

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: 3 m

Why buy this product

- ☑ Easy and safe: 100% electrically tested plug-in components
- ☑ Save time, thanks to installation with SPEEDCON fast locking system
- 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 181334	
GTIN	4046356181334	
Weight per Piece (excluding packing)	222.220 g	
Custom tariff number	85444290	
Country of origin	Poland	

Technical data

Dimensions

Length of cable	3 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



Technical data

Ambient conditions

	IP67		
Seneral			
Rated current at 40°C	2 A		
Rated voltage	30 V		
Number of positions	8		
Insulation resistance $\geq 100 \text{ M}\Omega$			
Coding A - standard			
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)	
ductor 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	



Technical data

Cable

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	
Minimum bending radius, drag chain applications	10 x D	
Traversing path	10 m	
Traversing rate	3 m/s	
Acceleration	10 m/s ²	
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)	



Technical data

Cable

-25	23 C 00 C (Cable, liexible installation)

Drawings

Schematic diagram



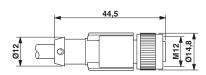
Pin assignment M12 socket, 8-pos., A-coded, view female side

Cable cross section

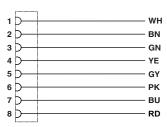


PUR halogen-free black [PUR]

Dimensional drawing



Circuit diagram



M12 x 1 socket, straight, shielded

Contact assignment of the M12 socket

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details



Approvals

UL Listed	U _L LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 221474
Nominal current IN			2 A	
Nominal voltage UN			30 V	

cUL Listed	C UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 221474
Nominal current IN			2 A	
Nominal voltage UN			30 V	

cULus Listed	C UL US			
--------------	---------	--	--	--

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