

# Round Water-resistant Connectors (M12) Single-ended Cables **XS2F-M12**

## Water- and Environment-resistive FA Connectors Save Wiring and Maintenance Effort

- Single-ended cables with M12 connectors satisfy IP67 requirements and ensure a 94V-0 fire retardant rating.
- Connectors make wiring a system more modular, simplify maintenance, and reduce downtime.
- Connectors with Cables and Connector Assemblies are available.



## ■ Ratings and Specifications

Item	4, 5 Poles
Rated current	4 A
Rated voltage	250 VDC
Contact resistance	40 mΩ max. (20 mV max., 100 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength (leakage current: 1 mA max.)	1,500 VAC for 1 min
Degree of protection	IP67 (IEC60529)
Insertion tolerance	200 times min.

## ■ Material

Contact / Surface	Copper Alloy / Nickel base, Au 0.4 μm
Connector housing	PBT resin (UL94V-0)
Nut / Surface	Copper Alloy / Nickel plated
Cover (XS2F/H/W/R)	PBT resin (UL94V-0)

## ■ PVC Cable

Item	3 cores	4 cores	5 cores
Color	Black		
Outer diameter	5 mm dia.	5.4 mm dia.	5.8 mm dia.
Conductor size	AWG22 0.34 mm <sup>2</sup> (43 × 0.1)		
Approvals	AWM		
Features	Flame retardant		
Temperature range	Cable fixed: -10 to +80°C Cable moved: -0 to +60°C		

## ■ PUR Cable

Item	3 cores	4 cores	5 cores
Color	Black		
Outer diameter	4.3 mm dia.	4.7 mm dia.	5 mm dia.
Conductor size	AWG22 0.34 mm <sup>2</sup> (43 × 0.1)		
Approvals	AWM		
Features	Flame retardant Halogen free Oil resistance		
Temperature range	Cable fixed: -50 to +80°C / Cable moved: -25 to +80°C		

4-Pin and 5-Pin Connectors , Single Keyway

■ XS2F - M12 Single-ended Cable with Socket

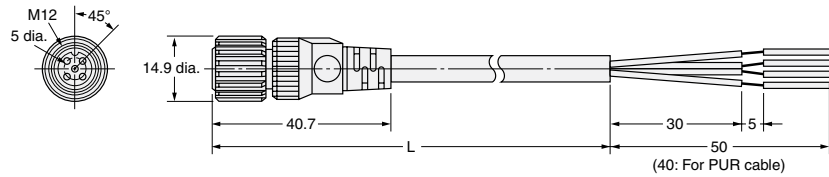
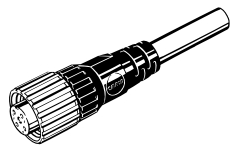
XS2F-M12PVC□□□□M PVC Cable  
 XS2F-M12PUR□□□□M PUR Cable



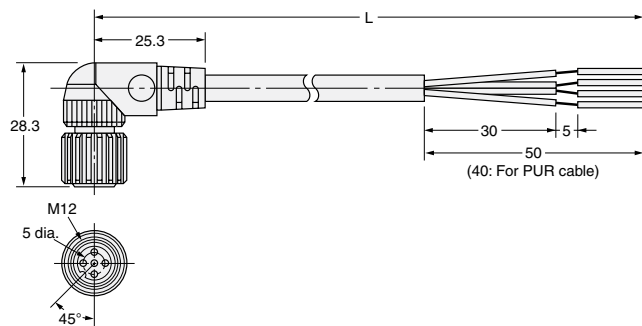
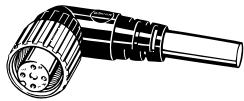
Dimensions

(Unit: mm)

Straight



Angled



Wiring Diagram

3 cores	4 cores	5 cores
<p>Contact No.</p> <p>Cable lead colors Brown Blue Black</p>	<p>Contact No.</p> <p>Cable lead colors Brown White Blue Black</p>	<p>Contact No.</p> <p>Cable lead colors Brown White Blue Black Green / Yellow</p>

**Ordering Information**

Connector	Size	Cable material	Cores	Shape	Length (m)	Product description
Socket	M12	PVC	3	Angled	2	XS2F-M12PVC3A2M
					5	XS2F-M12PVC3A5M
					10	XS2F-M12PVC3A10M
				Straight	2	XS2F-M12PVC3S2M
					5	XS2F-M12PVC3S5M
					10	XS2F-M12PVC3S10M
			4	Angled	2	XS2F-M12PVC4A2M
					5	XS2F-M12PVC4A5M
					10	XS2F-M12PVC4A10M
				Straight	2	XS2F-M12PVC4S2M
					5	XS2F-M12PVC4S5M
					10	XS2F-M12PVC4S10M
			5	Angled	2	XS2F-M12PVC5A2M
					5	XS2F-M12PVC5A5M
					10	XS2F-M12PVC5A10M
		Straight		2	XS2F-M12PVC5S2M	
				5	XS2F-M12PVC5S5M	
				10	XS2F-M12PVC5S10M	
		PUR	3	Angled	2	XS2F-M12PUR3A2M
					5	XS2F-M12PUR3A5M
					10	XS2F-M12PUR3A10M
				Straight	2	XS2F-M12PUR3S2M
					5	XS2F-M12PUR3S5M
					10	XS2F-M12PUR3S10M
			4	Angled	2	XS2F-M12PUR4A2M
					5	XS2F-M12PUR4A5M
					10	XS2F-M12PUR4A10M
				Straight	2	XS2F-M12PUR4S2M
					5	XS2F-M12PUR4S5M
					10	XS2F-M12PUR4S10M
5	Angled		2	XS2F-M12PUR5A2M		
			5	XS2F-M12PUR5A5M		
			10	XS2F-M12PUR5A10M		
	Straight	2	XS2F-M12PUR5S2M			
		5	XS2F-M12PUR5S5M			
		10	XS2F-M12PUR5S10M			

**Model Number Legend**

Use this model number legend to identify products from their model number. When ordering, use a model number from the table in *Ordering Information*.

**XS2F - M12**    
 1      2      3      4      5

**1. Screw Type**

M12: M12 size

**2. Cable type**

PVC: PVC cable

PUR: PUR cable

**3. Number of Cores**

3: 3 cores

4: 4 cores

5: 5 cores

**4. Connector Shape**

A: Angled

S: Straight

**5. Cable Length**

2M: 2 m

5M: 5 m

10M: 10 m



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**OMRON CANADA, INC. • HEAD OFFICE**

Toronto, ON, Canada • 416.286.6465 • 866.986.6766  
[www.omron247.com](http://www.omron247.com)

**OMRON ELETRÔNICA DO BRASIL LTDA • HEAD OFFICE**

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**OMRON EUROPE B.V.** Wegalaan 67-69, NL-2132 JD, Hoofddorp, The Netherlands. Tel: +31 (0) 23 568 13 00 Fax: +31 (0) 23 568 13 88 [www.industrial.omron.eu](http://www.industrial.omron.eu)