

1411606

https://www.phoenixcontact.com/us/products/1411606

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, Power, 4-position, Socket, straight, M12-Standard, coding: T, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 1.31 mm^2 , UL/cUL stranded hook-up wire, potted, this item is expected to be lead-free from Q4 2025 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

Your advantages

- · For compact devices: transmit high power in a confined space
- Easy-to-install, optimized XL housing contour with wrench size 19
- · Mechanical tightening limitation for long-term-stable gasket
- · 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
- For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1411606
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCFG
GTIN	4046356936200
Weight per piece (including packing)	55.733 g
Weight per piece (excluding packing)	43.434 g
Customs tariff number	85444290
Country of origin	DE



1411606

https://www.phoenixcontact.com/us/products/1411606

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.
General	Contact connection method: Crimp connection

Mounting

Mounting type	Front mounting M16 x 1.5 XL version, tightening limitation
Assembly note	XL version, tightening limitation

Product properties

Product type	Circular connectors (device side)
Application	Power
Sensor type	Power
Number of positions	4
No. of cable outlets	1
No. of power contacts	4
Shielded	no
Coding	Т
Thread type	M12
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3

Material specifications

Material Molding compound	PUR (potted)
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated
Conductor material	Bare Cu litz wires

Electrical properties

Rated surge voltage	1.5 kV
	1.5 kV AC/DC
Contact resistance	≤ 3 mΩ



1411606

https://www.phoenixcontact.com/us/products/1411606

Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	63 V DC
Nominal current I _N	12 A
Test voltage	1.5 kV

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	1.31 mm²
Tightening torque	0.8 Nm 1.3 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	Standard
Coding	Т

Connection 2

Head design	free cable end

Cable/line

Cable length	0.5 m
Cable type	UL/cUL stranded hook-up wire
Signal type/category	Power
Wire diameter incl. insulation	2 mm
Single wire, color	black, brown, blue, white
Cable cross section	1.31 mm²
Conductor material	Bare Cu litz wires
AWG signal line	16
Material wire insulation	mPPE
Halogen-free	yes
Flame resistance	in acc. to UL 1581 VW1
Ambient temperature (operation)	-40 °C 85 °C (without mechanical actuation)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 105 °C (Cable, flexible installation)



1411606

https://www.phoenixcontact.com/us/products/1411606

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67	
	IP65/IP67	
Ambient temperature (operation) (male connector/female connector)	-25 °C 85 °C (Plug / socket)	
Ambient temperature (operation) (Cable, fixed installation)	-40 °C 85 °C (without mechanical actuation)	
Ambient temperature (operation) (Cable, flexible installation)	-25 °C 105 °C (Cable, flexible installation)	
Ambient temperature (operation) (Cable, fixed installation)	-40 °C 105 °C (cable, fixed installation)	
UL Type Rating	Type 4 (indoor use only)	

Standards and regulations

Flame resistance	in acc. to UL 1581 VW1	
Standard designation	M12 circular connector	
Standards/specifications	according to IEC 61076-2-111	

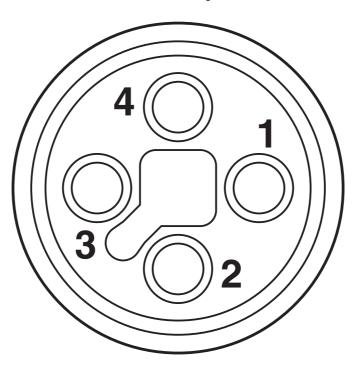


1411606

https://www.phoenixcontact.com/us/products/1411606

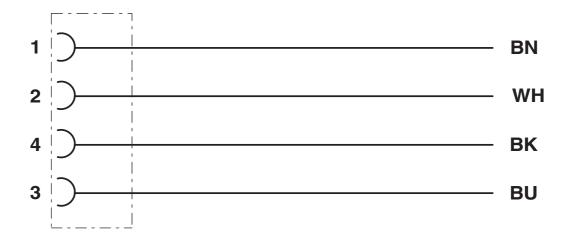
Drawings





Pin assignment of M12 socket, 4-pos., T-coded, socket side view

Circuit diagram



Contact assignment of the M12 socket



1411606

https://www.phoenixcontact.com/us/products/1411606

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1411606

cUL Recognized Approval ID: E468743-20190917					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		63 V	12 A	16	-

71	UL Recognized Approval ID: E468743-2	0190917			
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		63 V	12 A	16	-



1411606

https://www.phoenixcontact.com/us/products/1411606

Classifications

_	\sim	Ι.	٨	C	C
_	٠,			ດ	O

	ECLASS-13.0	27440103	
Εī	ГІМ		
	ETIM 9.0	EC003570	
UNSPSC			
	UNSPSC 21.0	39121400	



1411606

https://www.phoenixcontact.com/us/products/1411606

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	0d0deef6-3327-4f31-bda4-1044e7e391bd

Phoenix Contact 2025 @ - 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