

## Data connector - VS-08-M12MS-10G-P SCO - 1417430

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Data connector, Ethernet CAT6<sub>A</sub> (10 Gbps), 8-position, shielded, Plug straight M12 SPEEDCON, Coding: X, Piercecon<sup>®</sup>, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

### Your advantages

- ✓ Safe use in the field, thanks to a high degree of protection
- ✓ Flexible: connectors for on-site assembly
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Reliable signal transmission - 360° shielding in environments with electromagnetic interference



Ethernet



### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 046356 530699 |
| GTIN         | 4046356530699                                                                                           |

### Technical data

#### Dimensions

|                                |               |
|--------------------------------|---------------|
| Wrench size, union nut         | 13 mm         |
| Diameter housing               | 15 mm         |
| Length                         | 46.5 mm       |
| External cable diameter        | 4 mm ... 8 mm |
| Stripping length of the sheath | ≥ 70 mm       |

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -40 °C ... 85 °C (Plug / socket) |
|                                 | -40 °C ... 85 °C (Plug / socket) |
| Degree of protection            | IP65                             |

#### General

|      |                                                                                                                                          |
|------|------------------------------------------------------------------------------------------------------------------------------------------|
| Note | NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending |
|------|------------------------------------------------------------------------------------------------------------------------------------------|

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## Technical data

### General

|                                         |                                                                                                      |
|-----------------------------------------|------------------------------------------------------------------------------------------------------|
|                                         | forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties. |
| Rated current at 40°C                   | 0.5 A (30 W)                                                                                         |
| Rated voltage                           | 48 V AC                                                                                              |
|                                         | 60 V DC                                                                                              |
| Number of positions                     | 8                                                                                                    |
| Insulation resistance                   | ≥ 100 MΩ                                                                                             |
| Coding                                  | X - data                                                                                             |
| Standards/regulations                   | M12 connector IEC 61076-2-109                                                                        |
| Signal type/category                    | Ethernet CAT6 <sub>A</sub> (IEC 11801), 10 Gbps                                                      |
| Status display                          | No                                                                                                   |
| Overvoltage category                    | II                                                                                                   |
| Degree of pollution                     | 3                                                                                                    |
| Connection method                       | Piercecon®                                                                                           |
| Conductor cross section                 | 0.14 mm² ... 0.14 mm² (flexible)                                                                     |
| Conductor cross section AWG             | 26 (flexible)                                                                                        |
| Wire diameter including insulation      | 0.95 mm ... 1.15 mm                                                                                  |
| Insertion/withdrawal cycles             | ≥ 100                                                                                                |
| Torque                                  | 0.4 Nm (M12 knurl)                                                                                   |
|                                         | 2 Nm (Screw plug insert with sleeve housing as far it will go)                                       |
|                                         | 1 Nm (Pressure nut with coupling sleeve)                                                             |
| Transmission characteristics (category) | CAT6 <sub>A</sub>                                                                                    |

### Material

|                                        |                              |
|----------------------------------------|------------------------------|
| Flammability rating according to UL 94 | V0                           |
| Contact material                       | CuSn                         |
| Contact surface material               | Ni/Au                        |
| Contact carrier material               | PP                           |
| Material of grip body                  | Zinc die-cast, nickel-plated |
| Material, knurls                       | Zinc die-cast, nickel-plated |
| Sealing material                       | NBR                          |

### Standards and Regulations

|                                        |                               |
|----------------------------------------|-------------------------------|
| Standards/specifications               | M12 connector IEC 61076-2-109 |
| Connection in acc. with standard       | UL                            |
| Flammability rating according to UL 94 | V0                            |

