

SACC-SQ-M12MS-5CON-20-L180 - Device connector front mounting



1456433

<https://www.phoenixcontact.com/us/products/1456433>

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, Universal, 5-position, Pin, straight, M12-SPEEDCON, A-coding, Wave soldering, 0.34 mm², this item is expected to be lead-free from Q2 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

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 | 1456433 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales key | AB26 |
| Product key | ABQEGK |
| GTIN | 4046356617048 |
| Weight per piece (including packing) | 10.7 g |
| Weight per piece (excluding packing) | 8.21 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

SACC-SQ-M12MS-5CON-20-L180 - Device connector front mounting



1456433

<https://www.phoenixcontact.com/us/products/1456433>

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) |
| Number of positions | 5 |
| No. of cable outlets | 1 |
| Shielded | yes |
| Coding | A |
| Thread type | M12 |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| 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 | 1.5 kV |
| Contact resistance | ≤ 3 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U_N | 60 V |
| Nominal current I_N | 4 A |
| Max. conductor resistance | 57.6 mΩ/m |

Connection data

SACC-SQ-M12MS-5CON-20-L180 - Device connector front mounting



1456433

<https://www.phoenixcontact.com/us/products/1456433>

Conductor connection

| | |
|-------------------------|-----------------------------------|
| Connection method | Wave soldering |
| Contact connection type | Pin |
| Conductor cross-section | 0.34 mm ² |
| Tightening torque | 3 Nm ... 4 Nm (Installation-side) |

Mechanical properties

Mechanical data

| | |
|-----------------------------|-------|
| Insertion/withdrawal cycles | > 100 |
|-----------------------------|-------|

Connector

Connection 1

| | |
|-------------------|----------|
| Head design | Pin |
| Head cable outlet | straight |
| Head thread type | M12 |
| Head locking type | SPEEDCON |
| Coding | A |

Cable/line

| | |
|---------------------------------|----------------------|
| Signal type/category | Universal |
| Wire diameter incl. insulation | 1.2 mm ±0.07 mm |
| Cable cross section | 0.34 mm ² |
| 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 |

SACC-SQ-M12MS-5CON-20-L180 - Device connector front mounting



1456433

<https://www.phoenixcontact.com/us/products/1456433>

Drawings

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

SACC-SQ-M12MS-5CON-20-L180 - Device connector front mounting



1456433

<https://www.phoenixcontact.com/us/products/1456433>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1456433>

|  cUL Recognized Approval ID: E118976-20100522 | | | | |
|--|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 60 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 | | | | |
| | 60 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 | | | | |
| | 60 V | 4 A | - | - |

SACC-SQ-M12MS-5CON-20-L180 - Device connector front mounting



1456433

<https://www.phoenixcontact.com/us/products/1456433>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27440110 |
| ECLASS-15.0 | 27440110 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC003568 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

SACC-SQ-M12MS-5CON-20-L180 - Device connector front mounting



1456433

<https://www.phoenixcontact.com/us/products/1456433>

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 | ddd0e74-5d17-4b8d-86e4-c9ced94ef784 |

Phoenix Contact 2026 © - 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