

1517181

https://www.phoenixcontact.com/us/products/1517181

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.



Distributor box, application: Standard, connection method: M12-SPEEDCON-socket Metal, number of slots: 8, number of positions: 5, coding: A, slot assignment: Double, status display: Yes, pnp; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 5 m, shielding: no

Your advantages

- · Safety in the field, thanks to molded housing and high degree of protection
- · Convenient: increased machine availability thanks to quick and easy diagnostics
- · Save space: distributor box with double occupancy for two sensors in one slot
- · Save time, thanks to installation with SPEEDCON fast locking system

Commercial data

| Item number | 1517181 |
|--------------------------------------|---------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF42 |
| Product key | BF3CCA |
| Catalog page | Page 264 (C-2-2019) |
| GTIN | 4017918967857 |
| Weight per piece (including packing) | 1,401.9 g |
| Weight per piece (excluding packing) | 1,329.7 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |



1517181

https://www.phoenixcontact.com/us/products/1517181

Technical data

Notes

| Assembly note | 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. |
|---------------------|---|
| Note on application | Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories". |

Product properties

| Product type | Distributor box |
|---------------------|-----------------|
| Application | Standard |
| Number of positions | 5 |
| Number of slots | 8 |
| Coding | A |
| LED | yes |

System properties

Local diagnostics

| Monitored function | Supply voltage |
|------------------------|----------------|
| Optical representation | Green LED |

Electrical properties

| Max. operating voltage U _{max} | 30 V DC |
|---|-------------------------------|
| Local diagnostics | Supply voltage Green LED |
| | Status display I/O Yellow LED |
| Nominal voltage U _N | 24 V DC |
| Rated current, total | 12 A |
| Max. current carrying capacity per path | 2 A |
| Current carrying capacity per slot | 4 A |

Connection data

Conductor connection

| Sensor/actuator connection system | M12-SPEEDCON-socket |
|--|---------------------|
| Tightening torque slot sensor/actuator cable | 0.4 Nm |
| Tightening torque of mounting screw for fixing the housing | 0.5 Nm |

Pin assignment

| · ··· deerg.····ein | |
|--|------------------|
| Slot/position = Wire color or connection | 1 / 4 (A) = WH |
| | 1 / 2 (B) = GYPK |
| | 2 / 4 (A) = GN |
| | 2 / 2 (B) = RDBU |
| | 3 / 4 (A) = YE |
| | |



1517181

https://www.phoenixcontact.com/us/products/1517181

| | 3 / 2 (B) = WHGN |
|--|-----------------------|
| | 4 / 4 (A) = GY |
| | 4 / 2 (B) = BNGN |
| | 5 / 4 (A) = PK |
| | 5 / 2 (B) = WHYE |
| | 6 / 4 (A) = RD |
| | 6 / 2 (B) = YEBN |
| | 7 / 4 (A) = BK |
| | 7 / 2 (B) = WHGY |
| | 8 / 4 (A) = VT |
| | 8 / 2 (B) = GYBN |
| | 1-8 / 1 (+ 24 V) = BN |
| | 1-8 / 3 (0 V) = BU |
| | 1-8 / 5 (PE) = GNYE |
| | |

Signaling

| Status display present | Yes |
|------------------------|-----|
|------------------------|-----|

Dimensions

| Dimensional drawing | 153 153 153 153 153 153 153 153 |
|---------------------|--|
| Width | 58 mm |
| Height | 26 mm |
| Length | 153 mm |

Material specifications

| Material Threaded sleeve | Die-cast zinc |
|--|---------------|
| Material Housing | PBT |
| Material Molding compound | PUR |
| Flammability rating according to UL 94 | V0 |
| Seal material O-ring | NBR |
| Contact material | Cu alloy |
| Contact surface material | gold-plated |
| Contact carrier material | PA |

