

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, 5-position, PUR halogen-free, highly flexible, gray RAL 7001, Plug straight M12, A-coded, on Socket straight M12, A-coded, cable length: 2 m



Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 578288
GTIN	4046356578288
Weight per Piece (excluding packing)	91.000 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	2 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	48 V AC
	60 V DC
Number of positions	5
Insulation resistance	\geq 100 M Ω
Coding	A - standard
Status display	No



Technical data

General

Overvoltage category	II
Degree of pollution	3

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

Flammability rating according to UL 94	НВ
--	----

Cable

Note	Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments.
Cable type	PUR, halogen-free, highly stranded, resistant to welding sparks, gray
Cable type (abbreviation)	802
Cable abbreviation	Li12Y11Y-HF
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	1.3 mm ±0.05 mm (Signal line)
Wire colors	Black, brown, blue, white, green/yellow
Overall twist	5 wires around filler to the core
External sheath, color	gray RAL 7001
External cable diameter D	5.1 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	5 x D
Number of bending cycles	10000000
Minimum bending radius, drag chain applications	7,5 x D
Traversing path	5 m
Traversing rate	3.3 m/s
Acceleration	5 m/s²
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s²
Torsion force	± 360 °/m (1 000 000 torsion cycles)
Outer sheath, material	PUR

01/06/2019 Page 2 / 5



Technical data

Cable

Material conductor insulation	PES
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 20~\text{M}\Omega^*\text{km}$
Conductor resistance	approx. 53 Ω/km
Nominal voltage, cable	300 V
Test voltage, cable	1200 V
Special properties	Cable jacket is welding spark-resistant, recyclable, matt, low-adhesion, abrasion-resistant, flame-retardant, and self-extinguishing
	Free from silicone and cadmium
	Free of substances which would hinder coating with paint or varnish
Flame resistance	DIN VDE 0472 part 804, test type B
	IEC 60332-1
	in acc. with UL FT-2
Halogen-free	The cable is halogen-free
Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
	Silicone-free
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)
	-30 °C 90 °C (cable, flexible installation)
	to 120 °C (for 3000 h)

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Schematic diagram



Schematic diagram



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

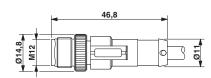
Pin assignment M12 socket, 5-pos., A-coded, socket side view



Cable cross section



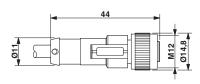
Dimensional drawing



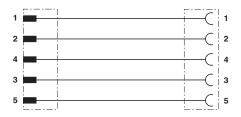
PUR, halogen-free, highly stranded, resistant to welding sparks, gray [802]

Plug, M12 x 1, straight, shielded

Dimensional drawing



Circuit diagram



M12 x 1 socket, straight

Contact assignment of the M12 plug and the M12 socket

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501



Classifications

UNSPSC	
---------------	--

UNSPSC 13.2	31251501
Approvals	
Approvals	
Approvals	
UL Listed / cUL Listed / cULus Listed	
Ex Approvals	

Approval details

UL Listed	U _L LISTED	http://database.ul.cor	m/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN			125 V	
Nominal current IN			4 A	

cUL Listed	CUL	http://database.ul.cor	m/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN			125 V	
Nominal current IN			4 A	

Phoenix Contact 2019 © - all rights reserved http://www.phoenixcontact.com