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Sensor/Actuator cable, 5-position, PUR halogen-free, welding sputter-resistant, highly flexible, gray RAL 7001, Plug straight M12, A-coded, on free cable end, Cable length: 1.5 m, for robots and drag chains

Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- Flexible: cable supports a high degree of torsion and bending
- Reliable solution for the body shop as cable is resistant to welding sparks



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 593649
GTIN	4046356593649
Weight per Piece (excluding packing)	60.000 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	1.5 m	
Ambient conditions		
Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)	
Degree of protection	IP65	
	IP67	
	IP68	



Technical data

General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Insulation resistance	\geq 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Overvoltage category	Ш
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Flammability rating according to UL 94	НВ
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	НВ

Cable

Note Due to the extremely robust outer sheath, this cable should o stripped in 5 cm increments.	
Cable type	PUR, halogen-free, highly stranded, resistant to welding sparks, gray
Cable type (abbreviation)	802
Cable abbreviation	Li12Y11Y-HF
Conductor cross section	5x 0.34 mm² (Signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.3 mm ±0.05 mm (Signal line)
Wire colors	Black, brown, blue, white, green/yellow
Overall twist	5 wires around filler to the core
External sheath, color	gray RAL 7001



Technical data

Cable

External cable diameter D	5.1 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	5 x D
Number of bending cycles	1000000
Minimum bending radius, drag chain applications	7,5 x D
Traversing path	5 m
Traversing rate	3.3 m/s
Acceleration	5 m/s ²
Number of bending cycles	1500000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s ²
Torsion force	± 360 °/m (1,000,000 torsion cycles)
Outer sheath, material	PUR
Material conductor insulation	PES
Conductor material	Bare Cu litz wires
Insulation resistance	\geq 20 MΩ*km
Conductor resistance	approx. 53 Ω/km
Nominal voltage, cable	300 V
Test voltage, cable	1200 V
Special properties	Sheath resistant to welding beads, can be recycled, matt, without adhesion, wear-resistant, flame resistant and self-extinguishing
	Free from silicone and cadmium
	Free of substances which would hinder coating with paint or varnish
Flame resistance	DIN VDE 0472 part 804, test type B
	IEC 60332-1
	in acc. with UL FT-2
Halogen-free	The cable is halogen-free
Resistance to oil	As per VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)
	-30 °C 90 °C (cable, flexible installation)
	to 120 °C (for 3000 h)

Drawings



Schematic diagram

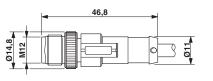


Pin assignment M12 male connector, 5-pos., A-coded, male side

Cable cross section

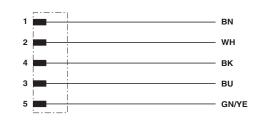


PUR, halogen-free, highly stranded, resistant to welding sparks, gray [802]



Dimensional drawing

Circuit diagram



Contact assignment of the M12 plug

Plug, M12 x 1, straight, shielded

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approval details

UL Listed	ULSTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FIL		FILE E 221474
Nominal current IN			4 A	
Nominal voltage UN			125 V	

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Approvals

cUL Listed	CUL LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal current IN		4 A	
Nominal voltage UN		125 V	
EAC	EAL		EAC-Zulassung
cULus Listed			

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