0350500	$18.50		Axial female	PUR/PP		38	15	–		
7000-12361-0350500	$18.50		90-degree female	PUR/PP		39	15	28		
7000-12241-0351000	$29.00		Axial female	PUR/PP		38	15	–		
7000-12361-0351000	$29.00		90-degree female	PUR/PP		39	15	28		
7000-12241-2150300	$13.00		Axial female	PVC/PVC	Gray	38	15	–	3 [9.8]	
7000-12361-2150300	$13.00		90-degree female			39	15	28		
7000-12241-2150500	$18.00		Axial female			38	15	–	5 [16.4]	
7000-12361-2150500	$18.00		90-degree female			39	15	28		
7000-12241-2151000	$26.00		Axial female			38	15	–	10 [32.8]	
7000-12361-2151000	$26.00		90-degree female			39	15	28		
7000-17041-2920300	$31.00	8	Axial female	PUR/PP		44.5	15	–	3 [9.8]	
7000-17061-2920300	$31.00		90-degree female			39	15	32		
7000-17041-2920500	$40.00		Axial female			44.5	15	–	5 [16.4]	
7000-17061-2920500	$40.00		90-degree female			39	15	32		
7000-17041-2921000	$60.50		Axial female			44.5	15	–	10 [32.8]	
7000-17061-2921000	$60.50		90-degree female			39	15	32		
7000-17041-2950300	$32.50		Axial female			44.5	15	–	3 [9.8]	
7000-17061-2950300	$32.50		90-degree female			39	15	32		
7000-17041-2950500	$40.50		Axial female			44.5	15	–	5 [16.4]	
7000-17061-2950500	$40.50		90-degree female			39	15	32		
7000-17041-2951000	$64.00		Axial female			44.5	15	–	10 [32.8]	
7000-17061-2951000	$64.00		90-degree female			39	15	32		
7000-19041-7050300	$51.50	12	Axial female	PUR/PP	Black	43.5	15	–	3 [9.8]	
7000-19061-7050300	$51.50		90-degree female	PUR/TPE		39	15	32		
7000-19041-7050500	$61.50		Axial female	PUR/PP		43.5	15	–	5 [16.4]	
7000-19061-7050500	$61.50		90-degree female	PUR/TPE		39	15	32		
7000-19041-7051000	$91.00		Axial female	PUR/PP		43.5	15	–	10 [32.8]	
7000-19061-7051000	$91.00		90-degree female	PUR/TPE		39	15	32		

Dimensions



Axial female



90-degree female

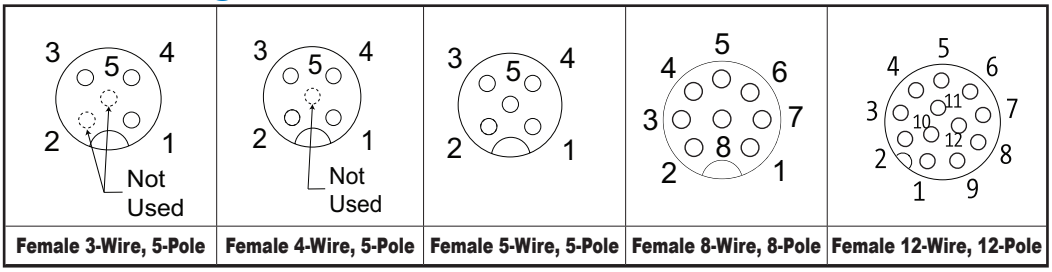
See our website: www.AutomationDirect.com
for complete engineering drawings.

Connection Cables - Sensor and Signal

M12 A-coded Cable to Pigtail Specifications							
Model	***CD12 Series***		***7000 Series***				
Type	3-Wire, 5-Pole	4-Wire, 5-Pole	3-Wire, 5-Pole	4-Wire, 5-Pole	5-Wire, 5-Pole	8-Wire, 8-Pole	12-Wire, 12-Pole
Max Voltage	250 VAC/VDC				125 VAC/VDC	30 VAC/VDC	
Max Voltage - UL Rating	N/A - not UL recognized		30 VAC/VDC				
Max Current Per Contact	4A					2A	1.5 A
Protection Degree	IP65 / IP66K / IP67						
Nut Material	Female threads are nickel plated die cast zinc						
Cable Jacket/Wire Insulation Material	PUR/PP or PVC/PVC		PVC/PVC or PUR/PP or PUR/PVC			PUR/PP	PUR/PP or PUR/TPE
Contacts Material	Copper Alloy						
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft·lb]						
Conductors Cross Section	0.34 mm² [22AWG]					0.25 mm² [24AWG]	0.14 mm² [26AWG]
Ø Outer Cable For PUR/PVC or PVC/PVC or PUR-PVC/PVC	4.6 mm [0.18 in]	5.0 mm [0.20 in]	PVC/PVC 4.6 mm [0.18 in] PUR/PVC 4.9 mm [0.19 in]	PVC/PVC 5.0 mm [0.20 in] PUR/PVC/PVC 5.2 mm [0.20 in]	PVC/PVC 5.2 mm [0.20 in] PUR-PVC/PVC 5.9 mm [0.23 in]	N/A	
Ø Outer Cable For PUR/PP or PUR/TPE	4.1 mm [0.16 in]	N/A	4.1 mm [0.16 in]	4.5mm [0.18 in]	4.8 mm [0.19 in]	5.8 mm [0.23 in]	6.0 mm [0.24 in]
Temperature Range - Stationary Use	PUR/PP -40 to 80°C [-40 to 176°F], PUR/PVC or PVC/PVC -30 to 80°C [-22 to 176°F]					PUR/PP -40 to 80C [-40 to 176F] PUR/TPE -25 to 80C [-13 to 176F]	
Temperature Range - Flexible Use	PUR/PP -25 to 80°C [-13 to 176°F]; PVC/PVC or PUR/PVC -5 to 80°C [23 to 176°F]					PUR/PP and PUR/TPE -25 to 80°C [-13 to 176°F]	
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter						
Approvals*	CE, cCSAus		cULus, UKCA, cCSAus				

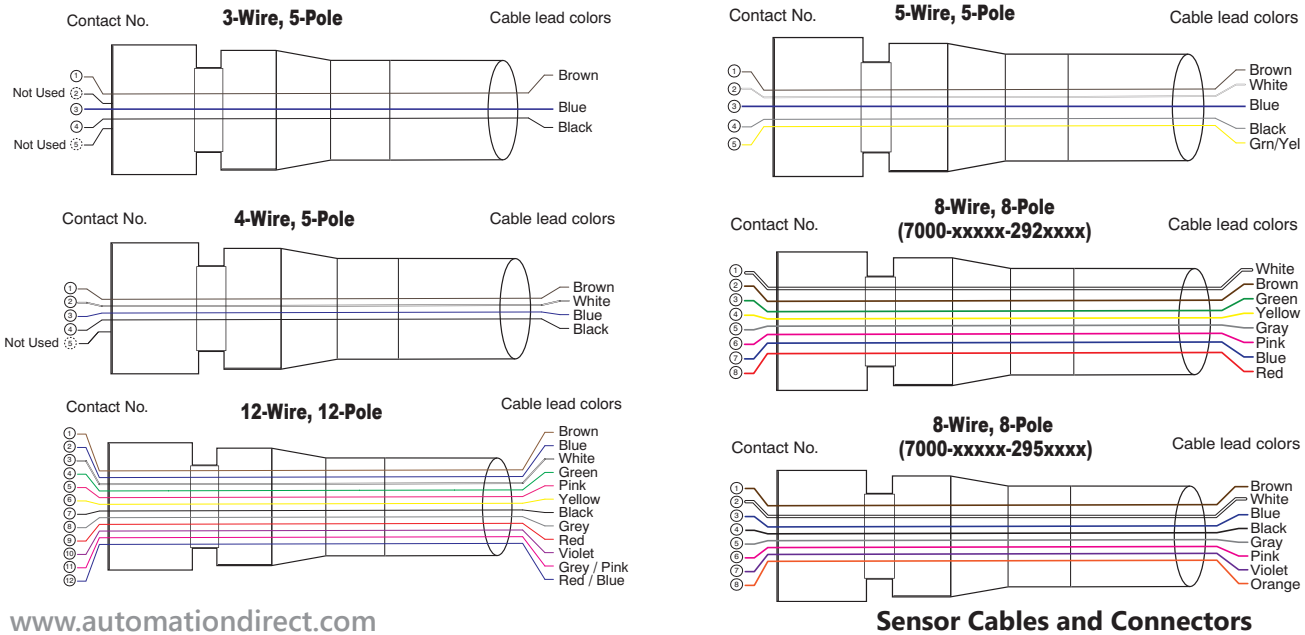
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Contact Diagrams



Female 3-Wire, 5-Pole	Female 4-Wire, 5-Pole	Female 5-Wire, 5-Pole	Female 8-Wire, 8-Pole	Female 12-Wire, 12-Pole

Wiring Diagrams



Connection Cables - Sensor and Signal

Shielded M12 A-coded Cable to Pigtail



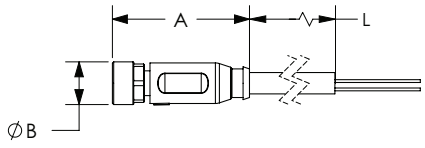
Features

- Industry standard axial and 90-degree M12 screw-lock connectors with open leads
- Braided shield located inside the cord jacket and connected to the coupling nut
- 5m [16.4 ft] and 10m [32.8 ft] cable lengths
- PVC (polyvinyl chloride) jacketed cable for general use and chemical wash-down applications, ex. food & beverage industry
- PUR (polyurethane) jacketed cable for applications with exposure to oil and dynamic applications requiring more flexibility

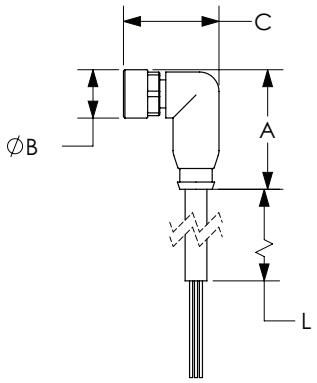
Shielded M12 A-coded Cable to Pigtail

Part Number	Price	Number of Wires	Connector	Cable Jacket/Wire Insulation Material	Jacket Color	Dimensions A (mm)	Dimensions B (mm)	Dimensions C (mm)	Dimensions L m [ft]
7000-13201-3310500	$29.50	4	Axial female	PUR-PVC/ PVC	Gray	43.5	15	–	5 [16.4]
7000-13261-3310500	$29.50		90-degree female			39	15	32	
7000-13201-3311000	$46.00		Axial female			43.5	15	–	10 [32.8]
7000-13261-3311000	$46.00		90-degree female			39	15	32	
7000-13221-3490500	$34.00	5	Axial female			43.5	15	–	5 [16.4]
7000-13281-3490500	$34.00		90-degree female			39	15	32	
7000-13221-3491000	$53.00		Axial female			43.5	15	–	10 [32.8]
7000-13281-3491000	$53.00		90-degree female			39	15	32	
7000-17121-2910500	$55.00	8	Axial female	PUR/PP		44.5	15	–	5 [16.4]
7000-17141-2910500	$55.00		90-degree female			39	15	32	
7000-17121-2911000	$78.00		Axial female			44.5	15	–	10 [32.8]
7000-17141-2911000	$80.00		90-degree female			39	15	32	
7000-17121-2940500	$55.00		Axial female			44.5	15	–	5 [16.4]
7000-17141-2940500	$55.00		90-degree female			39	15	32	
7000-17121-2941000	$84.00		Axial female			44.5	15	–	10 [32.8]
7000-17141-2941000	$84.00		90-degree female			39	15	32	

Dimensions



Axial female



90-degree female

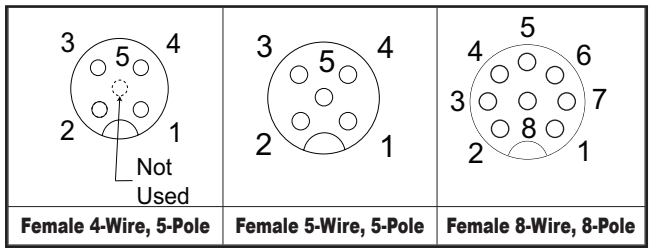
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for complete engineering drawings.

Connection Cables - Sensor and Signal

Shielded M12 A-coded Cable to Pigtail Specifications						
Model	***13201***	***13261***	***13221***	***13281***	***17121***	***17141***
Type	4-Wire, 5-Pole		5-Wire, 5-Pole		8-Wire, 8-Pole	
Max Voltage	60 VAC/VDC				30 VAC/VDC	
Max Voltage - UL Rating	30 VAC/VDC					
Max Current Per Contact	4A				2A	
Protection Degree	IP65 / IP66K / IP67					
Nut Material	Female threads are nickel plated die cast zinc					
Cable Jacket/Wire Insulation Material	PUR-PVC/PVC				PUR/PP	
Contacts Material	Copper Alloy					
Tightening Torque	0.6 N·m [0.44 ft·lb]					
Conductors Cross Section	0.34 mm² [22AWG]				0.25 mm² [24AWG]	
Ø Outer Cable	PUR-PVC/PVC 5.9 mm [0.23 in]				PUR/PP 7mm [0.28 in]	
Temperature Range - Stationary Use	-25 to 85°C [-13 to 185°F]		-40 to 80°C [-40 to 80°F]			
Temperature Range - Flexible Use	-5 to 70°C [23 to 158°F]				-25 to 80°C [-13 to 176°F]	
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter					
Approvals*	CE, UKCA, cCSAus				cULus, UKCA, cCSAus	

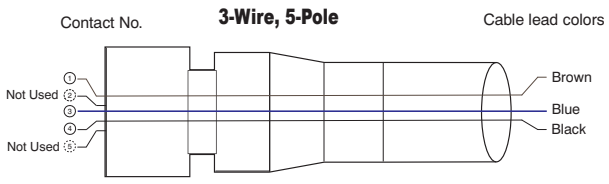
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

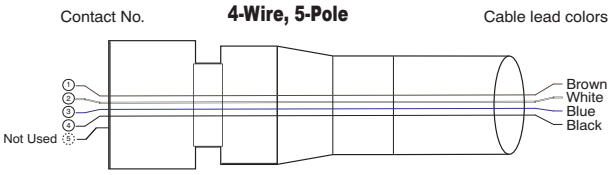
Contact Diagrams

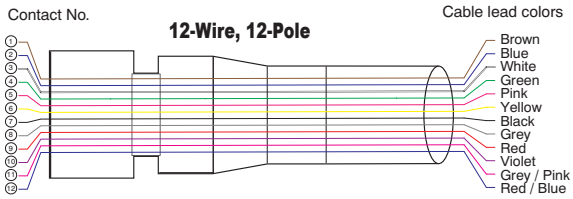


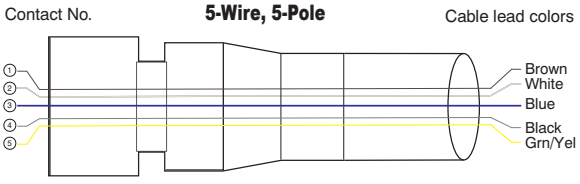
Female 4-Wire, 5-Pole	Female 5-Wire, 5-Pole	Female 8-Wire, 8-Pole

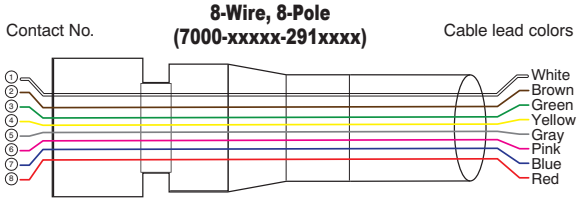
Wiring Diagrams

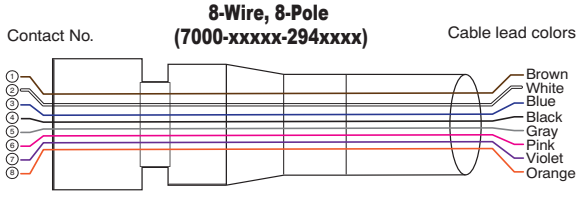












Connection Cables - Sensor and Signal

M12 A-coded Cable with LED Indication to Pigtail

Features

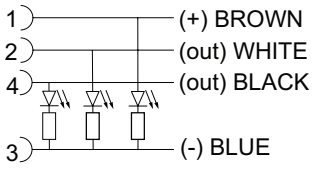
- Industry standard M12 right angle female plug with open leads
- Cables can be used with patch cables
- 2m [6.5 ft], 5m [16.4 ft] and 10m [32.8 ft] cable length
- LED indication for 10–36 VDC PNP sensors only
- PUR (polyurethane) jacketed cable for applications with exposure to oil and dynamic applications requiring more flexibility

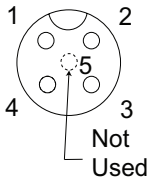


M12 A-coded Cable with LED Indication to Pigtail						
Part Number	*Price*	*Length*	*Number of Wires*	*Connector*	*LED*	*Cable Jacket/ Insulation Material*
*EVC178**	$15.50	2m [6.5 ft]	4	90-degree female	Yes	PUR
*EVC179**	$16.00	5m [16.4 ft]				
*EVC180**	$21.50	10m [32.8 ft]				

**Note: LED for 10–36 VDC PNP devices only.
Do not use with NPN or analog output devices.
Do not use when white wire (Pin 2) is used for selection of a sensor function.
Do not use when emitter has check function.**

Wiring



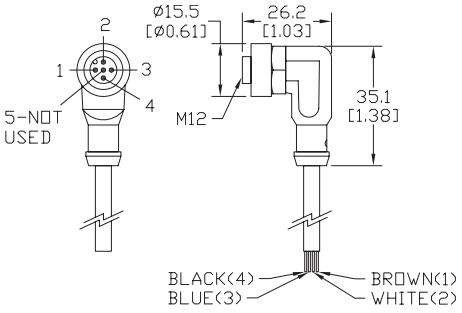


M12 A-coded Cable with LED Indication to Pigtail Specifications		
Operating Voltage	10-36 VDC	
Max Voltage - UL Rating	36VDC	
Max Current Per Contact	4A	
Protection Degree	IP65 / IP67 / IP68 / IP69K	
Nut Material	Nickel plated Brass	
Cable Jacket Insulation Material	Polyurethane (PUR)	
Contacts Material	Gold plated	
Tightening Torque	0.6 to 1.5 N·m [0.44 ft·lb to 1.1]	
Conductors Cross Section	0.34 mm² [22AWG]	
Ø Outer Cable For PUR	4.3 mm [0.17 in]	
Temperature Range Stationary Use	-25 to 90°C [-13 to 194°F]	
Temperature Range Flexible Use	-25 to 90°C [-13 to 194°F]	
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter	
LED Current Loading	10V input Brown wire LED: 1.7 mA White and/or Black LED: 0.9 mA	36V input Brown wire LED: 7.3 mA White and/or Black LED: 4.7 mA
Switching Status LED	2 x Yellow	
Function Display Power LED	1 x Green	
Approvals *	cULus, CE, UKCA	

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Dimensions

mm [inches]



UL Reference	
EVC178	ADOAH043MSS0002H04
EVC179	ADOAH043MSS0005H04
EVC180	ADOAH043MSS0010H04

Note: Shown in UL file under Mini-series Female Cord Connectors using catalog number

Connection Cables - Sensor and Signal

M12 A-coded Female with LED Indication to Male Cables

Features

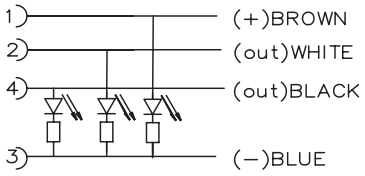
- 90-degree M12 female plug with LED indication on one end and axial male plug on the other end
- 0.3 m [0.98 ft], 0.6 m [1.97 ft], 1m [3.28 ft], 2m [6.5 ft], 5m [16.4 ft], and 10m [32.8 ft] cable lengths
- LED indication for 10–36 VDC PNP sensors only
- PUR (polyurethane) jacketed cable for app with exposure to oil and dynamic applicati requiring more flexibility

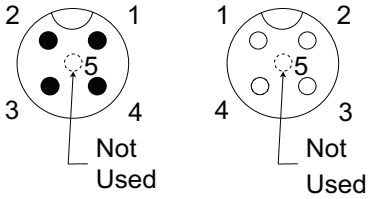


M12 A-coded Female with LED Indication to Male Cables						
Part Number	*Price*	*Length*	*Number of Wires*	*Connectors*	*LED*	*Cable Jacket Material*
*EVC322**	$15.50	0.3 m [0.98 ft]	4	90-degree female, axial male	Yes	PUR
*EVC323**	$17.00	0.6 m [1.97 ft]				
*EVC324**	$17.50	1m [3.28 ft]				
*EVC325**	$20.00	2m [6.5 ft]				
*EVC326**	$23.50	5m [16.4 ft]				
*EVC327**	$29.00	10m [32.8 ft]				

***Note: LED for 10–36 VDC PNP devices only.**
Do not use with NPN or analog output devices.
Do not use when white wire (Pin 2) is used for selection of a sensor function.
Do not use when emitter has check function.

Wiring



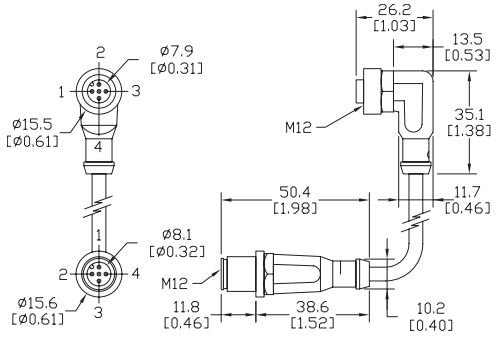


M12 A-coded Female with LED Indication to Male Cables Specifications		
Operating Voltage	10-36 VDC	
Max Voltage - UL Rating	36VDC	
Max Current Per Contact	4A	
Protection Degree	IP65 / IP67 / IP68 / IP69K	
Nut Material	Nickel plated Brass	
Cable Jacket Insulation Material	Polyurethane (PUR)	
Contacts Material	Gold plated	
Tightening Torque	0.6 to 1.5 N·m [0.4 to 1.1 ft·lb]	
Conductors Cross Section	0.34 mm² [22AWG]	
Ø Outer Cable For PUR	4.3 mm [0.17 in]	
Temperature Range Stationary Use	-25 to 90°C [-13 to 194°F]	
Temperature Range - Flexible Use	-25 to 90°C [-13 to 194°F]	
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter	
LED Current Loading	10V input Brown wire LED: 1.7 mA White and/or Black LED: 0.9 mA	36V input Brown wire LED: 7.3 mA White and/or Black LED: 4.7 mA
Switching Status LED	2 x Yellow	
Function Display Power LED	1 x Green	
*Approvals**	cULus, CE, UKCA	

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Dimensions

mm [inches]



UL Reference	
EVC322	VDOAH043MSS00.3H04STGH040MSS
EVC323	VDOAH043MSS00.6H04STGH040MSS
EVC324	VDOAH043MSS0001H04STGH040MSS
EVC325	VDOAH043MSS0002H04STGH040MSS
EVC326	VDOAH043MSS0005H04STGH040MSS
EVC327	VDOAH043MSS0010H04STGH040MSS

Connection Cables - Sensor and Signal

M8 A-coded Male to Female Cables

Features

- Industry standard M8 screw-lock connectors
- One male and one female connector
- Axial and 90-degree connector models
- 1m [3.28 ft] and 3m [9.84 ft] cable lengths
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry
- PUR (polyurethane) jacketed cable for applications with exposure to oil and dynamic applications requiring more flexibility
- PP (polypropylene) wire insulation for low temperature applications

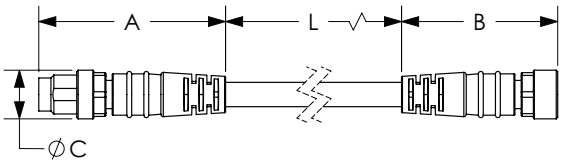


M8 A-Coded Male to Female Cables

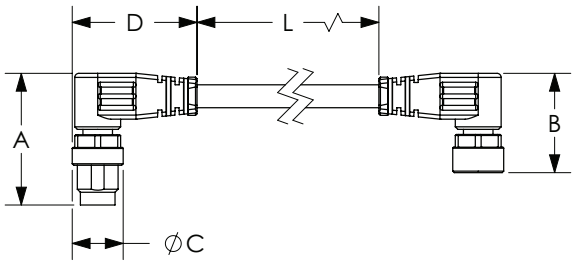
Part Number	Price	Number of Wires	Connectors	Cable Jacket/ Wire Insulation Material	Jacket Color	Dimensions A (mm)	B (mm)	C (mm)	D (mm)	L m [ft]
CDP08-0A-010-AA	$11.50	3	Axial male, axial female	PVC/PVC	Gray	39	32	10	–	1 [3.28]
CDP08-0A-010-BB	$11.50		90-degree male, 90-degree female			26	20	10	25	
CDP08-0A-030-AA	$13.00		Axial male, axial female			39	32	10	–	3 [9.84]
CDP08-0A-030-BB	$11.50		90-degree male, 90-degree female			26	20	10	25	
7000-88001-0300100	$11.50		Axial male, axial female	PUR/PP		39	32	10	–	1 [3.28]
7000-88081-0300100	$11.50		90-degree male, 90-degree female	PUR/PP		26	20	10	25	
7000-88001-0300300	$13.50		Axial male, axial female	PUR/PP		39	32	10	–	3 [9.84]
7000-88081-0300300	$13.50		90-degree male, 90-degree female	PUR/PP		26	20	10	25	

Dimensions

2 Axial - 1 male to 1 female



2 90-degree - 1 male to 1 female



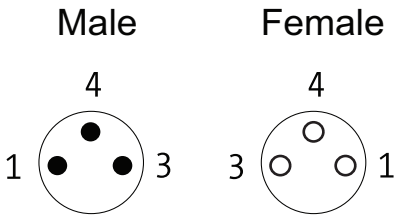
See our website: www.AutomationDirect.com for complete engineering drawings.

