

## Bus system flat-type plug - SACCBP-FS-8CON-M16/0,5-940 BK - 1425298

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Bus system flush-type socket, Ethernet, 8-pos., M12, shielded, rear/screw mounting with M16 thread, with 0.5 m bus cable, 4 x 2 x 0.26 mm<sup>2</sup>

The figure shows the standard item



Ethernet

### Key Commercial Data

|                        |   |
|------------------------|---|
| Packing unit           | 1 pc  |
| Minimum order quantity | 50 pc   |
| GTIN                   | <br>4 055626 399072 |
| GTIN                   | 4055626399072   |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 0.5 m |
|-----------------|-------|

#### Ambient conditions

|                      |                        |
|----------------------|------------------------|
| Degree of protection | IP67 (When plugged in) |
|                      | IP65 (When plugged in) |

#### General

|                       |              |
|-----------------------|--------------|
| Rated current at 40°C | 2 A          |
| Rated voltage         | 30 V         |
| Number of positions   | 8            |
| Insulation resistance | ≥ 100 MΩ     |
| Coding                | A - standard |
| Status display        | No           |
| Overvoltage category  | II           |
| Degree of pollution   | 3            |

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## Technical data

### Material

|  |                              |
|--|------------------------------|
| Flammability rating according to UL 94 | V0                           |
| Contact material                       | CuZn                         |
| Contact surface material               | Ni/Au                        |
| Contact carrier material               | PA 6.6                       |
| Material, knurls                       | Zinc die-cast, nickel-plated |
| Sealing material                       | FKM                          |

### Standards and Regulations

|  |    |
|--|----|
| Flammability rating according to UL 94 | V0 |
|--|----|

### Cable

|   |  |
|---|--|
| Cable type                                    | Ethernet flexible CAT5, 4-pair   |
| Cable type (abbreviation)                     | 94B  |
| UL AWM style                                  | 20963 (80°C/30 V)  |
| Signal type/category                          | Ethernet CAT5 (IEC 11801), 1 Gbps  |
| Cable structure                               | 4x2xAWG26/7; SF/UTP  |
| Conductor cross section                       | 4x 2x 0.14 mm <sup>2</sup>   |
| AWG signal line                               | 26   |
| Conductor structure signal line               | 7x 0.16 mm   |
| Core diameter including insulation            | 0.96 mm  |
| Wire colors                                   | white/blue-blue, white/orange-orange, white/green-green, white/brown-brown |
| Twisted pairs                                 | 2 cores to the pair  |
| Overall twist                                 | 4 pairs for core   |
| Shielding                                     | Aluminum-coated foil, tinned copper braided shield                         |
| Optical shield covering                       | 70 %   |
| External sheath, color                        | water blue RAL 5021  |
| Outer sheath thickness                        | 1.05 mm  |
| External cable diameter D                     | 6.4 mm ±0.2 mm   |
| Minimum bending radius, fixed installation    | 4 x D  |
| Minimum bending radius, flexible installation | 8 x D  |
| Tensile strength GRP                          | ≤ 100 N  |
| Cable weight                                  | 47 kg/km   |
| Outer sheath, material                        | PUR  |
| Material conductor insulation                 | Foamed PE  |
| Conductor material                            | Bare Cu litz wires   |
| Insulation resistance                         | ≥ 500 MΩ*km  |
| Loop resistance                               | ≤ 290.00 Ω/km  |
| Cable capacity                                | 48 nF/km (at 1 kHz)  |
| Wave impedance                                | 100 Ω ±5 Ω (at 100 MHz)  |
| Near end crosstalk attenuation (NEXT)         | 71.3 dB (with 1 MHz)   |

