

Sensor/Actuator cable - SAC-4P-20,0-600/M12FS SH HD - 1410151

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Sensor/Actuator cable, 4-position, PP-EPDM halogen-free, gray RAL 7035, shielded, free cable end, on Socket straight M12, A-coded, Cable length: 20 m, Hygienic design, with high-grade steel knurl

Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Easy to clean, thanks to the special hygienic design
- ✓ Corrosion protection for all exposed metal parts, thanks to the use of stainless steel type 1.4404
- ✓ Contamination can be detected quickly – thanks to the light color
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference

RoHS

Key Commercial Data

Packing unit	1 STK
Minimum order quantity	25 STK
GTIN	 4 046356 892896
GTIN	4046356892896
Custom tariff number	85444290

Technical data

Dimensions

Length of cable	20 m
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Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
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General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	A - standard

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Technical data

General

Standards/regulations	M12 connector IEC 61076-2-101
	Material conformance FDA 21 CFR 177.2600
Status display	No
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	Stainless steel
Sealing material	FKM

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Standard designation	Material conformance
Standards/regulations	FDA 21 CFR 177.2600

Cable

Cable type	Halogen-free PP gray shielded
Cable type (abbreviation)	600
Cable abbreviation	Li9YV1-C-V1-9Y
Conductor cross section	4x 0.34 mm ² (Signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.27 mm ±0.02 mm (Signal line)
Thickness, insulation	≥ 0.21 mm (Core insulation)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	48 mm
Shielding	Braided copper wires
Optical shield covering	85 %
External sheath, color	gray RAL 7035
Outer sheath thickness	approx. 0.8 mm
External cable diameter D	5.55 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000

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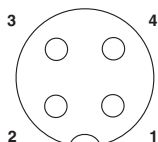
Technical data

Cable

Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Cable weight	40 kg/km
Outer sheath, material	PP-EPDM
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Conductor resistance	58 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000 V AC (for 60 s)
Special properties	FDA compliant according to FDA 21 CFR 177.2600
	Flexible
	Flexible cable conduit capable
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	Resistant to cold bending and cold impacts According to DIN EN 60811-1-4 (-40 °C)
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
	-25 °C ... 105 °C (cable, flexible installation)

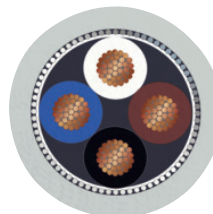
Drawings

Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

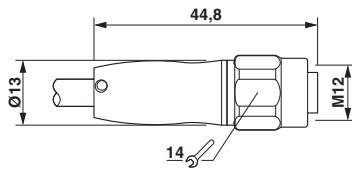
Cable cross section



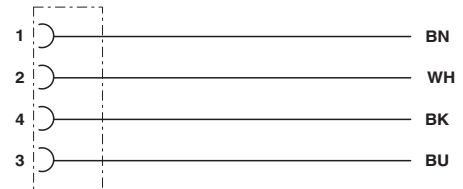
Halogen-free PP gray shielded [600]

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Dimensional drawing



Circuit diagram



M12 x 1 socket, straight

Contact assignment of the M12 plug and the M12 socket

Mouser Electronics

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