Connection Cables - Sensor and Signal

M8 A-coded Male to Female Cables Specifications		
Model	***CDP08 Series***	***7000 Series***
Type	3-Wire, 3-Pole	3-Wire, 3-Pole
Max Voltage	50VAC / 60VDC	
Max Voltage - UL Rating	30 VAC/VDC	
Max Current	4A	
Protection Degree	IP65 / IP66K / IP67	
Nut Material	Nickel plated Zinc	
Cable Jacket/Wire Insulation Material	PVC/PVC	PUR/PVC or PUR/PP
Contacts Material	Copper Alloy	
Tightening Torque	≤ 0.4 N·m [≤ 0.34 ft-lb]	
Conductors Cross Section	0.25 mm² [24AWG]	
Ø Outer Cable For PUR/PVC or PVC/PVC	4.5 mm [0.18 in]	
Ø Outer Cable For PUR/PP	N/A	4.1 mm [0.16 in]
Temperature Range - Stationary Use	PUR/PP -40 to 80°C [-40 to 176°F],	PVC/PVC or PUR/PVC -25 to 80°C [-13 to 176°F]
Temperature Range - Flexible Use	PUR/PP -25 to 80°C [-13 to 176°F],	PVC/PVC or PUR/PVC -5C to 80°C [23 to 176°F]
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter	
Approvals*	CE, cCSAus	cULus, CE, UKCA, cCSAus

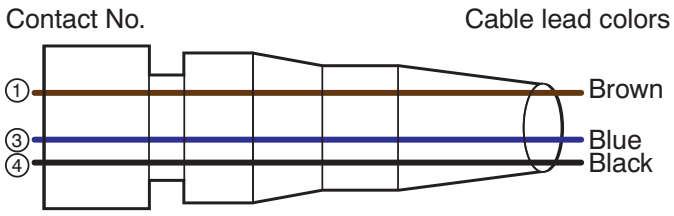
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Contact Diagram



3-Wire, 3 Pole

Wiring Diagram



Connection Cables - Sensor and Signal

M12 A-coded Male to Female Cables



Features

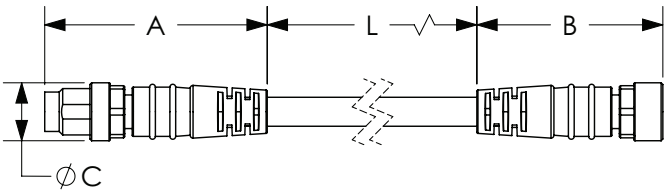
- Industry standard M12 screw-lock connectors
- One male and one female connector
- Axial and 90-degree connector models
- 1m [3.28 ft] and 3m [9.84 ft] cable lengths
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry
- PUR (polyurethane) jacketed cable for applications with exposure to oil and dynamic applications requiring more flexibility
- PP (polypropylene) wire insulation for low temperature applications

M12 A-coded Male to Female Cables

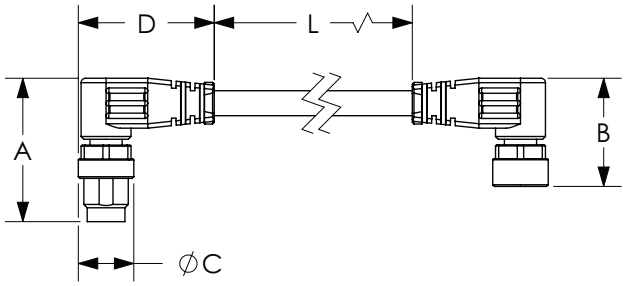
Part Number	Price	Number of Wires	Connectors	Cable Jacket/ Wire Insulation Material	Jacket Color	Dimensions				
						A	B	C	D	L
						mm				m [ft]
CDP12-0B-010-AA	$11.50	4	Axial male, axial female	PVC/PVC	Gray	41	38	15	–	1 [3.3]
CDP12-0B-010-BB	$11.50		90-degree male, 90-degree female			31	28	15	39	
CDP12-0B-030-AA	$11.50		Axial male, axial female			41	38	15	–	3 [9.8]
CDP12-0B-030-BB	$13.00		90-degree male, 90-degree female			31	28	15	39	
7000-40021-0340100	$10.50		Axial male, axial female	PUR/PP	Yellow	41	38	15	–	1 [3.3]
7000-40261-0340100	$13.50		90-degree male, 90-degree female	PUR/PP		31	28	15	39	
7000-40021-0340300	$14.50		Axial male, axial female	PUR/PP		41	38	15	–	3 [9.8]
7000-40261-0340300	$16.50		90-degree male, 90-degree female	PUR/PP		31	28	15	39	
7000-40041-0350100	$17.50	5	Axial male, axial female	PUR/PP		41	38	15	–	1 [3.3]
7000-40041-0350300	$22.00		Axial male, axial female	PUR/PP		41	38	15	–	3 [9.8]
7000-40041-2150100	$17.00		Axial male, axial female	PUR/PVC	Gray	41	38	15	–	1 [3.3]
7000-40041-2150300	$21.50		Axial male, axial female			41	38	15	–	3 [9.8]

Dimensions

2 Axial - 1 male to 1 female



2 90-degree - 1 male to 1 female



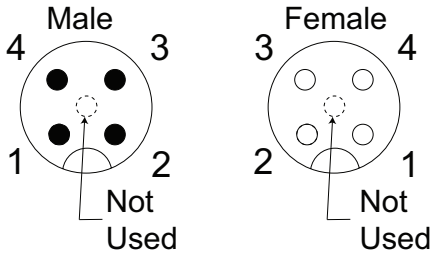
See our website: www.AutomationDirect.com for complete engineering drawings.

Connection Cables - Sensor and Signal

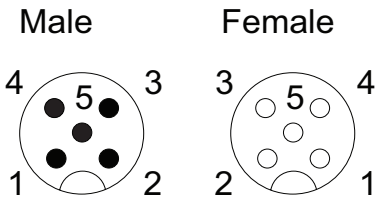
M12 A-coded Male to Female Cables Specifications			
Model	***CDP12 Series***	***7000 Series***	
Type	4-Wire, 5-Pole	4-Wire, 5-Pole	5-Wire, 5-Pole
Max Voltage	250 VAC/VDC		125 VAC/VDC
Max Voltage - UL Rating	30 VAC/VDC		
Max Current	4A		
Protection Degree	IP65 / IP66K / IP67		IP67
Nut Material	Male threads are nickel plated brass; Female threads are nickel plated die cast zinc		
Jacket/Wire Insulation Material	PVC/PVC	PVC/PVC or PUR-PVC/PVC or PUR/PP or PUR/PVC	
Contacts Material	Copper Alloy		
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft·lbs]		
Conductors Cross Section	0.34 mm² [22AWG]		
Ø Outer Cable For PUR-PVC/PVC or PUR/PVC or PVC/PVC	5.0 mm [0.20 in]	5.2 mm [0.20 in]	PUR-PVC/PVC 5.9 mm [0.23 in] PVC/PVC 5.2 mm [0.20 in]
Ø Outer Cable For PUR/PP	N/A	4.5 mm [0.18 in]	4.8 mm [0.19 in]
Temperature Range - Stationary Use	PUR/PP -40 to 80°C [-40 to 176°F], PVC/PVC or PUR-PVC/PVC -25 to 80°C [-13 to 176°F]		
Temperature Range - Flexible Use	PUR/PP -25 to 80°C [-13 to 176°F], PVC/PVC or PUR/PVC -5 to 80°C [23 to 176°F]		
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter		
Approvals*	CE, cCSAus	cULus, CE, UKCA, cCSAus	

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Contact Diagrams

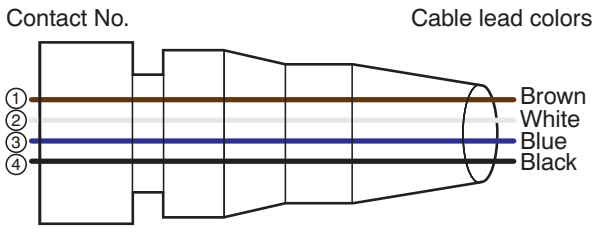


4-Wire, 5-Pole

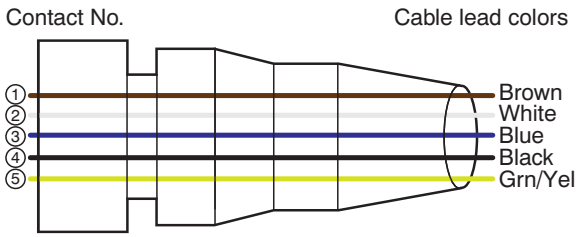


5-Wire, 5-Pole

Wiring Diagrams



4-Wire, 5-Pole



5-Wire, 5-Pole

Connection Cables - Sensor and Signal

M8 A-coded Cables to Pigtail - IP69K

Features

- Industry standard axial and 90-degree M8 connectors with open leads
- Available in 2m [6.56 ft], 5m [16.4 ft], and 10m [32.81] cable lengths
- IP69K rating, suitable for food and beverage industrial applications
- 316L stainless steel coupling nut
- EPDM O-ring
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry



M8 A-coded Cables to Pigtail - IP69K

Part Number	Price	Number of Wires	Connectors	Cable Jacket Material	Jacket Color	Length m [ft]	Drawing Link
EVT421	$14.00	4	Axial female	PVC	Orange	2 [6.56]	PDF
EVT422	$18.00					5 [16.4]	PDF
EVT423	$25.00					10 [32.81]	PDF
EVT424	$14.00		90-degree female			2 [6.56]	PDF
EVT425	$18.00					5 [16.4]	PDF
EVT426	$25.00					10 [32.81]	PDF

M8 A-coded Male to Female Cables - IP69K

Features

- Industry standard M8 screw-lock connectors
- Axial and 90-degree connector models
- 0.6 m [1.97 ft], 1m [3.28], 2m [6.56] and 5m [16.4] cable lengths
- IP69K rating, suitable for food and beverage industrial applications
- 316L stainless steel coupling nut
- EPDM O-ring
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry



M8 A-coded Male to Female Cables - IP69K (Euro, Micro DC-Single Key)

Part Number	Price	Number of Wires	Connectors	Cable Jacket Material	Jacket Color	Length m [ft]	Drawing Link
EVT428	$21.00	4	Axial male to axial female	PVC	Orange	0.6 [1.97]	PDF
EVT429	$22.50					1 [3.28]	PDF
EVT430	$27.50					2 [6.56]	PDF
EVT431	$31.00					5 [16.4]	PDF
EVT433	$21.00		Axial male to 90-degree female			0.6 [1.97]	PDF
EVT434	$22.50					1 [3.28]	PDF
EVT435	$27.50					2 [6.56]	PDF
EVT436	$31.00					5 [16.4]	PDF

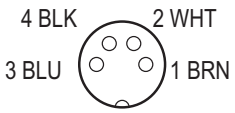
Connection Cables - Sensor and Signal

Cable Specifications	
Type	4-Wire, 4-Pole
Max Voltage	50VAC / 60VDC
Max Current Per Contact	3A
Protection Degree	IP65 / IP67 / IP68 / IP69K
Nut Material	316L stainless steel
Cable Jacket Material	Polyvinyl chloride (PVC)
Contacts Material	Gold plated
Tightening Torque	0.3 to 0.5 N·m [0.2 to 0.3 lb·ft]
Conductors Cross Section	0.34mm^2 [22AWG]
Ø Outer Cable	4.9 mm [0.19 in]
Temperature Range - Stationary Use	-25 to 80°C [-13 to 176°F]
Temperature Range - Flexible Use	5 to 80°C [41 to 176°F]
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter
Approvals*	cULus, CE, UKCA

*** To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

UL Reference	
Part Number	***UL Catalog Number***
EVT421	ADOGF040VAS0002E04
EVT422	ADOGF040VAS0005E04
EVT423	ADOGF040VAS0010E04
EVT424	ADOAF040VAS0002E04
EVT425	ADOAF040VAS0005E04
EVT426	ADOAF040VAS0010E04
EVT428	VDOGF040VAS00.6E04STGF040VAS
EVT429	VDOGF040VAS0001E04STGF040VAS
EVT430	VDOGF040VAS0002E04STGF040VAS
EVT431	VDOGF040VAS0005E04STGF040VAS
EVT433	VDOAF040VAS00.6E04STGF040VAS
EVT434	VDOAF040VAS0001E04STGF040VAS
EVT435	VDOAF040VAS0002E04STGF040VAS
EVT436	VDOAF040VAS0005E04STGF040VAS

Contact Diagrams

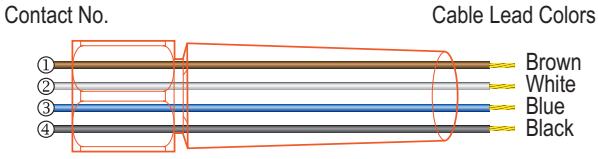


Female 4-Wire, 4-Pole

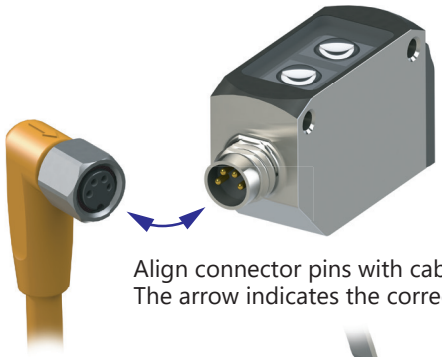


Male 4-Wire, 4-Pole

Wiring Diagram

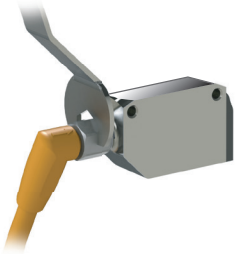


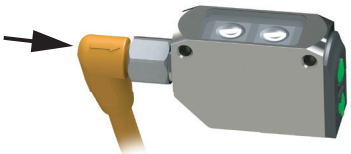
M8 Cables Mounting Instructions



Align connector pins with cable socket. The arrow indicates the correct position.

For applications in harsh environments, tighten the coupling nut with a 9mm wrench to a torque range from 0.3 – 0.5 N·m.





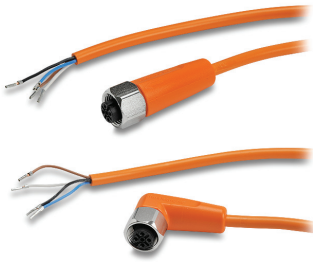
To remove, press the connector against the sensor and loosen the coupling nut.

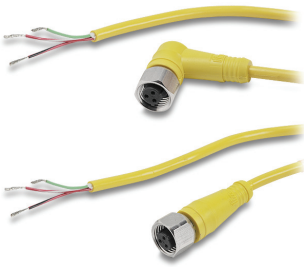
Connection Cables - Sensor and Signal

M12 A-coded Cables to Pigtail -IP69K

Features

- Industry standard axial and 90-degree M12 or 1/2" micro connectors with open leads
- 5m [16.4 ft] and 10m [32.8 ft] cable lengths
- IP69K rated for food and beverage industrial applications
- 316L stainless steel coupling nut
- EPDM o-ring
- PVC (polyvinyl chloride) jacket for food and beverage industrial applications





M12 A-coded Cables to Pigtail - IP69K (Euro, Micro DC-Single Key)								
Part Number	*Price*	*Number of Wires*	*Connector*	*LED*	*Cable Jacket Material*	*Jacket Color*	*Length m [ft]*	*Drawing Link*
M12 Quick-Disconnects								
EVT221	$17.50	4	Axial female	No	PVC	Orange	5 [16.4]	PDF
EVT222	$17.50		90-degree female					PDF
EVT223	$24.00		Axial female				10 [32.8]	PDF
EVT224	$24.00		90-degree female					PDF
Micro AC 1/2 Inch - 20UNF Cables								
1/2" Quick-Disconnects								
E18446	$29.00	3	Axial female	No	PVC	Yellow	5 [16.4]	PDF
E18447	$36.50		90-degree female					PDF
E18448	$29.00		Axial female				10 [32.8]	PDF
E18449	$36.50		90-degree female					PDF

M12 A-coded Female to Male Cables - IP69K

Features

- Industry standard M12 screw-lock connectors
- Axial and 90-degree connector models
- 0.3m [0.98 ft], 0.6m [1.97 ft], 1m [3.3 ft], 2m [6.6 ft] and 5m [16.4 ft] cable lengths
- IP69K rating, suitable for food and beverage industrial applications
- 316L stainless steel coupling nut
- EPDM o-ring
- PVC (polyvinyl chloride) jacket for food and beverage industrial applications



M12 A-coded Female to Male Cables - IP69K (Euro, Micro DC-Single Key)								
Part Number	*Price*	*Number of Wires*	*Connectors*	*Cable Jacket Material*	*Jacket Color*	*Length m [ft]*	*Drawing Link*
M12 Quick-Disconnect Patch Cables							
EVT225	$22.00	4	Axial female to axial male	PVC	Orange	0.3 [0.98]	PDF
EVT226	$23.00		90-degree female to axial male				PDF
EVT227	$23.50		Axial female to axial male			0.6 [1.97]	PDF
EVT228	$25.50		90-degree female to axial male				PDF
EVT229	$28.50		Axial female to axial male			1 [3.3]	PDF
EVT230	$22.00		90-degree female to axial male				PDF
EVT231	$23.00		Axial female to axial male			2 [6.6]	PDF
EVT232	$23.50		90-degree female to axial male				PDF
EVT233	$25.50		Axial female to axial male			5 [16.4]	PDF
EVT234	$28.50		90-degree female to axial male				PDF

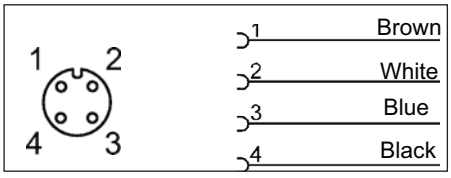
Connection Cables - Sensor and Signal

Cable Specifications			
Specification	***M12 Quick-Disconnects***	***1/2" Quick-Disconnects***	***M12 Quick-Disconnect Patch Cables***
Type	4-Wire, 5-Pole	3-Wire, 3-Pole	4-Wire, 5-Pole
Max Voltage	250VAC / 300VDC	300 VAC/VDC	250VAC / 300VDC
Max Current Per Contact	4A		
Protection Degree	IP65 / IP67/ IP68 / IP69K	IP68	IP65 / IP67/ IP68 / IP69K
Nut Material	316L Stainless steel		
Cable Jacket Material	PolyVinyl Chloride (PVC)		
Contacts Material	Gold plated		
Tightening Torque	0.6 to 1.5 N·m [0.44 to 1.1 ft·lb]		
Conductors Cross Section	0.34 mm^2 [22AWG]		
Ø Outer Cable	4.9 mm [0.19 in]	4.5 mm	4.9 mm [0.19 in]
Temperature Range - Stationary Use	-25 to 100°C [-13 to 212°F]	-10 to 100°C [14 to 212°F]	-25 to 100°C [-13 to 212°F]
Temperature Range - Flexible Use	5 to 80°C [41 to 176°F]	5 to 80°C [41 to 176°F]	-5 to 100°C [-23 to 212°F]
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter		
Approvals*	cULus, CE, UKCA	cULus,	cULus, CE, UKCA

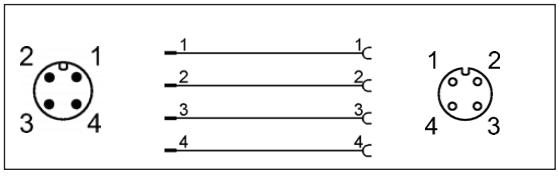
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Contact Diagrams M12 DC

EVT221, EVT222, EVT223, EVT224



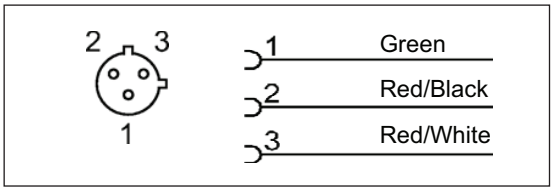
EVT225, EVT226, EVT227, EVT228, EVT229, EVT230, EVT231, EVT232, EVT233, EVT234



UL Reference	
Part Number	***UL Catalog Number***
EVT221	ADOGH040VAS0005E04
EVT222	ADOAH040VAS0005E04
EVT223	ADOGH040VAS0010E04
EVT224	ADOAH040VAS0010E04
EVT225	VDOGH040VAS00.3E04STGH040VAS
EVT226	VDOAH040VAS00.3E04STGH040VAS
EVT227	VDOGH040VAS00.6E04STGH040VAS
EVT228	VDOAH040VAS00.6E04STGH040VAS
EVT229	VDOGH040VAS0001E04STGH040VAS
EVT230	VDOAH040VAS0001E04STGH040VAS
EVT231	VDOGH040VAS0002E04STGH040VAS
EVT232	VDOAH040VAS0002E04STGH040VAS
EVT233	VDOGH040VAS0005E04STGH040VAS
EVT234	VDOAH040VAS0005E04STGH040VAS

Contact Diagram- 1/2" Micro AC

E18446, E18447, E18448, E18449



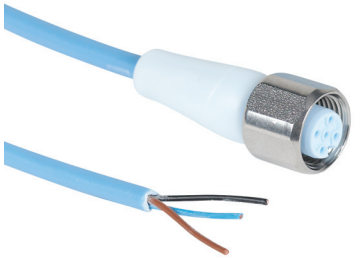
MURR ELEKTRONIK
stay connected

Connection Cables - Sensor and Signal

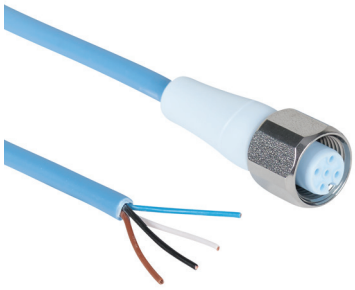
FDA Compliant M12 A-coded Cable to Pigtail

Features

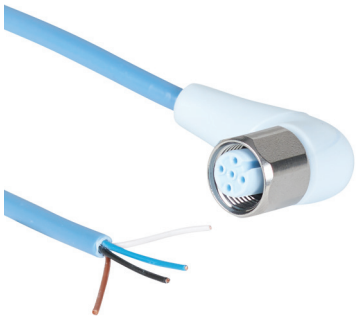
- Industry standard axial and 90-degree M12 connectors with open leads
- 2m [6.5 ft], 3m [9.8 ft], 5m [16.4 ft], 7m [22.9 ft], 10m [32.8 ft], 15m [49.2 ft], 20m [65.6 ft] and 25m [82ft] cable lengths
- IP69K rated to withstand high pressure, high temperature wash-down applications
- Food grade TPE-S (Styrene-Butadiene Thermoplastic Elastomer) jacket for food and beverage industrial applications



