

Sensor I/O Connectors (M8/S8) XS3

Compact, Watertight, Round Connectors

- Water-resistive, compact connector meets IP67 requirements.
- Ideal for a wide variety of FA and OA applications.
- Using connectors for wiring ensures ease of equipment maintenance and reduces downtime required for equipment maintenance.
- Vibration-proof robot cable available as a standard product.



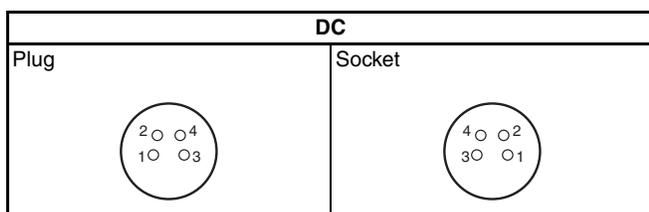
Ratings and Specifications

Item	Model	XS3W/F/H
Rated current		1 A
Rated voltage		125 VDC
Contact resistance (connector)		40 mΩ max. (20 mVDC max., 100 mA max.)
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength (connector)		1,000 VAC for 1 min. (leakage current: 1 mA max.)
Degree of protection		IP67 (IEC529)
Insertion tolerance		200 times
Cable tensile strength		50 N
Ambient temperature		Operating: -25°C to 70°C

Materials and Finish

Item	Model	XS3W/F/H
Pin Block		PBT resin/light gray or black
Contacts		Brass/nickel base, 0.4-μm gold plating
Thread bracket (M8) Shell (S8)		Brass/nickel plated
Cover		Thermoplastic elastomer/black
O-ring		Rubber

Pin Arrangement (Engaged Side)



XS3W

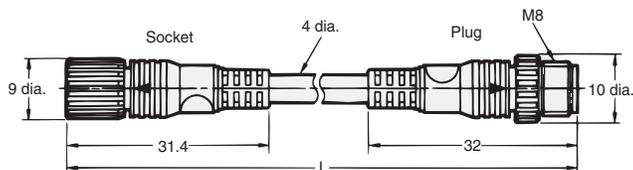
M8 Screw-mounting Connectors with Vibration-proof Robot Cable

XS3W-M42□-4□□-R

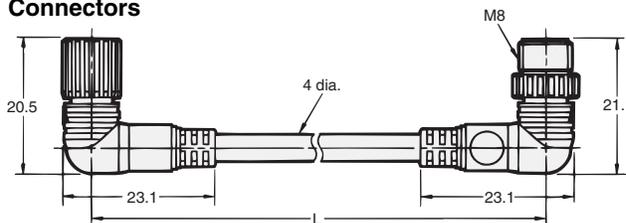
■ Dimensions

(Unit: mm)

Straight/Straight Connectors



L-shaped/L-shaped Connectors



■ 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.

XS3W-M4 □ - **4** □ □ - **R**

1 2 3 4 5 6

1. Fastening Method

M: M8

2. Connector Poles

4: 4 poles

3. Cable Connection Direction

1: Straight/straight

2: L-shaped/L-shaped

4. Connections

Pin No.

(1) (2) (3) (4)

4: Brown White Blue Black

5. Cable Length

01: 1 m

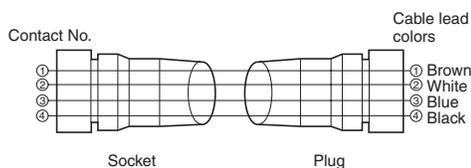
02: 2 m

05: 5 m

6. Cable Specifications

R: Vibration-proof robot cable

■ Wiring Diagram



■ Mating Connectors

Item	Socket side	Plug side
XS3W (M8)	XS3M (M8/S8)	XS3F (M8)
	XS3H (M8)	XS3W (M8)
		XS3P (M8)

Note: 1. Cables can be extended with more than one XS3W.

2. M8 screw-mounting models and S8 snap-in models cannot be connected to each other.

■ Ordering Information

Item	Cable connection direction	No. of cable conductors	Cable length (m)	Model
M8 Connectors Vibration-proof robot cable	Straight/Straight	4	1	XS3W-M421-401-R
			2	XS3W-M421-402-R
			5	XS3W-M421-405-R
	L-shaped/L-shaped		2	XS3W-M422-402-R
			5	XS3W-M422-405-R
			Straight/L-shaped	2
	5	XS3W-M423-405-R		
	L-shaped/Straight	2		XS3W-M424-402-R
		5	XS3W-M424-405-R	

XS3F Sockets on One Cable End

M8 Screw-on Cables with Vibration-proof Robot Cable/Standard Cable

XS3F-M42□-4□□-□

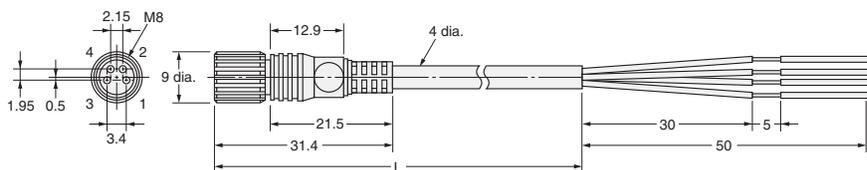
Dimensions

(Unit: mm)

