

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, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket straight M8 and Socket straight M8, Cable length: 0.6 m



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	40.0 g
Custom tariff number	85444290
Country of origin	Germany

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	30 V
Number of positions	3
Insulation resistance	$\geq 100 \text{ M}\Omega$
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No
Overvoltage category	II



Technical data

General

Degree of pollution	3
Torque	0.2 Nm (M8 knurl)

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	M8 connector
Standards/regulations	IEC 61076-2-104
Flammability rating according to UL 94	НВ

Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 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 (Signal line)
Thickness, insulation	≥ 0.38 mm (Core insulation)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 0.9 mm
External cable diameter D	4.4 mm ±0.15 mm
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Bending radius	44 mm



Technical data

Cable

Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	24 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	\geq 100 G Ω *km (at 20 °C)
Conductor resistance	\leq 78 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
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	hydrolysis and microbe resistant
	Highly resistant to acids, alkaline solutions and solvents
	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)

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
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311



Classifications

ETIM

ETIM 4.0	EC001855	
ETIM 5.0	EC001855	
UNSPSC		
	Tavasas	
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 (II)		
Nominal current IN	4 A	
	30 V	

cUL Listed **	
Nominal current IN	4 A



Approvals

Nominal voltage UN	30 V

cULus Listed ***

Drawings

Schematic diagram



Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

griniont we play, 1 pool, view male ele

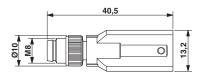
Cable cross section



Plug M8 x 1, Y-distributor

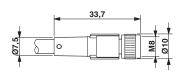
Dimensional drawing

Pin assignment M8 socket, 3-pos., view female side



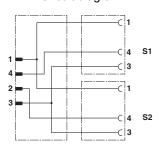
PUR halogen-free black [PUR]

Dimensional drawing



Socket M8 x 1, straight

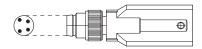
Circuit diagram



Contact assignment of the M8 plug and the M8 socket



Schematic diagram



Alignment of the connector pin assignment

Phoenix Contact 2016 © - all rights reserved http://www.phoenixcontact.com