

1425378

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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: 3 m, 1.31 mm², UL/cUL stranded hook-up wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239508

Your advantages

- · For compact devices: transmit high power in a confined space
- · 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	1425378		
Packing unit	1 pc		
Minimum order quantity	1 pc		
Sales key	AB24		
Product key	ABQCFG		
GTIN	4055626397344		
Weight per piece (including packing)	194.7 g		
Weight per piece (excluding packing)	185 g		
Customs tariff number	85444290		
Country of origin	DE		



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Technical data

Notes

otes	
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
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: On the product On the packing label In the supplied documentation 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.

The suitable accessories are available online in the accessory



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	section of the product at phoenixcontact.com/products
	 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 warnings (e.g. DIN EN ISO 13732-1:2008-12).
Nounting	
Mounting type	Front mounting M16 x 1.5
Product properties	
Product type	Circular connectors (device side)
Sensor type	Power
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	Т
Thread type	M12
Data management status	
Article revision	07
Insulation characteristics	
Overvoltage category	
Degree of pollution	3
Material specifications	
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material for screw connection	CuZn alloy, 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
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	63 V DC
.,	63 V DC



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Nominal current I _N	12 A
Test voltage	1.5 kV
	2000 V AC

Connection data

Conductor connection

Connection method	Individual wires	
Contact connection type	Socket	
Conductor cross section	1.31 mm²	
Tightening torque	M12 connector	

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
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Cable/line

Cable length 3 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			
Thickness, insulation	0.21 mm (Core insulation)		
Nominal voltage, cable	300 V		
Test voltage, cable 2000 V AC			
Halogen-free	yes		
Flame resistance in acc. to UL 1581 VW1			
Ambient temperature (operation)	-40 °C 105 °C (cable, fixed installation)		



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	-20 °C 105 °C (Cable, flexible installation)
vironmental and real-life conditions	
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Ambient conditions	
Degree of protection	IP67
	IP65/IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-20 °C 105 °C (Cable, flexible installation)
	-40 °C 105 °C (cable, fixed installation)
andards and regulations	
Flame resistance	in acc. to UL 1581 VW1
M12	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111
Note	In line with



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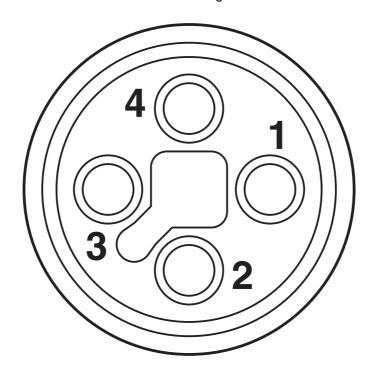
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Drawings

Circuit diagram



Schematic diagram



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



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1425378

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 - 16	-

SUL 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 - 16	-

cULus Recognized



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Classifications

ECLASS

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



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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	83695d10-7d21-4d13-94fd-91273d124ee7		



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Accessories

SACC-E-MU-M16 - Flat nut

1504097

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



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