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## Technical data

### Cable

|  |                            |
|--|----------------------------|
|  | 62.3 dB (at 4 MHz)         |
|  | 56.3 dB (at 10 MHz)        |
|  | 53.2 dB (at 16 MHz)        |
|  | 51.8 dB (at 20 MHz)        |
|  | 48.9 dB (at 31.25 MHz)     |
|  | 44.4 dB (at 62.5 MHz)      |
|  | 41.3 dB (at 100 MHz)       |
| Power-summated near end crosstalk attenuation (PSNEXT) | 62.3 dB (with 1 MHz)       |
|  | 53.3 dB (at 4 MHz)         |
|  | 47.3 dB (at 10 MHz)        |
|  | 44.2 dB (at 16 MHz)        |
|  | 42.8 dB (at 20 MHz)        |
|  | 39.9 dB (at 31.25 MHz)     |
|  | 35.4 dB (at 62.5 MHz)      |
|  | 32.3 dB (at 100 MHz)       |
| Attenuation  | 3.2 dB (with 1 MHz)        |
|  | 6 dB (at 4 MHz)            |
|  | 9.5 dB (at 10 MHz)         |
|  | 12.1 dB (at 16 MHz)        |
|  | 13.6 dB (at 20 MHz)        |
|  | 17.1 dB (at 31.25 MHz)     |
|  | 24.8 dB (at 62.5 MHz)      |
|  | 32 dB (at 100 MHz)         |
| Return loss (RL)                                       | 23 dB (at 4 MHz)           |
|  | 24.1 dB (at 8 MHz)         |
|  | 25 dB (at 10 MHz)          |
|  | 25 dB (at 16 MHz)          |
|  | 25 dB (at 20 MHz)          |
|  | 23.6 dB (at 31.25 MHz)     |
|  | 21.5 dB (at 62.5 MHz)      |
|  | 20.1 dB (at 100 MHz)       |
| Signal runtime   | 5.3 ns/m                   |
| Coupling resistance                                    | ≤ 100.00 mΩ/m (at 10 MHz)  |
| Nominal voltage, cable                                 | ≤ 100 V                    |
| Test voltage Core/Core                                 | 700 V (50 Hz, 1 min.)      |
| Test voltage Core/Shield                               | 700 V (50 Hz, 1 min.)      |
| Flame resistance                                       | according to IEC 60332-1-2 |
| Halogen-free   | according to IEC 60754-1   |
| Resistance to oil                                      | according to EN 60811-2-1  |

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### Technical data

#### Cable

|   |   |
|---|---|
| Ambient temperature (operation)         | -40 °C ... 80 °C (cable, fixed installation)    |
|   | -20 °C ... 80 °C (cable, flexible installation) |
| Ambient temperature (installation)      | -20 °C ... 80 °C                                |
| Ambient temperature (storage/transport) | -20 °C ... 80 °C                                |

