



SIGNAL CABLE AND M12 CONNECTORS

FOR ON-SITE ASSEMBLY OF DATA, SIGNAL & LOW-VOLTAGE POWER SUPPLY CABLES

GENERAL SPECIFICATIONS

Signal Cable

• Number of conductors	4
• Wire colors	Brown, white, blue, black
• Overall twist	4 twisted wires
• Optical shield covering	85%
• Shielding	Tinned copper braided shield
• Minimum bending radius	29.5 mm [1.16 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	5.9 mm ± 0.2 mm [232 ± 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





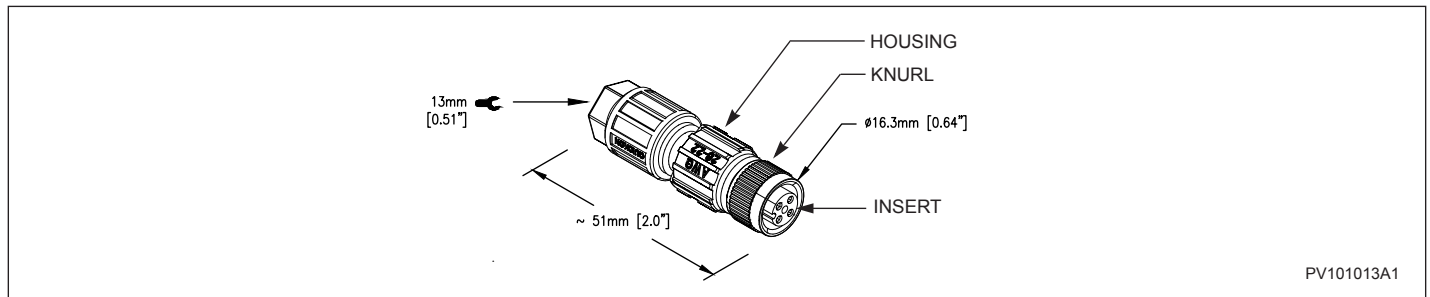
Specifications Common to All M12 Connectors

• Rated current at 40°C [104°F]	4 A
• Rated voltage	125 V
• 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	Cu/Sn
• Contact surface material	Ni/Au

M12 Non-Shielded, Straight Connector (Female Type)

• Number of positions	4
• Connection type	Female QUICKON™ fast connection
• Knurl material	Zinc die-cast, nickel-plated
• Housing material	Polyamide 66 (PA66)
• Insert material	Polyamide 66 (PA66)

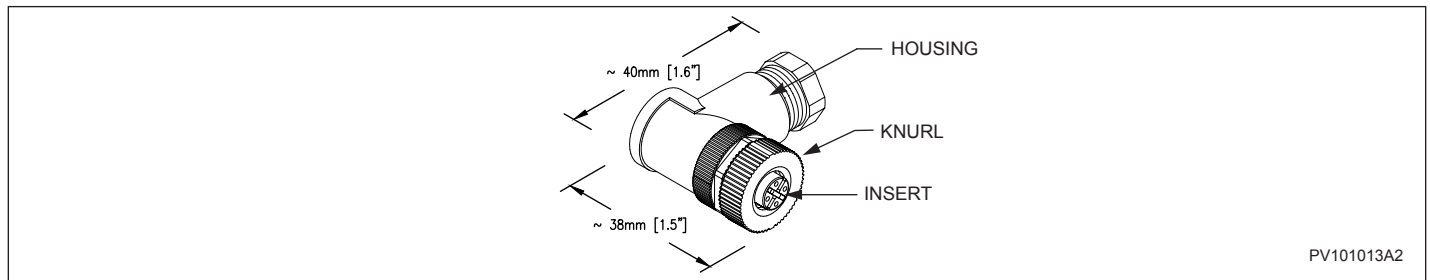
DIMENSIONS



M12 Non-Shielded, Right-Angle Connector (Female Type)

• Number of positions	5
• Connection type	Spring clamp (<i>comes with opening tool for spring clamp</i>)
• Knurl material	Brass (CuZn)
• Housing material	Polybutylene terephthalate (PBT)
• Insert material	Polyamide (PA)

DIMENSIONS

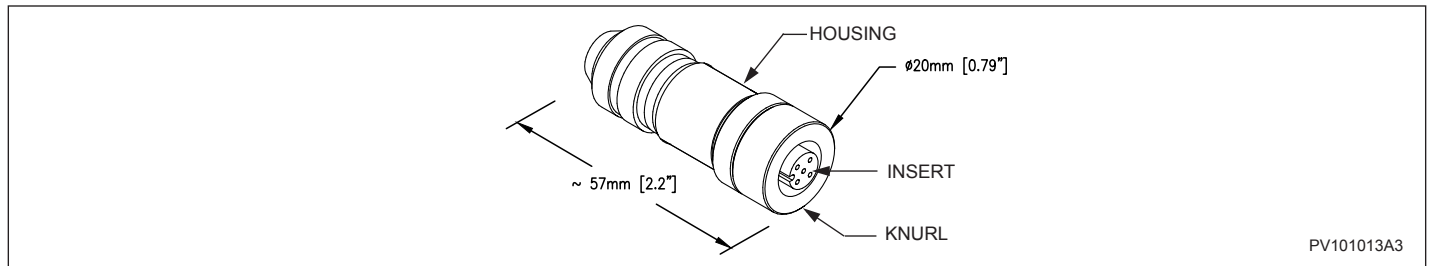




M12 Shielded, Straight Connector (Female Type)

- 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)

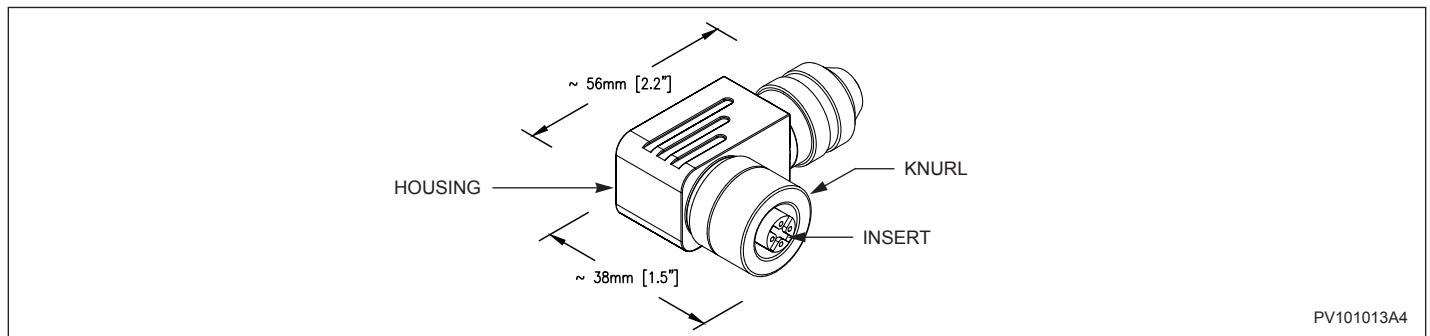
DIMENSIONS



M12 Shielded, Right-Angle Connector (Female Type)

- 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)

DIMENSIONS



PRODUCT IDENTIFICATION

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-M12FAC	M12 Mating angled connector (fem. type, unshielded)
VSM-M12FSSC	M12 Mating straight connector (fem. type, shielded)
VSM-M12FSAC	M12 Mating angled connector (fem. type, shielded)