

1441561

https://www.phoenixcontact.com/us/products/1441561

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 documentation. Our general terms of use for downloads are valid.



Device connector front mounting, 8-position, Pin, straight, M12, coding: A, on free cable end, Front mounting, Square flange, Individual wires, cable length: 0.5 m, 0.25 mm<sup>2</sup>, TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239721

#### Your advantages

- · Preassembled with litz wires for immediate use
- · Customer-specific assemblies and litz wire lengths available
- Sealed on the litz wire side for optimum leak-tightness
- All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- · For high transmission safety: shield connection to the housing with optional EMC nut
- · SPEEDCON fast locking system reduces cabling times

#### Commercial data

Item number	1441561
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCED
Catalog page	Page 43 (C-2-2019)
GTIN	4046356533874
Weight per piece (including packing)	29.3 g
Weight per piece (excluding packing)	29.01 g
Customs tariff number	85444290
Country of origin	DE



1441561

https://www.phoenixcontact.com/us/products/1441561

#### Technical data

#### Notes

General	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.
General	Contact connection method: Crimp connection

#### Mounting

Mounting type	Front mounting Square flange
---------------	------------------------------

#### Product properties

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

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### Material specifications

Flammability rating according to UL 94	V0
Seal material	FKM
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Conductor material	Tin-plated Cu litz wires

#### 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
Max. conductor resistance	80 mΩ/m



1441561

https://www.phoenixcontact.com/us/products/1441561

#### Connection data

#### Conductor connection

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.25 mm²
Tightening torque	3 Nm 4 Nm (Installation-side)

#### Mechanical properties

#### Mechanical data

insertion/withdrawar cycles > 100	Insertion/withdrawal cycles	> 100
-----------------------------------	-----------------------------	-------

#### Connector

#### Connection 1

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

#### Connection 2

#### Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Wire diameter incl. insulation	1.15 mm ±0.07 mm
Single wire, color	brown, blue, white, gray, pink, green, yellow, red
Cable cross section	0.25 mm²
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	14x 0.15 mm
AWG signal line	24
Material wire insulation	TPE
Thickness, insulation	0.21 mm (Core insulation)
Nominal voltage, cable	300 V
Test voltage, cable	3000 V AC (Spark test)
Cable resistance	≤ 80 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C 85 °C (cable, fixed installation)
	-25 °C 85 °C (Cable, flexible installation)

#### Environmental and real-life conditions

#### Ambient conditions



1441561

https://www.phoenixcontact.com/us/products/1441561

Degree of protection	IP67
	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)

#### Standards and regulations

#### M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



1441561

https://www.phoenixcontact.com/us/products/1441561

#### Classifications

UNSPSC 21.0

#### **ECLASS**

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ETIM				
	ETIM 9.0	EC002635		
UNSPSC				

39121400



1441561

https://www.phoenixcontact.com/us/products/1441561

### Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com