Cable/line

| Cable length | 5 m |
|---------------------|-----|
| PUR/PVC black [PUR] | |



1517181

https://www.phoenixcontact.com/us/products/1517181

| Dimensional drawing | |
|---|--|
| | |
| Cable weight | 183.7 kg/km |
| UL AWM Style | 20549 (80°C/300 V) |
| Number of positions | 19 |
| Shielded | no |
| Cable type | PUR/PVC black [PUR] |
| Conductor structure signal line | 28x 0.15 mm |
| AWG signal line | 20 |
| ductor cross section | 16x 0.5 mm² (Signal line) |
| | 3x 1 mm² (power line) |
| Wire diameter incl. insulation | 1.5 mm ±0.1 mm (Signal line) |
| | 2.1 mm ±0.1 mm (power line) |
| External cable diameter | 10.50 mm ±0.2 mm |
| Outer sheath, material | PUR |
| External sheath, color | black RAL 9005 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray, gray/brown |
| Inner sheath thickness | ≥ 0.15 mm |
| Thickness, outer sheath | ≥ 0.76 mm |
| Overall twist | Wires twisted in layers |
| Nominal voltage, cable | 300 V |
| Test voltage | 2000 V |
| Minimum bending radius, fixed installation | 7.5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Smallest bending radius, fixed installation | 79 mm |
| Smallest bending radius, movable installation | 105 mm |
| Max. bending cycles | 1500000 |
| Minimum bending radius, drag chain applications | 10 x D |
| Traversing path | 2 m |
| Traversing rate | 2 m/s |
| Flame resistance | according to DIN EN 50265 |
| Resistance to oil | according to VDE 0472 Part 803 |
| Other resistance | Highly resistant to acids, alkaline solutions and solvents |
| Special properties | Silicone-free |



1517181

https://www.phoenixcontact.com/us/products/1517181

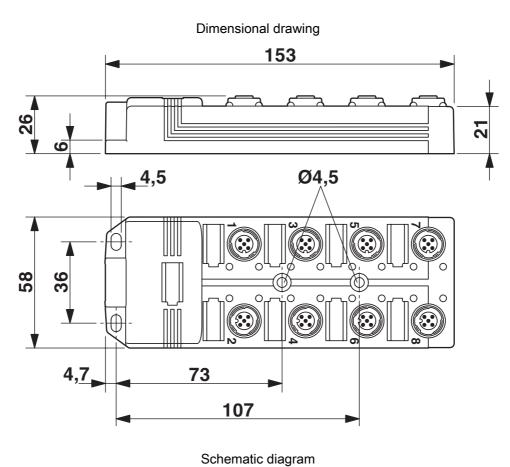
| Ambient temperature (operation) | -40 °C 90 °C (cable, fixed installation) | | |
|--|--|--|--|
| | -5 °C 80 °C (Cable, flexible installation) | | |
| Environmental and real-life conditions | | | |
| Ambient conditions | | | |
| Degree of protection | IP65 | | |
| | IP67 | | |
| | IP69K | | |
| Ambient temperature (operation) | -30 °C 90 °C | | |
| Standards and regulations | | | |
| Standard designation | M12 connector | | |
| Standards/specifications | IEC 61076-2-101 | | |

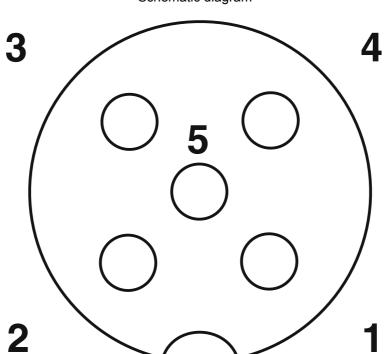


1517181

https://www.phoenixcontact.com/us/products/1517181

Drawings





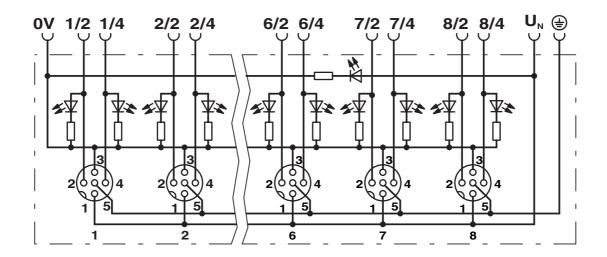
M12 slot, socket, 5-pos.



