SACC-SQ-M12FSD-4CON-20-L180 - Device connector front mounting

1456404

https://www.phoenixcontact.com/us/products/1456404

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Device connector front mounting, Universal, 4-position, Socket, straight, M12-SPEEDCON, D-coding, Wave soldering, 0.34 mm^2, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb < 0.1 %)

Your advantages

- Easy PCB assembly: one-piece connectors for wave soldering
- Standard pin assignments for signal and power transmission with a uniform design-in design
- SPEEDCON fast locking system reduces cabling times

Commercial data

Item number	1456404
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AB24
Product key	ABQEFK
GTIN	4046356617017
Weight per piece (including packing)	12.75 g
Weight per piece (excluding packing)	9.689 g
Customs tariff number	85366990
Country of origin	DE

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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.

Mounting

Mounting type	Front mounting/square flange (20 mm side length)
Tightening torque	3 Nm ... 4 Nm (Installation-side)

Product properties

Product type	Circular connectors (device side)
Application	Data
	Signal
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	D
Thread type	M12

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Material Housing	GD-Zn
Material Housing surface	Ni
Material Contact carrier	PA 6.6
Material Contact	CuZn
Material Contact surface	Au
Material Seal	FKM
Flammability rating according to UL 94	V0

Electrical properties

Rated surge voltage	2.5 kV
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

Connection data

Conductor connection

Connection method	Wave soldering
Contact connection type	Socket
Conductor cross-section	0.34 mm²
Tightening torque	3 Nm ... 4 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Interfaces

Signal type/category	Universal

Connector

Connection 1

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

Cable/line

Wire diameter incl. insulation	1.2 mm ±0.07 mm
Cable cross section	0.34 mm²
Conductor structure signal line	7x 0.25 mm
Thickness, insulation	0.21 mm
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °C
	-40 °C ... 85 °C (without mechanical actuation)
UL Type Rating	Type 4 (indoor use only)

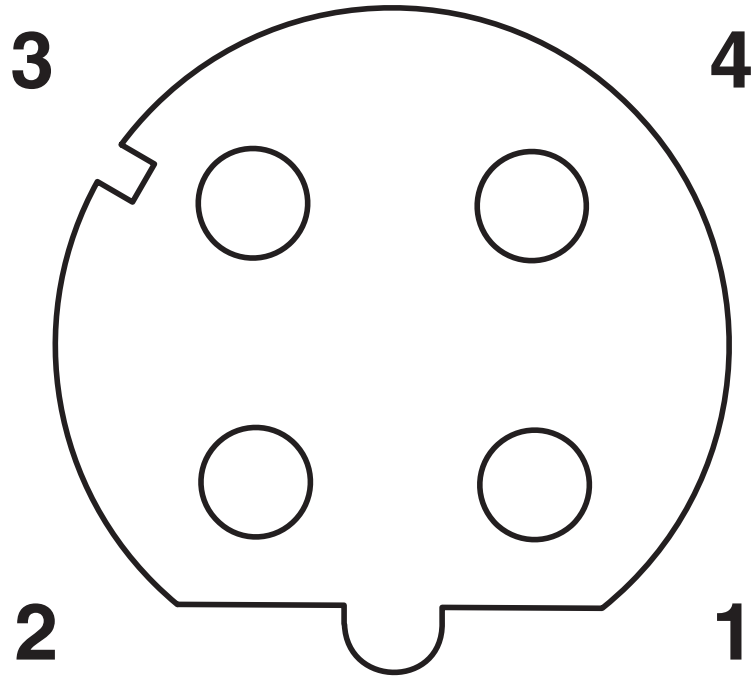
Standards and regulations

Standard designation	M12 circular connector

Standards/specifications	according to IEC 61076-2-101

Drawings

Schematic diagram



Pin assignment M12 socket, 4-pos., D-coded, female side

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1456404

cUL Recognized
Approval ID: E118976-20100522

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	250 V	4 A	22	-

UL Recognized
Approval ID: E118976-20100522

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	250 V	4 A	22	-

cULus Recognized
Approval ID: E221474-20140616

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	250 V	4 A	-	-

Classifications

ECLASS

ECLASS-13.0	27440110
ECLASS-15.0	27440110

ETIM

ETIM 10.0	EC003568

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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