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Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, A-coded, on Socket angled M12, A-coded, with 3 LEDs, cable length: 0.6 m

Why buy this product

- ✓ Our standard: robust halogen-free PUR cable
- ☑ Convenient: increased machine availability thanks to quick and easy diagnostics



Key Commercial Data

Packing unit	1 STK
GTIN	4 017918 459239
GTIN	4017918459239
Sales Key	02

Technical data

Dimensions

Length of cable	0.6 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	24 V
	24 V DC
Number of positions	5



Technical data

General

Insulation resistance	\geq 100 M Ω
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	3 LEDs
Protective circuit/component	Unwired
Overvoltage category	П
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

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
UL AWM style	20549
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	1.27 mm ±0.02 mm (Signal line)
Thickness, insulation	approx. 0.5 mm
Wire colors	brown, white, blue, black, green-yellow
External sheath, color	black-gray RAL 7021
External cable diameter D	4.55 mm ±0.15 mm
Smallest bending radius, fixed installation	23 mm
Smallest bending radius, movable installation	46 mm
Number of bending cycles	10000000
Bending radius	50 mm
Traversing path	10 m
Traversing rate	3 m/s



Technical data

Cable

Acceleration	10 m/s²	
Cable weight	33 kg/km	
Outer sheath, material	PUR	
Material conductor insulation	PP	
Conductor material	Bare Cu litz wires	
Insulation resistance	\geq 16 G Ω *km (at 20 °C)	
Conductor resistance	max. 58 Ω/km (at 20 °C)	
Nominal voltage, cable	300 V	
Test voltage, cable	3000 V	
Special properties	Flexible cable conduit capable	
	Silicone-free	
	Free of substances which would hinder coating with paint or varnish	
	flexible	
Flame resistance	in accordance with UL 758/1581 FT2	
	DIN EN 60332-2-2 (20 s)	
Halogen-free	in accordance with DIN VDE 0472 part 815	
Resistance to oil	in accordance with DIN EN 60811-2-1	
Other resistance	Highly resistant to acids, alkaline solutions and solvents	
	hydrolysis and microbe resistant	
	Resistant to salt water	
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A	
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)	
	-25 °C 80 °C (cable, flexible installation)	

Environmental Product Compliance

China RoHS Environmentally Friendly Use Period = 50			
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"		

Drawings

Schematic diagram



Schematic diagram

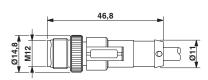


Pin assignment M12 male connector, 5-pos., A-coded, male side

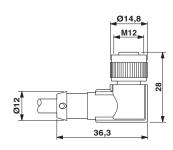
Pin assignment M12 socket, 5-pos., A-coded, socket side view



Dimensional drawing



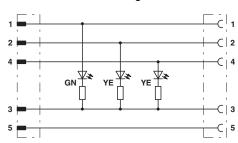
Dimensional drawing



Plug, M12 x 1, straight, shielded

M12 x 1 socket, angled

Circuit diagram



Contact assignment of M12 plugs / sockets with 3 LEDs

Approvals

Approvals

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UL Listed / cUL Listed / EAC / cULus Listed

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			24 V	
Nominal current IN			4 A	



Approvals

cUL Listed	CUL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 221474
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EAC	ERC	EAC-Zulassung
cULus Listed	C UL US	

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