

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, free cable end, on Socket straight M12, A-coded, cable length: 10 m

With a black handle



# **Key Commercial Data**

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 046356 518062
GTIN	4046356518062

# Technical data

#### **Dimensions**

Length of cable	10 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	2 A
Rated voltage	30 V AC
	30 V DC
Number of positions	8
Insulation resistance	$\geq$ 100 M $\Omega$
Coding	A - standard
Status display	No
Overvoltage category	П



# Technical data

### General

Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

### 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

Flammability rating according to UL 94	HB
--	----

### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y
UL AWM style	20549 / 10493 (80°C/300 V)
Conductor cross section	8x 0.25 mm <sup>2</sup>
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm
Thickness, insulation	≥ 0.21 mm
Wire colors	white, brown, green, yellow, gray, pink, blue, red
Overall twist	8 wires around filler to the core
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 0.8 mm
External cable diameter D	5.9 mm ±0.15 mm
Minimum bending radius, fixed installation	8 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Bending radius	59 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	46 kg/km
Outer sheath, material	PUR
Material, filler	PE PE
Material conductor insulation	PP
Conductor material	Bare Cu litz wires



# Technical data

### Cable

Conductor resistance	≤ 78 Ω/km
Cable capacity	≤ 70 pF/m
Wave impedance	100 Ω +15 % (with 1 MHz)
Inductance	# 0.6 mH (per km at 1 MHz)
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 DIN UL-Style 20549
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
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
	Low adhesion
	abrasion-resistant
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-25 °C 80 °C (cable, flexible installation)

### **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
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

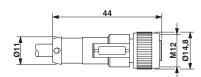
Cable cross section



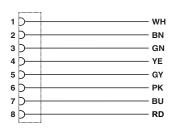
PUR halogen-free black [PUR]



### Dimensional drawing



### Circuit diagram



M12 x 1 socket, straight

Contact assignment of the M12 socket

Phoenix Contact 2018 © - 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