

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Sensor/Actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, shielded, free cable end, on Socket straight M12 SPEEDCON, A-coded, Cable length: 1.5 m

Why buy this product

- ☑ Easy and safe: 100% electrically tested plug-in components
- Our standard: robust halogen-free PUR cable
- Reliable signal transmission 360° shielding in environments with electromagnetic interference



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 790451
GTIN	4046356790451

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

General

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Insulation resistance	\geq 100 M Ω
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	CuZn
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
Cable abbreviation	LiF9YC11Y
UL AWM style	20549 / 10493 (80°C/300 V)
Conductor cross section	8x 0.25 mm² (Signal line)
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm
Thickness, insulation	approx. 0.2 mm
Wire colors	Brown, white, green, yellow, gray, pink, blue, red
Overall twist	8 wires around filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 0.5 mm
External cable diameter D	5.9 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000



Technical data

Cable

Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	53 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Conductor resistance	≤ 78 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000 V AC (for 60 s)
Special properties	Flexible cable conduit capable
Flame resistance	in acc. with UL FT-2
	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
	According to DIN EN 60332-2-2 (20 s)
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Other resistance	hydrolysis and microbe resistant
	Resistant to salt water
	Low adhesion
	Low adhesion
	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



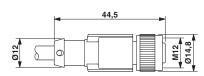
Pin assignment M12 socket, 8-pos., A-coded, view female side

Cable cross section



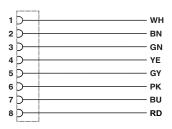
PUR halogen-free black [PUR]

Dimensional drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 socket

Phoenix Contact 2017 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany

Tel. +49 5235 300 Fax +49 5235 3 41200

http://www.phoenixcontact.com