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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: 10 m, for robots and drag chains

Why buy this product

- 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 pc
GTIN	4 046356 593670
Weight per Piece (excluding packing)	394.4 g
Custom tariff number	85444290
Country of origin	Poland
Note	Made to Order (non-returnable)

Technical data

Dimensions

Length of cable	10 m

Ambient conditions

Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)	
Degree of protection	IP65	
	IP67	
	IP68	

General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Contact resistance	$\leq 5 \text{ m}\Omega$

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Technical data

General

Insulation resistance	≥ 100 MΩ	
Coding	A - standard	
Standards/regulations	M12 connector IEC 61076-2-101	
Status display	No	
Protective circuit/component	Unwired	
Surge voltage category	П	
Pollution degree	3	
Insertion/withdrawal cycles	≥ 100	
Torque	0.4 Nm (M12 connector)	

Material

Inflammability class 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	

Cable

Note	Due to the extremely robust outer sheath, this cable should only be 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	
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	15000000	
Bending radius	50 mm	
Traversing path	0.9 m	
Traversing rate	5 m/s	
Acceleration	30 m/s ²	
Torsion force	± 360 °/m	
Outer sheath, material	PUR	
Material conductor insulation	PES	



Technical data

Cable

Conductor material	Bare Cu litz wires	
Insulation resistance	$\geq 20~\text{M}\Omega^*\text{km}$	
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)	

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27279218
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218

ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501



Approvals		
Approvals		
Approvals		
UL Listed / cUL Listed / EAC / cULus Listed		
Ex Approvals		
Approvals submitted		
Approval details		
UL Listed (IL)		
Nominal current IN	4 A	
Nominal voltage UN	125 V	
cUL Listed *		
Nominal current IN	4 A	
Nominal voltage UN	125 V	
EAC		
cULus Listed (10)		
Accessories		

Accessories

Protective cap



Accessories

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets



Screwdriver tools

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors $\frac{1}{2}$

Drawings

Schematic diagram



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

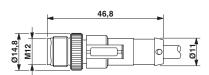
Cable cross section



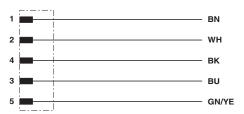
PUR, halogen-free, highly stranded, resistant to welding sparks, gray [802]



Dimensioned drawing



Circuit diagram



M12 x 1 plug, straight

Contact assignment of the M12 plug

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