

1429091

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Device connector rear mounting, 8-position, SANTOPRENE halogen-free, black RAL 9005, shielded, Socket, straight, M12, coding: A, on free cable end, Rear mounting, M16 x 1.5, Cable connection, cable length: 0.5 m, 0.25 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239595

## Your advantages

- · Preassembled with cables in various standard lengths for immediate use
- · Customer-specific assemblies and cable lengths can be supplied
- · Sealed on the cable side for optimum tightness of seal
- · Cable designs for all common networks and fieldbuses
- · For high transmission safety: shield connection to the housing with optional EMC nut

### Commercial data

Item number	1429091
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGG
Catalog page	Page 324 (PC-2011)
GTIN	4046356323055
Weight per piece (including packing)	65.9 g
Weight per piece (excluding packing)	63.6 g
Customs tariff number	85444290
Country of origin	DE



1429091

https://www.phoenixcontact.com/us/products/1429091

## Technical data

### Notes

Notes on operation	The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
Order information:	Lock nut is included in the scope of delivery

## Mounting

Mounting type	Rear mounting M16 x 1.5 With flat nut
Assembly note	With flat nut

### Product properties

Product type	Circular connectors (device side)
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A
Thread type	M12

### Data management status

Article revision	10
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#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

## Material specifications

Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Brass, nickel-plated
Outer sheath, material	SANTOPRENE halogen-free

## Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	30 V
Nominal current I <sub>N</sub>	2 A



1429091

https://www.phoenixcontact.com/us/products/1429091

### Connection data

### Conductor connection

Connection method	Cable connection
Contact connection type	Socket
Conductor cross section	0.25 mm <sup>2</sup>
Tightening torque	2 Nm 3 Nm (Installation-side)

## Mechanical properties

#### Mechanical data

### Connector

### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	A

#### Connection 2

## Cable/line

Cable length	0.5 m
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### VARAN [970]

### Dimensional drawing



Cable weight	81 kg/km
Number of positions	6
Shielded	yes
Cable type	VARAN [970]
Conductor structure	1x2xAWG22/19 + 1x4xAWG24/19
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor cross section	4x 0.25 mm² (Signal line)



1429091

https://www.phoenixcontact.com/us/products/1429091

	2x 0.38 mm² (Power supply)
Wire diameter incl. insulation	1.35 mm (Signal line)
	1.5 mm (Power supply)
xternal cable diameter	7.80 mm ±0.2 mm
Outer sheath, material	SANTOPRENE halogen-free
external sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material, filler	Yarn
Material wire insulation	PP
single wire, color	brown, blue, white/orange, white/green, green, orange
ype of pair shielding	Tinned copper braided shield, 95 % covering
Overall twist	1 star quad and 2 wires with 2 fillers
Max. conductor resistance	77 Ω/m (Data cable)
nsulation resistance	5 GΩ*km (Data cable)
Vave impedance	100 Ω ±15 %
Vorking capacitance	50 nF (Data cable)
lominal voltage, cable	125 V (Data cable)
	48 V (Power supply)
est voltage	2000 V (Power supply)
	max. 700 V AC (Data cable)
smallest bending radius, fixed installation	≥ 93 mm
mallest bending radius, movable installation	≥ 93 mm
Max. bending cycles	3000000
lending radius	93 mm
raversing path	2 m
raversing rate	1 m/s
cceleration	2 m/s²
lalogen-free	in accordance with DIN EN 50267-2-1
mbient temperature (operation)	-20 °C 80 °C (Cable)
mbient temperature (installation)	0 °C 50 °C

### Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67 (When plugged in)
	IP65 (When plugged in)
	IP65/IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 85 °C (Cable, flexible installation)
	-40 °C 85 °C (cable, fixed installation)

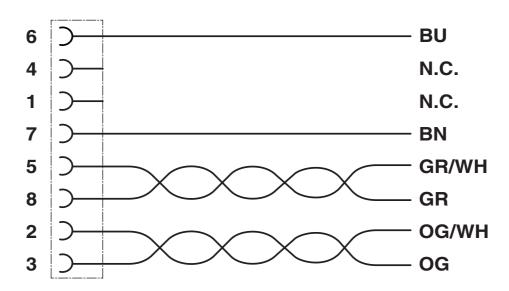


1429091

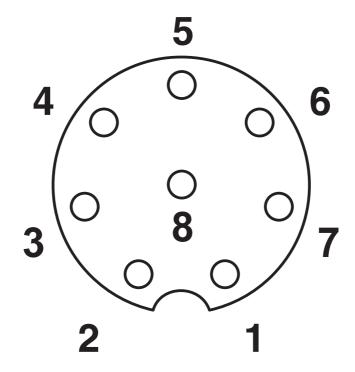
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## Drawings

## Circuit diagram



## Schematic diagram



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



1429091

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## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1429091

CUL Recognized Approval ID: E221474-20220907					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use gr	Use group keine				
		30 V	1.5 A	-	-

UL Recognized Approval ID: E221474-20220907				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group keine				
	30 V	2 A	-	-

cULus Recognized		



1429091

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## Classifications

### **ECLASS**

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ΕT	ETIM			
	ETIM 9.0	EC002635		
UN	UNSPSC			
	UNSPSC 21.0	39121400		



1429091

https://www.phoenixcontact.com/us/products/1429091

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	6d9df074-2a90-4c77-84ec-06a9b90cc41f

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