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Sensor/actuator cable, 4-position, PUR halogen-free, resistant to welding sparks, highly flexible, gray RAL 7001, free cable end, on Socket straight M12, A-coded, cable length: 5 m, for robots and drag chains

Your advantages

- ☑ 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 pc
GTIN	4 046356 327121
GTIN	4046356327121

Technical data

Dimensions

Length of cable	5 m
Stripping length of the free conductor end	50 mm

Ambient conditions

Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)
Degree of protection	IP65/IP68/IP69K

General

Rated current at 40°C	4 A
Rated voltage	250 V AC
	250 V DC
Number of positions	4
Insulation resistance	$\geq 100 \text{ M}\Omega$
Coding	A - standard



Technical data

General

Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	unwired
Overvoltage category	II
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	
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	Gray, highly flexible PUR	
Cable type (abbreviation)	800	
Cable abbreviation	Li12YYTPE-HF	
UL AWM style	20233	
Conductor cross section	4x 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	brown, white, blue, black	
Overall twist	4 wires, twisted	
External sheath, color	gray RAL 7001	
External cable diameter D	4.8 mm ±0.2 mm	
Minimum bending radius, fixed installation	4 x D	
Minimum bending radius, flexible installation	7.5 x D	
Number of bending cycles	10000000	
Minimum bending radius, drag chain applications	7,5 x D	
Traversing path	5 m	
Traversing rate	3.3 m/s	



Technical data

Cable

Acceleration	5 m/s ²		
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 (1 000 000 torsion cycles)		
Cable weight	33.5 kg/km		
Outer sheath, material	PUR		
Material conductor insulation	PES		
Conductor material	Bare Cu litz wires		
Insulation resistance	≥ 20 MΩ*km		
Conductor resistance	approx. 53 Ω/km		
Nominal voltage, cable	300 V		
Test voltage, cable	2000 V		
Special properties	Cable jacket is welding spark-resistant, recyclable, matt, low-adhesion abrasion-resistant, flame-retardant, and self-extinguishing		
	Free from silicone and cadmium		
	Free of substances which would hinder coating with paint or varnish		
Flame resistance	according to IEC 60332-1-2		
	according to UL 758/1581 VW-1		
	according to UL 758/1581 FT1		
Halogen-free	in accordance with DIN VDE 0472 part 815		
Resistance to oil	According to HD 22.10		
	in accordance with DIN EN 60811-404 (external sheath)		
Other resistance	Highly resistant to acids, alkaline solutions and solvents		
	Silicone-free		
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)		
	-30 °C 90 °C (cable, flexible installation)		
	to 120 °C (for 3000 h)		

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e	
	No hazardous substances above threshold values	

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed



Approvals	or cable .	3AC-4F - 3,0-000/W12F3 - 1307322	
Ex Approvals			
Approval details			
UL Listed	UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN		300 V	
Nominal current IN		4 A	
cUL Listed	C UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN		300 V	
Nominal current IN		4 A	
EAC	EAC		RU C- DE.BL08.B.00286

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