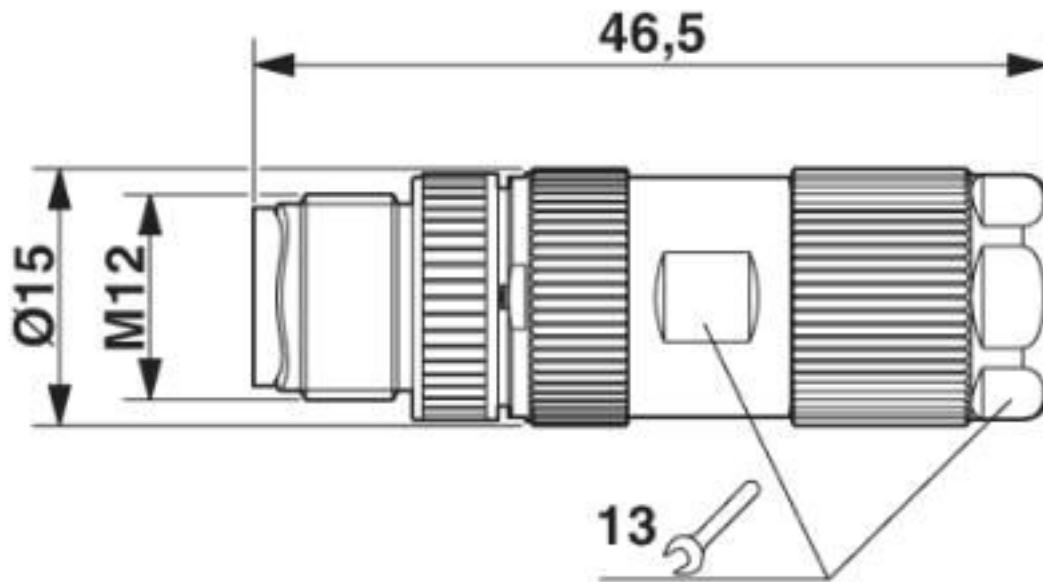
### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50 years                                                      |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Data connector - VS-08-M12MS-10G-P SCO - 1417430

