# OMRON

# 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.

# ■ 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				

## 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)

(Unit: mm)

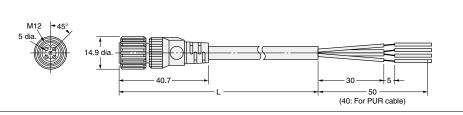
# ■ XS2F - M12 Single-ended Cable with Socket



#### **Dimensions**

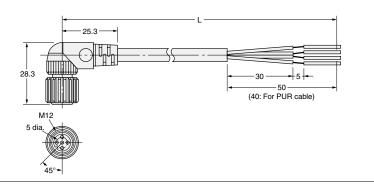
Straight





Angled





## **Wiring Diagram**

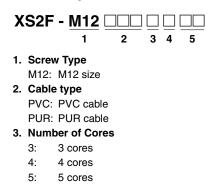
3 cores	4 cores	5 cores	
Contact No. Cable lead colors Brown Blue Black	Contact No. Cable lead colors Brown White Blue Black	Contact No. Cable lead colors White Black Green / Yellow	

# OMRON

nector	Size	Cable material	Cores	Shape	Length (m)	Product description		
				Angled	2	XS2F-M12PVC3A2M		
					5	XS2F-M12PVC3A5M		
		3		10	XS2F-M12PVC3A10M			
			Straight 2 5 10		2	XS2F-M12PVC3S2M		
				5	XS2F-M12PVC3S5M			
				10	XS2F-M12PVC3S10M			
				2 XS2F-M12PV0	XS2F-M12PVC4A2M			
		PVC			5	XS2F-M12PVC4A5M		
		FVC	4		10	XS2F-M12PVC4A10M		
			4		2	XS2F-M12PVC4S2M		
			Straight	5	XS2F-M12PVC4S5M			
				10	XS2F-M12PVC4S10M			
			Angled	2	XS2F-M12PVC5A2M			
		5	Angled	5	XS2F-M12PVC5A5M			
			Ohusiaha	2	XS2F-M12PVC5S2M			
ket	M12			Straight	5	XS2F-M12PVC5S5M		
Kel	IVI 12			Angled	2	XS2F-M12PUR3A2M		
			1		5	XS2F-M12PUR3A5M		
			3		10	XS2F-M12PUR3A10M		
			3		2	XS2F-M12PUR3S2M		
						Straight	5	XS2F-M12PUR3S5M
					10	XS2F-M12PUR3S10M		
				Angled	2	XS2F-M12PUR4A2M		
		PUR			5	XS2F-M12PUR4A5M		
			4		10	XS2F-M12PUR4A10M		
			4	Straight	2	XS2F-M12PUR4S2M		
					5	XS2F-M12PUR4S5M		
					10	XS2F-M12PUR4S10M		
			5	Angled	2	XS2F-M12PUR5A2M		
				Angled	5	XS2F-M12PUR5A5M		
			3	Otwainshi	2	XS2F-M12PUR5S2M		
		1	Straight	5	XS2F-M12PUR5S5M			

### **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*.



- 4. Connector Shape A: Angled
  - S: Straight
- 5. Cable Length
  - 2M: 2 m 5M: 5 m
  - 10M: 10 m

# OMRON

#### OMRON ELECTRONICS LLC • THE AMERICAS HEADQUARTERS • Schaumburg, IL USA • 847.843.7900 • 800.556.6766 • www.omron247.com

OMRON CANADA, INC. • HEAD OFFICE Toronto, ON, Canada • 416.286.6465 • 866.986.6766 www.omron247.com

OMRON ELETRÔNICA DO BRASIL LTDA • HEAD OFFICE São Paulo, SP, Brasil • 55.11.2101.6300 • www.omron.com.br

**OMRON ELECTRONICS MEXICO SA DE CV • HEAD OFFICE** Apodaca, N.L. • 52.811.156.99.10 • 001.800.556.6766 • mela@omron.com OMRON ARGENTINA • SALES OFFICE Cono Sur • 54.11.4783.5300

OMRON CHILE • SALES OFFICE Santiago • 56.9.9917.3920

OTHER OMRON LATIN AMERICA SALES 54.11.4783.5300

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

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Omron:

XS2F-D421-D80-F	XS2F-M12PUR3A10M	XS2F-M12PUR3A2M	XS2F-M12PUR3A5M	XS2F-M12PUR3S10M
XS2F-M12PUR3S2M	XS2F-M12PUR3S5M	XS2F-M12PUR4A10M	XS2F-M12PUR4A2M	XS2F-M12PUR4A5M
XS2F-M12PUR4S10N	XS2F-M12PUR4S2M	XS2F-M12PUR4S5M	XS2F-M12PUR5A2M	XS2F-M12PUR5A5M
XS2F-M12PUR5S2M	XS2F-M12PUR5S5M	XS2F-M12PVC3A10M	XS2F-M12PVC3A2M	XS2F-M12PVC3A5M
XS2F-M12PVC3S10M	XS2F-M12PVC3S2M	XS2F-M12PVC3S5M	XS2F-M12PVC4A10M	XS2F-M12PVC4S10M
XS2F-M12PVC5A2M	XS2F-M12PVC5A5M	XS2F-M12PVC5S2M	XS2F-M12PVC5S5M	