





M12 type mating connectors DC sensors

Suitable for DC sensors with 2, 3 or 4 wires						
Cable sheath	Length	Number of cores	Ø (mm ²)	Design straight	Design angled	Design angled with 2 LEDs
PVC, black	2 m	4	0.34	V1-G-2M-PVC	V1-W-2M-PVC	
	5 m	4	0.34	V1-G-5M-PVC	V1-W-5M-PVC	
	10 m	4	0.34	V1-G-10M-PVC	V1-W-10M-PVC	
PUR, black	2 m	4	0.34	V1-G-2M-PUR	V1-W-2M-PUR	V1-W-A2-2M-PUR
	5 m	4	0.34	V1-G-5M-PUR	V1-W-5M-PUR	V1-W-A2-5M-PUR V1-A0-5M-PUR V1-W-E2/E3-5M-PUR
	10 m	4	0.34	V1-G-10M-PUR	V1-W-10M-PUR	V1-W-A2-10M-PUR
PUR, black	2 m	3	0.34			V1-W-E2-2M-PUR
	5 m	3	0.34			V1-W-E2-5M-PUR V1-W-E-5M-PUR
	10 m	3	0.34			V1-W-E2-10M-PUR
PVC, black	2 m	5	0.34	V15-G-2M-PVC	V15-W-2M-PVC	
	5 m	5	0.34	V15-G-5M-PVC	V15-W-5M-PVC	
	10 m	5	0.34	V15-G-10M-PVC	V15-W-10M-PVC	
PUR, black	2 m	5	0.25		V15-W-2M-PUR	
	5 m	5	0.25		V15-W-5M-PUR	

For pin assignment, see page 29 and 30

M12 type mating connectors for AC sensors

Suitable for AC sensors with 2 wires					
Cable sheath	Length	Number of cores	Ø (mm ²)	Design straight	Design angled
PUR	5 m	3	0.34	V13-G-5M-PUR	V13-W-5M-PUR

For pin assignment, see page 29 and 30

Technical Data for Plug Connectors with Moulded Cable

Plug Connectors and Sockets

Number of Pins	2, 3, 4 or 5
Locking	screw lock
Self-locking	via O-ring in cap nut
Colour of handle	green
Material of handle	PUR
Material of contacts	CuSn/Au
Material of contact surface	Au
Material of cap nut	CuSn/Ni
Material of sealing ring	NBR
Degree of protection acc. to DIN 40050	IP68 in screwed state
Max. operating voltage	60 V DC or 250 V AC (for V13-...types)
Max. operating current	4 A
Volume resistance	< 5 mΩ
Insulation resistance	acc. to VDE 0295
Test voltage	1500 V _{eff.} AC, 50 Hz

Cable

Cable structure	finely stranded, flexible
Core cross-sections	Cables for M12 connections: 0.34 mm ² but NAMUR mating connectors: 0.50 mm ² Cables for M8 connections: 0.25 mm ²
Colour of sheath	black for M12 and grey for M8
Temperature range for PVC conductors	moving: -5 °C to +70 °C non-moving: -30 °C to +80 °C
Temperature range for PUR conductors ¹⁾	moving: -5 °C to +70 °C non-moving: -30 °C to +100 °C
Minimum permissible bending radius	> 10 x conductor diameter
Sheath diameter	Ø4.6 mm for M8 and Ø4.8 mm for M12, but Ø5.2 mm for 5-pin version
Core insulation material	PVC
Core colours according to VDE 293	2-pin: BN, BU 3-pin: BN, BU, BK 4-pin: BN, BU, BK, WH 5-pin: BN, BU, BK, WH, GY

¹⁾ Please note reduced mechanical values for PUR cables at temperatures over +80 °C.