Straight Connectors



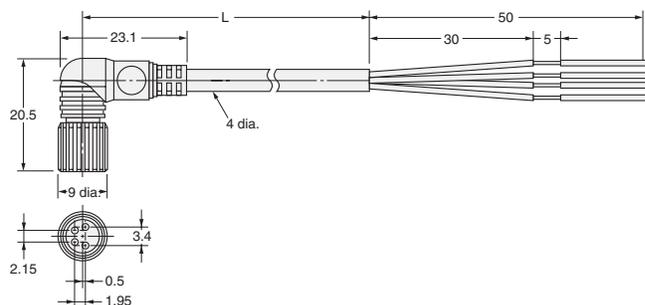
CAD Data



L-shaped Connectors



CAD Data



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.

XS3F-M42□-4□□-□
1 2 3 4 5 6

1. Fastening Method

M: M8

2. Connector Poles

4: 4 poles

3. Cable Connection Direction

1: Straight
 2: L-shaped

4. Connections

Pin No.

(1) (2) (3) (4)

4: Brown White Blue Black

5. Cable Length

01: 1 m

02: 2 m

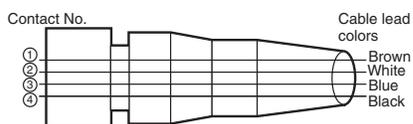
05: 5 m

6. Cable Specifications

A: Standard cable

R: Vibration-proof robot cable

Wiring Diagram



Mating Connectors

Model	Mating connector
XS3F (M8)	XS3M (M8/S8), XS3H (M8), XS3W (M8)

Note: M8 screw models and S8 snap-in models cannot be connected to each other.

Ordering Information

M8 Model

Item	Cable connection direction	No. of cable conductors	Cable length (m)	Model
Standard cable	Straight	4	2	XS3F-M421-402-A
			5	XS3F-M421-405-A
	L-shaped		2	XS3F-M422-402-A
			5	XS3F-M422-405-A
Vibration-proof robot cable	Straight	4	2	XS3F-M421-402-R
			5	XS3F-M421-405-R
	L-shaped		2	XS3F-M422-402-R
			5	XS3F-M422-405-R

XS3H Plugs on One Cable End

M8 Screw-on Connectors with Vibration-proof Robot Cable

XS3H-M42□-4□□-R

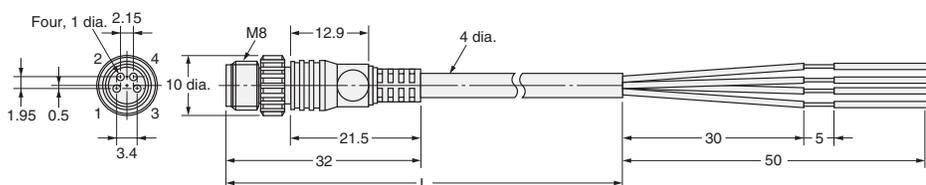
Dimension

(Unit: mm)

Straight Connectors



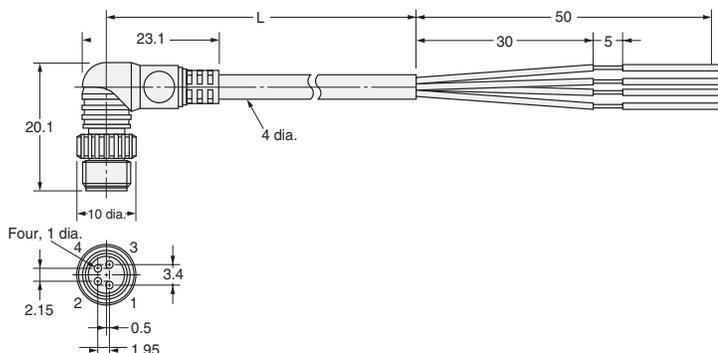
CAD Data



L-shaped Connectors



CAD Data



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.

XS3H-M42□-4□□-□
1 2 3 4 5 6

1. Fastening Method

M: M8

2. Connector Poles

4: 4 poles

3. Cable Connection Direction

1: Straight

2: L-shaped

4. Connections

Pin No.

(1) (2) (3) (4)

4: Brown White Blue Black

5. Cable Length

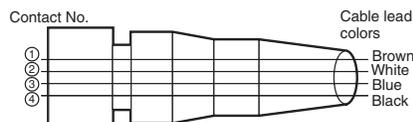
C3: 0.3 m

01: 1 m

6. Cable Specifications

R: Vibration-proof robot cable

Wiring Diagram



Mating Connectors

Model	Mating connector
XS3H (M8)	XS3F (M8), XS3W (M8), XS3P (M8)

Note: M8 screw models and S8 snap-in models cannot be connected to each other.

Ordering Information

M8 Model

Cable connection direction	No. of cable conductors	Cable length (m)	Model
Straight	4	0.3	XS3H-M421-4C3-R
		1	XS3H-M421-401-R
L-shaped	4	0.3	XS3H-M422-4C3-R
		1	XS3H-M422-401-R

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