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 ² (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 ² (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) | |

4-Pin and 5-Pin Connectors, Single Keyway

■ XS2F - M12 Single-ended Cable with Socket

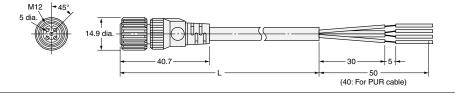
| XS2F-M12PVC□□□□M PVC Cable |
|----------------------------|
| XS2F-M12PUR□□□□M PUR Cable |



<u>Dimensions</u> (Unit: mm)

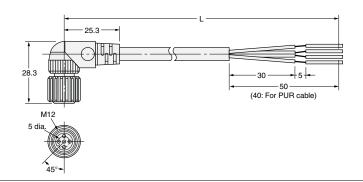
Straight



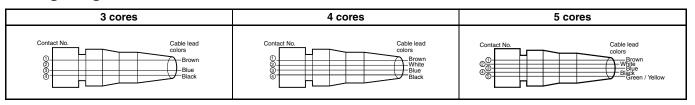


Angled





Wiring Diagram



Ordering Information

| Connector | Size | Cable material | Cores | Shape | Length (m) | Product description |
|-----------|------|----------------|-------|----------|------------|---------------------|
| | | | | Angled | 2 | XS2F-M12PVC3A2M |
| | | | | | 5 | XS2F-M12PVC3A5M |
| | | | 3 | | 10 | XS2F-M12PVC3A10M |
| | | | | Straight | 2 | XS2F-M12PVC3S2M |
| | | | | | 5 | XS2F-M12PVC3S5M |
| | | | | | 10 | XS2F-M12PVC3S10M |
| | | | | Angled | 2 | XS2F-M12PVC4A2M |
| | | PVC | | | 5 | XS2F-M12PVC4A5M |
| | | PVC | _ | | 10 | XS2F-M12PVC4A10M |
| | | | 4 | | 2 | XS2F-M12PVC4S2M |
| | | | | Straight | 5 | XS2F-M12PVC4S5M |
| | | | | | 10 | XS2F-M12PVC4S10M |
| | | | | AII | 2 | XS2F-M12PVC5A2M |
| | M12 | | E | Angled | 5 | XS2F-M12PVC5A5M |
| | | | 5 | Straight | 2 | XS2F-M12PVC5S2M |
| Socket | | | | | 5 | XS2F-M12PVC5S5M |
| Socker | | 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 | Anglad | 2 | XS2F-M12PUR5A2M |
| | | | | Angled | 5 | XS2F-M12PUR5A5M |
| | | | | Straight | 2 | XS2F-M12PUR5S2M |
| | | | | | 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*.

1. Screw Type

M12: M12 size

2. Cable type

PVC: PVC cable PUR: PUR cable

3. Number of Cores

3: 3 cores4: 4 cores5: 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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G22I-E-01

Note: Specifications are subject to change.

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