### Drawings

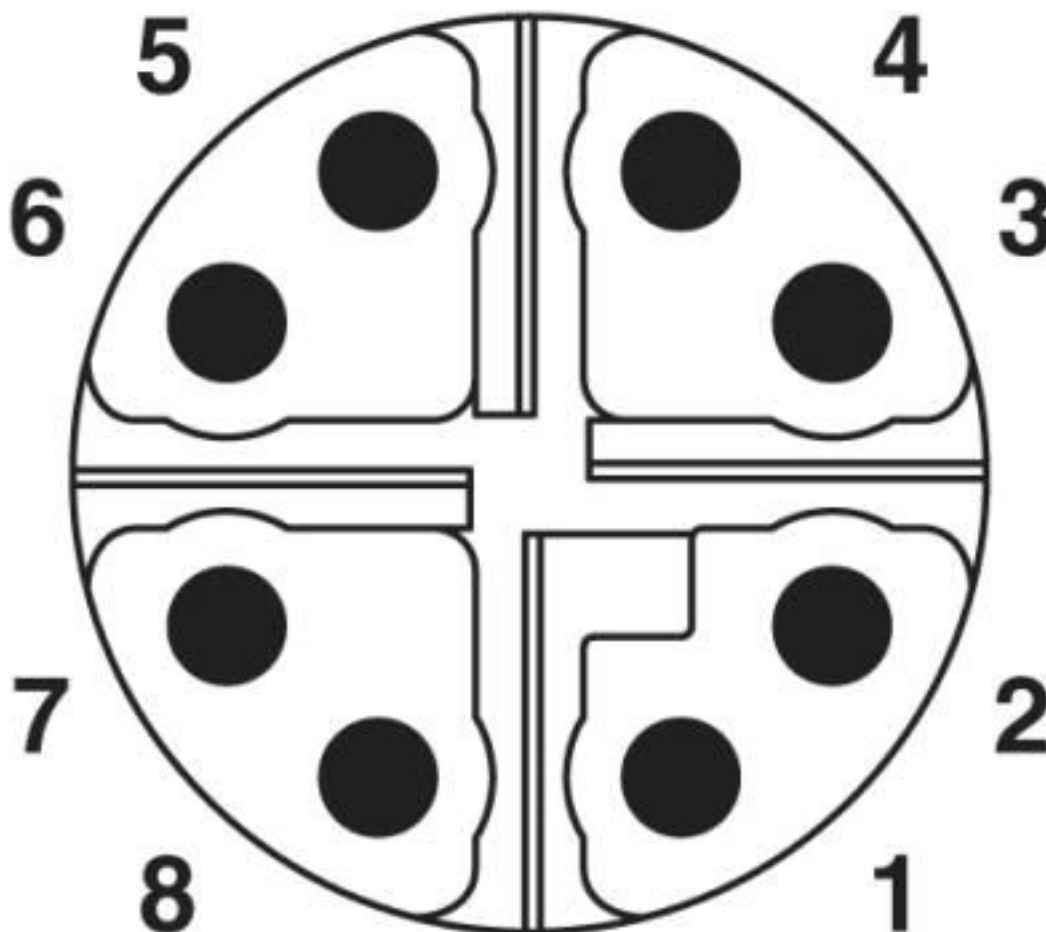
Dimensional drawing



Dimens. drawing: M12 connectors

## Data connector - VS-08-M12MS-10G-P SCO - 1417430

Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440102 |
| eCl@ss 11.0   | 27440102 |
| eCl@ss 4.0    | 27260700 |
| eCl@ss 4.1    | 27260700 |
| eCl@ss 5.0    | 27260700 |
| eCl@ss 5.1    | 27260700 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27440104 |
| eCl@ss 8.0    | 27440104 |
| eCl@ss 9.0    | 27440102 |

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### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001121 |
| ETIM 3.0 | EC002062 |
| ETIM 4.0 | EC002062 |
| ETIM 5.0 | EC002635 |
| ETIM 6.0 | EC002635 |
| ETIM 7.0 | EC002635 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 39121413 |
| UNSPSC 18.0   | 39121413 |
| UNSPSC 19.0   | 39121413 |
| UNSPSC 20.0   | 39121413 |
| UNSPSC 21.0   | 39121413 |

### Approvals

#### Approvals

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UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

#### Ex Approvals

### Approval details

|                    |                                                                                     |                                                                                                                                                                        |
|--------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UL Recognized      |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E335024-20120308 |
| Nominal voltage UN | 60 V                                                                                |                                                                                                                                                                        |
| Nominal current IN | 0.5 A                                                                               |                                                                                                                                                                        |

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### Approvals

|                    |                                                                                   |                                                                                                                                                                        |
|--------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cUL Recognized     |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E335024-20120308 |
| Nominal voltage UN | 60 V                                                                              |                                                                                                                                                                        |
| Nominal current IN | 0.5 A                                                                             |                                                                                                                                                                        |

|     |                                                                                   |                          |
|-----|-----------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.01102 |
|-----|-----------------------------------------------------------------------------------|--------------------------|

|     |                                                                                   |               |
|-----|-----------------------------------------------------------------------------------|---------------|
| EAC |  | EAC-Zulassung |
|-----|-----------------------------------------------------------------------------------|---------------|

|                  |                                                                                     |  |
|------------------|-------------------------------------------------------------------------------------|--|
| cULus Recognized |  |  |
|------------------|-------------------------------------------------------------------------------------|--|

### Accessories

#### Accessories

#### Electronics pliers

Diagonal cutter - MICROFOX-SP-1 - 1212487



Electronic diagonal cutter, tapered head, without chamfer, with opening spring, non-reflective phosphate-treated surface, punched version

#### Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



#### Screwdriver tools

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### Accessories

Tool - SAC BIT M12-D15 - 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

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Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



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

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### Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



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

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Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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Stripping tool - VS-CABLE-STRIP-VARIO - 1657407



Stripping tool, for the multi-level stripping of shielded cables

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