

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://download.phoenixcontact.com)



Sensor/Actuator cable, 4-position, PUR halogen-free, Black-gray RAL 7021, Free cable end, on Socket angled M8, Cable length: 20 m

Product Features

- Easy and safe: 100% electrically tested plug-in components

- System cable for supply voltage and bus signal



Key commercial data

Packing unit	11
Weight per Piece (excluding packing)	222.22 GRM
Custom tariff number	85444290
Country of origin	Germany

Technical data

Dimensions

Length of cable	20 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
	IP67
	IP68

General

Rated current at 40°C	4 A
Rated voltage	30 V



Technical data

General

Number of positions	4
Contact resistance	$\leq 5~\text{m}\Omega$
Insulation resistance	\geq 100 M Ω
Coding	A - standard
Status display	No
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100

Material

Inflammability class 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

Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549 / 10493 (80°C/300 V)
Conductor cross section	4x 0.34 mm²
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.27 mm ±0.02 mm
Thickness, insulation	≥ 0.21 mm
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
External sheath, color	Black-gray RAL 7021
Outer sheath thickness	approx. 0.8 mm
External cable diameter D	4.7 mm ±0.15 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Minimum bending radius, drag chain applications	10 x D



Technical data

Cable

Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	30 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km
Conductor resistance	≤ 58 Ω/km
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
	in accordance with FT1 as per UL 758
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
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)

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	27061801
eCl@ss 7.0	27061801



Classifications

Nominal voltage UN

- 01	<u> </u>
eUI	@ടട

eCl@ss		
eCl@ss 8.0	27061801	
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 / cULus Listed		
Ex Approvals		
Approvals submitted		
Approval details		
UL Listed (PL)		
Nominal current IN	4 A	

125 V



Approvals

cUL Listed (W)	
Nominal current IN	4 A
Nominal voltage UN	125 V

cULus Listed ⁶

Drawings

Schematic diagram



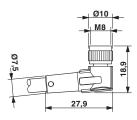
Pin assignment M8 socket, 4-pos., view female side

Cable cross section



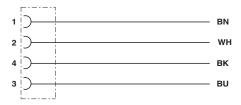
PUR halogen-free black [PUR]

Dimensioned drawing



Socket M8 x 1, angled

Circuit diagram



Contact assignment of M8 socket