SACC-E-M12FSM-5PE-M16XL/0,2 - Device connector front mounting

1415301

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Device connector front mounting, Power, 6-position, Socket, straight, M12-Standard, M-coding, on free cable end, Individual wires, cable length: 0.2 m, 1.31 mm^2, UL/cUL stranded hook-up wire, potted, this item is expected to be lead-free from Q1 2027 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	1415301
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCFG
GTIN	4055626056296
Weight per piece (including packing)	46.3 g
Weight per piece (excluding packing)	33.427 g
Customs tariff number	85444290
Country of origin	DE

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.

Safety note

Safety note	• 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.

Mounting

Mounting type	Front mounting (M16 x 1.5, XL variant, tightening limitation)
Tightening torque	1.5 Nm ... 2 Nm (Installation-side)

Product properties

Product type	Circular connectors (device side)
Application	Power
Number of positions	6
Connection profile	5+PE
No. of cable outlets	1
No. of power contacts	5
Shielded	no
Coding	M
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
Material grommet GRP	FKM
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated
Conductor material	Bare Cu litz wires

Electrical properties

Rated voltage in acc. with IEC 61076-2-101	630 V
Rated surge voltage	6 kV
Rated surge voltage	6 kV AC
Nominal voltage U_N	630 V
Nominal current I_N	8 A
Test voltage	6 kV

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross-section	1.31 mm²
Tightening torque	1.5 Nm ... 2 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Interfaces

Signal type/category	Power

Connector

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	M

Connection 2

Head design	free cable end

Cable/line

Cable length	0.2 m
Cable type	UL/cUL stranded hook-up wire
Wire diameter incl. insulation	2.2 mm
Single wire, color	black 1, black 2, black 3, black 4, black 5, green/yellow
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 ... 105 °C (cable, fixed installation)
	-25 °C ... 105 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

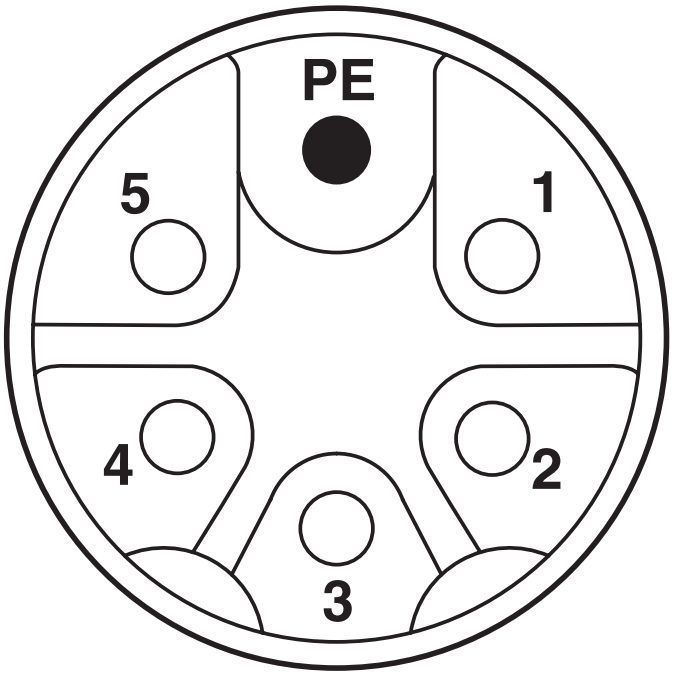
Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)
	-40 °C ... 85 °C (without mechanical actuation)
Ambient temperature (operation) (Cable, flexible installation)	-25 °C ... 105 °C (Cable, flexible installation)
Ambient temperature (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

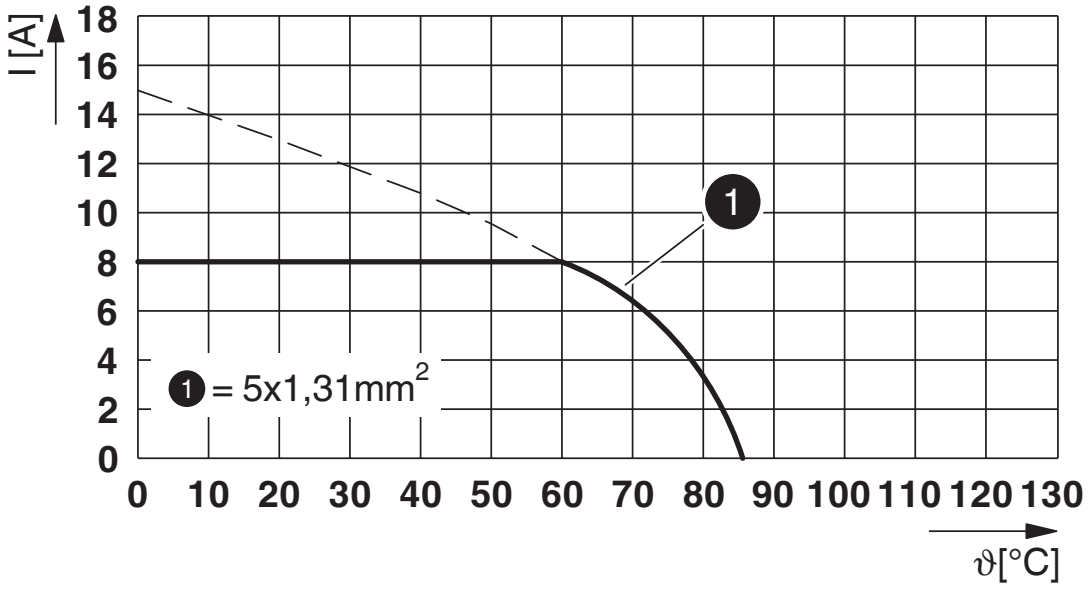
Drawings

Schematic diagram



Pin assignment of M12 socket, 6-pos., M-coded, socket side view

Diagram



I = current strength, T = ambient temperature

Approvals

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cULus Recognized
Approval ID: E468743-20180113

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	10 A	16	-

Classifications

ECLASS

ECLASS-13.0	27440103
ECLASS-15.0	27440103

ETIM

ETIM 10.0	EC003570

UNSPSC

UNSPSC 21.0	39121400

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	804cbd86-c7d4-4db6-a5e4-7efdf5302c94

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