1517181

https://www.phoenixcontact.com/us/products/1517181

Circuit diagram





1517181

https://www.phoenixcontact.com/us/products/1517181

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1517181

| cUL Recognized Approval ID: FILE E 118976 | | | | | |
|---|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | 24 V | 3 A | - | - |

| UL Recognized Approval ID: FILE E 118976 | | | | | |
|--|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | 24 V | 3 A | - | - |

| ᆈᄟ | Dago | anized |
|----|----------|--------|
| | | |



1517181

https://www.phoenixcontact.com/us/products/1517181

Classifications

ECLASS

| | ECLASS-11.0 | 27440108 | |
|--------|-------------|----------|--|
| | ECLASS-12.0 | 27440108 | |
| | ECLASS-13.0 | 27440108 | |
| ETIM | | | |
| | ETIM 9.0 | EC002585 | |
| UNSPSC | | | |
| | UNSPSC 21.0 | 31251500 | |



1517181

https://www.phoenixcontact.com/us/products/1517181

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% | | | |



1517181

https://www.phoenixcontact.com/us/products/1517181

Accessories

PROT-MS SCO - Screw plug

1553129

https://www.phoenixcontact.com/us/products/1553129



M12 screw plug with fast-locking system for unoccupied M12 female connectors of sensor/actuator cables, boxes, and flush-type connectors

UC-EM (17,5X9) - Snap-in markers

0827490

https://www.phoenixcontact.com/us/products/0827490



Snap-in markers, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, lettering field size: 17. 5 x 9 mm, Number of individual labels: 20



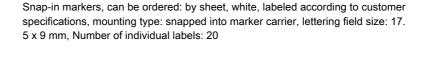
1517181

https://www.phoenixcontact.com/us/products/1517181

UC-EM (17,5X9) CUS - Snap-in markers

0828238

https://www.phoenixcontact.com/us/products/0828238





UCT-EM (17,5X9) - Snap-in markers

0801491

https://www.phoenixcontact.com/us/products/0801491



Snap-in markers, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, lettering field size: 17.5 x 9 mm, Number of individual labels: 24



1517181

https://www.phoenixcontact.com/us/products/1517181

UCT-EM (17,5X9) CUS - Snap-in markers

0801575

https://www.phoenixcontact.com/us/products/0801575

UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications



UC-EM (17,5X9) YE - Snap-in markers

0827494

https://www.phoenixcontact.com/us/products/0827494



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, lettering field size: 17.5 x 9 mm, Number of individual labels: 20



1517181

https://www.phoenixcontact.com/us/products/1517181

UC-EM (17,5X9) YE CUS - Snap-in markers

0828239

https://www.phoenixcontact.com/us/products/0828239



Snap-in markers, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm, Number of individual labels: 20

UCT-EM (17,5X9) YE - Snap-in markers

0801492

https://www.phoenixcontact.com/us/products/0801492



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, lettering field size: 17. 5 x 9 mm, Number of individual labels: 24



1517181

https://www.phoenixcontact.com/us/products/1517181

UCT-EM (17,5X9) YE CUS - Snap-in markers

0801576

https://www.phoenixcontact.com/us/products/0801576

UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications



UTA 136 - DIN rail adapter

2853996

https://www.phoenixcontact.com/us/products/2853996

Universal DIN rail adapter, for screwing on switchgear





1517181

https://www.phoenixcontact.com/us/products/1517181

TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm



1517181

https://www.phoenixcontact.com/us/products/1517181

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

SAC BIT M12-D15 - Tool

1208432

https://www.phoenixcontact.com/us/products/1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive



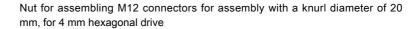
1517181

https://www.phoenixcontact.com/us/products/1517181

SACC BIT M12-D20 - Tool

1208445

https://www.phoenixcontact.com/us/products/1208445





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