

1402457

https://www.phoenixcontact.com/us/products/1402457

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Contact carrier, Ethernet CAT6<sub>A</sub>, 8-position, Socket, straight, M12, X-coding, THR solder connection, this item is expected to be lead-free from Q4 2025 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

## Your advantages

- · Reduced mounting costs thanks to two-piece device connector
- · Packaging available for automated pick and place assembly
- · All common pin assignments and codings available
- Easy device integration thanks to mechanical port screw connections with threaded attachment, press-in contour or direct integration in the front plate
- · Compatible with connectors with screw or push-in connection

#### Commercial data

| Item number                          | 1402457       |
|--------------------------------------|---------------|
| Packing unit                         | 20 pc         |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AB23          |
| Product key                          | ABQAGS        |
| GTIN                                 | 4046356615907 |
| Weight per piece (including packing) | 4.657 g       |
| Weight per piece (excluding packing) | 3.049 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 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. |
|--------------------|--|
|                    | 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  |

### Product properties

| Product type        | Contact insert |
|---------------------|----------------|
| Application         | Data           |
| Sensor type         | Ethernet       |
| Number of positions | 8              |
| Seal present        | no             |
| Shielded            | yes            |
| Coding              | X              |
| Thread type         | M12            |

#### Insulation characteristics

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

### Electrical properties

| Rated surge voltage                     | 1.5 kV            |
|---|-------------------|
| Contact resistance                      | ≤ 5 mΩ            |
| Insulation resistance                   | > 100 MΩ          |
| Nominal voltage $U_N$                   | 50 V AC           |
|   | 60 V DC           |
| Nominal current I <sub>N</sub>          | 0.5 A             |
| Transmission characteristics (category) | CAT6 <sub>A</sub> |

### Connection data

| Connection method | THR solder connection |
|-------------------|-----------------------|
|                   |                       |

#### Interfaces

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

### Material specifications

| Material Contact carrier               | PPA          |
|--|--------------|
| Material Contact                       | Copper alloy |
| Material Contact surface               | Au           |
| Flammability rating according to UL 94 | V0           |

## Connector



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| _       |    |    |     |        |     |
|---------|----|----|-----|--------|-----|
| $C_{c}$ | nr | ne | ∩ti | $\cap$ | า 1 |

| Head design       | Socket   |
|-------------------|----------|
| Head cable outlet | straight |
| Head thread type  | M12      |
| Coding            | X        |

#### Cable/line

| Signal type/cotogony | Ethornot CATS              |
|----------------------|----------------------------|
| Signal type/category | Ethernet CAT6 <sub>A</sub> |

### Mechanical properties

#### Mechanical data

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

#### Environmental and real-life conditions

#### Ambient conditions

| Degree of protection                                   | IP67 (correctly plugged in and locked) |
|--|--|
| Ambient temperature (operation) (male connector/female | -40 °C 90 °C                           |
| connector)   |  |

#### Standards and regulations

| Standard designation     | M12 circular connector       |  |
|--------------------------|------------------------------|--|
| Standards/specifications | according to IEC 61076-2-109 |  |

### Packaging specifications

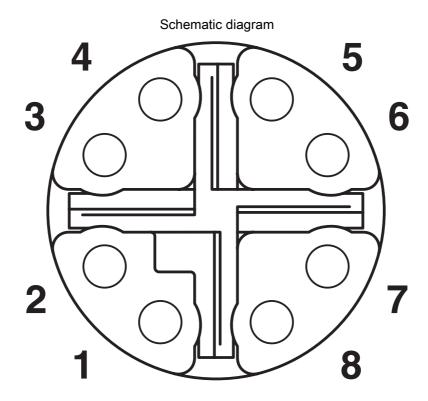
| Type of packaging | Blister |
|-------------------|---------|



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# Drawings



Pin assignment M12 connector, 8-pos., view socket side



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1402457

| . <b>9</b> 1 | CUL Recognized Approval ID: E335024-20120308 |                                |                                |                   |                               |
|--------------|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
|              |  | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| keine        |  |                                |                                |                   |                               |
|              |  | 60 V                           | 0.5 A                          | -                 | -                             |

| <b>7.1</b> | UL Recognized Approval ID: E335024-20120308 |                                |                                |                   |                               |
|------------|---|--------------------------------|--------------------------------|-------------------|-------------------------------|
|            |   | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| keine      |   |                                |                                |                   |                               |
|            |   | 60 V                           | 0.5 A                          | -                 | -                             |



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# Classifications

#### **ECLASS**

|      | ECLASS-13.0 | 27440223 |  |
|------|-------------|----------|--|
|      | ECLASS-15.0 | 27440223 |  |
|      |             |          |  |
| ETIM |             |          |  |
|      | ETIM 9.0    | EC003557 |  |
|      | JORGO       |          |  |
| Uľ   | NSPSC       |          |  |
|      | UNSPSC 21.0 | 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                                    | ebece220-b57c-4dcb-8b4a-6148d527e8ef  |

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