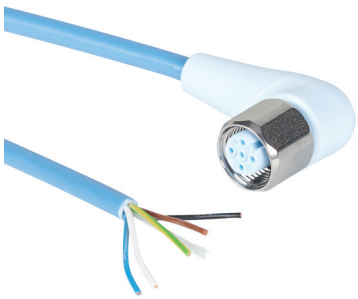
7024-12181-3150500



7024-12221-3210200



7024-12341-3210200



7024-12361-3390300

M12 A-Coded Cable to Pigtail

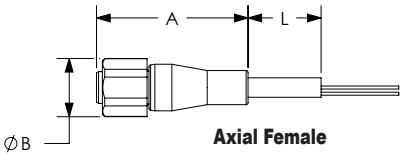
Part Number	Price	Number of Wires	Connector	Cable Jacket/ Wire Insulation Material	Jacket Color	Dimensions (mm [in])			
						A	B	C	L (m [ft])
7024-12181-3150500	$21.50	3	Axial female	TPE-S/PP	Ice blue	39 [1.5]	15 [0.6]	n/a	5 [16.4]
7024-12221-3210200	$17.50	4							2 [6.5]
7024-12221-3210300	$20.50								3 [9.8]
7024-12221-3210500	$22.50								5 [16.4]
7024-12221-3210700	$27.50								7 [22.9]
7024-12221-3211000	$32.50								10 [32.8]
7024-12221-3211500	$41.50								15 [49.2]
7024-12221-3212000	$51.50								20 [65.6]
7024-12221-3212500	$61.50								25 [82]
7024-12241-3390200	$22.50	5							2 [6.5]
7024-12241-3390300	$24.00								3 [9.8]
7024-12241-3390500	$27.50								5 [16.4]
7024-12241-3390700	$32.50								7 [22.9]
7024-12241-3391000	$38.00								10 [32.8]
7024-12241-3391500	$50.00								15 [49.2]
7024-12241-3392000	$60.50								20 [65.6]
7024-12241-3392500	$69.50								25 [82]
7024-12321-3150500	$21.50	3	90-degree female			37 [1.46]	15 [0.6]	29 [1.1]	5 [16.4]
7024-12341-3210200	$17.50	4							2 [6.5]
7024-12341-3210300	$20.50								3 [9.8]
7024-12341-3210500	$22.50								5 [16.4]
7024-12341-3210700	$27.50								7 [22.9]
7024-12341-3211000	$32.50								10 [32.8]
7024-12341-3211500	$41.50								15 [49.2]
7024-12341-3212000	$51.50								20 [65.6]
7024-12341-3212500	$61.50								25 [82]
7024-12361-3390200	$22.50	5							2 [6.5]
7024-12361-3390300	$24.00								3 [9.8]
7024-12361-3390500	$27.50								5 [16.4]
7024-12361-3390700	$32.50								7 [22.9]
7024-12361-3391000	$38.00								10 [32.8]
7024-12361-3391500	$50.00								15 [49.2]
7024-12361-3392000	$60.50								20 [65.6]
7024-12361-3392500	$69.50								25 [82]

Connection Cables - Sensor and Signal

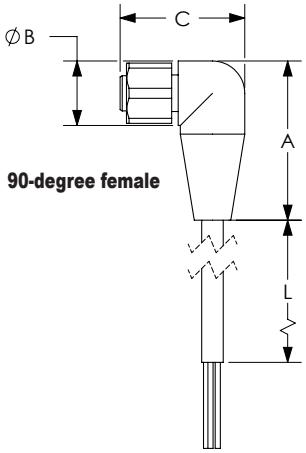
M12 A-coded Cable to Pigtail Specifications			
Model	***7024 Series***		
Type	3-Wire, 5-Pole	4-Wire, 5-Pole	5-Wire, 5-Pole
Max Voltage	250 VAC/VDC		125 VAC/VDC
Max Voltage - UL Rating	30 VAC/VDC		
Max contact Per Contact	4A		
Protection Degree	IP65 / IP68 / IP69K		
Nut Material	Stainless steel		
Cable Jacket/Wire Insulation Material	TPE-S/PP		
Contacts Material	Copper-Tin alloy		
Tightening Torque	0.6 N·m [0.44 ft-lb]		
Conductors Cross Section	0.34 mm² [22AWG]		
Ø Outer Cable	4.3 mm [0.17 in]	4.7 mm [0.18 in]	5.0 mm [0.20 in]
Temperature Range - Stationary Use	-40 to 105°C [-40 to 221°F]		
Temperature Range - Flexible Use	-25 to 105°C [-13 to 221°F]		
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter		
Approvals*	cULus		

*** To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Dimensions

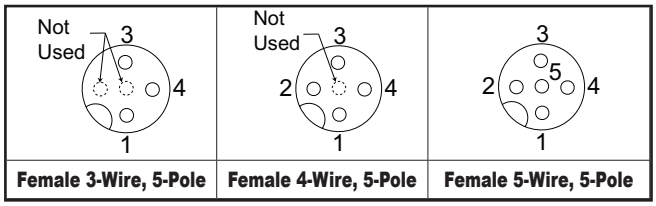


Axial Female



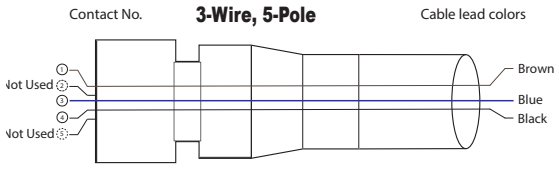
90-degree female

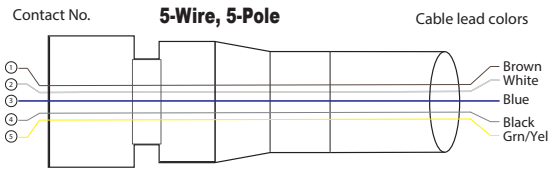
Contact Diagrams

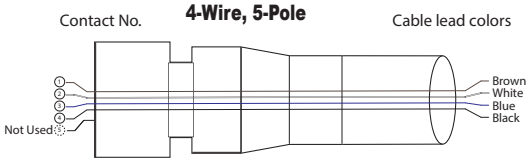


Female 3-Wire, 5-Pole	Female 4-Wire, 5-Pole	Female 5-Wire, 5-Pole

Wiring Diagrams







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Connection Cables - Sensor and Signal

FDA Compliant M12 A-Coded Male to Female Cables

Features

- Available patch cables include:
- Industry standard M12 screw-lock connectors
- One male and one female connector
- Axial and 90-degree connector models
- 1m [3.2 ft], 3m [9.8 ft] and 5m [16.4 ft] cable lengths
- IP69K rating, suitable for food and beverage industrial applications
- TPE-S (Styrene-Butadiene Thermoplastic Elastomer) jacket for food and beverage industrial applications



7024-40021-3210100



7024-40261-3210100

M12 A-coded Male to Female Cables (Euro, Micro DC-Single Key)

Part Number	Price	Number of Wires	Connectors	Cable Jacket/ Wire Insulation Material	Jacket Color	Dimensions (mm [in])				
						A	B	C	D	L (m [ft])
7024-40021-3210100	$26.00	4	Axial male to axial female	TPE-S /PP	Ice Blue	42 [1.65]	39 [1.5]	15 [0.6]	n/a	1 [3.2]
7024-40021-3210300	$29.50									3 [9.8]
7024-40021-3210500	$33.50									5 [16.4]
7024-40261-3210100	$28.50		90-degree male to 90-degree female			32 [1.26]	29 [1.1]	15 [0.6]	37 [1.46]	1 [3.2]
7024-40261-3210300	$32.50									3 [9.8]
7024-40261-3210500	$37.00									5 [16.4]
7024-40041-3390100	$29.50	5	Axial male to axial female			42 [1.65]	39 [1.5]	15 [0.6]	n/a	1 [3.2]
7024-40041-3390300	$33.50									3 [9.8]
7024-40041-3390500	$37.00									5 [16.4]

M12 A-coded Male to Female Cables Specifications

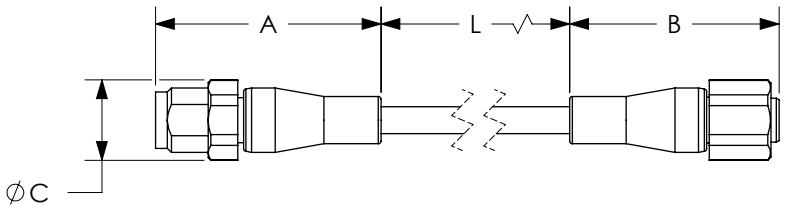
Model	7024 Series	
Type	4-Wire, 5-Pole	5-Wire, 5-Pole
Max Voltage	250 VAC/VDC	125 VAC/VDC
Max Voltage - UL Rating	30 VAC/VDC	
Max Current Per Contact	4A	
Protection Degree	IP65 / IP68 / IP69K	
Nut Material	Stainless steel	
Cable Jacket/Wire Insulation Material	TPE-S/PP	
Contact Material	Copper-Tin Alloy	
Tightening Torque	0.6 N·m [0.44 ft-lb]	
Conductors Cross Section	0.34 mm² [22AWG]	
Ø Outer Cable	4.7 mm [0.18 in]	5.0 mm [0.20 in]
Temperature Range - Stationary Use	-40 to 105°C [-40 to 221°F]	
Temperature Range - Flexible Use	-25 to 105°C [-13 to 221°F]	
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter	
Approvals*	cULus	

*** To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

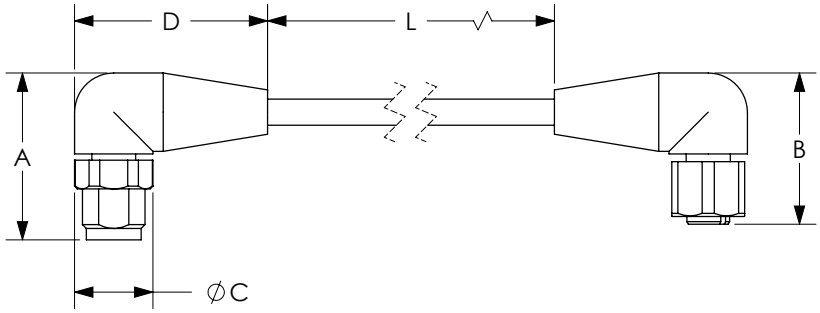
Connection Cables - Sensor and Signal

Dimensions

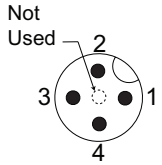
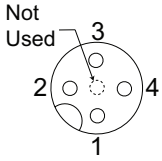
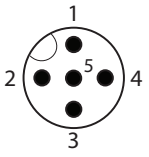
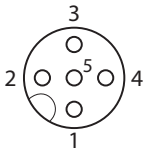
2 Axial - 1 male to female



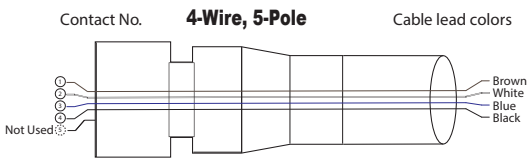
2 90-degree 1 male to female

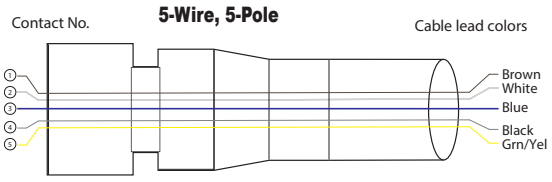


Contact Diagrams

			
Male 4-Wire, 5-Pole	**Female 4-Wire, 5-Pole**	**Male 5-Wire, 5-Pole**	**Female 5-Wire, 5-Pole**

Wiring Diagrams





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Field Wireable Connectors Sensor and Signal

M12 A-coded Connectors



7000-12701-0000000



7000-12821-0000000

Features

- IP67 rated once properly assembled
- Various cable gauges and diameters accepted
- Plastic and metal housings with good resistance against chemicals and oils
- Various terminal connections: screw, IDC, and push-lock spring clamp

M12 A-coded Connectors Selector Table

Part Number	Price	Number of Wires, Pins	Connection Type	Conductor Size	Housing Material	Terminal Connection	Outside Cable Ø	Drawing Link
Unshielded								
7000-12701-0000000	$10.50	4-Wire, 5 Pin	Axial male with male threads	18AWG [0.75 mm²] max	Polyamide (PA)	Screw	4–6mm [0.15–0.23 in]	PDF
7000-12901-0000000	$10.50		Axial female with female threads					PDF
7000-12741-0000000	$10.50		Axial male with male threads				6–8mm [0.23–0.31 in]	PDF
7000-12941-0000000	$10.50		Axial female with female threads					PDF
7000-12821-0000000	$10.50		90-degree male with male threads				4–6mm [0.15–0.23 in]	PDF
7000-12981-0000000	$10.50		90-degree female with female threads					PDF
7000-12481-0000000	$11.50		Axial male with male threads	24–20 AWG [0.25–0.5 mm²]	Thermoplastic polyester elastomer (TPE- E)	Insulation displacement (IDC)	4–5.1 mm [0.157–0.20 in]	PDF
7000-12601-0000000	$13.00		Axial female with female threads					PDF
7000-12491-0000000	$13.00		Axial male with male threads	26–22 AWG [0.14–0.34 mm²]	Polyamide (PA)		2.9–5.1 mm [0.114–0.20 in]	PDF
7000-12611-0000000	$15.50		Axial female with female threads					PDF
7000-12561-0000000	$16.50		90-degree male with male threads	24–20 AWG [0.25–0.5 mm²]	Thermoplastic polyester elastomer (TPE- E)		4–5.1 mm [0.157–0.20 in]	PDF
7000-12681-0000000	$18.00		90-degree female with female threads					PDF
7000-12721-0000000	$13.00	5-Wire, 5-Pin	Axial male with male threads	18AWG [0.75 mm²] max	Polyamide (PA)	Screw	4–6mm [0.15–0.23 in]	PDF
7000-12921-0000000	$13.00		Axial female with female threads					PDF
7000-12761-0000000	$13.00		Axial male with male threads				6–8mm [0.23–0.31 in]	PDF
7000-12961-0000000	$13.00		Axial female with female threads					PDF
7000-13041-0000000	$13.00		90-degree female with female threads					PDF
7000-13901-0000000	$17.50		Axial male with male threads	26–18AWG [0.14–0.75 mm²]	Polyamide (PA)	Push-lock spring clamp	4–8mm [0.15–0.31 in]	PDF
7000-13911-0000000	$17.50		90-degree male with male threads					PDF
7000-13941-0000000	$17.50		Axial female with female threads					PDF
7000-13951-0000000	$17.50		90-degree female with female threads					PDF
7000-17301-0000000	$29.50	8-Wire, 8-Pin	Axial male with male threads	20AWG [0.5 mm²] max	Polyurethane (PUR)	Screw	6–8mm [0.23–0.31 in]	PDF
7000-17311-0000000	$29.50		90-degree male with male threads					PDF
7000-17321-0000000	$29.50		Axial female with female threads					PDF
7000-17331-0000000	$29.50		90-degree female with female threads					PDF
Shielded								
7000-13321-0000000	$27.50	5-Wire, 5-Pin	Axial male with male threads	18AWG [0.75 mm²] max	Die-cast zinc nickel-plated	Screw	6–8mm [0.23–0.31 in]	PDF
7000-13361-0000000	$36.00		90-degree male with male threads					PDF
7000-17341-0000000	$36.00	8-Wire, 8-Pin	Axial male with male threads	20AWG [0.5 mm²] max				PDF

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Field Wireable Connectors Sensor and Signal

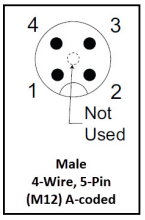
Specifications

M12 A-coded Connectors Specifications								
Coding	A-coded							
Model	12491, 12611	12481,12601, 12561, 12681	12701, 12901, 12821, 12981	12721, 12921	13901, 13911, 13941, 13951	12741, 12941	12761, 12961, 13041, 13321, 13361	17301, 17311, 17321, 17331, 17341
Max Voltage	32 VAC/VDC		250 VAC/VDC	60 VAC/VDC	250 VAC/VDC	250 VAC/VDC	60 VAC/VDC	30 VAC/VDC
Max Current Per Contact	4A							2A
Temperature Range	-25 to 85°C [13 to 185°F]				-40 to 85°C [-40 to 185°F]			
Protection Degree	IP65, IP67		IP67		IP65, IP67	IP67		
Locking Material	Zinc die-cast, nickel-plated							
Weight	0.05 oz [1.42 g]	0.06 oz [1.7 g]	0.05 oz [1.42 g		1oz [28.24 g]	0.06 oz [1.7 g]		
Approvals*	cURus							

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

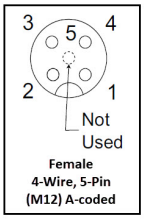
Pin Assignments

LEGEND
■ MALE PIN ON CONNECTOR
○ FEMALE PIN ON CONNECTOR
(FIELD CONNECTION TERMINAL

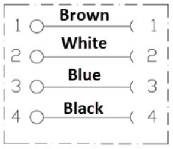


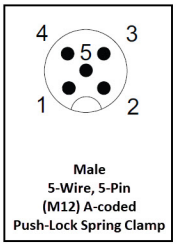
Male
4-Wire, 5-Pin
(M12) A-coded



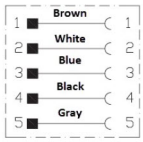


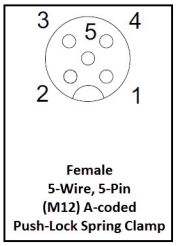
Female
4-Wire, 5-Pin
(M12) A-coded



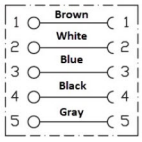


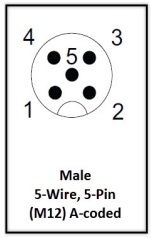
Male
5-Wire, 5-Pin
(M12) A-coded
Push-Lock Spring Clamp



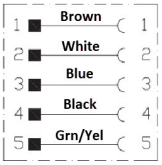


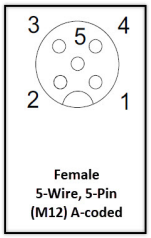
Female
5-Wire, 5-Pin
(M12) A-coded
Push-Lock Spring Clamp



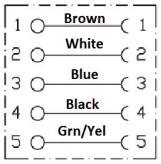


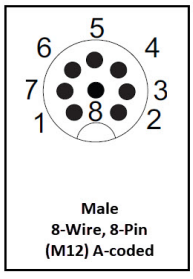
Male
5-Wire, 5-Pin
(M12) A-coded



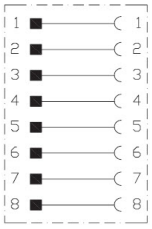


Female
5-Wire, 5-Pin
(M12) A-coded

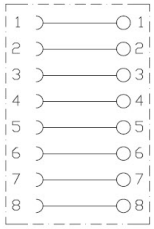


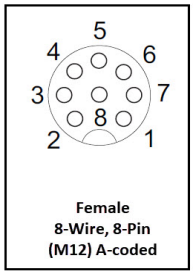


Male
8-Wire, 8-Pin
(M12) A-coded



8-Wire, 8-Pin Color Code Based on Cables		
Pin	7000-17041-292xxxx 7000-17061-292xxxx	7000-17041-295xxxx 7000-17061-295xxxx
1	White	Brown
2	Brown	White
3	Green	Blue
4	Yellow	Black
5	Gray	Gray
6	Pink	Pink
7	Blue	Violet
8	Red	Orange



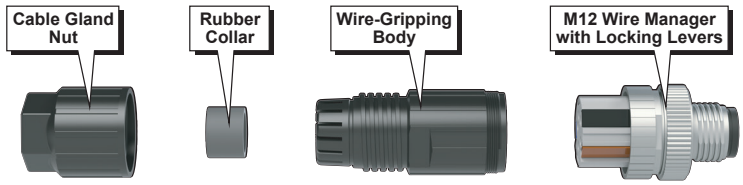


Female
8-Wire, 8-Pin
(M12) A-coded

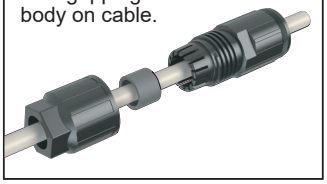
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Field Wireable Connectors Sensor and Signal

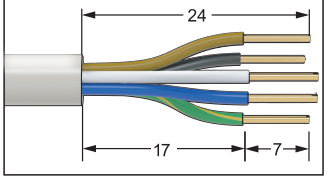
Assembly Instructions for M12 A-coded Push-lock Spring Clamp Connectors



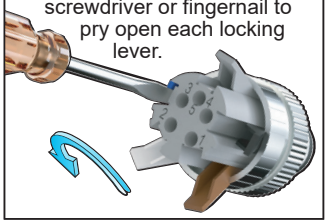
1 Before stripping cable jacket, install cable gland nut, rubber collar, and wire-gripping body on cable.



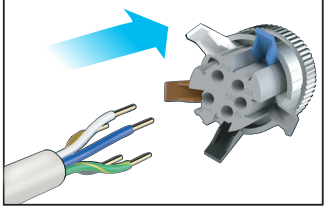
2 Remove 24mm of outer jacket from cable and strip 7mm of insulation from individual wires.



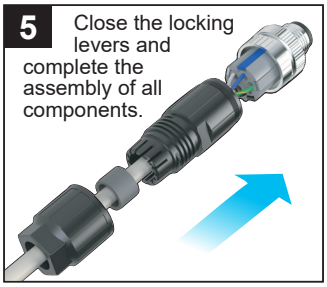
3 Prepare the M12 wire manager using a small screwdriver or fingernail to pry open each locking lever.



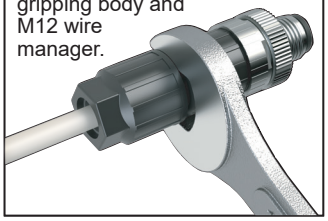
4 Insert individual wires into the M12 wire manager.



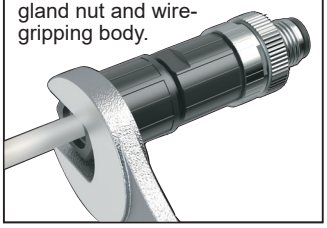
5 Close the locking levers and complete the assembly of all components.



6 Hand-tighten or use 15mm wrench to secure wire-gripping body and M12 wire manager.



7 Hand-tighten or use 15mm wrench to secure cable gland nut and wire-gripping body.



8 **Assembly complete.**



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M12 T-Couplers



M12 T-Couplers

Features

- Molded T-Couplers allow for various wire splitting
- Standard M12 or M8 connections available
- Uses include splitting power to multiple devices or bringing multiple device signals into a wiring block
- Made of molded polyurethane

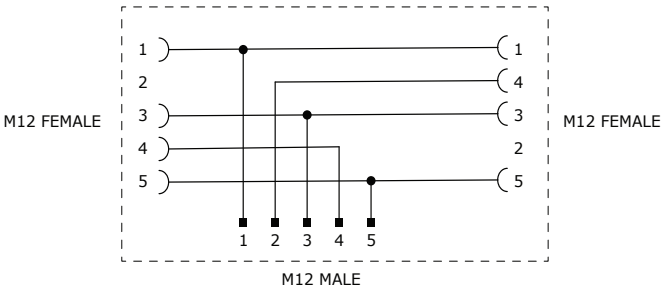
M12 T-Couplers						
Part Number	***Price***	***Trunk Connection***	***Number of Trunk Wires***	***Branch Connection***	***Number of Branch Wires***	***Drawing Link***
7000-41121-0000000	$20.50	1 M12 male	5	2 M12 female	4	PDF
7000-41141-0000000	$20.50				5	PDF
7000-41181-0000000	$20.50					PDF
7000-41201-0000000	$20.50		4	2 M8 female	3	PDF

M12 T-Couplers Specifications				
Model	***41121***	***41141***	***41181***	***41201***
Type	Trunk 5-Wire, 5-Pole Branch 4-Wire, 5-Pole	Trunk 5-Wire, 5-Pole Branch 5-Wire, 5-Pole	Trunk 5-Wire, 5-Pole Branch 4-Wire, 5-Pole	Trunk 4-Wire, 4-Pole Branch 3-Wire, 3-Pole
Max Voltage	60 VAC/VDC			50 VAC / 60 VDC
Max Voltage - UL Rating	30 VAC/VDC			
Max Current Per Contact	4A			
Temperature Range	-25 to 85°C [13 to 185°F]			
Protection Degree	IP67			
Nut Material	Male threads are nickel plated brass; Female threads are nickel plated die cast zinc			
Housing Material	Polyurethane (PUR)			
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft-lb]			
Weight	0.06 oz [27.21 g]			0.05 oz [22.68 g]
Approvals*	cULus			

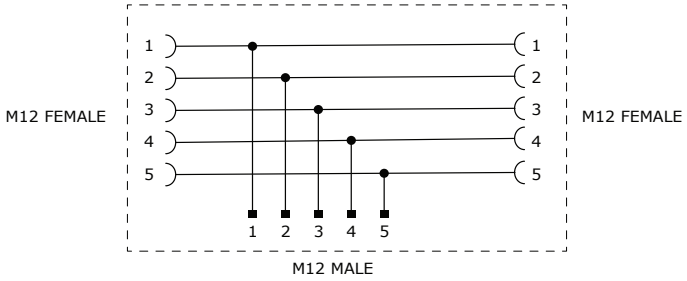
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Wiring Diagrams

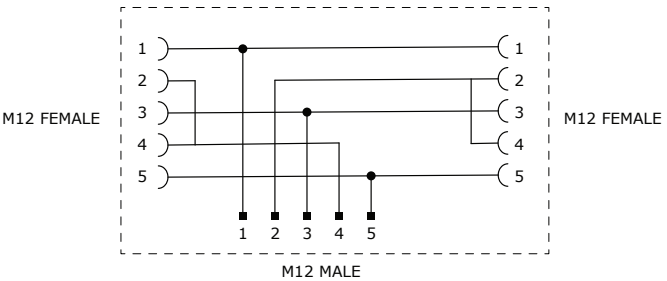
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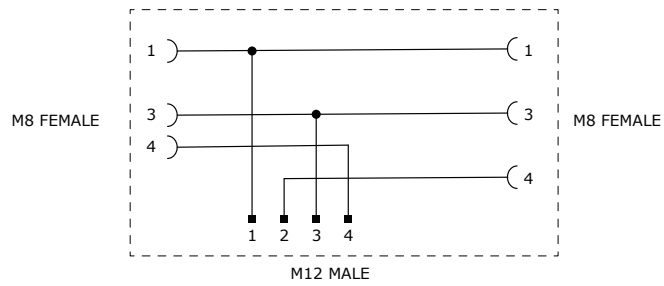
7000-41141-0000000



