



SIGNAL CABLE BY THE METRE & M12 CONNECTORS

To Assemble Cables of Various Lengths as Needed

GENERAL SPECIFICATIONS

Signal Cable

• Number of conductors	4
• Wire colors	Brown, white, blue, black
• Overall twist	4 twisted wires
• Optical shield covering	80%
• Shielding	Tinned copper braided shield
• Minimum bending radius	25 mm [1 in.]
• Nominal voltage conductor	< 300 V
• Conductor cross section	4 x 0.34 mm ² [AWG 22]
• Nominal capacitance	
Conductor to conductor	≤ 80 pF/m
Conductor to shield	≤ 135 pF/m
• External cable diameter	4.95 mm ± 0.2 mm [195 ± 8 mils]
• Outer jacket material	Polyurethane (PUR)
• Conductor insulation	Polypropylene (PP)
• Conductor material	Bare Cu litz wires
• Insulation resistance	> 100 GΩ*km (at 20°C [68°F])
• Conductor resistance	Max. 58 Ω/km (at 20°C [68°F])
• Temperature range	
Operating and storage	-25 to 80°C [-13 to 176°F]
• Flame resistance	In accordance with UL FT-2
• Halogen-free	In accordance with DIN VDE 0472 Part 815 & DIN EN 50267-2-1
• Resistance to oil	In accordance with DIN EN 60811-2-1



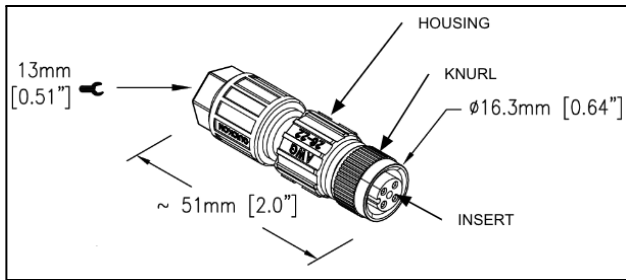


M12 Connectors - Common Specifications to All Models

- | | |
|---------------------------------------|---|
| • Rated current | 4 A (at 40°C [104°F]) |
| • Conductor cross-section (min...max) | 0.14 to 0.34 mm ² [AWG 26 to AWG 22] |
| • Temperature range | |
| Operating and storage | -25 to 80°C [-13 to 176°F] |
| • Degree of protection | IP65 |
| • Contact material | ①②: Cu/Sn, ③④: Cu/Zn |
| • Contact surface material | ①②: Ni/Au, ③④: Au |

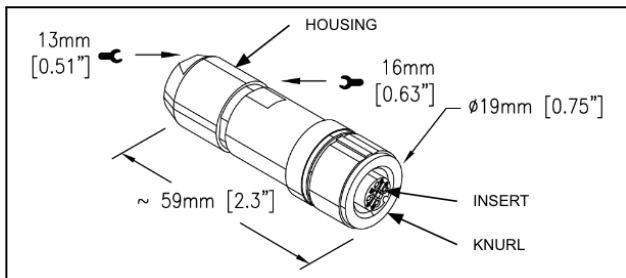
① M12 Unshielded, Straight Connector (Female Type) - VSM-M12FSC

- | | |
|-----------------------|----------------------------------|
| • Number of positions | 4 |
| • Connection type | Female QUICKON™ fast connection |
| • Knurl material | Zinc die-cast, nickel-plated |
| • Housing material | Polyamide (PA 6.6) |
| • Insert material | Thermoplastic polyurethane (TPU) |
| • Rated voltage | 125 Vac / 125 Vdc |



② M12 Shielded, Straight Connector (Female Type) - VSM-M12FSSC

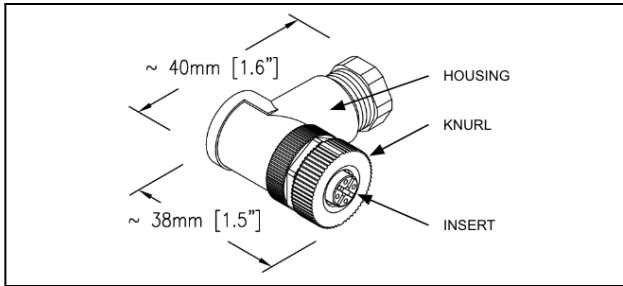
- | | |
|-----------------------|------------------------------|
| • Number of positions | 4 |
| • Connection type | Push-lock spring connection |
| • Knurl material | Zinc die-cast, nickel-plated |
| • Housing material | Zinc die-cast, nickel-plated |
| • Insert material | Polyamide (PA 6.6) |
| • Rated voltage | 48 Vac / 60 Vdc |





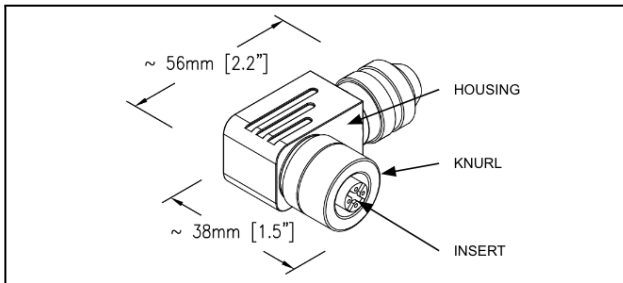
③ M12 Unshielded, Right-Angle Connector (Female Type) - VSM-M12FAC

- Number of positions: 5
- Connection type: Spring clamp
- Knurl material: Brass (CuZn)
- Housing material: Polybutylene terephthalate (PBT)
- Insert material: Polyamide (PA)
- Rated voltage: 60 Vac / 60 Vdc



④ M12 Shielded, Right-Angle Connector (Female Type) - VSM-M12FSAC

- Number of positions: 4
- Connection type: Screw locking
- Knurl material: Zinc die-cast, nickel-plated
- Housing material: Zinc die-cast, nickel-plated
- Insert material: Polyamide (PA)
- Rated voltage: 125 Vac / 125 Vdc



PRODUCT INFORMATION

Product Number	Description
VSM-CBL-4CSZH22-M	Cable / 4 conductors shielded "Zero-Halogen" - AWG 22 (m)
VSM-CBL-4CSZH22-300M	Cable / 4 conductors shielded "Zero-Halogen" - AWG 22 (300 m spool)
VSM-M12FSC	M12 Mating straight connector (fem. type, unshielded)
VSM-M12FSSC	M12 Mating straight connector (fem. type, shielded)
VSM-M12FAC	M12 Mating angled connector (fem. type, unshielded)
VSM-M12FSAC	M12 Mating angled connector (fem. type, shielded)