

SACC-M12MS-4QO SH PBPA - Data connector



1413933

<https://www.phoenixcontact.com/us/products/1413933>

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.



Data connector, PROFIBUS (31.25 kbps), 2-position, halogen-free, shielded, Plug straight M12, coding: A, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

Your advantages

- Safe use in the field, thanks to a high degree of protection
- Insulation displacement connection: innovative and time-saving assembly without stripping the single wire
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1413933 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF31 |
| Product key | BF2CDC |
| Catalog page | Page 423 (C-2-2019) |
| GTIN | 4055626013152 |
| Weight per piece (including packing) | 43.5 g |
| Weight per piece (excluding packing) | 45.3 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

1413933

<https://www.phoenixcontact.com/us/products/1413933>

Technical data

Notes

| | |
|---------|--|
| General | NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties. |
|---------|--|

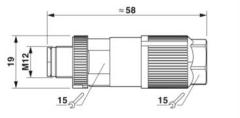
Product properties

| | |
|----------------------|---------------------------------|
| Product type | Circular connector (cable-side) |
| Sensor type | PROFIBUS |
| Number of positions | 2 |
| Application | Data |
| No. of cable outlets | 1 |
| Shielded | yes |
| Coding | A |
| Cable outlet | straight |

Insulation characteristics

| | |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution | 3 |

Dimensions

| | |
|------------------------|--|
| Dimensional drawing |  |
| Length | 58 mm |
| Wrench size, union nut | 15 mm |

External dimensions

| | |
|------------------|-----------------|
| Outside diameter | 5 mm ... 9.7 mm |
|------------------|-----------------|

Housing

| | |
|------------------|-------|
| Diameter housing | 19 mm |
|------------------|-------|

Material specifications

| | |
|--|------------------------------|
| Flammability rating according to UL 94 | V0 |
| Seal material | NBR |
| Material of grip body | Zinc die-cast, nickel-plated |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | PA 6.6 |
| Material for screw connection | Zinc die-cast, nickel-plated |

SACC-M12MS-4QO SH PBPA - Data connector



1413933

<https://www.phoenixcontact.com/us/products/1413933>

| | |
|--------------------------|--|
| Standards/regulations | PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |
| Wire insulation material | PVC / PE / PP / rubber |

Connection data

Conductor connection

| | |
|------------------------------|--|
| Connection method | Insulation displacement connection |
| Connection cross section | 0.25 mm ² ... 0.75 mm ² (flexible) |
| | 0.14 mm ² ... 0.5 mm ² (solid) |
| Connection cross section AWG | 24 ... 18 (flexible) |
| | 26 ... 20 (solid) |
| Tightening torque | 5 Nm (Pressure nut) |

Pin assignment

| | |
|---|-------------------------------------|
| Contact Color (signal designation) Contact (optional) | PROFIBUS PA: 1 = OG (DATA+) |
| | PROFIBUS PA: 3 = BU (DATA-) |
| | PROFIBUS PA: 4 = WH (shield) |
| | FOUNDATION Fieldbus: 1 = BU (DATA-) |
| | FOUNDATION Fieldbus: 2 = OG (DATA+) |
| | FOUNDATION Fieldbus: 3 (shield) |

Electrical properties

| | |
|--------------------------------|----------|
| Rated surge voltage | 0.8 kV |
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U _N | 30 V DC |
| Nominal current I _N | 4 A |

Mechanical properties

Mechanical data

| | |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|-------|

Connector

Connection 1

| | |
|-------------------|----------|
| Head design | Plug |
| Head cable outlet | straight |
| Head thread type | M12 |
| Coding | A |

Cable/line

| | |
|----------------------|----------------------|
| Signal type/category | PROFIBUS, 31.25 kbps |
|----------------------|----------------------|

Environmental and real-life conditions

Ambient conditions

SACC-M12MS-4QO SH PBPA - Data connector



1413933

<https://www.phoenixcontact.com/us/products/1413933>

| | |
|---------------------------------|----------------------------------|
| Degree of protection | IP65 |
| | IP67 |
| Ambient temperature (operation) | -40 °C ... 85 °C (Plug / socket) |
| Ambient temperature (assembly) | -5 °C ... 50 °C |

Standards and regulations

Testing

| | |
|-----------------------|--|
| Standards/regulations | PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |
|-----------------------|--|

M12

| | |
|--------------------------|------------------------------|
| Standard designation | M12 connector |
| Standards/specifications | according to IEC 61076-2-101 |

SACC-M12MS-4QO SH PBPA - Data connector



1413933

<https://www.phoenixcontact.com/us/products/1413933>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27440102 |
| ECLASS-12.0 | 27440116 |
| ECLASS-13.0 | 27440116 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC002635 |
|----------|----------|

UNSPSC

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

SACC-M12MS-4QO SH PBPA - Data connector



1413933

<https://www.phoenixcontact.com/us/products/1413933>

Environmental product compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Phoenix Contact 2024 © - 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