7000-41181-0000000



7000-41201-0000000



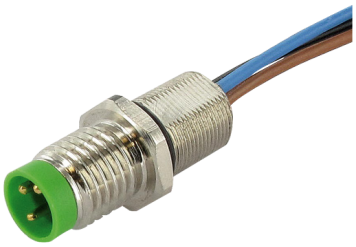
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M8 Bulkhead Connectors

M8 A-coded Bulkhead Connector to Pigtail

Features

- Male M8 to open leads connectors
- Metal housings

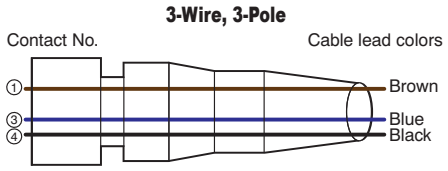


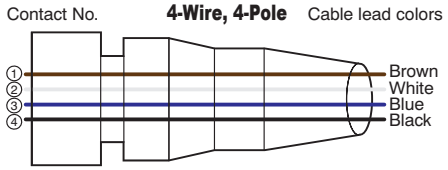
M8 A-coded Bulkhead Connectors to Pigtail					
Part Number	*Price*	*Cable Length*	*Number of Wires*	*Connector*	*Drawing Link*
7000-08553-9700050	$12.00	0.5 m [1.64 ft]	3	Axial male	PDF
7000-08563-9690050	$13.00		4		PDF
7000-08553-9700100	$13.00	1m [3.28 ft]	3		PDF
7000-08563-9690100	$14.00		4		PDF

M8 A-coded Bulkhead Connectors to Pigtail Specifications		
Model	*08553*	*08563*
Type	3-Wire, 3-Pole	4-Wire, 4-Pole
Nominal Voltage	50VAC / 60VDC	
Max Current Per Contact	4A	
Protection Degree	IP67 in mated condition and tightened NEMA 3, 4, 6P (UL50E)	
Threaded Material	Nickel plated brass	
Cable Jacket material	Polyurethane (PUR)	
Contacts Material	Copper Alloy	
Conductors Cross Section	0.25 mm² [24AWG]	
Mounting Hole Diameter	8.2 mm; max mounting material thickness: 4.5 mm	
Tightening Torque	≤ 0.4 N·m [≤ 0.34 ft-lb]	
Temperature Range	-40 to 90°C [-40 to 194°F]	
*Approvals**	cURus	

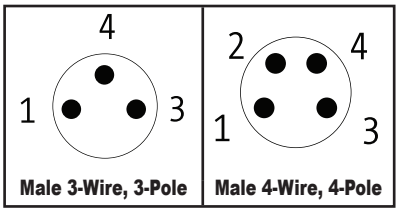
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Wiring Diagrams





Contact Diagrams



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M12 Bulkhead Connectors

M12 A-coded Bulkhead Connectors

Features

- Male or female M12 to pigtail open leads
- Male M12 to female M12 connectors
- Metal housings
- IP67 rated



7000-42111-0000000



7231-13501-9710050



7231-13541-9710050

M12 A-coded Bulkhead Connectors

Part Number	Price	Cable Length m [ft]	Number of Wires	Connector	Drawing Link
7000-42111-0000000	$22.50	N/A	5	Male to female	PDF
7000-48111-0000000	$29.50		8		PDF
7231-13501-9710050	$11.50	0.5 [1.64]	4	Male to leads	PDF
7231-13541-9710050	$11.50			Female to leads	PDF
7231-13501-9710100	$12.50	1 [3.28]		Male to leads	PDF
7231-13541-9710100	$12.50			Female to leads	PDF
7231-13521-9720050	$12.50	0.5 [1.64]	5	Male to leads	PDF
7231-13561-9720050	$12.50			Female to leads	PDF
7231-13521-9720100	$14.00	1 [3.28]		Male to leads	PDF
7231-13561-9720100	$14.00			Female to leads	PDF
7231-17161-9730050	$20.50	0.5 [1.64]	8	Male to leads	PDF
7231-17181-9730050	$20.50			Female to leads	PDF
7231-17161-9730100	$21.50	1 [3.28]		Male to leads	PDF
7231-17181-9730100	$21.50			Female to leads	PDF
7000-17162-9730050	$19.50	0.5 [1.64]	8	Male to leads	PDF
7000-17162-9820050	$19.50				PDF
7000-19162-9790050	$28.50		12		PDF
7000-17162-9730100	$21.00	1 [3.28]	8		PDF
7000-17162-9820100	$21.00				PDF
7000-19162-9790100	$29.50		12		PDF

M12 A-coded Bulkhead Connectors Specifications

Model	42111, 48111		13501, 13541	13521, 13561	17161, 17181, 17162	19162
Type	5-Wire, 5-Pole	8-Wire, 8-Pole	4-Wire, 5-Pole	5-Wire, 5-Pole	8-Wire, 8-Pole	12-Wire, 12-Pole
Max Voltage	60 VAC/VDC	30 VAC/VDC	250 VAC/VDC	125 VAC/VDC	30 VAC/VDC	
Max Voltage - UL Rating	30 VAC/VDC		250 VAC/VDC	125 VAC/VDC	30 VAC/VDC	
Max Current Per Contact	4A	2A	4A		2A	1.5 A
Protection Degree	IP65 / IP67 NEMA 3, 4, 6P (UL50E)		IP67 in mated condition and tightened, NEMA 3, 4, 6P (UL50E)			
Threaded Material	Male threads are nickel plated brass; Female threads are nickel plated die cast zinc					
Wire Insulation Material	N/A		PUR			PP
Contacts Material	Copper Alloy					
Conductors Cross Section	N/A		0.34 mm² [22AWG]		0.25 mm² [24AWG]	0.14mm² [26AWG]
Mounting Hole Diameter	16.1 mm; maximum mounting material thickness: 4.5 mm					
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft-lb]					
Temperature Range	-25 to 85°C [-13 to 185°F]		-40 to 90°C [-40 to 194°F]		-25 to 85°C [-13 to 185°F]	
Approvals *	cULus		UR			

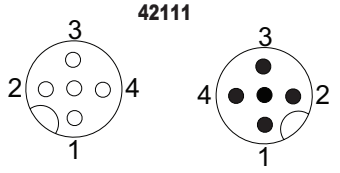
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

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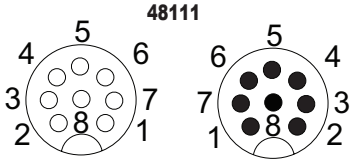
M12 Bulkhead Connectors

Contact Diagrams

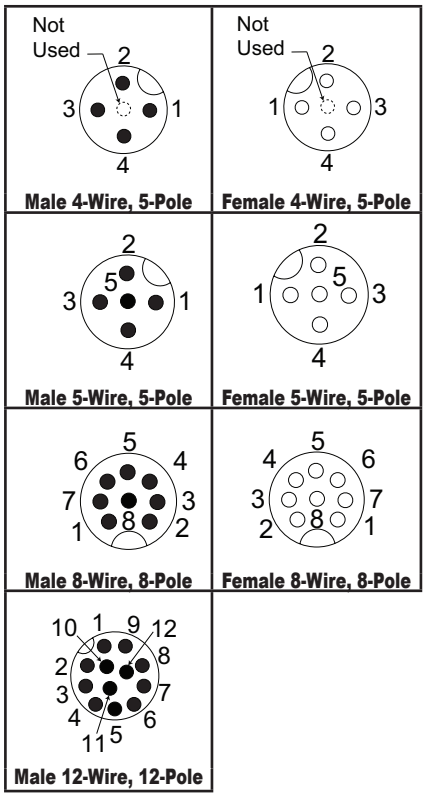
42111



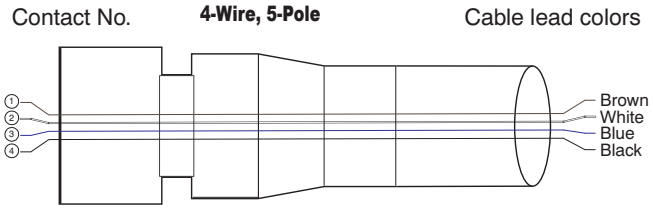
48111

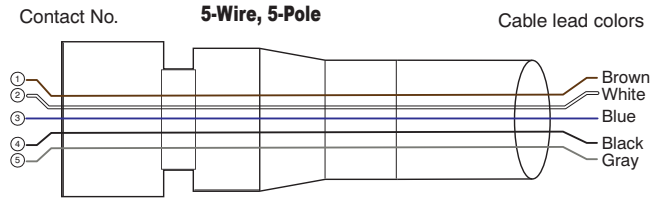


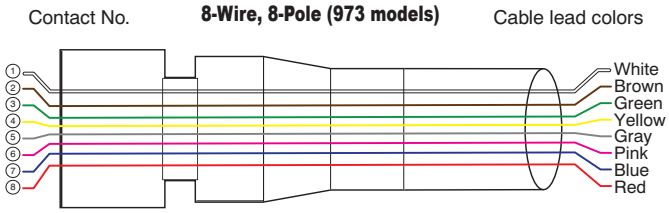
All other models

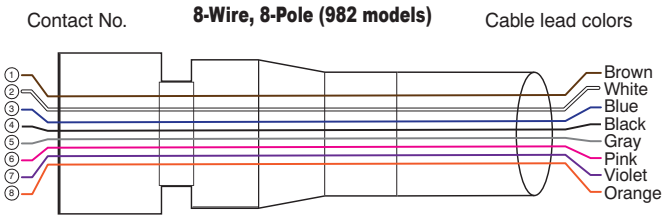


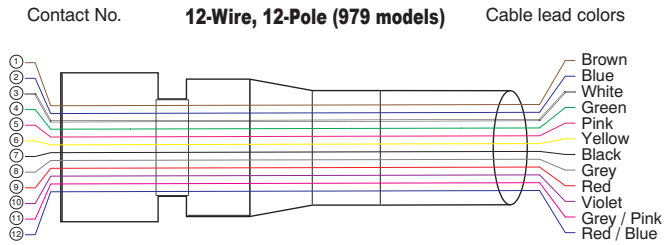
Wiring Diagrams











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Connection Cables - Data

Industrial Ethernet Shielded M12 D-coded Cables

Features

- High flex industrial Ethernet shielded Cat5e cables
- Resistant to welding sparks
- Flame retardant, chemical resistant
- TPE (thermoplastic elastomer) wire insulation for applications requiring high flexibility
- HDPE (High Density Polyethylene) wire insulation for excellent insulation properties and abrasion resistance

Ethernet Shielded M12 D-coded Cables

Part Number	Price	Number of Wires	Connectors	Cable Jacket/ Wire Insulation Material	Jacket Color	Length m [ft]	Drawing Link
7700-44511-S4U0060	$28.50	4	Axial male to axial male	Thermoplastic Elastomer (TPE) / High Density Polyethylene (HDPE)	Teal	0.6 [1.9]	PDF
7700-44511-S4U0100	$29.50					1.0 [3.2]	PDF
7700-44511-S4U0300	$37.00					3.0 [9.8]	PDF
7700-44511-S4U0500	$38.00					5.0 [16.4]	PDF
7700-44511-S4U0750	$46.50					7.5 [24.6]	PDF
7700-44511-S4U1000	$55.00					10 [32.8]	PDF
7700-44511-S4U1500	$74.00					15 [49.2]	PDF
7700-44541-S4U0060	$28.50		Axial male to 90-degree male			0.6 [1.9]	PDF
7700-44541-S4U0100	$29.50					1.0 [3.2]	PDF
7700-44541-S4U0300	$39.00					3.0 [9.8]	PDF
7700-44541-S4U0500	$40.50					5.0 [16.4]	PDF
7700-44541-S4U0750	$48.50					7.5 [24.6]	PDF
7700-44541-S4U1000	$58.00					10 [32.8]	PDF
7700-44541-S4U1500	$79.00					15 [49.2]	PDF
7700-44711-S4U0060	$27.50		Axial male to axial male RJ45			0.6 [1.9]	PDF
7700-44711-S4U0100	$28.50					1.0 [3.2]	PDF
7700-44711-S4U0300	$34.00					3.0 [9.8]	PDF
7700-44711-S4U0500	$38.00					5.0 [16.4]	PDF
7700-44711-S4U0750	$48.50					7.5 [24.6]	PDF
7700-44711-S4U1000	$57.00					10 [32.8]	PDF
7700-44711-S4U1500	$79.00					15 [49.2]	PDF
7700-44761-S4U0060	$27.50		90-degree male to axial male RJ45			0.6 [1.9]	PDF
7700-44761-S4U0100	$29.00					1.0 [3.2]	PDF
7700-44761-S4U0300	$35.00					3.0 [9.8]	PDF
7700-44761-S4U0500	$39.50					5.0 [16.4]	PDF
7700-44761-S4U0750	$48.50					7.5 [24.6]	PDF
7700-44761-S4U1000	$55.00					10 [32.8]	PDF
7700-44761-S4U1500	$74.00					15 [49.2]	PDF
7700-44851-S4U0050	$29.00		Female bulkhead to axial male RJ45			0.5 [1.6]	PDF
7700-44851-S4U0060	$31.00					0.6 [1.9]	PDF
7700-44851-S4U0100	$31.00					1.0 [3.2]	PDF



7700-44511 series



7700-44541 series



7700-44711 series



7700-44851 series

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Connection Cables - Data

Industrial Ethernet M12 D-coded Shielded Cables

Ethernet Shielded M12 D-coded Specifications					
Model	***44511***	***44541***	***44711***	***44761***	***44851***
Type	(M12) 4-Wire, 5-Pole; (RJ45) 4-Wire, 8-Pin				
Max Voltage	60VDC				
Max Voltage - UL Rating	60VDC	30VDC			
Max Current Per Contact	4A (UL Rated to 1.5 A)	4A	1.5 A		
Protection Degree	IP65 / IP66K / IP67		M12 IP67 RJ45 IP20		M12 IP67, Nema 3, 4, 6P (UL50E), RJ45 IP20
Nut Material	Nickel plated die cast zinc				
Cable Jacket/Wire Insulation Material	Thermoplastic Elastomer (TPE) / High Density Polyethylene (HDPE)				
Contacts Material	Copper Alloy				
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft·lb]				
Conductors Cross Section	24/7 AWG				
Ø Outer Cable	6.6 mm [0.26 in]				
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter				
Cable Temperature Range	-40 to 80°C [-40 to 176°F]				
Channel Transmission Length	max 70m				
Data Transmission Standard	CAT5e ISO/IEC 11801 (Class D - 100 MBit/s)				
Approvals*	cULus				

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

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Connection Cables - Data

Industrial Ethernet Shielded RJ45 Cables



7700-74301 series

Features

- High flex industrial Ethernet shielded Cat5e cables
- Resistant to welding sparks
- Flame retardant, chemical resistant
- TPE (thermoplastic elastomer) jacket for typical industrial applications
- HDPE (High Density Polyethylene) wire insulation for excellent insulation properties and abrasion resistance.

Industrial Ethernet Shielded RJ45 Cables

Part Number	Price	Number of Wires	Connectors	Cable Jacket/ Wire Insulation Material	Jacket Color	Length m [ft]	Drawing Link
7700-74301-S4U0060	$20.00	4	RJ45 axial male to RJ45 axial male	Thermoplastic Elastomer (TPE) / High Density Polyethylene (HDPE)	Teal	0.6 [1.9]	PDF
7700-74301-S4U0100	$21.00					1.0 [3.2]	PDF
7700-74301-S4U0300	$26.00					3.0 [9.8]	PDF
7700-74301-S4U0500	$33.50					5.0 [16.4]	PDF
7700-74301-S4U0750	$42.00					7.5 [24.6]	PDF
7700-74301-S4U1000	$51.00					10 [32.8]	PDF
7700-74301-S4U1500	$73.00					15 [49.2]	PDF

Industrial Ethernet Shielded RJ45 Cables Specifications

Model	74301
Type	4-Wire ,8-Pin
Max Voltage	60VDC
Max Voltage UL Rating	30VDC
Max Current Per Contact	1.5 A
Protection Degree	IP20
Cable Jacket/Wire Insulation Material	Thermoplastic Elastomer (TPE) / High Density Polyethylene (HDPE)
Contacts Material	Copper Alloy
Conductor Cross Section	24/7 AWG
Ø Outer Cable	6.6 mm [0.260 in]
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter
Cable Temperature Range	-40 to 80°C [-40 to 176°F]
Channel Transmission Length	max 70m
Data Transmission Standard	Cat5e (ISO/IEC 11801 (Class D - 100 MBit/s)
Approvals**	cULus

**To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

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Connection Cables - Data

Industrial Ethernet Shielded M12 D-coded to Pigtail Cables



7700-14541-series

Features

- High flex industrial Ethernet shielded Cat5e cables
- Resistant to welding sparks
- Flame retardant, chemical resistant
- TPE (thermoplastic elastomer) jacket for typical industrial applications
- HDPE (High Density Polyethylene) wire insulation for excellent insulation properties and abrasion resistance

Ethernet Shielded M12 D-coded to Pigtail Cables

Part Number	*Price*	*Number of Wires*	*Connector*	*Cable Jacket/ Wire Insulation Material*	*Jacket Color*	*Length m [ft]*	*Drawing Link*
7700-14541-S4U0060	$18.50	4	Axial male to pigtail	Thermoplastic Elastomer (TPE) / High Density Polyethylene (HDPE)	Teal	0.6 [1.9]	PDF
7700-14541-S4U0100	$20.00					1.0 [3.2]	PDF
7700-14541-S4U0300	$26.50					3.0 [9.8]	PDF
7700-14541-S4U0500	$32.00					5.0 [16.4]	PDF
7700-14541-S4U0750	$40.50					7.5 [24.6]	PDF
7700-14541-S4U1000	$48.50					10 [32.8]	PDF
7700-14541-S4U1500	$68.00					15 [49.2]	PDF

Ethernet Shielded M12 D-coded to Pigtail Cable Specifications

Model	*14541*
Type	4-Wire, 5-Pole
Max Voltage	60VDC
Max Voltage - UL Rating	30VDC
Max Current Per Contact	1.5 A
Protection Degree	IP65 / IP66K / IP67
Cable Jacket/Wire Insulation Material	Thermoplastic Elastomer (TPE) / High Density Polyethylene (HDPE)
Contacts Material	Copper Alloy
Conductors Cross Section	0.25 mm² [24AWG]
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft-lb]
Ø Outer Cable	~ 6.6 mm [0.260 in]
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter
Cable Temperature Range	-40 to 80°C [-40 to 176°F]
Channel Transmission Length	max 70m
Data Transmission Standard	Cat5e, (ISO/IEC 11801), (Class D - 100 MBit/s)
*Approvals**	cULus

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

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Field Wireable Connectors - Data

Shielded M12 D-coded Connectors

Features

- IP65/IP67 protection rating
- Ethernet Cat5
- Mounting nuts included



7000-14801-0000000



7000-14811-0000000

Shielded M12 D-coded Connectors Selector Table

Part Number	Price	Number of Wires, Pins	Connection Type	Conductor Size	Terminal Connection	Cable Ø Range	Drawing Link
7000-14521-0000000	$39.00	4-Wire, 4-Pin	Axial male with male threads	26–22 AWG [0.14–0.34 mm²]	Insulation displacement (IDC)	4.5–8.8 mm [0.18–0.35 in]	PDF
7000-14621-0000000	$45.00		Axial female with female threads				PDF
7000-14581-0000000	$32.50		90-degree male with male threads	22–18 AWG [0.34–0.75 mm²] max	Screw	6–8mm [0.23–0.31 in]	PDF
7000-14801-0000000	$22.00		Axial male with male threads	26–18AWG [0.14–0.75 mm²]	Push-lock spring clamp	4–8mm [0.15– 0.31 in]	PDF
7000-14811-0000000	$40.50		90-degree male with male threads				PDF

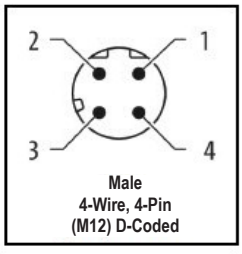
Shielded M12 D-coded Connectors

Coding	D-coded			
Model	14521, 14621	14581	14801	14811
Max. Voltage	32 VAC/VDC	250 VAC/VDC	60VDC	
Max. Current per Contact	4A			
Transmission Type	Cat5			
Bandwidth	100 MBit/s	100 MHz		
Temperature Range	-25 to 85°C [-13 to 185°F]	40 to 85°C [-40 to 185°F]		
Protection Degree	IP65, IP67	IP67	IP65, IP67	
Housing Material	Polypropylene (PP)	Nickel plated zinc die cast		
Locking Material	Zinc die-cast, nickel-plated			
Weight	1.90 oz [54g]	0.03 oz [67g]	1.34 oz [38g]	1.41 oz [40g]
Approvals*	cURus E224242	cULus E325311		

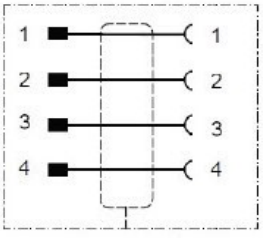
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Pin Assignments

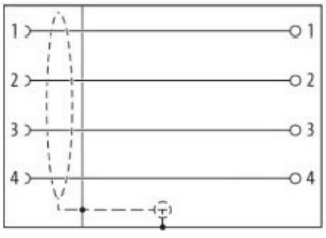
LEGEND
■ MALE PIN ON CONNECTOR
○ FEMALE PIN ON CONNECTOR
(FIELD CONNECTION TERMINAL

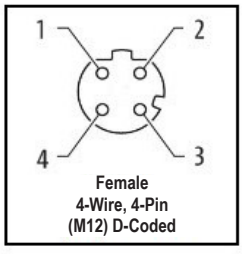


Male
4-Wire, 4-Pin
(M12) D-Coded



Yellow (TD+)
White (RD+)
Orange (TD-)
Blue (RD-)
Shield



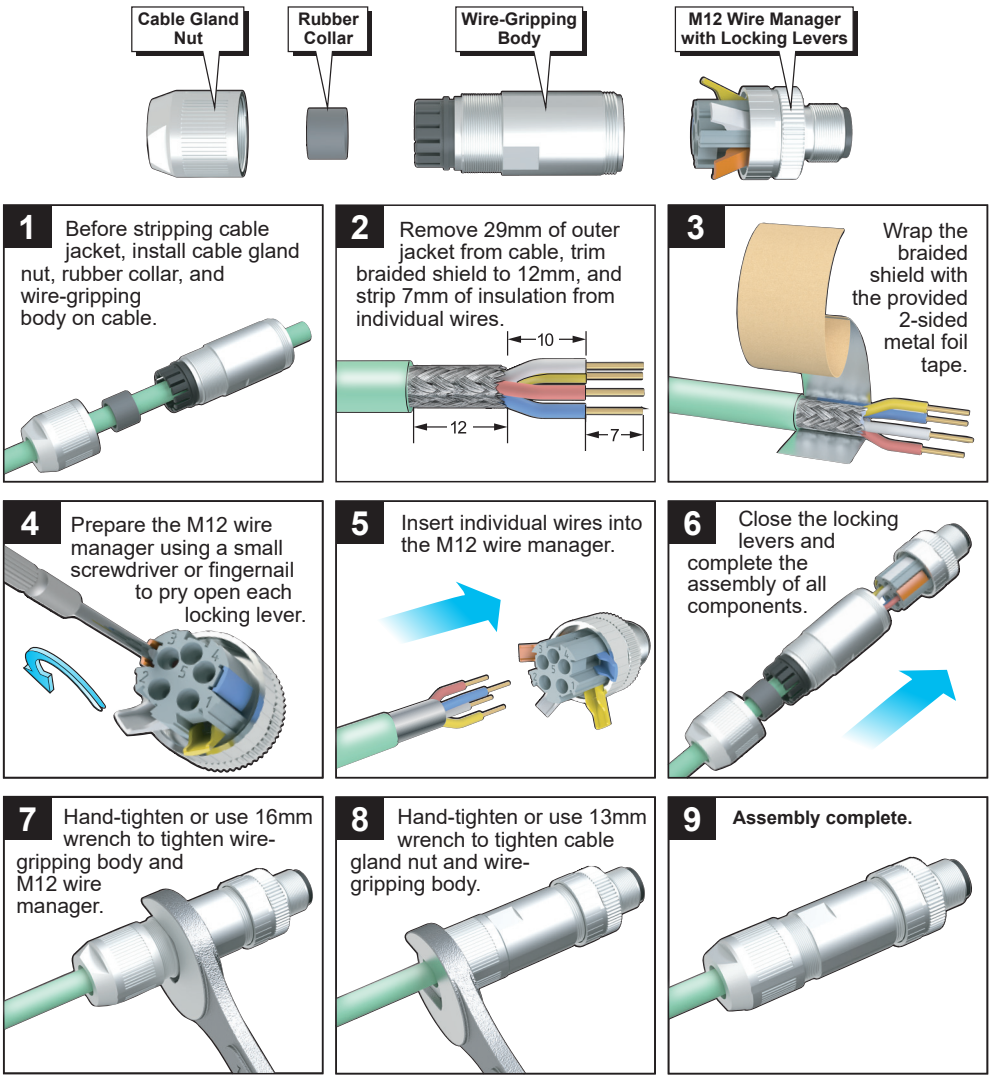


Female
4-Wire, 4-Pin
(M12) D-Coded

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Field Wireable Connectors - Data

