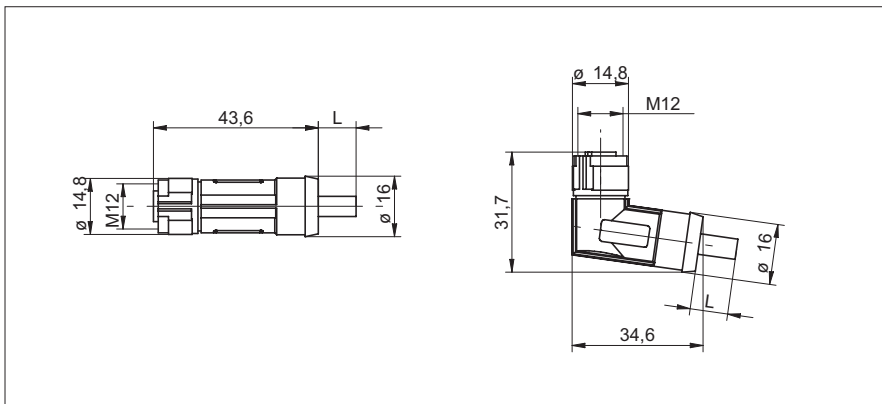


Female connector M12 with attached RADOX®-cable, shielded

dimension drawing



- 4-wire, shielded
- shield connected with cap-nut (360°)
- RADOX® halogen-free
- self-locking cap nut
- for railway applications

General data

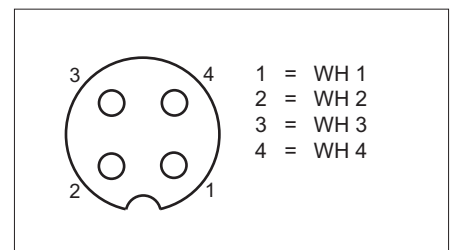
Nominal current at 40 °C	4 A
Nominal voltage	250 V
Number of positions	4
Insulation resistance	≥ 100 MΩ
Length of cable	see listing
Stripping length of the free conductor end	50 mm
Ambient temperature (operation)	-40 ... +85 °C

General characteristics (grip-body)

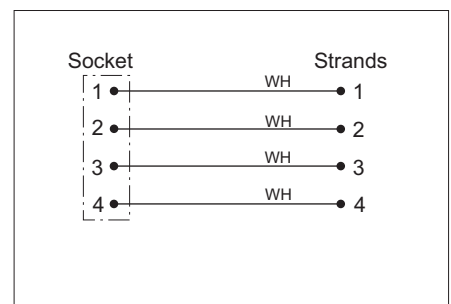
Coding	A-standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65
Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	PA 6.6
Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR
Status display	no
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

type	Mat.-No.	length
straight		
ESG 34AB0200G	11164785	2 m
ESG 34AB0500G	11163204	5 m
ESG 34AB1000G	11164786	10 m
angular		
ESW 33AB0200G	11164783	2 m
ESW 33AB0500G	11164782	5 m
ESW 33AB1000G	11164784	10 m
other lengths on request		

pin assignment



contact assignment



Female connector M12 with attached RADOX®-cable, shielded

Conductor data	
Cable type	RADOX® halogen-free black, shielded
Conductor cross section	4 x 0,5 mm ²
AWG signal line	20
Conductor structure signal line	19x 0.18 mm
Core diameter including insulation	1,43 mm
Wire colors	white 1, white 2, white 3, white 4
Overall twist	4 wires, twisted
Shielding	tinned copper braided shield
External sheath, color	black
External cable diameter D	5,4 ±0,3 mm
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	4 x D
Cable weight	56 kg/km
Outer sheath, material	EC-X
Material conductor insulation	EC-X
Conductor material	tin-plated Cu litz wires
Conductor resistance	≤ 40,1 Ω/km
Nominal voltage, cable	600 V AC (Core-ground, U0) 1000 V AC (Core-ground, U) ≤ 720 V AC (core-ground) ≤ 1200 V AC (Core-ground, Um) ≤ 900 V DC (Core-ground, V0) ≤ 1500 V DC (core-core)
Test voltage, cable	3500 V AC (50 Hz, 5 min.) 8400 V DC (50 Hz, 5 min.)
Fire protection in rail vehicles	BS 6853 (Category Ia, Ib, II) GM/RT 2130 (Category Ia, Ib, II) EN 45545 (Risk level HL1 - HL3) DIN 5510 (Fire protection level 1, 2, 3, 4) NF F16-101 (Category A1, A2, B) NF F16-101 (Class C/F0) NFPA 130 UNI CEI 11170 (Risk level LR1 - LR4)
Flame resistance	EN 60332-1-2 EN 50266 EN 50305, 9.1.2 NF C32-070, 2.1 NF C32-070, 2.2 UL 1685, 12 (FT4) in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Halogen-free	according to EN 50267-2-1
Resistance to oil	according to IRM 902, 72 h at 100 °C
Other resistance	resistance to fuels according to IRM 903, 168 h at 70 °C
Concentration of fumes	BS 6853 D.8.7 EN 61034-2 UL 1685, 12 (FT4)
Fume corrosiveness	EN 50267-2-2
Fume toxicity	BS 6853 B.1 EN 50305, 9.2
Ambient temperature (operation)	-50 °C ... 120 °C (cable, fixed installation) -25 °C ... 90 °C (cable, flexible installation)