

M8 Molded Sensor I/O Connectors

XS3

Compact Connectors for
Space-Saving Industrial Automation
Equipment

- Surpasses IP67 requirements and ensures 94V-0 fire retardant rating
- Quick disconnect simplifies maintenance and reduces downtime
- Extension cable has one female socket, one male plug
- Single-end I/O connector has a female socket with attached cable
- Robotic cable and vibration-proof connectors withstand repeated flexing



Ordering Information

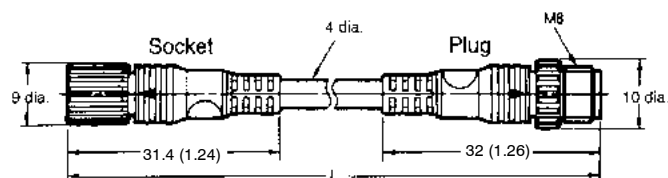
■ EXTENSION CABLE WITH DOUBLE-ENDED, MOLDED SENSOR CONNECTORS

Shape	Number of conductors	Cable length	Part number
Straight-to-straight	4	1 m (6.56 ft)	XS3W-M421-401-R
		2 m (16.40 ft)	XS3W-M421-402-R

■ DIMENSIONS

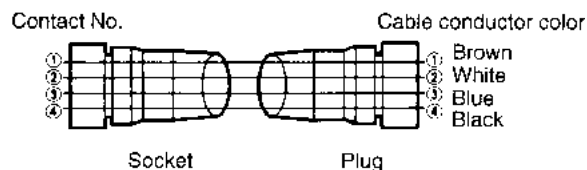
Unit: mm (inch)

XS3W-M421 Straight Connectors on Both Ends



Part number	L
XS3W-M421-401-R	1 m
XS3W-M421-402-R	2 m

■ WIRING DIAGRAM

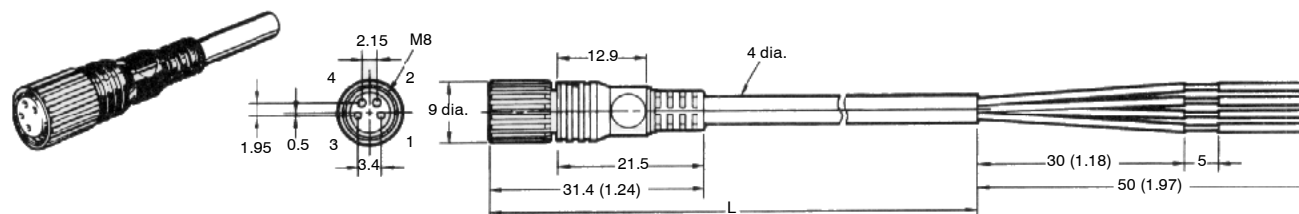


■ SINGLE-ENDED, MOLDED SENSOR CONNECTORS

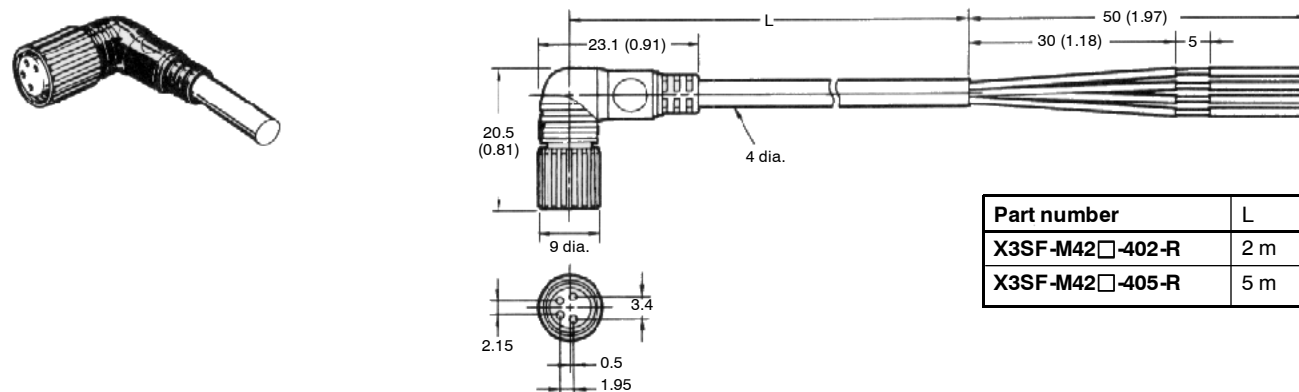
Shape	Number of conductors	Cable length	Part number
Straight connector	4	2 m (6.56 ft)	XS3F-M421-402-R
		5 m (16.40 ft)	XS3F-M421-405-R
Right angle connector		2 m (6.56 ft)	XS3F-M422-402-R
		5 m (16.40 ft)	XS3F-M422-405-R

■ DIMENSIONS

XS3F-M421 Straight Connectors

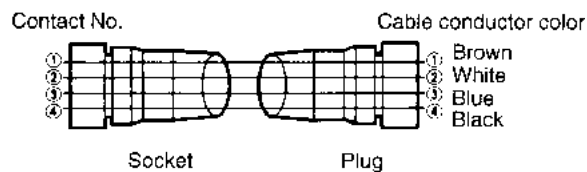


XS3F-M421 Right Angle Connectors



Part number	L
XS3F-M421-402-R	2 m
XS3F-M421-405-R	5 m

■ WIRING DIAGRAM



Specifications

■ MATERIALS AND FINISH

Contact block	PBT resin (UL94V-0), light gray finish
Contact	Brass/nickel base, 0.4 µm (0.016 µin. gold plating)
M8 threaded bracket, shell	Nickel-plated brass
Cover	Black thermoplastic elastomer
O-ring	Rubber

■ CHARACTERISTICS

Current rating	1 A
Voltage rating	125 VDC
Contact resistance	40 mΩ max., 20 mV max., 100 mA max.
Insulation resistance	1000 MΩ at 500 VDC
Dielectric strength	1000 VAC for 1 minute Leakage current: 1 mA max.
Enclosure rating	IEC IP67
Insertion tolerance	200 times minimum
Tensile strength	50 N (5.1 kgf/15 sec)
Ambient operating temperature	-25°C to 70°C (-13°F to 158°F)

Precautions

■ TIGHTENING THE CAP

Tighten the cap firmly by hand (4 to 5 kgf.cm). Use of pliers or other tools may damage the cap.

If the cap is not securely tightened, the following may occur:
Enclosure rating of IP67 will be compromised.
Vibration may loosen the cap.

■ INSERTING AND REMOVING THE CONNECTOR

Turn off the power before inserting or removing the connector.

Complete the following steps before mating any connector:

Fully insert the mating parts.

Tighten the anchor. This will prevent damage to the threads.

Firmly tighten (4 to 5 kgf • cm) the anchors by hand only. Tighten until threads can no longer be seen.

Only loosen the anchor when removing the connector. Do not loosen the cap.

Loosen the anchor in the direction of the groove.

■ PROTECTIVE HOUSING

Do not use a connector that has an enclosure rating of IP67 in an environment where it is continually under stress. The protection rating may decrease.

Do not use the connector in an application that requires the connector to be under water continually. Connectors with an enclosure rating of IP67 are not completely watertight.

The housing is made of plastic. Do not step on it or place heavy objects on top of it.

■ STORAGE

Store connectors in a moisture- and dust-free environment. Do not store connectors near ammonia gas, sulfuric gas, and so forth.

NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

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