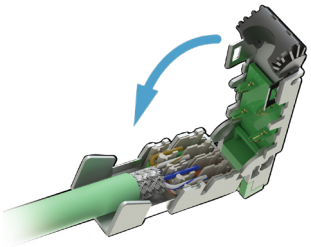
Assembly Instructions for M12 D-coded Push-lock Spring Clamp Connectors



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Field Wireable Connectors - Data

Shielded RJ45 IDC Field Wireable Connectors



Features

- Insulation displacement connector (IDC)
- Cat5, Cat5e, and Cat6 models available
- Available in axial, 45°, and 90° outlets


7000-74001-0000000


7000-74031-0000000


7000-74075-0000000


7000-74085-0000000

Shielded RJ45 IDC Field Wireable Connectors							
Part Number	*Price*	*Wire Size*	*Number of Wires*	*Connector Type*	*Connection*	*Housing Material*	*Drawing Link*
7000-74001-0000000	$22.00	26 to 22 AWG	4	RJ45 axial male	Cat5	Polyvinyl chloride (PVC) Polyethylene (PE)	PDF
7000-74011-0000000	$25.50		8		Cat6		PDF
7000-74021-0000000	$24.00		4	RJ45 male 45-degree	Cat5		PDF
7000-74031-0000000	$27.50		8		Cat6		PDF
7000-74075-0000000	$27.00	26 to 24 AWG		RJ45 axial male	Cat5e	Die-cast zinc	PDF
7000-74085-0000000	$29.00			RJ45 90-degree male	Cat5e		PDF

Shielded RJ45 IDC Field Wireable Connectors Specifications			
Model	*74001, 74021*	*74011, 74031*	*74075, 74085*
Type	RJ45: 4-Wire, 4-Pin	RJ45: 8-Wire, 8-Pin	RJ45: 8-Wire, 8-Pin
Maximum Voltage	60VDC		50V
Maximum Current per Contact	1.76 A		1.75 A
Transmission Type	Cat5	Cat6	Cat5e
Transfer Rate	10/100 Mbps	10 Gbit/s	1 Gbit/s
Bandwidth	100 MHz	250 MHz	100 MHz
Temperature Range	-40 to 70°C [-40 to 158°F]		
Protection Degree	IP20		
Wire Ø	max 1.6 mm		
Outside Cable Ø	5 to 9mm (74001, 74011), 5 to 8mm (74021, 74031)		5 to 9 mm
Conductor Cross Section	0.14 to 0.34 mm² [26 to 22 AWG]		0.14 to 0.25 mm² [26 to 24 AWG]
Housing Material	Polyvinyl chloride(PVC) / Polyethylene (PE)		Zinc die casting
Contact Material	—		Gold-plated
*Approvals**	cURus		cULus

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Pin Assignments

74001,74021
Industrial



74075,74085
Ethernet, AWG 24 - 26

568-A



568-B



74011,74031

568-B



568-A



Industrial

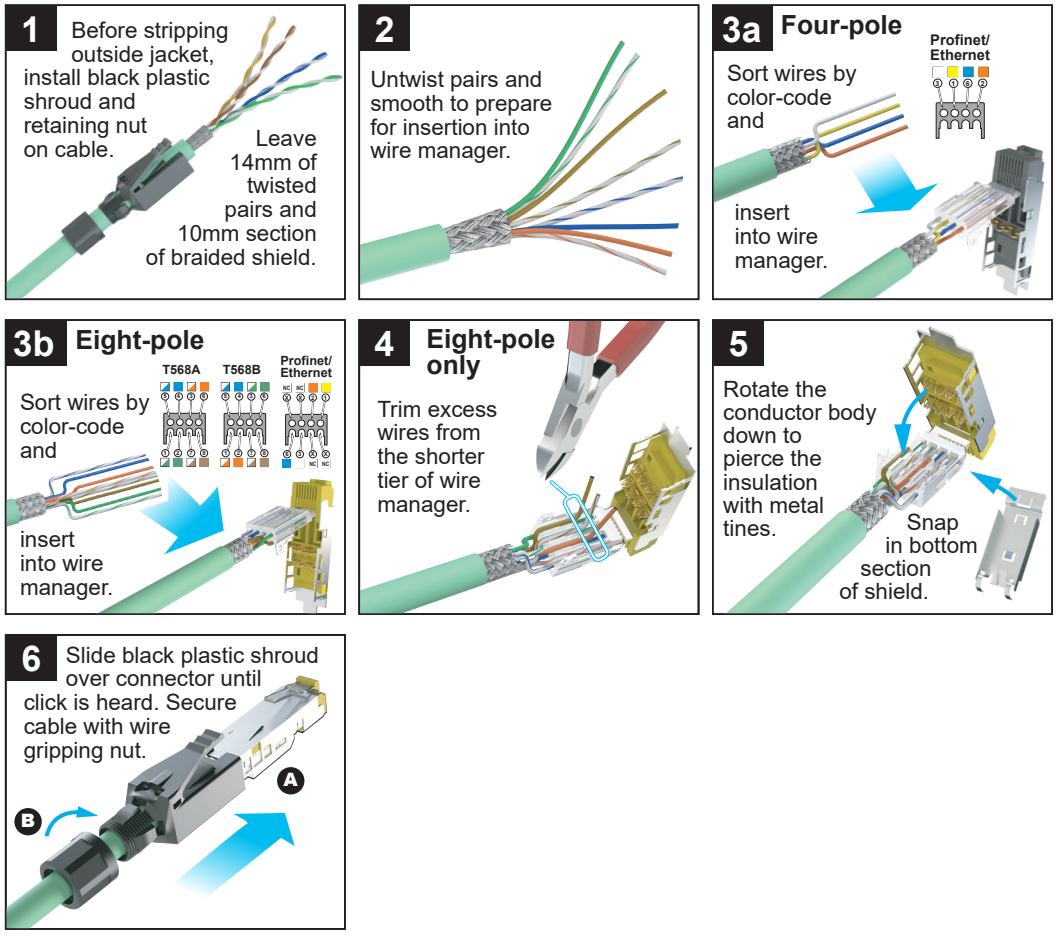


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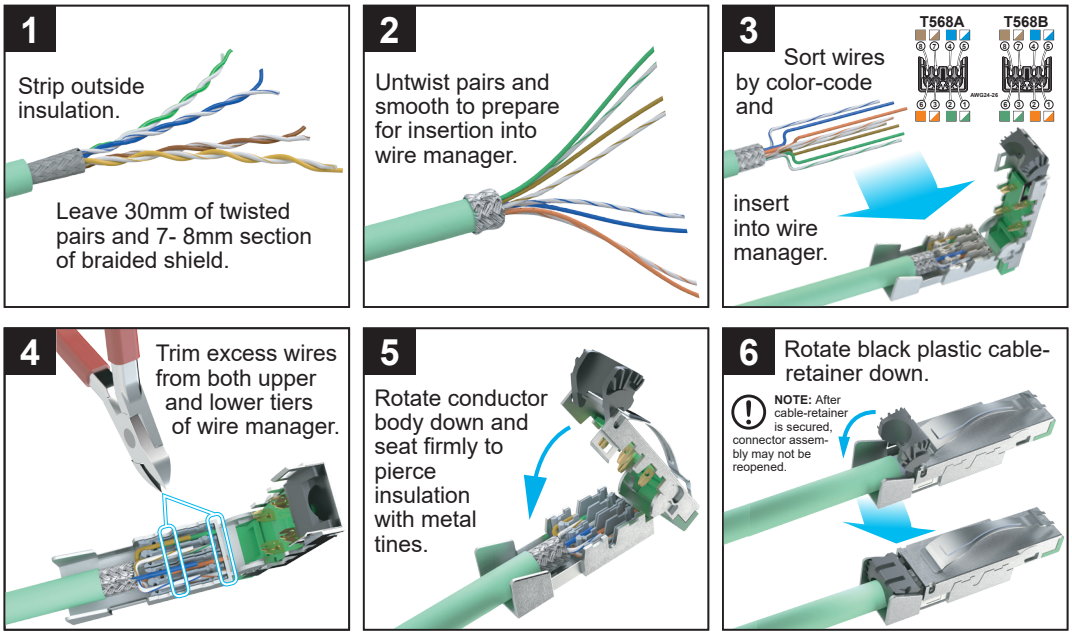
Field Wireable Connectors - Data

Assembly Instructions

Part Numbers: 7000-74001-0000000, 7000-74011-0000000, 7000-74021-0000000, 7000-74031-0000000



Part Numbers: 7000-74075-0000000, 7000-74085-0000000



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Field Wireable Connectors - Data

Shielded RJ45 M12 D-coded Bulkhead Connectors

Features

- Axial or 90-degree models
- Mounting nuts included
- Plastic housing



7000-44671-0000000



7000-44681-0000000

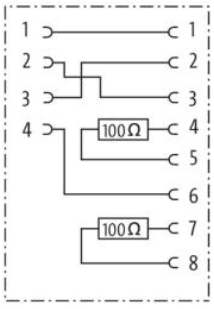
Shielded RJ45 M12 D-coded Bulkhead Connectors							
Part Number	***Price***	***Wire Size***	***Number of Wires***	***Connector Type***	***Connection***	***Housing Material***	***Drawing Link***
7000-44671-0000000	$32.50	N/A	4	M12 D-coded axial female to RJ45 axial male	Cat5	Polyurethane (PUR)	PDF
7000-44681-0000000	$33.00			M12 D-coded axial female to RJ45 90-degree female			PDF

Shielded RJ45 M12 D-coded Bulkhead Connectors Specifications	
Model	***44671, 44681***
Type	M12: 4-Wire, 4-Pole
Maximum Voltage	60VDC
Maximum Current per Contact	1.76 A
Transmission Type	Cat5
Bandwidth	100 MHz
Temperature Range	-25 to 85°C [-13 to 185°F]
Protection Degree	IP68 (M12); IP20 (RJ45)
Housing Mounting Panel Thickness	2.0 to 5.0 mm [0.08 to 0.20 in]
Housing Mounting Tightening Torque	0.6 N•m [5.3 in-lb]
Housing Material	Polyurethane (PUR)
Approvals*	cULus

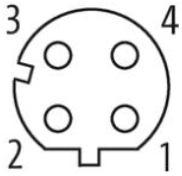
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Pin Assignments

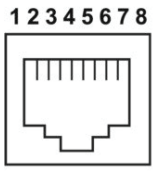
M12 **RJ45**



Female

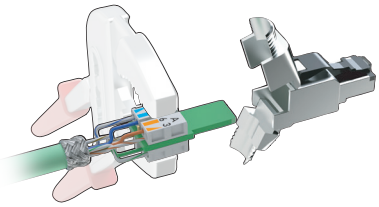


Female



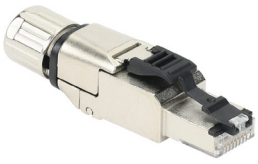
Field Wireable Connectors - Data

Shielded RJ45 IDC Field Wireable Connectors



Features

- Insulation displacement connector (IDC)
- Cat6a (Gigabit)
- 5-year warranty



490174



490152

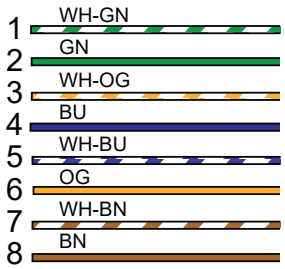
Shielded RJ45 IDC Field Wireable Connectors							
Part Number	*Price*	*Wire Size*	*Number of Wires*	*Connector Type*	*Connection*	*Conductor Color Code*	*Drawing Link*
490174	$37.50	5.5-10mm	8	RJ45 male axial 8-wire/8-pin	Cat6a	TIA-568B	PDF
490175	$37.50					TIA-568A	PDF
490176	$37.50					TIA-568B	PDF
490151	$40.00			RJ45 male 90-degree 8-wire/8-pin		TIA-568B	PDF
490152	$44.00					TIA-568A	PDF
490153	$40.00					TIA-568B	PDF

Shielded RJ45 IDC Field Wireable Connectors Specifications						
Model	490174	490175	490176	490151	490152	490153
Type	RJ45 Axial 8-Wire, 8-Pin			RJ45 90-degree 8-wire, 8-Pin		
Rated Voltage	30V					
Maximum Current per Contact	≤1A					
Degree of Pollution	1					
Transmission Type	Cat6a					
Transfer Rate	10 Gbit/s					
Bandwidth	500 MHz					
Operating Temperature Range	-40 to 85°C [-40 to 185°F]					
Protection Degree	IP20					
Flammability	V0 according to UL 94					
Wire Ø	1 to 1.6 mm		0.85 to 1.1 mm	1 to 1.6 mm		0.85 to 1.1 mm
Outside Cable Ø	5.5 to 10mm					
Conductor Cross Section	24-22 AWG [0.25 to 0.34 mm²]		26-22 AWG [0-14 to 0.34 mm²]	24-22 AWG [0.25 to 0.34 mm²]		26-22 AWG [0-14 to 0.34 mm²]
Housing Material	Die-cast zinc					
Cover Material	Polybutylene terephthalate (PBT)					
Contact Material	Spring steel gold-plated					
*Approvals**	cULus					

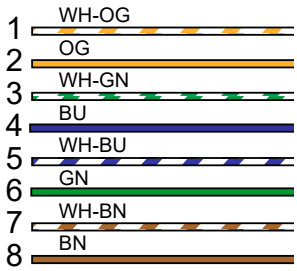
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Pin Assignments

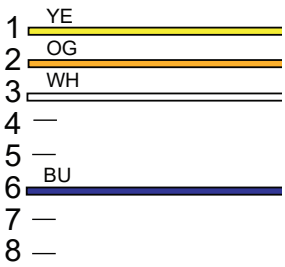
TIA-T568A



TIA-T568B



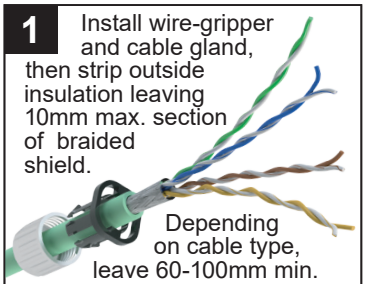
Profinet/Industrial



Shielded RJ45 IDC Field Wireable Connectors

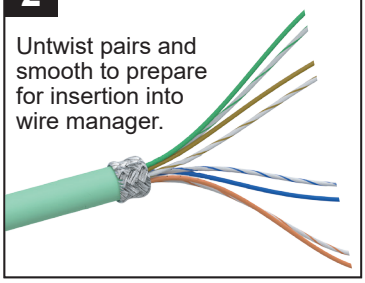
Assembly Instructions

1 Install wire-gripper and cable gland, then strip outside insulation leaving 10mm max. section of braided shield.

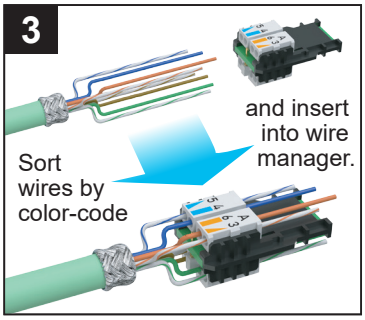


Depending on cable type, leave 60-100mm min. section of twisted pairs.

2 Untwist pairs and smooth to prepare for insertion into wire manager.



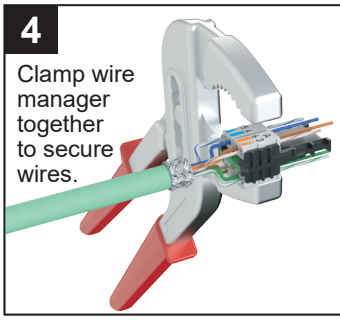
3



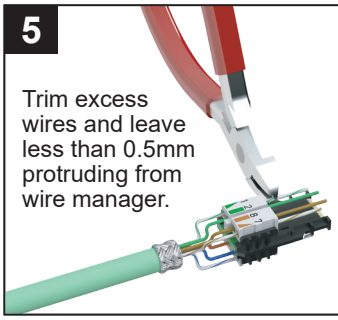
Sort wires by color-code

and insert into wire manager.

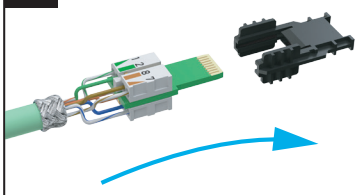
4 Clamp wire manager together to secure wires.



5 Trim excess wires and leave less than 0.5mm protruding from wire manager.

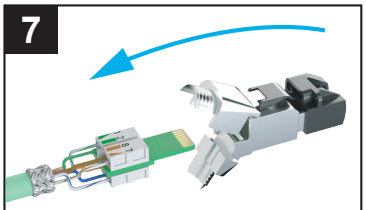


6



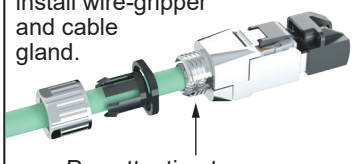
Remove assembly aid from the wire manager.

7



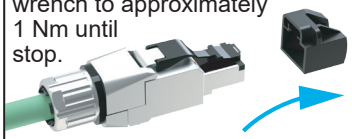
Install the wire manager into the Lutze RJ45 Field Wireable Connector.

8 Press half-shells together, then install wire-gripper and cable gland.



Pay attention to position of braided shield.

9 Tighten cable gland with 13mm wrench to approximately 1 Nm until stop.



Remove protective cap to begin use.

Field Wireable Connectors - Data

Shielded RJ45 to RJ45 Bulkhead Connectors

Features

- Cat5e or Cat6a models available
- Mounting hardware included
- 5-year warranty



492075



492076

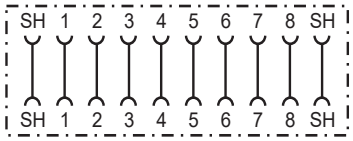
Shielded RJ45 to RJ45 Bulkhead Connectors						
Part Number	Price	Number of Wires	Connector Type		Connection	Drawing Link
			Exterior	Interior		
492075	$45.00	8	RJ45 female 8-wire/8-pin	RJ45 female 8-wire/8-pin	Cat5e	PDF
492076	$44.00		RJ45 female 8-wire/8-pin	RJ45 female 8-wire/8-pin	Cat6a	PDF

Shielded RJ45 to RJ45 Bulkhead Connectors Specifications		
Model	492075	492076
Type	RJ45:8-Wire, 8-Pin	
Rated Voltage	24V AC/DC	
Maximum Operating Voltage	50V	
Rated Current	1.5 A	
Transmission Type	Cat5e	Cat6a
Transfer Rate	1 Gbit/s	10 Gbit/s
Bandwidth	500 MHz	
Operating Temperature Range	-25 to 70°C [-13 to 158°F]	
Protection Degree	IP65 UL508E Type 2, 3R, 4, 4X ,12, 13 (cover closed), IP20 (cable inserted)	
Housing Mounting	Front installation	
Housing Mounting Hole Size	22.5 mm	
Housing Mounting Panel Thickness	1.0 to 5.0 mm [0.04in to 0.20 in]	
Housing Mounting Tightening Torque	1.2 to 2 N•m [10.6 to 17.7 in-lb]	
Housing Material	Polyamide/thermoplastic (PA) / Polybutylene terephthalate (PBT)	
Cover Material	Thermoplastic polyurethane (TPU)	
Contact Material	Copper Tin Alloy (CuSn) gold plated	
Approvals*	cULus File E326112	

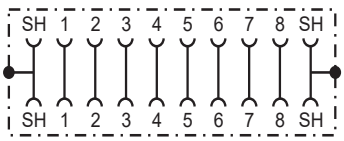
*To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

Wiring Diagrams

492075

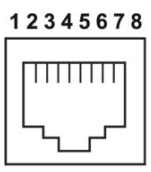


492076

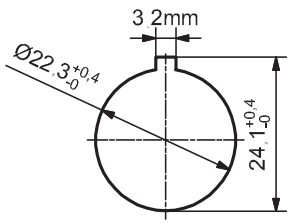


Pin Assignment

RJ45 Female



Mounting Diagram



Field Wireable Connectors - Data

DIN Rail Holder for Shielded IDC Field Wireable Connectors



490238

Features

- Insulation displacement connector (IDC)
- Cat6a (Gigabit)
- 5-year warranty

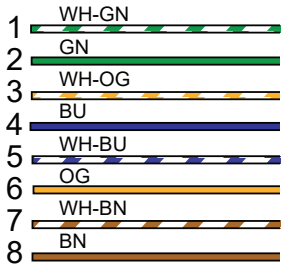
DIN Rail Holder for Shielded IDC Field Wireable Connectors						
Part Number	***Price***	***Number of Wires***	***Connector Type***	***Connection***	***Conductor Color Code***	***Drawing Link***
490209	$30.50	8	RJ45 female axial 8-wire/8-pin	Cat6a	TIA-568B	PDF
490238	$30.50		RJ45 female axial 8-wire/8-pin		TIA-568A	PDF

DIN Rail Holder for Shielded IDC Field Wireable Connectors Specifications		
Model	***490209***	***490238***
Type	RJ45:8-Wire, 8-Pin	
Rated Voltage	24V AC/DC	
Max. Current Per Contact	≤1A	
Transmission Type	Cat6a	
Transfer Rate	10 Gbit/s	
Bandwidth	500 MHz	
Operating Temperature Range	-40 to 85°C [-40 to 185°F]	
Protection Degree	IP20	
Flammability	V0 according to UL 94	
Wire Ø	0.9 to 1.6 mm	
Outside Cable Ø	9mm	
Conductor Cross Section	26-22 AWG [0-14 to 0.34 mm^2]	
DIN rail Holder Material	Polycarbonate (PC)	
Contact Material	Copper Tin Alloy (CuSn) gold plated	
Approvals*	cULus	

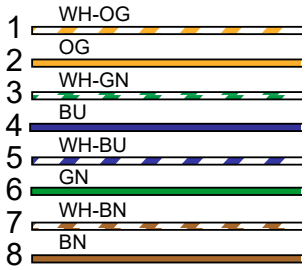
***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

Pin Assignments

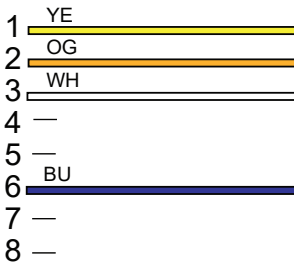
TIA-T568A



TIA-T568B



Profinet/Industrial



LUTZE SYSTEMATIC TECHNOLOGY

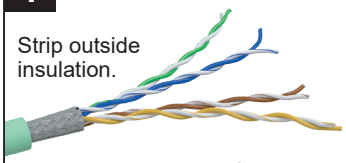
Field Wireable Connectors - Data

DIN Rail Holder for Shielded IDC Field Wireable Connectors

Assembly/Disassembly Instructions

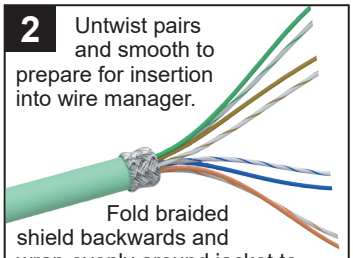
1 Prepare RJ45 connector

Strip outside insulation.



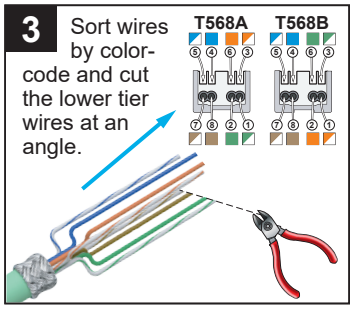
Leave min. 40mm of twisted pairs and 10-15 mm section of braided shield.

2 Untwist pairs and smooth to prepare for insertion into wire manager.

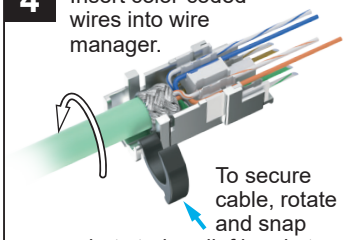


Fold braided shield backwards and wrap evenly around jacket to form band approx. 6 mm wide.

3 Sort wires by color-code and cut the lower tier wires at an angle.



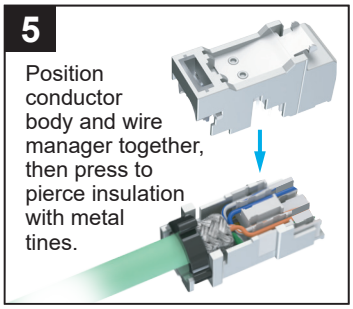
4 Insert color-coded wires into wire manager.



