

# XS2F-M12

## Water- and Environment-resistive FA Connectors

### Save Wiring and Maintenance Effort

- Compact FA connectors meet IP67 requirements and ensure a 94V-0 fire retardant rating.
- A wide array of connectors makes a wiring system more modular, simplifies maintenance, and reduces downtime.
- IEC61076-2-101(IEC60947-5-2)
- Lineup of connectors with LEDs for easy visual confirmation of Sensor operating status.



## Ratings and Specifications

Item	XS2F-M12□□□□□□M XS2W-M12□□□□□□M	XS2F-M12□□□□A□□M□LED
Rated current	4A	
Rated voltage	125 VDC	24 VDC
Contact resistance (Connector)	40 mΩ max. (20 mV max., 100 mA max.)	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	-
Dielectric strength (Connector)	AC 1,500 V 1 min. (leakage current: 1 mA max.).	
Degree of protection	IP67 (IEC60529)	
Temperature range	-10 to +80°C	

## Materials and Finish

Contacts	Copper alloy/ nickel base, gold plating
Pin block	PBT resin (UL94 V-0)
Fixtures	Copper alloy/ nickel plating
Cover	PBT resin (UL94V-0)

## PVC Cable

Item	3 cores	4 cores
Color	Black	
Outer diameter	5 mm dia.	5 mm dia. *
Conductor size	AWG23 0.25 mm <sup>2</sup> (32/0.1)	
Approvals	AWM2464	
Features	Flame retardant	

\*LED Type is 5.4 mm dia.

## PUR Cable

Item	3 cores	4 cores
Color	Black	
Outer diameter	4.3 mm dia.	4.7 mm dia.
Conductor size	AWG22 0.32 mm <sup>2</sup> (42/0.1)	
Approvals	AWM20936	
Features	Flame retardant Halogen free Oil resistance	

## Connector Pinout Diagram (from Mating Side)

Item	No. of poles	4 poles
DC type	Male (plug) contacts	
	Female (socket) contacts	

# XS2F M12 Sockets on One Cable End

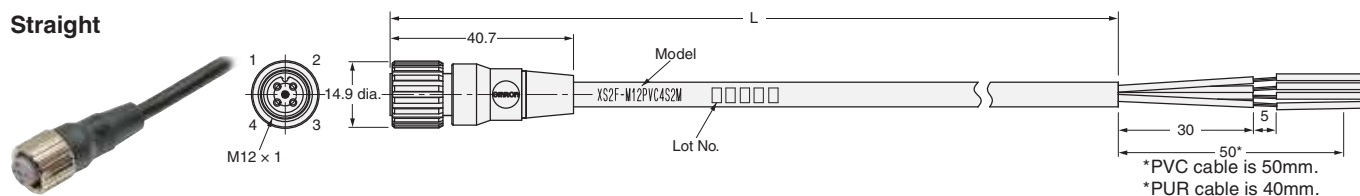
XS2F-M12PVC□□□□M PVC cable

XS2F-M12PUR□□□□M PUR cable

## Dimensions

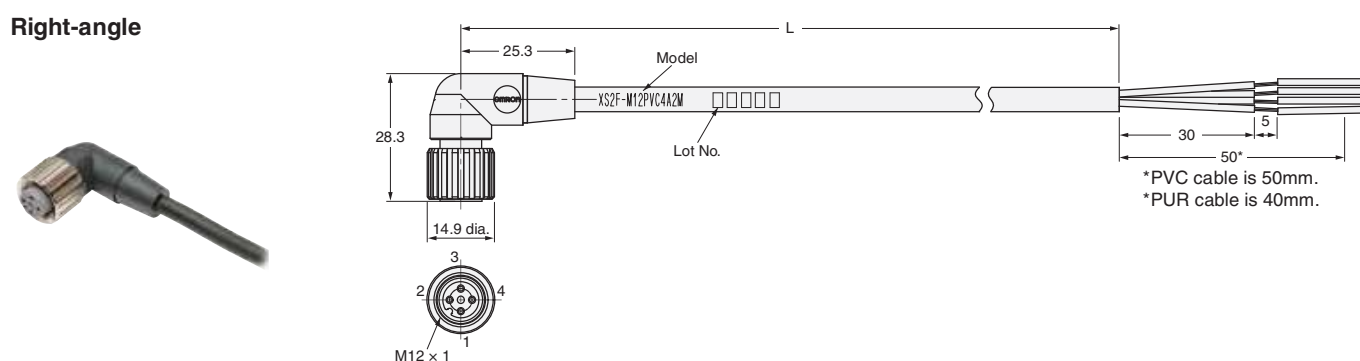
(Unit: mm)

### Straight



\*PVC cable is 50mm.  
\*PUR cable is 40mm.

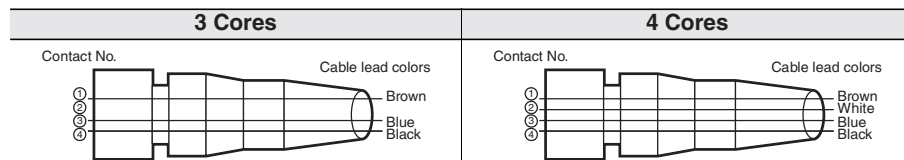
### Right-angle



\*PVC cable is 50mm.  
\*PUR cable is 40mm.

