

1421679

https://www.phoenixcontact.com/us/products/1421679

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Data connector, Ethernet CAT5 (1 Gbps), 8-position, halogen-free, shielded, Plug straight M12, 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
- · Save time, thanks to installation with SPEEDCON fast locking system
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

Commercial data

| Item number | 1421679 |
|--------------------------------------|---------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF31 |
| Product key | BF2CDI |
| Catalog page | Page 343 (C-2-2019) |
| GTIN | 4055626276816 |
| Weight per piece (including packing) | 39.56 g |
| Weight per piece (excluding packing) | 39.56 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |



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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. |

Mounting

Product properties

| Product type | Circular connector (cable-side) | |
|----------------------------|---------------------------------|--|
| Sensor type | Ethernet | |
| Number of positions | 8 | |
| Application | Data | |
| No. of cable outlets | 1 | |
| Shielded | yes | |
| Coding | A | |
| Cable outlet | straight | |
| | | |
| Insulation characteristics | | |
| Overvoltage category | III | |

3

Dimensions

Degree of pollution

| Dimensional drawing | 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 |
|------------------------|---|
| 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 |



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| Contact carrier material | PA 6.6 |
|-------------------------------|--|
| Material for screw connection | Zinc die-cast, nickel-plated |
| 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 | 0.14 mm ² 0.34 mm ² (solid) |
| | 0.14 mm ² 0.34 mm ² (solid) |
| Connection cross section AWG | 26 22 (flexible) |
| | 26 22 (solid) |
| Tightening torque | 5 Nm (Pressure nut) |

Pin assignment

| Fill assignment | |
|---|----------------|
| Contact Color (signal designation) Contact (optional) | 1 = WHOG (D1+) |
| | 2 = OG (D1-) |
| | 3 = WHGN (D2+) |
| | 4 = GN (D2-) |
| | 5 = WHBN (D4+) |
| | 6 = BN (D4-) |
| | 7 = WHBU (D3-) |
| | 8 = BU (D3+) |

Electrical properties

| Rated surge voltage | 0.8 kV |
|--------------------------------|----------|
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U _N | 48 V AC |
| | 60 V DC |
| Nominal current I _N | 2 A |

Mechanical properties

Mechanical data

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

Connector

Connection 1

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



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| Ca | ble/line | | | |
|--|---------------------------------|--|--|--|
| | Signal type/category | Ethernet CAT5 (based on IEC 11801), 1 Gbps | | |
| Environmental and real-life conditions | | | | |
| 1 | Ambient conditions | | | |
| | Degree of protection | IP65 | | |
| | | IP67 | | |
| | Ambient temperature (operation) | -40 °C 85 °C (Plug / socket) | | |
| | Ambient temperature (assembly) | -5 °C 50 °C | | |

Standards and regulations

| _ | | |
|---|------|-----|
| 1 | esti | nr |
| | COL | 110 |

| 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 |



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1421679



EAC

Approval ID: RU C-DE.Al30.B.01102



EAC

Approval ID: RU C-DE.BL08.B.00511



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Classifications

UNSPSC 21.0

ECLASS

| Е | ECLASS-11.0 | 27440102 |
|--------|-------------|----------|
| E | ECLASS-12.0 | 27440116 |
| Е | ECLASS-13.0 | 27440116 |
| ETIM | | |
| Е | ETIM 8.0 | EC002635 |
| UNSPSC | | |

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Environmental product compliance

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

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