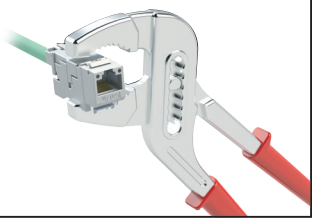
To secure cable, rotate and snap shut strain-relief bracket.

5

Position conductor body and wire manager together, then press to pierce insulation with metal tines.

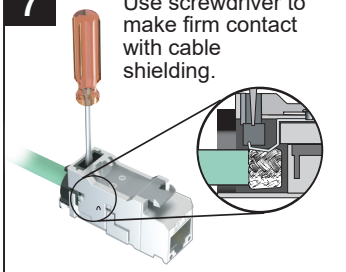


6 Compress conductor and wire manager bodies together with appropriate tool.



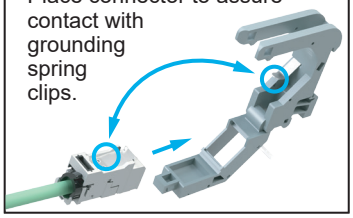
7

Use screwdriver to make firm contact with cable shielding.



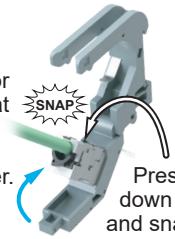
8 Insert RJ45 connector into DIN rail holder

Place connector to assure contact with grounding spring clips.



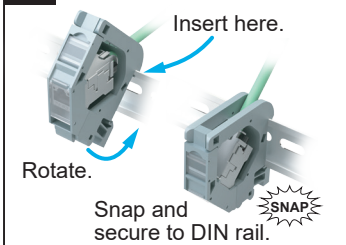
9

Rotate connector up to seat and lock into DIN rail holder.

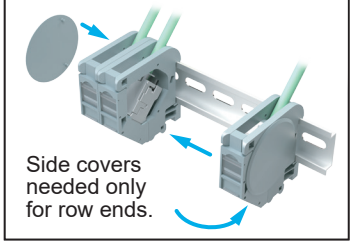


Press down here and snap in to engage lock.

10 Mount assembly on DIN rail



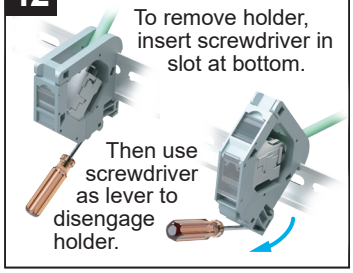
11 Slide together modules on DIN rail to form a row.



Side covers needed only for row ends.

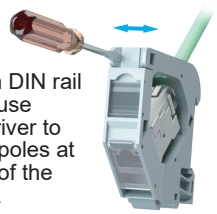
12 Remove from DIN Rail

To remove holder, insert screwdriver in slot at bottom.



Then use screwdriver as lever to disengage holder.

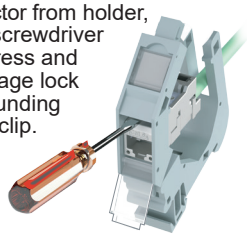
13



To open DIN rail holder, use screwdriver to spread poles at the top of the module.

14

To remove the RJ45 connector from holder, place screwdriver to depress and disengage lock on grounding spring clip.



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Connection Cables - Power

M12 L-coded Cables

Features

- Resistant to welding sparks
- Flame retardant, chemical resistant
- 600V cable insulation rating
- TPE (thermoplastic elastomer) jacket for typical industrial applications
- PVC (polyvinyl chloride) jacketed cable for general use and chemical washdown applications, ex. food & beverage industry

M12 L-coded Cables

Part Number	Price	Number of Wires	Connector	Wire Size	Amperage Rating	Cable Jacket/ Wire Insulation Material	Jacket Color	Length m [ft]	Drawing Link
7700-P4241-U0P0200	$70.00	5	Axial male to axial female	14AWG	16A	Thermoplastic Elastomer (TPE) / Polyvinyl Chloride (PVC)	Yellow	2.0 [6.5]	PDF
7700-P4241-U0P0300	$82.00							3.0 [9.8]	PDF
7700-P4241-U0P0500	$106.00							5.0 [16.4]	PDF
7700-P4241-U0P0750	$136.00							7.5 [24.6]	PDF
7700-P4241-U0P1000	$166.00							10 [32.8]	PDF
7700-P4241-U0P1500	$227.00							15 [49.2]	PDF
7700-P4241-U0D0200	$63.00			16AWG	12A			2.0 [6.5]	PDF
7700-P4241-U0D0300	$73.00							3.0 [9.8]	PDF
7700-P4241-U0D0500	$90.00							5.0 [16.4]	PDF
7700-P4241-U0D0750	$111.00							7.5 [24.6]	PDF
7700-P4241-U0D1000	$133.00							10 [32.8]	PDF
7700-P4241-U0D1500	$176.00							15 [49.2]	PDF
7700-P4201-U0P0200	$43.00		Axial male to pigtail	14AWG	16A			2.0 [6.5]	PDF
7700-P4201-U0P0300	$55.00							3.0 [9.8]	PDF
7700-P4201-U0P0500	$77.00							5.0 [16.4]	PDF
7700-P4201-U0P0750	$104.00							7.5 [24.6]	PDF
7700-P4201-U0P1000	$131.00							10 [32.8]	PDF
7700-P4201-U0P1500	$187.00							15 [49.2]	PDF
7700-P4201-U0D0200	$38.00			16AWG	12A			2.0 [6.5]	PDF
7700-P4201-U0D0300	$45.00							3.0 [9.8]	PDF
7700-P4201-U0D0500	$61.00							5.0 [16.4]	PDF
7700-P4201-U0D0750	$81.00							7.5 [24.6]	PDF
7700-P4201-U0D1000	$101.00							10 [32.8]	PDF
7700-P4201-U0D1500	$138.00							15 [49.2]	PDF
7700-P4221-U0P0200	$44.00		Axial female to pigtail	14AWG	16A			2.0 [6.5]	PDF
7700-P4221-U0P0300	$54.00							3.0 [9.8]	PDF
7700-P4221-U0P0500	$75.00							5.0 [16.4]	PDF
7700-P4221-U0P0750	$102.00							7.5 [24.6]	PDF
7700-P4221-U0P1000	$127.00							10 [32.8]	PDF
7700-P4221-U0P1500	$181.00							15 [49.2]	PDF
7700-P4221-U0D0200	$39.50			16AWG	12A			2.0 [6.5]	PDF
7700-P4221-U0D0300	$47.50							3.0 [9.8]	PDF
7700-P4221-U0D0500	$62.00							5.0 [16.4]	PDF
7700-P4221-U0D0750	$81.00							7.5 [24.6]	PDF
7700-P4221-U0D1000	$101.00							10 [32.8]	PDF
7700-P4221-U0D1500	$138.00							15 [49.2]	PDF



7700-P4241 series



7700-P4201 series



7700-P4221 series

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Connection Cables - Power

M12 L-coded Cables Specifications

M12 L-coded Cables Specifications		
Model	7000-xxxxx-U0Pxxxx	7000-xxxxx-U0Dxxxx
Type	5-Wire, 5-Pole	
Max Voltage	63VDC	
Max Current Per Contact	16A	12A
Protection Degree	IP65 / IP67	
Nut Material	Male threads are nickel plated brass; Female threads are nickel plated die cast zinc	
Cable Jacket/Wire Insulation Material	TPE/PVC	
Contacts Material	Copper Alloy	
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft·lb]	
Conductors Cross Section	2.11 mm^2 [14AWG]	1.31 mm^2 [16AWG]
Ø Outer Cable	10.5 mm [0.415 in]	9.8 mm [0.385 in]
Temperature Range - Stationary Use	-50 to 105°C [-58 to 221°F]	
Temperature Range - Flexible Use	-20 to 90C [-4 to 194F]	
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter	
Approvals*	cULus, CE	

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

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Connection Cables - Power

M12 L-coded Adapter Cable and T-Coupler

- Use to convert a 7/8-16 connection to M12 L-coded connection



7000-P4541-P040200

M12 L-coded to 7/8" Adapter Cable							
Part Number	Price	Number of Wires	Connectors	Jacket		Length	Drawing Link
				Material	Color	m [ft]	
7000-P4541-P040200	$80.00	5	M12 axial female to 7/8" axial male	PUR/PP	Black	2 [6.5]	PDF

Adapter Cable M12 L-coded to 7/8" Specifications	
Type	5-Wire, 5-Pole
Max Voltage	63 VAC/VDC
Max Current	12A
Connection	Connector 1: M12 L-coded axial female Connector 2: 7/8" axial male
Tightening Torque	M12: 0.6 N·m [0.44 ft·lb]; 7/8": 1.5 N·m [1.1 ft·lb]
Conductors Cross Section	1.5mm² [16AWG]
Locking Material	Male threads are nickel plated brass; Female threads are nickel plated die cast zinc
Protection Degree	IP67
Ø Outer Cable	8.2 mm [0.32 in]
Min Bend Radius	Stationary use: 5 x cable diameter; Flexible use: 10 x cable diameter
Temperature Range - Stationary Use	-50 to 80°C [-58 to 176°F]
Temperature Range - Flexible Use	-25 to 80°C [-13 to 176°F]
Contact Material	Copper Alloy
Agency Approvals *	NA

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

M12 L-coded T-Coupler



7000-P4901-0000000

M12 L-coded T-Coupler					
Part Number	Price	Number of Poles	Connectors	Wiring	Drawing Link
7000-P4901-0000000	$122.00	5	Axial male to (2) axial female	1- 1 - 1 2 - 2 - 2 3 - 3 - 3 4 - 4 - 4 FE - FE - FE	PDF

M12 L-coded T-Coupler Specifications	
Type	5-Wire, 5-Pole
Max Voltage	63VDC
Max Current	16A
Connection	M12 L-coded
Tightening Torque	≤ 0.6 N·m [≤ 0.44 ft·lb]
Locking Material	Male threads are nickel plated brass; Female threads are nickel plated die cast zinc
Protection Degree	IP65 / IP67 / IP68
Temperature Range	-30 to 90°C [-22 to 194°F]
Material	Housing (TPU), Contact Carrier (PA), Contact (Brass, gold plated)
Approvals*	cULus, CE

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

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Field Wireable Connectors - Power

M12 L-coded Connectors

Features

- IP65/IP67 protection rating
- Available with screw or push-lock spring clamp terminal connections



7000-P4591-0000000



7000-P4611-0000000



7000-P4651-0000000



7000-P4661-0000000

M12 L-coded Connectors Selector Table

Part Number	Price	Number of Wires, Pins	Connection Type	Conductor Wire	Terminal Connection	Cable Ø Range	Drawing Link
7000-P4591-0000000	$32.00	5-Wire, 5-Pin	Axial male with male threads	1.5–2.5 mm² [16–14AWG]	Screw terminal	8–13mm [0.31–0.51 in]	PDF
7000-P4611-0000000	$32.00		Axial female with female threads				PDF
7000-P4651-0000000	$40.50		Axial male with male threads	1.5–2.5 mm² [16–14 AWG]	Push-lock spring clamp	9–13mm [0.35–0.51 in]	PDF
7000-P4661-0000000	$42.00		Axial female with female threads				PDF

M12 L-coded Connector Specifications

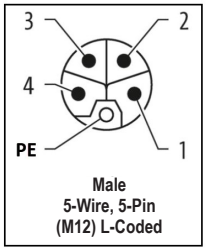
Coding	L-coded	
Model	P4591, P4611	P4651, P4661
Max. Voltage	63V	
Max. Current per Contact	16A	
Protection Degree	IP67	IP65
Temperature Range	-40 to 85°C [-40 to 185°F]	
Wire Connection	Screw terminal; M2.5x0.45 mm², torque to 40 N·m [29.5 ft-lb]	Push-lock spring clamp 0.6 N•m [0.44 ft-lb]
Wire Connection Cross Section	1.5 mm² [16AWG] (with wire end ferrule); 2.5 mm² [14AWG] (without wire end ferrule)	0.75–2.5 mm² [18–14AWG] (with wire end ferrule) 1.5–2.5 mm² [16–14AWG] (without wire end ferrule)
Housing Material	Polyamide (PA)	Nickel-plated brass (NPB)
Locking Material	Male threads are nickel plated brass; Female threads are nickel plated die cast zinc	Brass
Weight	P4591 0.95 oz [27g] P4611 1.94 oz [55g]	P4651 2.6 oz [73.70 g] P4661 3.25 oz [92.13 g]
Approvals*	cURus	cULus

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

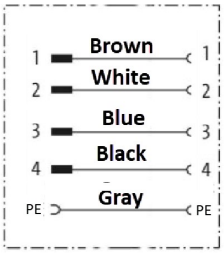
Pin Assignments

LEGEND
■ MALE PIN ON CONNECTOR
○ FEMALE PIN ON CONNECTOR
(FIELD CONNECTION TERMINAL

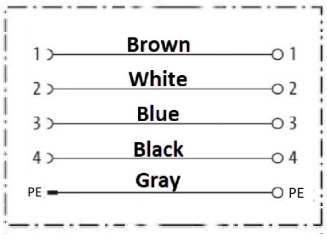
Part Numbers: 7000-P4591-0000000 and 7000-P4651-0000000

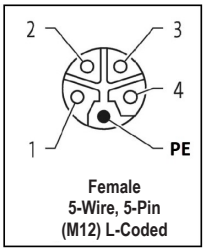


Male
5-Wire, 5-Pin
(M12) L-Coded



Part Numbers: 7000-P4611-0000000 and 7000-P4661-0000000

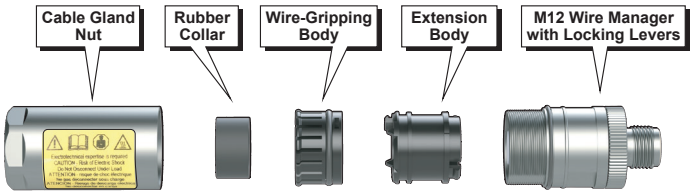




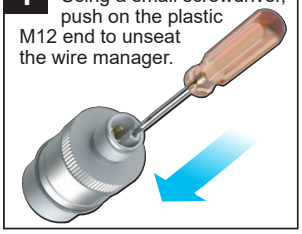
Female
5-Wire, 5-Pin
(M12) L-Coded

Field Wireable Connectors - Power

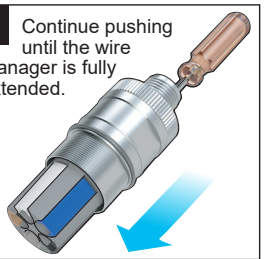
Assembly Instructions for M12 L-coded Push-lock Spring Clamp Connectors



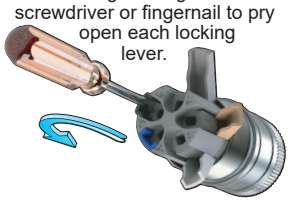
1 Using a small screwdriver, push on the plastic M12 end to unseat the wire manager.



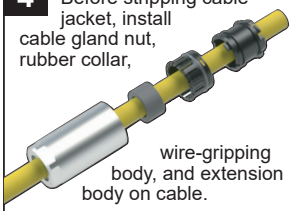
2 Continue pushing until the wire manager is fully extended.



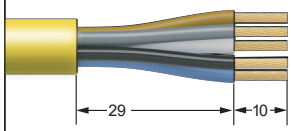
3 Prepare the M12 wire manager using a small screwdriver or fingernail to pry open each locking lever.



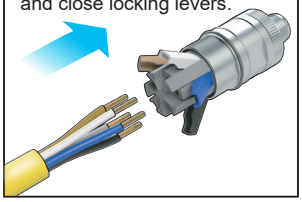
4 Before stripping cable jacket, install cable gland nut, rubber collar, wire-gripping body, and extension body on cable.



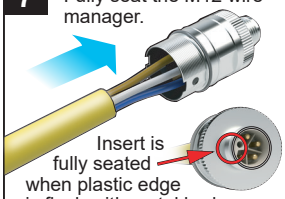
5 Remove 39mm of outer jacket from cable and strip 7mm of insulation from individual wires.



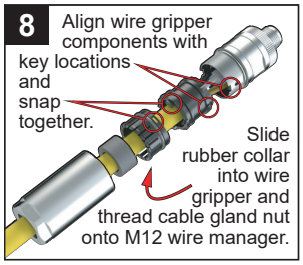
6 Insert individual wires into the M12 wire manager and close locking levers.



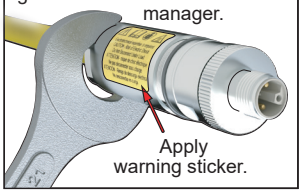
7 Fully seat the M12 wire manager.



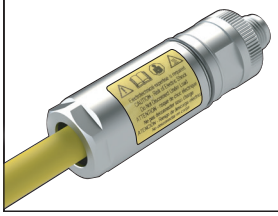
8 Align wire gripper components with key locations and snap together.



9 Hand-tighten or use 21mm wrench to tighten cable gland nut to secure M12 wire manager.



10 Assembly complete.



ZIPport Mini Cordsets

Features and General Specifications

- Oil-resistant yellow PVC body and cable jacket.
- Copper alloy contacts with gold plating
- Nickel-plated brass nut coupling
- Non-wicking, non-hygroscopic, UL style STOW
- Bare copper conductors, PVC insulated
- Temperature: -40 to 105°C (-40 to 221°F)
- IP67 protection rating when connected
- Approvals: UL File E328610, CE
- Made in the USA



STOW cords are ideal for usage in flex applications in harsh environments where high degree of oil resistance and extended service life are in great demand. Typical applications are portable tools, motors, sound equipment, portable lights and similar equipment.

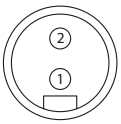
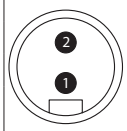
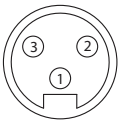
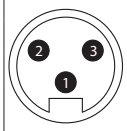
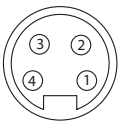
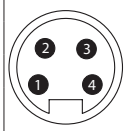
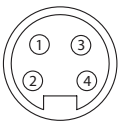
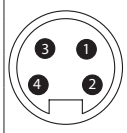
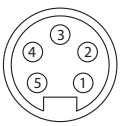
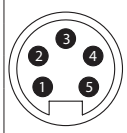
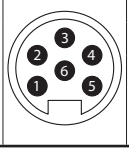
S = Service or Hard Service Cord

T = Thermoplastic (PVC)

O = Oil Resistant Jacket

W = Weather and Water Resistance

Mini Size 1 Straight Cordsets

Face View of Male	Face View of Female	# of Poles	Wire Rating	Length m [ft]	Female Plugs	Price	Male Plugs	Price
		2 (North American Color Code)	16AWG 600V 13A	2 [6.56]	ZP-S1-2FP-2M	$27.50	ZP-S1-2MP-2M	$29.50
				4 [13.12]	ZP-S1-2FP-4M	$37.00	ZP-S1-2MP-4M	$35.50
				6 [19.69]	ZP-S1-2FP-6M	$53.00	ZP-S1-2MP-6M	$50.00
				10 [32.81]	ZP-S1-2FP-10M	$64.00	ZP-S1-2MP-10M	$62.00
		3 (North American Color Code)	16AWG 600V 13A	2 [6.56]	ZP-S1-3FP-2M	$28.50	ZP-S1-3MP-2M	$32.00
				4 [13.12]	ZP-S1-3FP-4M	$39.00	ZP-S1-3MP-4M	$41.50
				6 [19.69]	ZP-S1-3FP-6M	$50.00	ZP-S1-3MP-6M	$57.00
				10 [32.81]	ZP-S1-3FP-10M	$77.00	ZP-S1-3MP-10M	$79.00
		4 (North American Color Code)	16AWG 600V 10A	2 [6.56]	ZP-S1-4FP-2M	$35.00	ZP-S1-4MP-2M	$34.50
				4 [13.12]	ZP-S1-4FP-4M	$45.00	ZP-S1-4MP-4M	$46.00
				6 [19.69]	ZP-S1-4FP-6M	$59.00	ZP-S1-4MP-6M	$63.00
				10 [32.81]	ZP-S1-4FP-10M	$79.00	ZP-S1-4MP-10M	$83.00
		4 (Cenelec Color Code)	18AWG 300V 5.5 A	2 [6.56]	ZP-S1C-4FPX-2M	$28.50	ZP-S1C-4MPX-2M	$31.50
				4 [13.12]	ZP-S1C-4FPX-4M	$36.50	ZP-S1C-4MPX-4M	$42.00
				6 [19.69]	ZP-S1C-4FPX-6M	$41.50	ZP-S1C-4MPX-6M	$49.50
				10 [32.81]	ZP-S1C-4FPX-10M	$60.00	ZP-S1C-4MPX-10M	$66.00
		5 (North American Color Code)	16AWG 600V 8A	2 [6.56]	ZP-S1-5FP-2M	$50.00	ZP-S1-5MP-2M	$42.50
				4 [13.12]	ZP-S1-5FP-4M	$65.00	ZP-S1-5MP-4M	$63.00
				6 [19.69]	ZP-S1-5FP-6M	$82.00	ZP-S1-5MP-6M	$83.00
				10 [32.81]	ZP-S1-5FP-10M	$115.00	ZP-S1-5MP-10M	$116.00
		6 (North American Color Code)	16AWG 600V 8A	2 [6.56]	ZP-S1-6FP-2M	$49.50	ZP-S1-6MP-2M	$48.00
				4 [13.12]	ZP-S1-6FP-4M	$68.00	ZP-S1-6MP-4M	$71.00
				6 [19.69]	ZP-S1-6FP-6M	$90.00	ZP-S1-6MP-6M	$85.00
				10 [32.81]	ZP-S1-6FP-10M	$119.00	ZP-S1-6MP-10M	$117.00

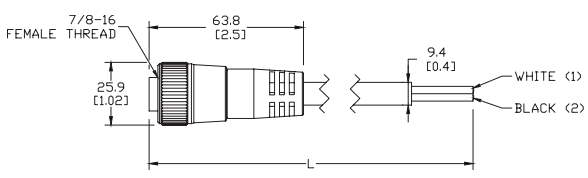
Note: Tightening torque 44 lb·in (5.0 N·m) coupling nut.

Color Codes

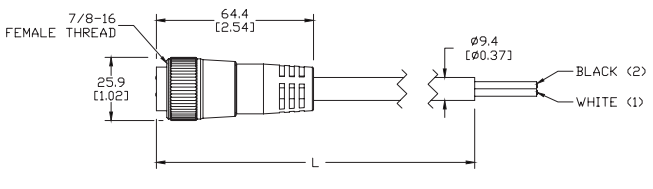
Poles			Color
North American	2	1	White
		2	Black
	3	1	Green/Yellow
		2	Black
		3	White
	4	1	Black
		2	White
		3	Red
		4	Green/Yellow
	5	1	White
		2	Red
		3	Green/Yellow
		4	Orange
		5	Black
	6	1	White
		2	Red
		3	Green/Yellow
		4	Orange
		5	Black
		6	Blue
Cenelec	4	1	Brown
		2	White
		3	Blue
		4	Black

Dimensions

mm [in]



Female Plugs



Male Plugs

See our website: www.AutomationDirect.com for complete engineering drawings.

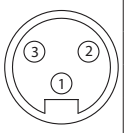
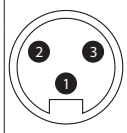
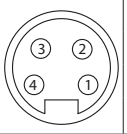
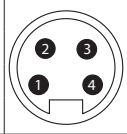
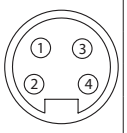
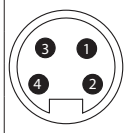
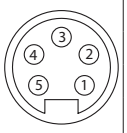
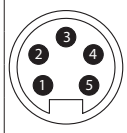
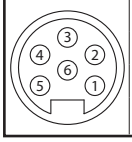
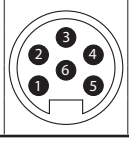
ZIPport Mini Patch Cables

Features and General Specifications

- Oil-resistant yellow PVC body and cable jacket
- Copper alloy contacts with gold plating
- Nickel-plated brass nut coupling
- Non-wicking, non-hygroscopic, UL style STOW
- Bare copper conductors, PVC insulated
- Temperature: -40 to 105°C (-40 to 221°F)
- IP67 protection rating when connected
- Approvals: UL File E328610, CE
- Made in the USA



Mini Size 1 Male to Female Patch Cables

Face View of Male	Face View of Female	# of Poles	Wire Rating	Length m [ft]	Type	Part Number	Price
		3	16AWG 600V 13A	2 [6.56]	Male (Female Threads) to Female (Female Threads)	ZP-S1-3MFP-2M	$47.50
				4 [13.12]		ZP-S1-3MFP-4M	$55.00
				6 [19.69]		ZP-S1-3MFP-6M	$72.00
				10 [32.81]		ZP-S1-3MFP-10M	$85.00
		4	16AWG 600V 10A	2 [6.56]	Male (Female Threads) to Female (Female Threads)	ZP-S1-4MFP-2M	$48.00
				4 [13.12]		ZP-S1-4MFP-4M	$64.00
				6 [19.69]		ZP-S1-4MFP-6M	$73.00
				10 [32.81]		ZP-S1-4MFP-10M	$94.00
		4	18AWG 300V 5.5 A	2 [6.56]	Male (Male Threads) to Female (Female Threads)	ZP-S1C-4MFPX-2M	$46.00
				4 [13.12]		ZP-S1C-4MFPX-4M	$55.00
				6 [19.69]		ZP-S1C-4MFPX-6M	$61.00
				10 [32.81]		ZP-S1C-4MFPX-10M	$74.00
		5	16AWG 600V 8A	2 [6.56]	Male (Female Threads) to Female (Female Threads)	ZP-S1-5MFP-2M	$71.00
				4 [13.12]		ZP-S1-5MFP-4M	$87.00
				6 [19.69]		ZP-S1-5MFP-6M	$116.00
				10 [32.81]		ZP-S1-5MFP-10M	$150.00
		6	16AWG 600V 8A	2 [6.56]	Male (Female Threads) to Female (Female Threads)	ZP-S1-6MFP-2M	$70.00
				4 [13.12]		ZP-S1-6MFP-4M	$88.00
				6 [19.69]		ZP-S1-6MFP-6M	$101.00
				10 [32.81]		ZP-S1-6MFP-10M	$138.00

STOW cords are ideal for usage in flex applications in harsh environments where high degree of oil resistance and extended service life are in great demand. Typical applications are portable tools, motors, sound equipment, portable lights and similar equipment.