Note: For 3-core, pin 2 is not connected internally

## Wiring Diagram



## Ordering Information

Cable type	No. of cable cores	Cable outer diameter	Cable connection direction	Cable length (m)	Model
PVC	3	5.0 dia	Straight	2	XS2F-M12PVC3S2M
				5	XS2F-M12PVC3S5M
				10	XS2F-M12PVC3S10M
			Right-angle	2	XS2F-M12PVC3A2M
				5	XS2F-M12PVC3A5M
				10	XS2F-M12PVC3A10M
	4		Straight	2	XS2F-M12PVC4S2M
				5	XS2F-M12PVC4S5M
				7	XS2F-M12PVC4S7M
			Right-angle	10	XS2F-M12PVC4S10M
				2	XS2F-M12PVC4A2M
				5	XS2F-M12PVC4A5M
PUR	3	4.3 dia	Straight	7	XS2F-M12PVC4A7M
				10	XS2F-M12PVC4A10M
				2	XS2F-M12PUR3S2M
			Right-angle	5	XS2F-M12PUR3S5M
				10	XS2F-M12PUR3S10M
				2	XS2F-M12PUR3A2M
	4		Straight	5	XS2F-M12PUR3A5M
				10	XS2F-M12PUR3A10M
				2	XS2F-M12PUR4S2M
			Right-angle	5	XS2F-M12PUR4S5M
				10	XS2F-M12PUR4S10M
				2	XS2F-M12PUR4A2M
				5	XS2F-M12PUR4A5M
				10	XS2F-M12PUR4A10M

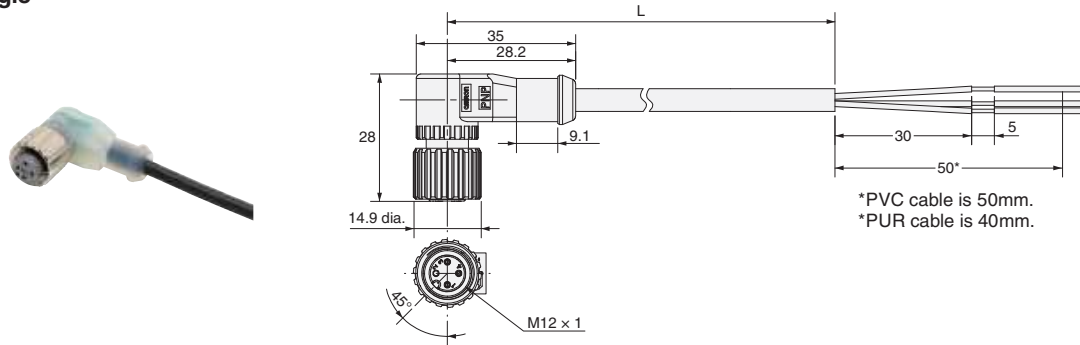
# XS2F M12 Sockets on One Cable End with LED

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

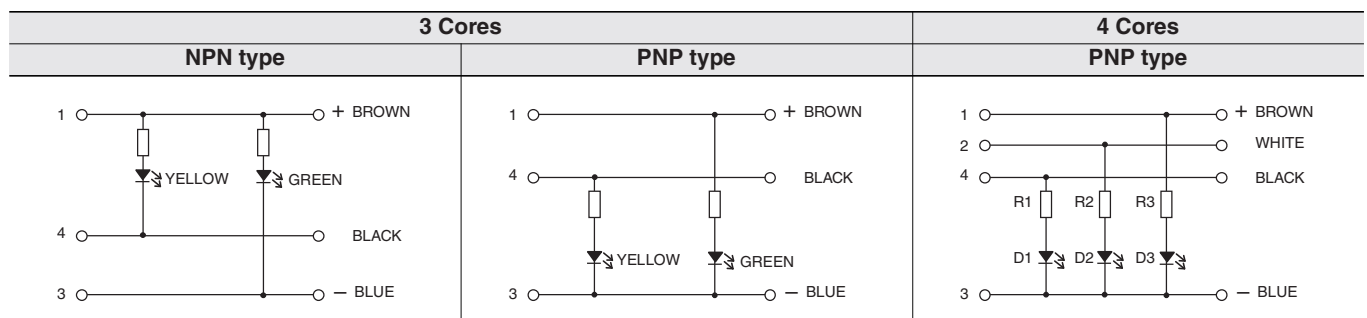
## Dimensions

(Unit: mm)

### Right-angle



## Wiring Diagram



## Ordering Information

Cable type	No. of cable cores	Cable outer diameter	Cable connection direction	Cable length (m)	Model	LED
PVC	3	5.0 dia.	Right-angle	2	XS2F-M12PVC3A2MPLED	PNP
				5	XS2F-M12PVC3A5MPLED	
				10	XS2F-M12PVC3A10MPLED	
	4	5.4 dia.		2	XS2F-M12PVC3A2MNLED	NPN
				5	XS2F-M12PVC3A5MNLED	
				10	XS2F-M12PVC3A10MNLED	
PUR	3	4.3 dia.	2	XS2F-M12PUR3A2MPLED	PNP	
			5	XS2F-M12PUR3A5MPLED		
			10	XS2F-M12PUR3A10MPLED		
	4	4.7 dia.	2	XS2F-M12PUR4A2MPLED		
			5	XS2F-M12PUR4A5MPLED		
			10	XS2F-M12PUR4A10MPLED		