



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



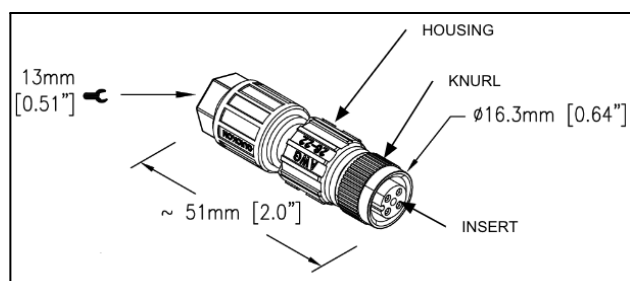


M12 Connectors - Common Specifications to All Models

• 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

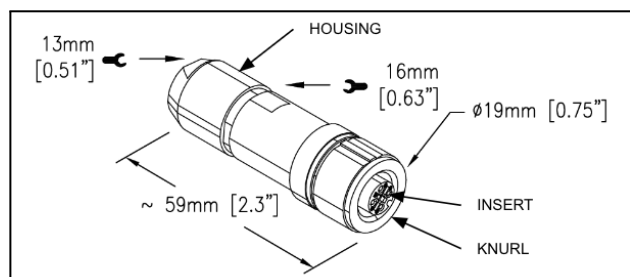
① M12 Unshielded, Straight Connector (Female Type) - VSM-M12FSC

• 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

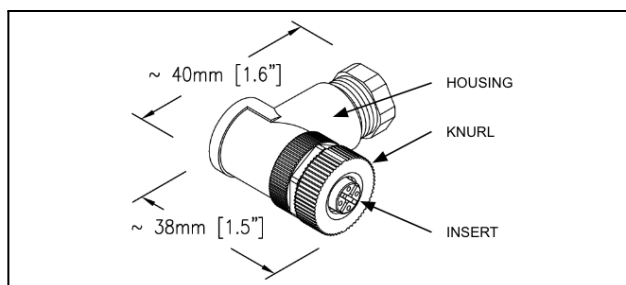
• Number of positions	4
• Connection type	Push-lock spring connection
• Knurl material	Zinc die-cast, nickel-plated
• Housing material	Zinc die-cast, nickel-plated
• Insert material	Polyamide (PA 6.6)
• Rated voltage	48 Vac / 60 Vdc





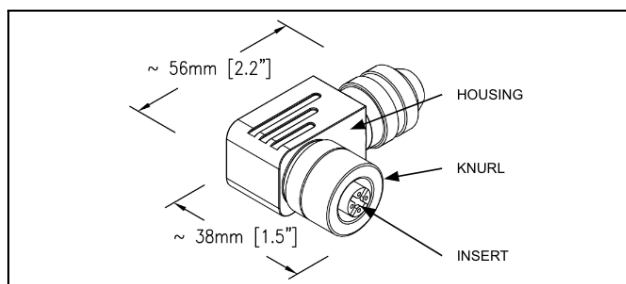
③ M12 Unshielded, Right-Angle Connector (Female Type) - VSM-M12FAC

- 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)