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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 Socket straight M12, A-coded, 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 578271

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

General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Insulation resistance	\geq 100 M Ω
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Overvoltage category	
Degree of pollution	3



Technical data

General

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
Sealing material	NBR

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

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Technical data

Cable

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 3.0	EC001855
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 (1)			
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 ^E			
Drawings			
Schematic diagram	Schematic diagram		
4 5 0 3 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{c c} 3 & & 4 \\ & & 5 & 0 \\ & & & 0 \\ 2 & & & 1 \end{array}$		

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

Pin assignment M12 socket, 5-pos., A-coded, socket side view



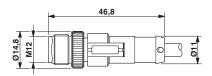
Cable cross section

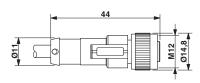


PUR, halogen-free, highly stranded, resistant to welding sparks, gray [802]

M12 x 1 plug, straight

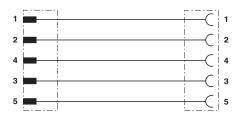
Dimensional drawing





Dimensional drawing

Circuit diagram



M12 x 1 socket, straight

Contact assignment of the M12 plug and the M12 socket

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Product	Code	Reference	Product link
Sensor/Actuator cable, 5-position, PUR halogen-free, welding sputter-resistant, highly flexible, gray RAL 7001, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 1.5 m, for robots and drag chains	1454587	SAC-5P- M12MS/ 1,5-802/M12FS	Buy on EAN