

1404741

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Device connector rear mounting, Ethernet CAT6 $_{\rm A}$  (10 Gbps), 8-position, Socket, straight-SPEEDCON, coding: X, Rear mounting, M12 x 1, Wave soldering, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1238707

## Your advantages

- Easy PCB assembly: one-piece connectors for wave soldering
- · All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- · For high transmission reliability: optional shield connection to the housing by means of shield contact

## Commercial data

| Item number                          | 1404741            |
|--------------------------------------|--------------------|
| Packing unit                         | 20 pc              |
| Minimum order quantity               | 20 pc              |
| Product key                          | ABQEHL             |
| Catalog page                         | Page 91 (C-2-2013) |
| GTIN                                 | 4046356737029      |
| Weight per piece (including packing) | 15.752 g           |
| Weight per piece (excluding packing) | 15.752 g           |
| Customs tariff number                | 85366990           |
| Country of origin                    | DE                 |



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## Technical data

#### Notes

| Notes on operation | The electrical and mechanical data specified assumes that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of pollution, the connector must be sealed using a protective cap >IP54. Influences arising from litz wires, cables, or PCB mounting must also be taken into consideration. Additional mechanical fixing of the PCB is required. |
|--------------------|--|
| Order information: | Lock nut is included in the scope of delivery  |

## Mounting

| Mounting type | Rear mounting M12 x 1 |
|---------------|-----------------------|
|---------------|-----------------------|

### Product properties

| Product type        | Circular connectors (device side) |
|---------------------|-----------------------------------|
| Application         | Data                              |
| Sensor type         | Ethernet                          |
| Number of positions | 8                                 |
| Shielded            | yes                               |
| Coding              | X                                 |
| Thread type         | M12                               |

### Data management status

| Article revision | 80 |
|------------------|----|
|------------------|----|

### Insulation characteristics

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

### Dimensions

| Length of the solder pin | 6 mm |
|--------------------------|------|
|                          | 6 mm |

## Material specifications

| Material                               | Zinc die-cast (nickel-plated) |
|--|-------------------------------|
| Flammability rating according to UL 94 | V0                            |
| Seal material                          | FKM                           |
| Material of grip body                  | Zinc die-cast, nickel-plated  |
| Contact material                       | CuZn                          |
| Contact surface material               | gold-plated                   |
| Contact carrier material               | PPA                           |
| Material for screw connection          | Zinc die-cast, nickel-plated  |



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## Electrical properties

| Rated surge voltage                     | 0.8 kV            |
|---|-------------------|
| Contact resistance                      | ≤ 3 mΩ            |
| Insulation resistance                   | > 100 MΩ          |
| Nominal voltage U <sub>N</sub>          | 50 V AC           |
|   | 60 V DC           |
| Nominal current I <sub>N</sub>          | 0.5 A (Data)      |
| Transmission characteristics (category) | CAT6 <sub>A</sub> |

#### Connection data

#### Conductor connection

| Connection method       | Wave soldering |
|-------------------------|----------------|
| Contact connection type | Socket         |
| Tightening torque       | 2 Nm 3 Nm      |

## Mechanical properties

#### Mechanical data

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

#### Connector

#### Connection 1

| Head design       | Socket   |
|-------------------|----------|
| Head cable outlet | straight |
| Head locking type | SPEEDCON |
| Coding            | X        |

### Cable/line

| Signal type/category Ethernet CAT6 <sub>A</sub> , 10 Gbps |
|---|
|---|

#### Environmental and real-life conditions

## Ambient conditions

| Degree of protection            | IP67 (When plugged in) |  |
|---------------------------------|------------------------|--|
|                                 | IP67                   |  |
| Ambient temperature (operation) | -40 °C 85 °C           |  |

## Standards and regulations

#### M12

| Standard designation     | M12 connector    |  |
|--------------------------|------------------|--|
| Standards/specifications | IEC 61076-2-109  |  |
| Standard designation     | Shock, vibration |  |



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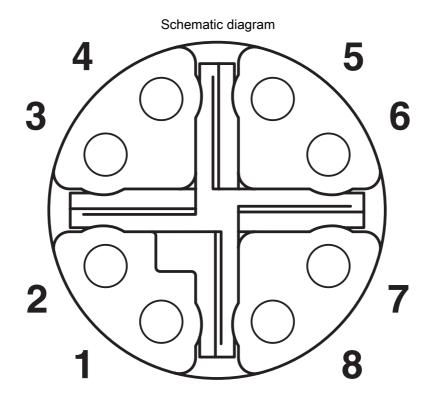
| Standards/specifications EN 50155 |
|-----------------------------------|
|-----------------------------------|



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## Drawings



M12 socket pin assignment, 8-pos, view of socket side



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## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1404741

| .71 | cUL Recognized Approval ID: E335024-20120308 |                              |                                |                   |                               |
|-----|--|------------------------------|--------------------------------|-------------------|-------------------------------|
|     | Nom  | ninal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|     | 60 V   | /                            | 0.5 A                          | -                 | -                             |

| <b>71</b> | SUL Recognized Approval ID: E335024-20120308 |                       |                                |                   |                               |
|-----------|--|-----------------------|--------------------------------|-------------------|-------------------------------|
|           |  | Nominal voltage $U_N$ | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|           |  | 60 V                  | 0.5 A                          | -                 | -                             |

cULus Recognized



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## Classifications

UNSPSC 21.0

### **ECLASS**

| ECLASS-11.0 | 27440102 |
|-------------|----------|
| ECLASS-12.0 | 27440116 |
| ECLASS-13.0 | 27440116 |
| ETIM        |          |
| ETIM 9.0    | EC002635 |
| UNSPSC      |          |

39121400



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## 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                                    | b720dd2e-e3ac-46c1-b1fd-36d4e51c5d3c  |

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