

1425537

https://www.phoenixcontact.com/us/products/1425537

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Device connector front mounting, Universal, 4-position, Plug, straight, M12-SPEEDCON, coding: A , Front mounting, M16 x 1.5, Individual wires, TPE litz wire

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	1425537
Packing unit	1 pc
Minimum order quantity	20 pc
Sales key	AB24
Product key	ABQCEB
GTIN	4055626409139
Weight per piece (including packing)	45.9 g
Weight per piece (excluding packing)	32.72 g
Customs tariff number	85444290
Country of origin	DE



1425537

https://www.phoenixcontact.com/us/products/1425537

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.

Safety note

Safety note

WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.

- WARNING: Commission properly functioning products only.
 The products must be regularly inspected for damage.
 Decommission defective products immediately. Replace damaged products. Repairs are not possible.
- WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
- The products are suitable for applications in plant, controller, and electrical device engineering.
- When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
- Assembled products may not be manipulated or improperly opened.
- Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
- When using the product in direct connection with third-party manufacturers, the user is responsible.
- For operating voltages > 50 V AC, conductive connector housings must be grounded
- Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
- Observe the corresponding technical data. You will find information:
- o On the product
- o On the packing label
- o In the supplied documentation
- o Online at phoenixcontact.com/products under the product
- · Only use tools recommended by Phoenix Contact
- Use a protective cap to protect connectors that are not in use.
 The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products



1425537

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Connection method

	Ensure that the protective or functional ground has been properly connected. VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting
	 are applicable when combining several circuits in a cable and/or connector The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting
	ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting
	warnings (e.g. DIN EN ISO 13732-1:2008-12).
Mounting	
Mounting type	Front wall/screw mounting
Connection method	Individual wires
Product properties	
Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Insulation characteristics	
Overvoltage category	ll l
Degree of pollution	3
laterial 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	Zinc die-cast, nickel-plated
lectrical properties	
Rated surge voltage	2.5 kV AC
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	250 V
Nominal current I _N	4 A
Max. conductor resistance	57.6 mΩ/m
Max. conductor resistance Connection data	
ctor connection	

Individual wires



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Contact connection type	Crimp contacts
Conductor cross section	0.34
Tightening torque	3 Nm
	4 Nm

Mechanical properties

Mechanical data

Meditalical data		
	Insertion/withdrawal cycles	> 100

Connector

Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A

Cable/line

Cable length	1.5
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire, color	brown, white, blue, black
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Thickness, insulation	0.21 mm (Core insulation)
Nominal voltage, cable	300 V
Test voltage, cable	3000 V AC
Cable resistance	≤ 57.6 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

Ambient conditions	
Degree of protection	IP67
	IP65/IP67
Ambient temperature (operation)	-2585 (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 85 °C (Cable, flexible installation)
	-40 °C 85 °C (cable, fixed installation)



1425537

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Standards and regulations

M12

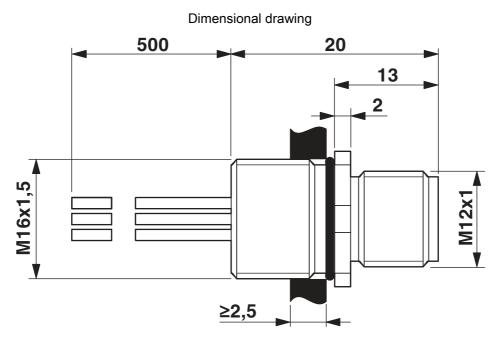
Standard designation	M12 connector
Standards/specifications	according to IEC 61076-2-101



1425537

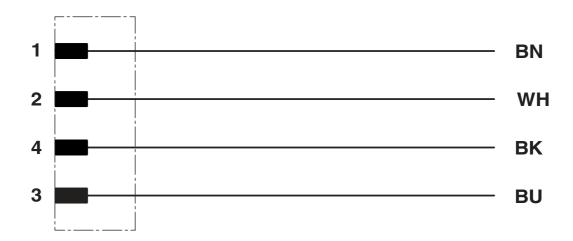
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Drawings



Dimensional drawing

Circuit diagram

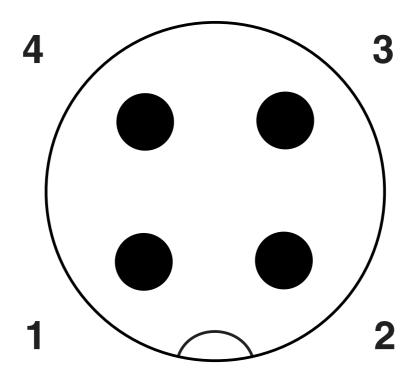




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Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side



1425537

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1425537



EAC

Approval ID: B.01687



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Classifications

ECLASS

	ECLASS-11.0	27440102	
	ECLASS-12.0	27440116	
	ECLASS-13.0	27440116	
ETIM			
	ETIM 8.0	EC002635	
UNSPSC			
	UNSPSC 21.0	39121400	



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Environmental product compliance

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



1425537

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Accessories

SACC-E-MU-M16 - Flat nut

1504097

https://www.phoenixcontact.com/us/products/1504097

Flat nut, Screw mounting, M16 x 1.5, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239863



SACC-M16-SEAL CLM - Flat gasket

1430394

https://www.phoenixcontact.com/us/products/1430394

M16 flat gasket for M12 flush-type connectors with M16 fastening thread





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PROT-M12 FS - Sealing cap

1560251

https://www.phoenixcontact.com/us/products/1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

PROT-M12 FS-M - Sealing cap

1430488

https://www.phoenixcontact.com/us/products/1430488



M12 metal sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

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