S = Service or Hard Service Cord

T = Thermoplastic (PVC)

O = Oil Resistant Jacket

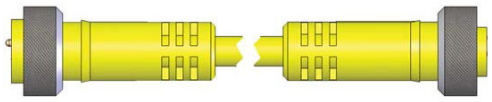
W = Weather and Water Resistance

Dimensions

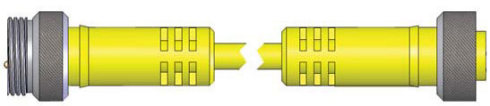
mm [in]

Note: Tightening torque 44 lb·in (5.0 N·m) coupling nut.

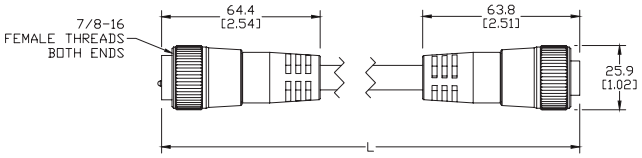
Male - Female Extension Cable



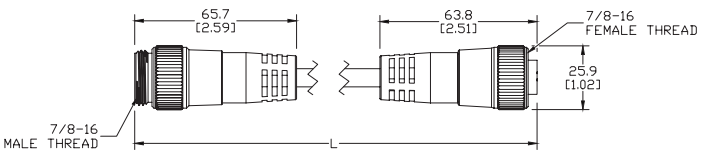
Male (Male Threads) to Female (Female Threads)



Male (Female Threads) to Female (Female Threads)



Male (Male Threads) to Female (Female Threads)



See our website: www.AutomationDirect.com for complete engineering drawings.

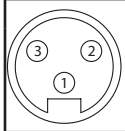
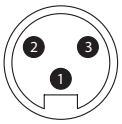
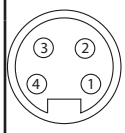
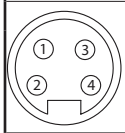
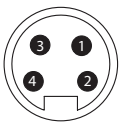
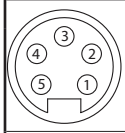
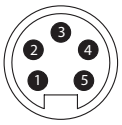
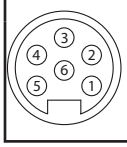
Field Wireable Connectors

Features and General Specifications

- Polyamide body
- Copper alloy/gold plating contacts
- BUNA-N O-Ring
- Nickel-plated brass coupling nut
- PVC insert
- Temperature: -40 to 90°C (-40 to 194°F)
- IP67 protection when connected
- Approvals: UL File E328610, CE
- Made in the USA



Field Wireable Connectors - Size 1

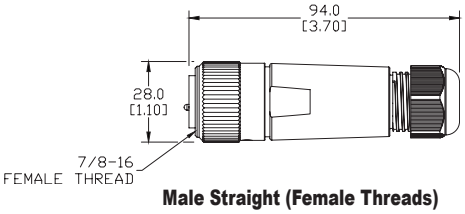
Face View of Male	Face View of Female	# of Poles	Wire Rating	Cable O.D. Range - mm [in]	Female Straight (Female Threads)	Price	Male Straight (Female Threads)	Price	Male Straight (Male Threads)	Price
		3 (North American Color Code)	14-22 AWG 600V 18A Max	5-13 [0.20-0.51]	ZP-S1-3FP-FW	$18.00	ZP-S1-3MP-FW	$16.50	ZP-S1-3MPM-FW	$16.50
				8-17 [0.31-0.67]	ZP-S1-3FP-FWX	$18.00	ZP-S1-3MP-FWX	$16.00	ZP-S1-3MPM-FWX	$17.50
		4 (North American Color Code)	14-22 AWG 600V 15A Max	5-13 [0.20 - 0.51]	ZP-S1-4FP-FW	$20.50	ZP-S1-4MP-FW	$17.00	ZP-S1-4MPM-FW	$18.00
				8-17 [0.31-0.67]	ZP-S1-4FP-FWX	$20.50	ZP-S1-4MP-FWX	$17.50	ZP-S1-4MPM-FWX	$18.00
		4 (Cenelec Color Code)	14-22 AWG 600V 15A Max	5-13 [0.20-0.51]	ZP-S1C-4FP-FW	$21.00	–		ZP-S1C-4MP-FW	$19.00
				8-17 [0.31-0.67]	ZP-S1C-4FP-FWX	$21.00	–		ZP-S1C-4MP-FWX	$19.50
		5 (North American Color Code)	14-22 AWG 600V 12A Max	5-13 [0.20-0.51]	ZP-S1-5FP-FW	$22.50	ZP-S1-5MP-FW	$17.50	ZP-S1-5MPM-FW	$19.50
				8-17 [0.31-0.67]	ZP-S1-5FP-FWX	$23.00	ZP-S1-5MP-FWX	$19.50	ZP-S1-5MPM-FWX	$19.50
		6 (North American Color Code)	16-22 AWG 600V 8A Max	5-13 [0.20-0.51]	ZP-S1-6FP-FW	$25.00	ZP-S1-6MP-FW	$21.00	ZP-S1-6MPM-FW	$24.00
				8-17 [0.31-0.67]	ZP-S1-6FP-FWX	$25.00	ZP-S1-6MP-FWX	$21.50	ZP-S1-6MPM-FWX	$24.00

Note: Connection via screw terminal. Voltage and amperage ratings are cable dependent and are based on 600V 14AWG cable. Cables with lower voltage ratings and smaller conductors will lower these ratings.

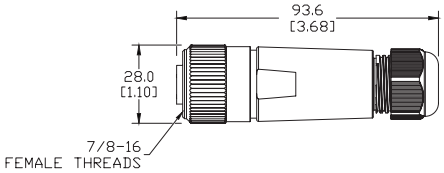
Dimensions

mm [in]

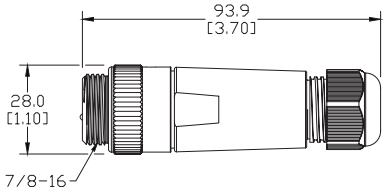
Note: Tightening torque 44 lb·in (5.0 N·m) coupling nut.
Screw connections 20 lb·in (2.3 N·m)



Male Straight (Female Threads)



Female Straight (Female Threads)



Male Straight (Male Threads)

Color Codes

Poles		Color
Cenelec	1	Brown
	2	White
	3	Blue
	4	Black

Color Codes

Poles		Color
North American	2	1 White
		2 Black
	3	1 Green/Yellow
		2 Black
		3 White
	4	1 Black
		2 White
		3 Red
		4 Green/Yellow
	5	1 White
		2 Red
		3 Green/Yellow
		4 Orange
		5 Black
	6	1 White
		2 Red
		3 Green/Yellow
		4 Orange
		5 Black
		6 Blue

See our website: www.AutomationDirect.com for complete engineering drawings.

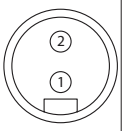
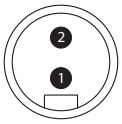
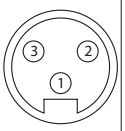
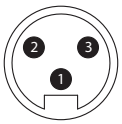
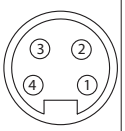
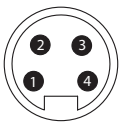
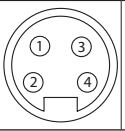
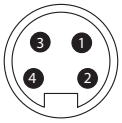
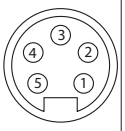
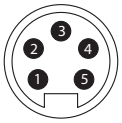
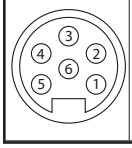
Mini Bulkhead Connectors

Features and General Specifications

- Clear anodized aluminum shell
- Yellow PVC insert
- Gold-plated copper alloy contacts
- Zinc-plated steel locknut
- NBR O-ring
- Cable length 0.3 m (1ft)
- Front mount
- Mounting thread 1/2 NPT
- Ingress protection rating: IP67 when connected
- Temperature: -40 to 105°C [-40 to 221°F]
- Approvals: UL File E328610, CE
- Made in the USA



Mini Bulkhead Connectors

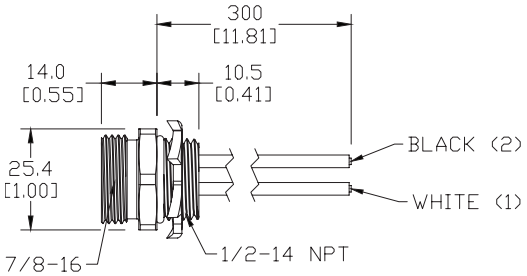
Face View of Male	Face View of Female	# of Poles	Wire Rating	Female Receptacles	Price	Male Receptacles	Price
		2 North American Color Code	16AWG Max 600V 13A Max	ZP-S1-2FR-0P3M	$12.50	ZP-S1-2MR-0P3M	$12.00
		3 North American Color Code	16AWG Max 600V 13A Max	ZP-S1-3FR-0P3M	$13.50	ZP-S1-3MR-0P3M	$13.00
		4 North American Color Code	16AWG Max 600V 10A Max	ZP-S1-4FR-0P3M	$17.00	ZP-S1-4MR-0P3M	$14.00
		4 Cenelec Color Code	18AWG Max 300V 5.5 A Max	ZP-S1C-4FR-0P3M-18	$17.00	ZP-S1C-4MR-0P3M-18	$14.50
		5 North American Color Code	16AWG Max 600V 8A Max	ZP-S1-5FR-0P3M	$18.00	ZP-S1-5MR-0P3M	$17.00
		6 North American Color Code	16AWG Max 600V 8A Max	ZP-S1-6FR-0P3M	$17.50	ZP-S1-6MR-0P3M	$17.00

Color Codes

Poles			Color
North American	2	1	White
		2	Black
	3	1	Green/Yellow
		2	Black
		3	White
	4	1	Black
		2	White
		3	Red
		4	Green/Yellow
	5	1	White
		2	Red
		3	Green/Yellow
		4	Orange
		5	Black
	6	1	White
		2	Red
		3	Green/Yellow
		4	Orange
		5	Black
		6	Blue
Cenelec	4	1	Brown
		2	White
		3	Blue
		4	Black

Dimensions

mm [in]

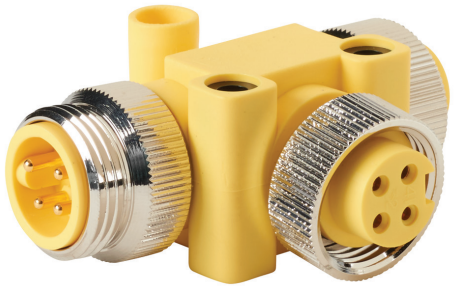


See our website: www.AutomationDirect.com for complete engineering drawings.

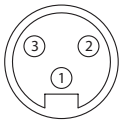
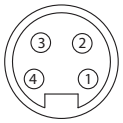
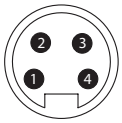
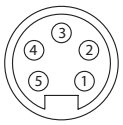
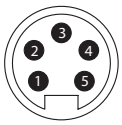
Mini Cordsets and Receptacles Accessories

Mini "T" Connectors Features and General Specifications

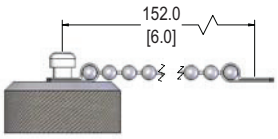
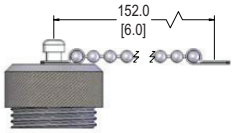
- Oil-resistant yellow PVC body
- Copper alloy/gold plating contacts
- Nickel-plated brass coupling nut
- Operating temperature range: -40 to 105°C [-40 to 221°F]
- IP67 protection when connected
- Approvals: UL File E328610, CE
- Made in the USA



Mini "T" Connectors

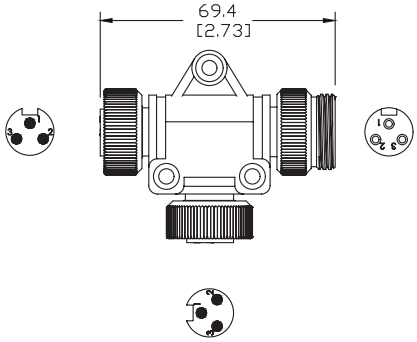
Face View of Male	Face View of Female	# of Poles	Rating	Part Number	Wiring	Price
		3	300V 8A	ZP-S1-3MFF-T	1 – 1 – 1 2 – 2 – 2 3 – 3 – 3	$50.00
		4	300V 8A	ZP-S1-4MFF-T	1 – 1 – 1 2 – 2 – 2 3 – 3 – 3 4 – 4 – 4	$58.00
		5	300V 8A	ZP-S1-5MFF-T	1 – 1 – 1 2 – 2 – 2 3 – 3 – 3 4 – 4 – 4 5 – 5 – 5	$74.00

Caps and Adapters

Dimensions – mm [in]	Description	Part Number	Price
	Closure cap for covering receptacles and plugs with male threads. 0.17" diameter mounting hole for securing the chain. Clear anodized aluminum with nickel-plated brass chain and hardware.	ZP-S1-CAP	$6.25
	Closure plug for covering receptacles and plugs with female threads. 017" diameter mounting hole for securing the chain. Clear anodized aluminum with nickel-plated brass chain and hardware.	ZP-S1-PLUG	$10.00
	Adapter coupling for connecting male and female plugs with female couplings. Clear anodized aluminum.	ZP-S1-XMP-AD	$4.50

Dimensions

mm [in]



Note: Tightening torque 44 lb·in (5.0 N·m) coupling nut.

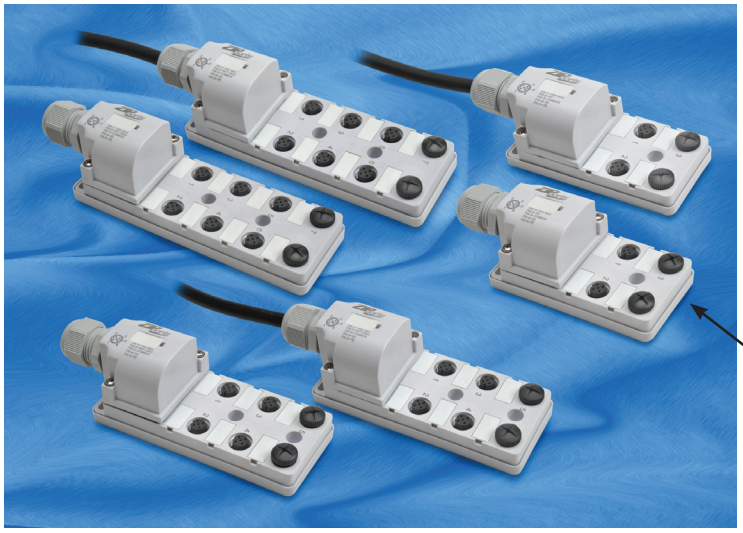








M12 Junction Blocks – Specifications



Note: **2 port caps for unused ports are included.**

Overview

ZIPport multi-port interconnection junction blocks provide a simple and effective way to organize machine wiring for a variety of control systems, such as packaging equipment and conveying systems. These systems typically have many I/O points, such as sensors or solenoid-operated valves, consolidated in one location. Many times these devices are hard-wired to a junction box or separately wired back to the main control cabinet. ZIPport multi-port junction blocks provide a more efficient and cost-effective solution: a main home-run control cable is run back to the main control cabinet, so the cost associated with errors in wiring, rewiring, and I/O replacement is greatly reduced. The designer can choose from a variety of circuit configurations in industry standard M12-style connection, in port configurations of 4-, 6- and 8-pole, with a choice of one I/O per port or two I/O per port.

ZIPport Junction Block Specifications		
Electrical Specifications		
Voltage Rating	Without LEDs: 0 to 150 V AC/DC max. With LEDs: 48 VDC max, in accordance with LED Configuration	
Current Rating	3A per connector, 8A per block	
Technical Specifications		
Approvals*	UL file E328610, CE	
Degree of Protection	IP 67, with proper field wiring cable and all ports being used or covered with a protective cap.	
Operating Temperature Range	-20 to 80°C [-4 to 176°F]	
Material Specifications		
Body	Polypropylene	
Inserts	Polyamide	
Coupling Nuts	4, 6, and 8-Port: PBT	
Screws	Two m3x0.5x14 screws are used to assemble backshell.	
O-Ring	BUNA-N	
Cable Gland	M20x1.5	
Recommended Cable Diameters for Field Wireable	With inner grommet intact: • Max OD: 0.31" [7.9 mm]. • Min OD: For PUR Cable 0.19" [4.8 mm], For PVC Cable 0.17" [4.3 mm]	With inner grommet removed: • Max OD: 0.49" [12.5 mm]. • Min OD: For PUR Cable 0.28" [7.2 mm], For PVC cable 0.28" [7.2 mm], For SJT/SJE/ST/SE Cable 0.305" [7.75 mm]
LED Lens	Polycarbonate (LEDs visible only when power is supplied to the block)	
Contacts	Copper Alloy with Gold Plating	
Marker Tags	Polyamide (supplied on all units)	
Accessories	2 port caps for unused ports included. Purchase additional caps (in packs of 5) separately.	
Port Cap	Nylon	

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

ZIPport M12 Junction Blocks – Selection

ZIPport M12 Series Selection Chart											
Part Number	**Price**	**Ports**	**Wires/ Poles**	**Indicating LEDs**	**I/O per Socket**	**Rating per Socket**	**Home Run Connection Type**	**Wiring**	**Pin Out Table**	**Dims.**	**Accessories**
4 Port											
ZP-JBH44-00-FW	$73.00	4	4/5	No LED	1	150V AC/DC max, 3A	Cable clamp for field wiring	Diagram 1-A	–	Figure 1	ZP-JBH-CAP CDP12-0B-010-AA CDP12-0B-030-AA CDP12-0B-010-BB CDP12-0B-030-BB CDP12-0B-030-BB
ZP-JBH44-2P-FW	$94.00			PNP	1	48VDC max, 3A		Diagram 1-B	–	Figure 1	
ZP-JBH44-2N-FW	$95.00			NPN	1	48VDC max, 3A		Diagram 1-C	–	Figure 1	
ZP-JBH44-00-5	$112.00			No LED	1	150V AC/DC max, 3A	5m integrated cable	Diagram 1-A	Table 1	Figure 1	
ZP-JBH44-2P-5	$122.00			PNP	1	48VDC max, 3A		Diagram 1-B	Table 1	Figure 1	
ZP-JBH44-2N-5	$125.00			NPN	1	48VDC max, 3A		Diagram 1-C	Table 1	Figure 1	
ZP-JBH45-00-FW	$87.00		5/5	No LED	2	150V AC/DC max, 3A	Cable clamp for field wiring	Diagram 2-A	–	Figure 2	
ZP-JBH45-2P-FW	$104.00			PNP	2	48VDC max, 3A		Diagram 2-B	–	Figure 2	
ZP-JBH45-00-5	$132.00			No LED	2	150V AC/DC max, 3A	5m integrated cable	Diagram 2-A	Table 2	Figure 2	
ZP-JBH45-2P-5	$146.00			PNP	2	48VDC max, 3A		Diagram 2-B	Table 2	Figure 2	
6 Port											
ZP-JBH64-00-FW	$96.00	6	4/5	No LED	1	150V AC/DC max, 3A	Cable clamp for field wiring	Diagram 3-A	–	Figure 3	ZP-JBH-CAP CDP12-0B-010-AA CDP12-0B-030-AA CDP12-0B-010-BB CDP12-0B-030-BB
ZP-JBH64-2P-FW	$122.00			PNP	1	48VDC max, 3A		Diagram 3-B	–	Figure 3	
ZP-JBH64-2N-FW	$122.00			NPN	1	48VDC max, 3A		Diagram 3-C	–	Figure 3	
ZP-JBH64-00-5	$142.00			No LED	1	150V AC/DC max, 3A	5m integrated cable	Diagram 3-A	Table 3	Figure 3	
ZP-JBH64-2P-5	$145.00			PNP	1	48VDC max, 3A		Diagram 3-B	Table 3	Figure 3	
ZP-JBH64-2N-5	$145.00			NPN	1	48VDC max, 2A		Diagram 3-C	Table 3	Figure 3	
ZP-JBH65-00-FW	$109.00		5/5	No LED	2	150V AC/DC max, 3A	Cable clamp for field wiring	Diagram 4-A	–	Figure 4	
ZP-JBH65-2P-FW	$130.00			PNP	2	48VDC max, 3A		Diagram 4-B	–	Figure 4	
ZP-JBH65-00-5	$165.00			No LED	2	150V AC/DC max, 3A	5m integrated cable	Diagram 4-A	Table 4	Figure 4	
ZP-JBH65-2P-5	$184.00			PNP	2	48VDC max, 3A		Diagram 4-B	Table 4	Figure 4	
8 Port											
ZP-JBH84-00-FW	$110.00	8	4/5	No LED	1	150V AC/DC max, 3A	Cable clamp for field wiring	Diagram 5-A	–	Figure 5	ZP-JBH-CAP CDP12-0B-010-AA CDP12-0B-030-AA CDP12-0B-010-BB CDP12-0B-030-BB
ZP-JBH84-2P-FW	$116.00			PNP	1	48VDC max, 3A		Diagram 5-B	–	Figure 5	
ZP-JBH84-2N-FW	$115.00			NPN	1	48VDC max, 3A		Diagram 5-C	–	Figure 5	
ZP-JBH84-00-5	$178.00			No LED	1	150V AC/DC max, 3A	5m integrated cable	Diagram 5-A	Table 5	Figure 5	
ZP-JBH84-2P-5	$180.00			PNP	1	48VDC max, 3A		Diagram 5-B	Table 5	Figure 5	
ZP-JBH84-2N-5	$187.00			NPN	1	48VDC max, 3A		Diagram 5-C	Table 5	Figure 5	
ZP-JBH85-00-FW	$129.00		5/5	No LED	2	150V AC/DC max, 3A	Cable clamp for field wiring	Diagram 6-A	–	Figure 6	
ZP-JBH85-2P-FW	$153.00			PNP	2	48VDC max, 3A		Diagram 6-B	–	Figure 6	
ZP-JBH85-2N-FW	$153.00			NPN	2	48VDC max, 3A		Diagram 6-C	–	Figure 6	
ZP-JBH85-00-5	$204.00			No LED	2	150V AC/DC max, 3A	5m integrated cable	Diagram 6-A	Table 6	Figure 6	
ZP-JBH85-2P-5	$222.00			PNP	2	48VDC max, 3A		Diagram 6-B	Table 6	Figure 6	
ZP-JBH85-2N-5	$228.00			NPN	2	48VDC max, 3A		Diagram 6-C	Table 6	Figure 6	

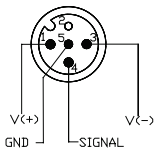
Accessories

Part Number	Price	Qty	Description		Use With
ZP-JBH-CAP	$4.50	5	ZIPport junction block M12 protective cap.		M12 ZipPort junction blocks

