

1430446

https://www.phoenixcontact.com/gb/products/1430446

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 rear mounting, Universal, 12-position, Socket, straight, M12-SPEEDCON, Acoding, on free cable end, Individual wires, cable length: 0.5 m, 0.14 mm², TPE litz wire, potted, this item is expected to be lead-free from Q3 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

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	1430446
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	ABQCHE
Product key	ABQCHE
GTIN	4046356325806
Weight per piece (including packing)	29.1 g
Weight per piece (excluding packing)	27.651 g
Customs tariff number	85444290
Country of origin	DE



1430446

https://www.phoenixcontact.com/gb/products/1430446

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
General	Contact connection method: Crimp connection

Mounting

Mounting type	Rear mounting (Pg9, with flat nut)
Tightening torque	2 Nm 3 Nm (Installation-side)

Product properties

Product type	Circular connectors (device side)
Application	Signal
Sensor type	Universal
Number of positions	12
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Insulation characteristics	
Overvoltage category	II

3

Material specifications

Degree of pollution

Material Molding compound	PUR (potted)
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	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



1430446

https://www.phoenixcontact.com/gb/products/1430446

Nominal voltage U _N	30 V (AC)
	30 V (DC)
Nominal current I _N	1.5 A
Max. conductor resistance	57.6 mΩ/m

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.14 mm²
Tightening torque	2 Nm 3 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Connector

Connection 1

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

Connection 2

Head design	free cable end
-------------	----------------

Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.1 mm ±0.05 mm
Single wire, color	brown, blue, white, green, pink, yellow, black, gray, red, violet, gray/pink, red/blue
Cable cross section	0.14 mm²
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Material wire insulation	TPE
Thickness, insulation	0.21 mm
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC



1430446

https://www.phoenixcontact.com/gb/products/1430446

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

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

Standards and regulations

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

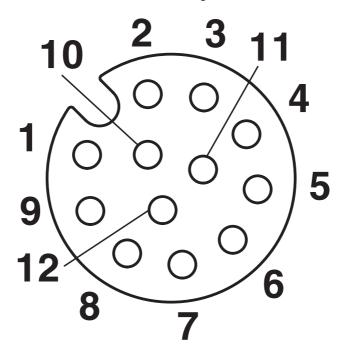


1430446

https://www.phoenixcontact.com/gb/products/1430446

Drawings

Schematic diagram



Pin assignment M12, 12-pos., female side view

Circuit diagram



Contact assignment of the M12 socket



1430446

https://www.phoenixcontact.com/gb/products/1430446

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1430446

c 711 us	cULus Recognized Approval ID: E221474-20140616				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		30 V	1.5 A	26	-

71	UL Recognized Approval ID: E118976-20100522				
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		30 V	1.5 A	26	-



1430446

https://www.phoenixcontact.com/gb/products/1430446

Classifications

ECLASS

	ECLASS-13.0	27440103	
	ECLASS-15.0	27440103	
ETIM			
	ETIM 9.0	EC003570	
UNSPSC			
	UNSPSC 21.0	39121400	



1430446

https://www.phoenixcontact.com/gb/products/1430446

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	c0ac3cda-6a36-4204-bb22-3f99041ff2f6

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT Ltd Halesfield 13, Telford Shropshire, TF7 4PG 01952 681700 info@phoenixcontact.co.uk