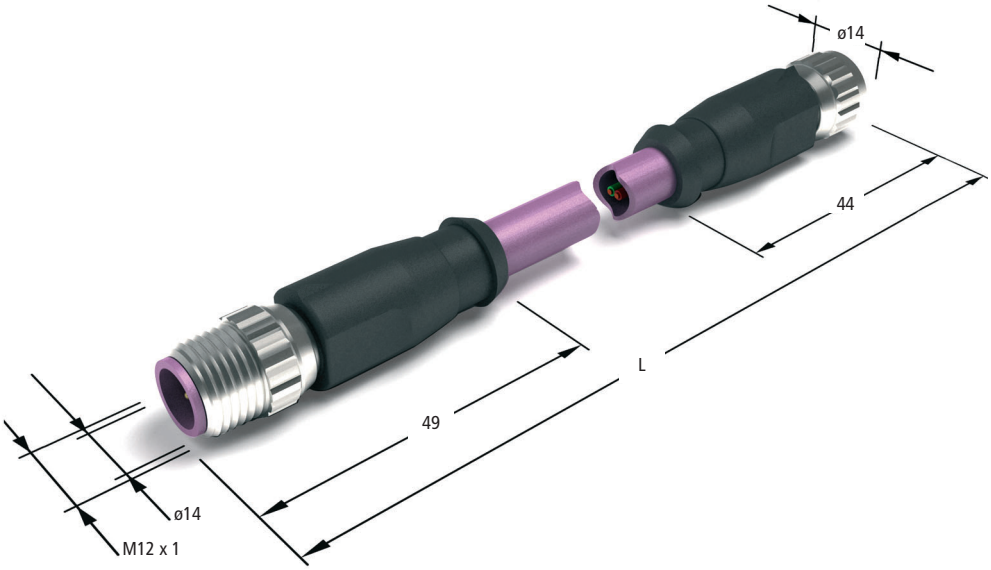
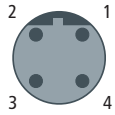
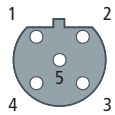




1 | n. c.
2 | green
3 | n. c.
4 | red

Plug M12, 4-pin



1 | n. c.
2 | green
3 | n. c.
4 | red

Socket M12, 5-pin

PROFIBUS cable | **M12 plug, straight, reverse-keyed, 4-pin – M12 socket, straight, reverse-keyed, 4-pin**

Electrical data	ZK1031-6251-1xxx
Rated voltage	160 V (according to IEC 61076-2-101)
Rated current	4 A at 40 °C (according to IEC 61076-2-101)
Insulation resistance	≥ 10 GΩ (according to IEC 60512-2)
Line capacitance	28.5 nF/km
Nominal impedance	3…20 MHz, (150 ±15) Ω 38.4 kHz, (185 ±8.5) Ω 9.6 kHz, (270 ±27) Ω
Shielding	aluminium-clad foil, braiding of tinned copper wires
Attenuation	16 MHz: 42 dB/km 4 MHz: 25 dB/km 38.4 kHz: 4 dB/km 9.6 kHz: 3 dB/km

Mechanical data	
Bus plug	B-coded
Protection class	IP 67 in screwed condition (according to IEC 60529)
Ambient temperature	-30 °C…+80 °C (according to IEC 60644-1)
Insertion cycles	≤ 100 (according to IEC 60512-9a)
Contamination level	3/2 (according to IEC 60664-1)

Mechanical properties cable	
Temperature range (cable)	-40 °C…+80 °C
Cable outside diameter	8.50 ±0.40 mm
Drag chain suitable	yes
Bending radius	7.5 x D
Number of cycles	min. 5 million
Parameter	acceleration max. 4 m/sec²
Approbations	UL Style 119100 VOL.1 SEC.8 Page 1
Material properties	RoHS-compliant, halogen-free as per DIN VDE 0472, part 815/A, flame-resistant as per IEC 60332-1-2, oil-resistant as per DIN EN 60811-2-1
Wire pair 1	stranded bare copper wire 19 x 0.14 mm (0.006 in), ø 0.65 mm (0.026 in)

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Materials	
Contact material	CuZn
Contact surface	Ni, Au gal.
Contact carrier/body	TPU GF, UL 94/TPU, UL 94
Coupling screw/nut	CuZn, Ni
Seal	FPM
Cable	TPU (thermoplastic polyurethan), UL, 2-wire with filler, purple, shielded

Ordering information	Cable length
ZK1031-6251-1003	0.30 m
ZK1031-6251-1005	0.50 m
ZK1031-6251-1010	1.00 m
ZK1031-6251-1020	2.00 m
ZK1031-6251-1025	2.50 m
ZK1031-6251-1050	5.00 m
ZK1031-6251-1070	7.00 m
ZK1031-6251-1080	8.00 m
ZK1031-6251-1090	9.00 m
ZK1031-6251-1095	9.50 m
ZK1031-6251-1100	10.00 m
ZK1031-6251-1105	10.50 m
ZK1031-6251-1110	11.00 m
ZK1031-6251-1130	13.00 m
ZK1031-6251-1145	14.50 m
ZK1031-6251-1150	15.00 m
ZK1031-6251-1195	19.50 m
ZK1031-6251-1200	20.00 m
ZK1031-6251-1220	22.00 m

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