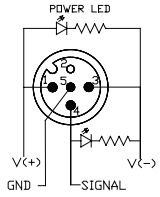
M12 Junction Blocks – Wiring

Wiring Diagrams

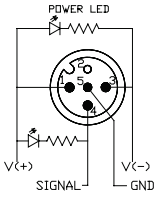
4-Port, 4-Wire/5-Pole



No LED Version
Diagram 1-A

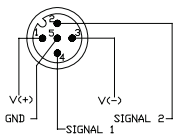


PNP Version
Diagram 1-B

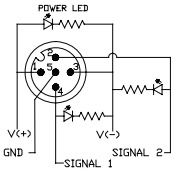


NPN Version
Diagram 1-C

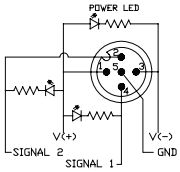
4-Port, 5-Wire/5-Pole



No LED Version
Diagram 2-A

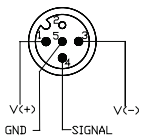


PNP Version
Diagram 2-B

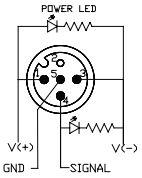


NPN Version
Diagram 2-C

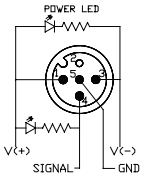
6-Port, 4-Wire/5-Pole



No LED Version
Diagram 3-A

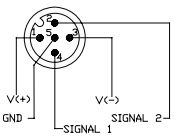


PNP Version
Diagram 3-B

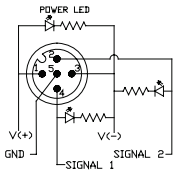


NPN Version
Diagram 3-C

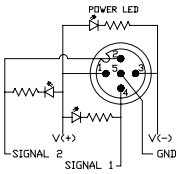
6-Port, 5-Wire/5-Pole



No LED Version
Diagram 4-A

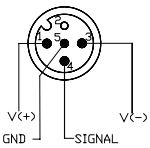


PNP Version
Diagram 4-B

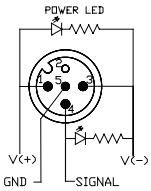


NPN Version
Diagram 4-C

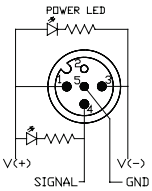
8-Port, 4-Wire/5-Pole



No LED Version
Diagram 5-A

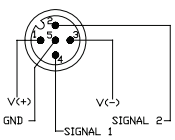


PNP Version
Diagram 5-B

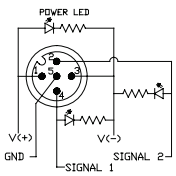


NPN Version
Diagram 5-C

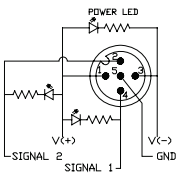
8-Port, 5-Wire/5-Pole



No LED Version
Diagram 6-A



PNP Version
Diagram 6-B



NPN Version
Diagram 6-C

Pin Out Tables

Pin Out Table 1	
M12 4-Port, 4-Wire/5-Pole ZipPort	
Function	***Cable O.D. 0.34"***
+V	Brown
-V	Blue
Ground	Green/Yellow
Port 1 Pin 4	White
Port 2 Pin 4	Green
Port 3 Pin 4	Yellow
Port 4 Pin 4	Gray

Pin Out Table 2	
M12 4-Port, 5-Wire/5-Pole ZipPort	
Function	***Cable O.D. 0.38"***
+V	Brown
-V	Blue
Ground	Green/Yellow
Port 1 Pin 2	Pink
Port 1 Pin 4	White
Port 2 Pin 2	Red
Port 2 Pin 4	Green
Port 3 Pin 2	Black
Port 3 Pin 4	Yellow
Port 4 Pin 2	Violet
Port 4 Pin 4	Gray

Pin Out Table 3	
M12 6-Port, 4-Wire/5-Pole ZipPort	
Function	***Cable O.D. 0.35"***
+V	Brown
-V	Blue
Ground	Green/Yellow
Port 1 Pin 4	White
Port 2 Pin 4	Green
Port 3 Pin 4	Yellow
Port 4 Pin 4	Gray
Port 5 Pin 4	Pink
Port 6 Pin 4	Red

Pin Out Table 4	
M12 6-Port, 5-Wire/5-Pole ZipPort	
Function	***Cable O.D. 0.40"***
+V	Brown
-V	Blue
Ground	Green/Yellow
Port 1 Pin 2	Gray/Pink
Port 1 Pin 4	White
Port 2 Pin 2	Red/Blue
Port 2 Pin 4	Green
Port 3 Pin 2	White/Green
Port 3 Pin 4	Yellow
Port 4 Pin 2	Brown/Green
Port 4 Pin 4	Gray
Port 5 Pin 2	White/Yellow
Port 5 Pin 4	Pink
Port 6 Pin 2	Yellow/Brown
Port 6 Pin 4	Red

Pin Out Table 5	
M12 8-Port, 4-Wire/5-Pole ZipPort	
Function	***Cable O.D. 0.35"***
+V	Brown
-V	Blue
Ground	Green/Yellow
Port 1 Pin 4	White
Port 2 Pin 4	Green
Port 3 Pin 4	Yellow
Port 4 Pin 4	Gray
Port 5 Pin 4	Pink
Port 6 Pin 4	Red
Port 7 Pin 4	Black
Port 8 Pin 4	Violet

Note: Pin Out Tables are For 5-meter integrated cable only. Please refer to product insert for field wiring.

Pin Out Table 6	
M12 8-Port, 5-Wire/5-Pole ZipPort	
Function	***Cable O.D. 0.43"***
+V	Brown
-V	Blue
Ground	Green/Yellow
Port 1 Pin 2	Gray/Pink
Port 1 Pin 4	White
Port 2 Pin 2	Red/Blue
Port 2 Pin 4	Green
Port 3 Pin 2	White/Green
Port 3 Pin 4	Yellow
Port 4 Pin 2	Brown/Green
Port 4 Pin 4	Gray
Port 5 Pin 2	White/Yellow
Port 5 Pin 4	Pink
Port 6 Pin 2	Yellow/Brown
Port 6 Pin 4	Red
Port 7 Pin 2	White/Gray
Port 7 Pin 4	Black
Port 8 Pin 2	Gray/Brown
Port 8 Pin 4	Violet

M12 Junction Blocks – Dimensions

Dimensions

inches [mm]

Figure 1: 4-Port, 4-Wire/5-Pole

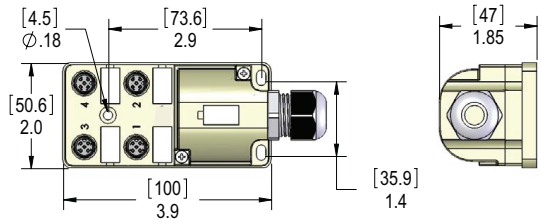


Figure 2: 4-Port. 5-Wire/5-Pole

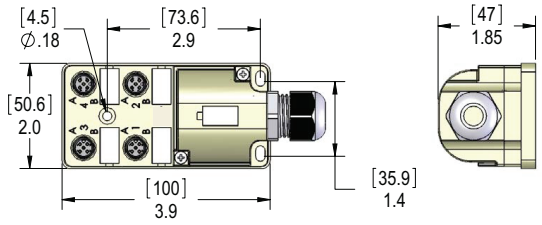


Figure 3: 6-Port, 4-Wire/5-Pole

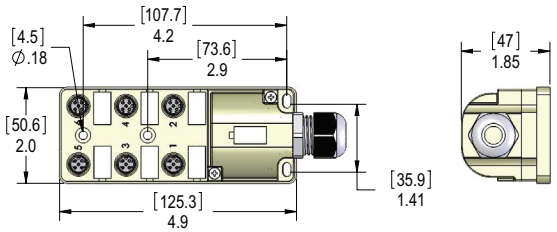


Figure 4: 6-Port, 5-Wire/5-Pole

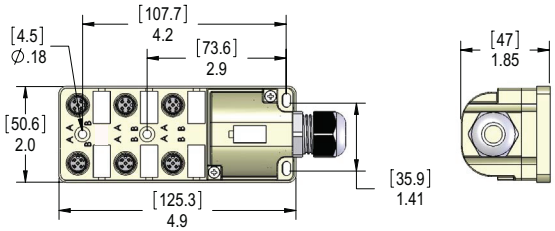


Figure 5: 8-Port, 4-Wire/5-Pole

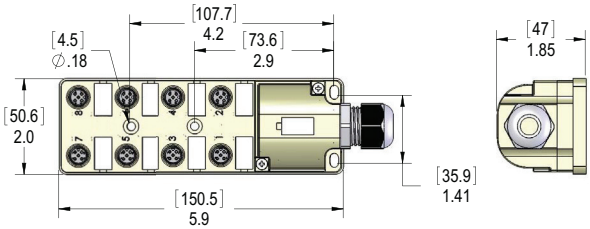
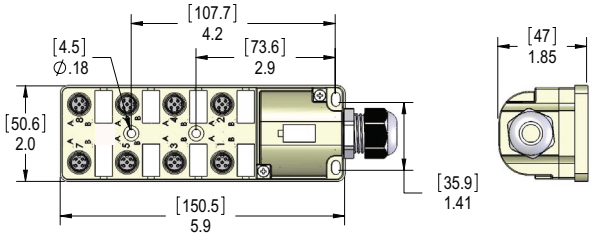


Figure 6: 8-Port, 5-Wire/5-Pole



M12 and M8 Series Distribution Blocks



Overview

Single-wire connectivity in machines and installations is troublesome and error-prone. Murrelektronik' s passive distribution boxes provide a much more convenient method for connecting sensors and actuators to the control cabinet. Murrelektronik supplies a comprehensive range of distribution boxes. They create optimum installations for any application and are cost-effective, reliable, and space saving solutions!

Features

- 30mm wide footprint saves space and offers flexible mounting options
- Integrated LED indicators make troubleshooting easy
- Over molded bodies for vibration and environmental protection
- Available with Integrated cable or M12 12-pin Homerun cabling option
- Marking tags Included

Distribution Block Specifications	
Electrical Specifications	
Voltage Rating	24 VDC
Voltage Range	18–30.2 VDC
Technical Specifications	
Approvals *	UL file E201820, CE
Degree of Protection	IP67
Material Specifications	
Body	Thermoplastic Polyurethane (TPU) clear and Polyamide (PA) UL 94 HB, Black
Contact Carrier M8	Polyamide (PA), UL94 HB, Green
Contact Carrier M12	Polyamide (PA) UL94 HB, Black
Contacts	Gold-plated
Gasket	Thermoplastic Polyurethane (TPU) clear
Connector housing M12 (12-pin M12 Quick-Disconnect)	Nickel-plated (CuZn)
Backside Gasket (8000-88590)	O-ring NBR
LED Lens	Thermoplastic Polyurethane (TPU), clear
LED Indicator Color	Power - Green, Signal 1- Yellow, Signal 2 - White
Marking Tags	Soft PVC

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.**

M12 and M8 Series Distribution Blocks



Exact 12 Series



Exact 8 Series

M12 and M8 Series Distribution Blocks									
Part Number	*Price*	*Ports*	*LED Indicator*	*Socket Type*	*I/O per Socket*	*Socket Current*	*Load Current*	*Number of Commons*	*Operating Temperature*
Exact 12									
8000-84560-0000000	$110.00	4	PNP	5-pin M12	2	1A	–	1	-20 to 60°C [-4 to 140°F]
8000-88460-0000000	$131.00	8	PNP	5-pin M12	1	1A	–	1	-20 to 60°C [-4 to 140°F]
8000-88590-0000000	$131.00	8	PNP	5-pin M12	2	4A	8A/common	2	-30 to 70°C [-22 to 158°F]
Exact 8									
8000-84010-3370500	$95.00	4	PNP	3-pin M8	1	2A	8A/common	1	-20 to 72°C [-4 to 162°F]
8000-84011-3370500	$95.00	4	NPN	3-pin M8	1	2A	8A/common	1	-20 to 72°C [-4 to 162°F]
8000-84060-0000000	$100.00	4	PNP	3-pin M8	1	1A	–	1	-20 to 57°C [-4 to 135°F]
8000-84110-3580500	$122.00	4	PNP	4-pin M8	2	2A	8A/common	1	-20 to 72°C [-4 to 162°F]
8000-84111-3580500	$122.00	4	NPN	4-pin M8	2	2A	8A/common	1	-20 to 72°C [-4 to 162°F]
8000-84160-0000000	$106.00	4	PNP	4-pin M8	2	1A	–	1	-20 to 57°C [-4 to 135°F]
8000-88010-3570500	$122.00	8	PNP	3-pin M8	1	2A	8A/common	1	-20 to 72°C [-4 to 162°F]
8000-88011-3570500	$122.00	8	NPN	3-pin M8	1	2A	8A/common	1	-20 to 72°C [-4 to 162°F]
8000-88060-0000000	$113.00	8	PNP	3-pin M8	1	1A	–	1	-20 to 57°C [-4 to 135°F]
8000-88110-3950500	$162.00	8	PNP	4-pin M8	2	2A	8A/common	1	-20 to 72°C [-4 to 162°F]
8000-88111-3950500	$162.00	8	NPN	4-pin M8	2	2A	8A/common	1	-20 to 72°C [-4 to 162°F]

M12 and M8 Series Distribution Blocks					
Part Number	*Wiring*	*Pin Out Table*	*Main Connection Type*	*Recommended Cables*	*Drawing Link*
Exact 12					
8000-84560-0000000	Diagram 1	Table 1	M12	7000-19041-705xxxx, 7000-19061-705xxxx	PDF
8000-88460-0000000	Diagram 2	Table 2	M12	7000-19041-705xxxx, 7000-19061-705xxxx	PDF
8000-88590-0000000	Diagram 1	Table 3	M12	–	PDF
Exact 8					
8000-84010-3370500	Diagram 3	Table 4	M8	–	PDF
8000-84011-3370500	Diagram 5	Table 4	M8	–	PDF
8000-84060-0000000	Diagram 3	Table 5	M8	7000-19041-705xxxx, 7000-19061-705xxxx	PDF
8000-84110-3580500	Diagram 4	Table 6	M8	–	PDF
8000-84111-3580500	Diagram 6	Table 6	M8	–	PDF
8000-84160-0000000	Diagram 4	Table 7	M8	7000-19041-705xxxx, 7000-19061-705xxxx	PDF
8000-88010-3570500	Diagram 3	Table 8	M8	–	PDF
8000-88011-3570500	Diagram 5	Table 8	M8	–	PDF
8000-88060-0000000	Diagram 3	Table 9	M8	7000-19041-705xxxx, 7000-19061-705xxxx	PDF
8000-88110-3950500	Diagram 4	Table 10	M8	–	PDF
8000-88111-3950500	Diagram 6	Table 10	M8	–	PDF

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M12 and M8 Series Distribution Blocks

Pin Out Tables

Pin Out Table 1

M12 Male 12-pole plug
M12, 4 port, 5-pin

M12-Male pin	Function	
1	+V, Port 1-4, Pin 1	Brown
2	-V, Port 1-4, Pin 3	Blue
3	Port 1 Pin 4	White
5	Port 1 Pin 2	Pink
4	Port 2 Pin 4	Green
9	Port 2 Pin 2	Red
6	Port 3 Pin 4	Yellow
7	Port 3 Pin 2	Black
8	Port 4 Pin 4	Gray
10	Port 4 Pin 2	Violet
Thread M12	PE, Port 1-4, Pin 5	

Pin Out Table 2

M12 Male 12-pole plug
M12, 8 port, 4-pin

M12-Male pin	Function	
1	+V, Port 1-8, Pin 1	Brown
2	-V, Port 1-8, Pin 3	Blue
3	Port 1 Pin 4	White
11	Port 1 Pin 2	Gray / Pink
4	Port 2 Pin 4	Green
12	Port 2 Pin 2	Red / Blue
6	Port 3 Pin 4	Yellow
8	Port 4 Pin 4	Gray
5	Port 5 Pin 4	Pink
9	Port 6 Pin 4	Red
7	Port 7 Pin 4	Black
10	Port 8 Pin 4	Violet
Thread M12	PE, Port 1-8, Pin 5	

Pin Out Table 3

Backside plug, removable spring terminals
M12, 8 port, 5-pin

Terminal	Function
+	+V, Port 1-8, Pin 1
+	
-	-V, Port 1-8, Pin 3
-	
Ground	PE, Port 1-8, Pin 5
1/4	Port 1 Pin 4
1/2	Port 1 Pin 2
2/4	Port 2 Pin 4
2/2	Port 2 Pin 2
3/4	Port 3 Pin 4
3/2	Port 3 Pin 2
4/4	Port 4 Pin 4
4/2	Port 4 Pin 2
5/4	Port 5 Pin 4
5/2	Port 5 Pin 2
6/4	Port 6 Pin 4
6/2	Port 6 Pin 2
7/4	Port 7 Pin 4
7/2	Port 7 Pin 2
8/4	Port 8 Pin 4
8/2	Port 8 Pin 2

Pin Out Table 4

M8, 4 Port , 3-pin

Function	Cable O.D. 6.9 mm
+V, Port 1-4, Pin 1	Brown
-V, Port 1-4, Pin 3	Blue
Port 1 Pin 4	White
Port 2 Pin 4	Green
Port 3 Pin 4	Yellow
Port 4 Pin 4	Gray

Pin Out Table 5

M12 Male 12-pole plug
M8, 4 port, 3-pin

M12-Male pin	Function	
1	+V, Port 1-4, Pin 1	Brown
2	-V, Port 1-4, Pin 3	Blue
3	Port 1 Pin 4	White
4	Port 2 Pin 4	Green
6	Port 3 Pin 4	Yellow
8	Port 4 Pin 4	Gray

Pin Out Table 6

Pre-wired cable, 5m
M8, 4 port, 4-pin

Function	Cable O.D. 8.6 mm
+V, Port 1-4, Pin 1	Brown
-V, Port 1-4, Pin 3	Blue
Port 1 Pin 4	White
Port 1 Pin 2	Gray Pink
Port 2 Pin 4	Green
Port 2 Pin 2	Red Blue
Port 3 Pin 4	Yellow
Port 3 Pin 2	White Green
Port 4 Pin 4	Gray
Port 4 Pin 2	Brown Green

Pin Out Table 7

M12 Male 12-pole plug
M12, 4 port, 5-pin

M12-Male pin	Function	
1	+V, Port 1-4, Pin 1	Brown
2	-V, Port 1-4, Pin 3	Blue
3	Port 1 Pin 4	White
4	Port 2 Pin 4	Green
6	Port 3 Pin 4	Yellow
8	Port 4 Pin 4	Gray
5	Port 1 Pin 2	Pink
9	Port 2 Pin 2	Red
7	Port 3 Pin 2	Black
10	Port 4 Pin 2	Violet

Pin Out Table 8

Pre-wired cable, 5m
M8, 8 port, 3-pin

Function	Cable O.D. 8.6 mm
+V, Port 1-8, Pin 1	Brown
-V, Port 1-8, Pin 3	Blue
Port 1 Pin 4	White
Port 2 Pin 4	Green
Port 3 Pin 4	Yellow
Port 4 Pin 4	Gray
Port 5 Pin 4	Pink
Port 6 Pin 4	Red
Port 7 Pin 4	Black
Port 8 Pin 4	Violet

Pin Out Table 9

M12 Male, 12-pole plug
M8, 8 port, 3-pin

M12-Male pin	Function	
1	+V, Port 1-8, Pin 1	Brown
2	-V, Port 1-8, Pin 3	Blue
3	Port 1 Pin 4	White
4	Port 2 Pin 4	Green
6	Port 3 Pin 4	Yellow
8	Port 4 Pin 4	Gray
5	Port 5 Pin 4	Pink
9	Port 6 Pin 4	Red
7	Port 7 Pin 4	Black
10	Port 8 Pin 4	Violet

Pin Out Table 10

Pre-wired cable, 5m
M8, 8 port, 4-pin

Function	Cable O.D. 9.6 mm
+V, Port 1-8, Pin 1	Brown
-V, Port 1-8, Pin 3	Blue
Port 1 Pin 4	White
Port 1 Pin 2	Gray Pink
Port 2 Pin 4	Green
Port 2 Pin 2	Red Blue
Port 3 Pin 4	Yellow
Port 3 Pin 2	White Green
Port 4 Pin 4	Gray
Port 4 Pin 2	Brown Green
Port 5 Pin 4	Pink
Port 5 Pin 2	White Yellow
Port 6 Pin 4	Red
Port 6 Pin 2	Yellow Brown
Port 7 Pin 4	Black
Port 7 Pin 2	White Gray
Port 8 Pin 4	Violet
Port 8 Pin 2	Gray Green

M12 and M8 Series Distribution Blocks

Wiring Diagrams

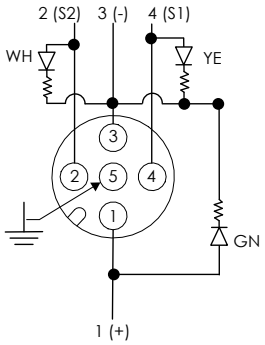


Diagram 1
(PNP field connection)
8000-84560-0000000
8000-88590-0000000

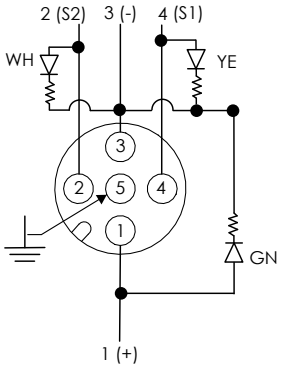


Diagram 2
(PNP field connection)
8000-88460-0000000

Note: Ports 1 and 2 have 2 signals S1 and S2
Ports 3 – 8 have signal S1 only

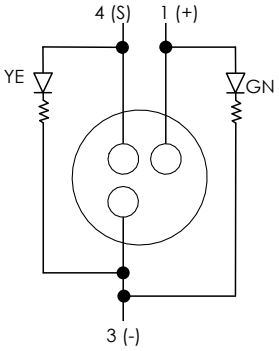


Diagram 3
(PNP field connection)
8000-84010-3370500
8000-88011-3570500
8000-84060-0000000
8000-88060-0000000

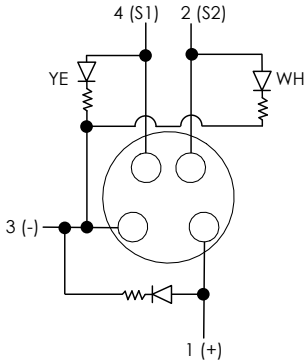


Diagram 4
(PNP field connection)
8000-84110-3580500
8000-88110-3950500
8000-84160-0000000

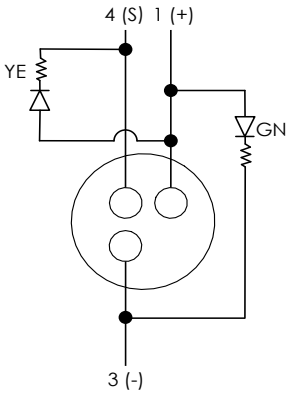


Diagram 5
(NPN field connection)
8000-84011-3370500
8000-88011-3570500

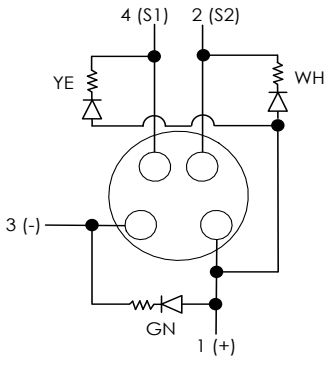


Diagram 6
(NPN field connection)
8000-84111-3580500
8000-88111-3950500

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Connection Cables X-Coded Data

Industrial Ethernet Shielded M12 X-Coded Cables

Features

- High flex industrial Ethernet shielded Cat6a cables
- Resistant to welding sparks
- Flame retardant, chemical resistant
- TPE (thermoplastic elastomer) jacket for typical industrial applications



7700-51101 Series



7700-51201 Series

Ethernet Shielded M12 X-coded Cables							
Part Number	*Price*	*Poles/ Pins*	*Connectors*	*Jacket*		*Length*	*Drawing Link*
				Material	*Color*	*m [ft]*	
7700-51101-S4X0100	$69.00	8	Male straight M12 to straight RJ45	TPE Thermoplastic Elastomer	Teal	1.0 [3.2]	PDF
7700-51101-S4X0300	$87.00					3.0 [9.8]	PDF
7700-51101-S4X0500	$107.00					5.0 [16.4]	PDF
7700-51201-S4X0100	$75.00		Male 90-degree M12 to straight RJ45			1.0 [3.2]	PDF
7700-51201-S4X0300	$95.00					3.0 [9.8]	PDF
7700-51201-S4X0500	$113.00					5.0 [16.4]	PDF

Specifications			
Nominal Voltage	60VDC UL rated: 30VDC	*Locking Material*	Zinc die casting, matte nickel plated
Max Current	0.5 A	*Protection Degree*	M12: IP66K/67 ; RJ45: IP20
Rated Surge Voltage	1.0 kV	*Outer Ø*	7.4 mm [0.29 in] ±5%
Transfer Parameters	Cat6a, Class EA (ISO/IEC 11801)	*Bend Radius*	10 x outer Ø*
Transfer Rate	Up to 10Gbps full duplex	*Temperature Range*	Cable: -40 to +80°C [-40 to +176°F] Connector: -25 to 85°C [13 to 185°F]
Connection	Connector 1: M12 X-coded Connector 2: RJ45	*Wire Material*	Copper wire, tin plated
		Approvals	cULus File E362618
Tightening Torque	0.6 N·m	To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.	

***For a linear flex application with a bend radius of 10x of the outside diameter of the cable, you can expect a life of 1 million cycles. For a linear flex application with a bend radius of 20x of the outside diameter of the cable, you can expect a life of 10 million cycles.**