

1162541

https://www.phoenixcontact.com/us/products/1162541

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, rear mounting, Power, 4-position, straight, M12, coding: T, on free cable end, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 1.31 mm², UL/cUL stranded hook-up wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1238551

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 | 1162541 |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| Sales key | AB27 |
| Product key | ABQCGG |
| GTIN | 4063151172374 |
| Weight per piece (including packing) | 105 g |
| Weight per piece (excluding packing) | 105 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |



1162541

https://www.phoenixcontact.com/us/products/1162541

Technical data

Notes

| General | 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. |
|---------|--|
| General | Lock nut is included in the scope of delivery |

Mounting

| Mounting type | Rear mounting |
|-----------------------|-----------------------|
| Assembly instructions | Tightening limitation |
| Connection method | Individual wires |

Product properties

| Product type | Circular connectors (device side) |
|----------------------|-----------------------------------|
| Sensor type | Power |
| Number of positions | 4 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | T |
| Thread type | M12 |

Insulation characteristics

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

Material specifications

| Flammability rating according to UL 94 | V0 |
|--|------------------------------|
| Seal material | 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 surge voltage | 1.5 kV |
|--------------------------------|--------------|
| | 1.5 kV AC/DC |
| Contact resistance | ≤ 3 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U _N | 63 V |



1162541

https://www.phoenixcontact.com/us/products/1162541

| Nominal current I _N | 12 A |
|--------------------------------|--------|
| Test voltage | 1.5 kV |

Connection data

Conductor connection

| Connection method | Individual wires |
|-------------------------|------------------|
| Contact connection type | Pin |
| Conductor cross section | 1.31 mm² |
| Tightening torque | 0.8 Nm |
| | 1.3 Nm |

Mechanical properties

Mechanical data

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

Connector

Connection 1

| Head thread type M12 | Head cable outlet | straight |
|----------------------|-------------------|----------|
| | Head thread type | M12 |
| Coding | Coding | Т |

Connection 2

Cable/line

| Cable length | 0.5 m |
|---------------------------------|--|
| Cable type | UL/cUL stranded hook-up wire |
| Signal type/category | Power |
| Wire diameter incl. insulation | 2 mm |
| Single wire, color | black, brown, blue, white |
| 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) |
| | -20 °C 105 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

| Degree of protection | IP67 |
|----------------------|-----------|
| | IP65/IP67 |



1162541

https://www.phoenixcontact.com/us/products/1162541

| Ambient temperature (operation) | -25 °C 85 °C (Plug / socket) |
|---------------------------------|--|
| | -20 °C 105 °C (Cable, flexible installation) |
| | -40 °C 105 °C (cable, fixed installation) |
| Standards and regulations | |
| Flame resistance | in acc. to UL 1581 VW1 |
| M12 | |
| Standard designation | M12 connector |
| Standards/specifications | IEC 61076-2-111 |
| Note | In line with |

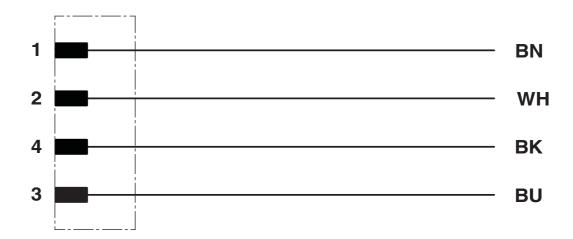


1162541

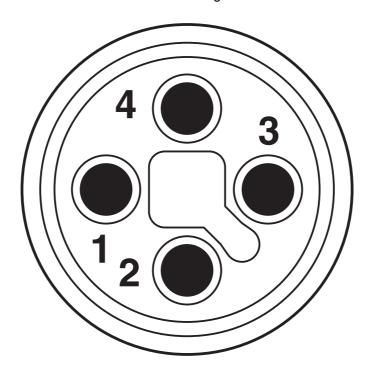
https://www.phoenixcontact.com/us/products/1162541

Drawings

Circuit diagram



Schematic diagram



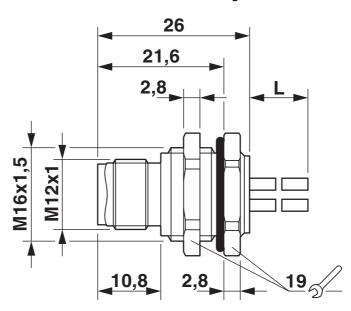
Connector pin assignment of M12 plug, 4-pos., T-coded, view of pin side



1162541

https://www.phoenixcontact.com/us/products/1162541

Dimensional drawing



Dimensional drawing



1162541

https://www.phoenixcontact.com/us/products/1162541

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1162541



| . 91 | cUL Recognized Approval ID: E468743-20190917 | | | | |
|-------------|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | 63 V | 12 A | - 16 | - |

| 71 | UL Recognized Approval ID: E468743-20190917 | | | | |
|-----------|---|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | 63 V | 12 A | - 16 | - |

cULus Recognized



1162541

https://www.phoenixcontact.com/us/products/1162541

Classifications

UNSPSC 21.0

ECLASS

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

39121400



1162541

https://www.phoenixcontact.com/us/products/1162541

Environmental product compliance

| REACh SVHC | Lead 7439-92-1 |
|------------|--|
| | |
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads" |

Phoenix Contact 2023 © - 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