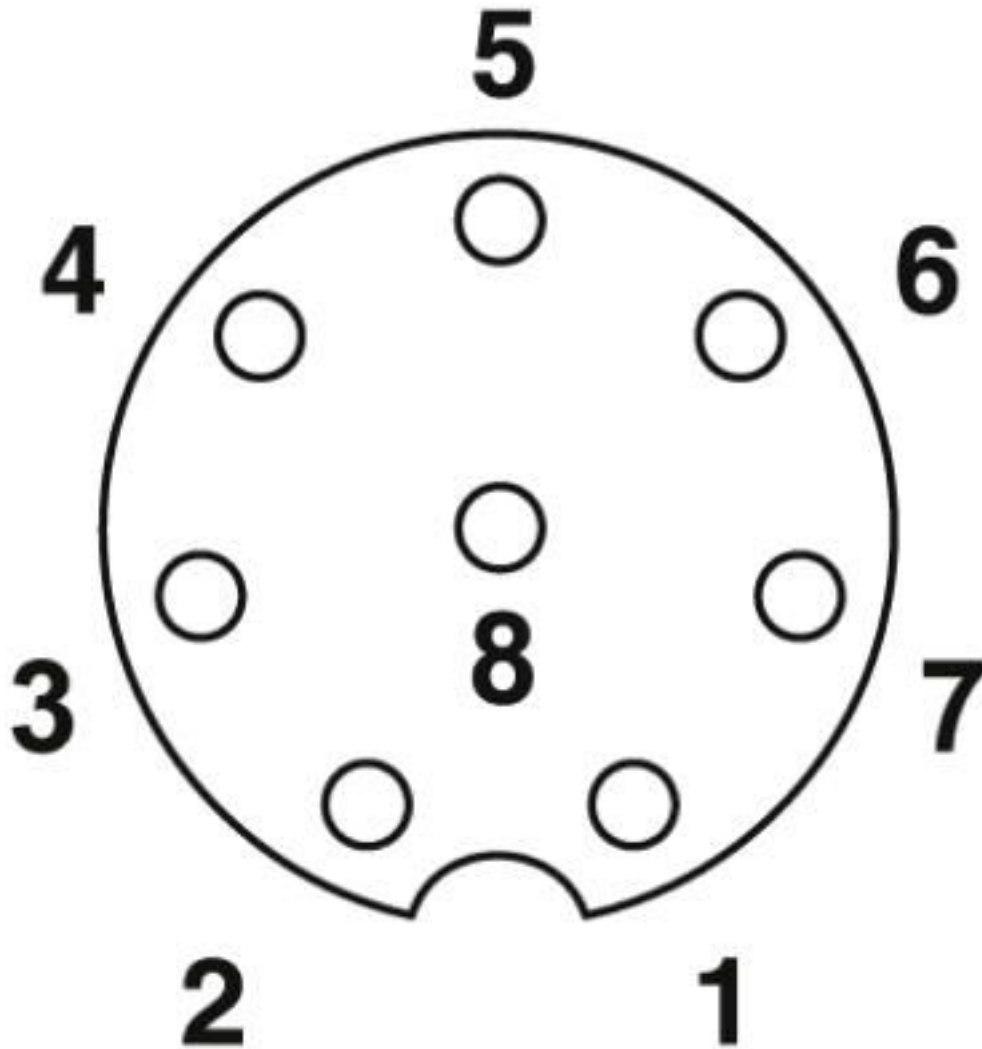
#### Environmental Product Compliance

|            |   |
|------------|---|
| 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" |

### Drawings

Bus system flat-type plug - SACCBP-FS-8CON-M16/0,5-940  
BK - 1425298

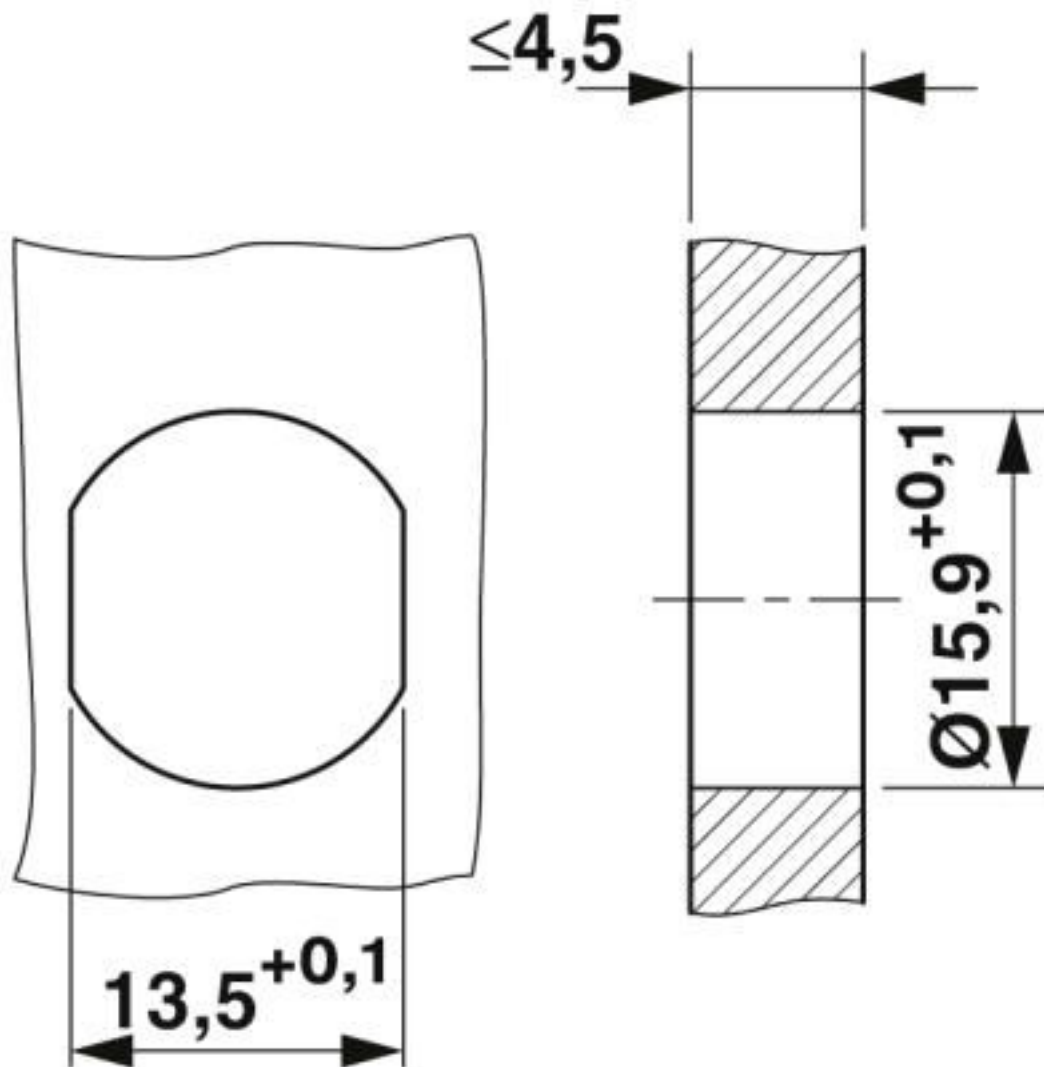
Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

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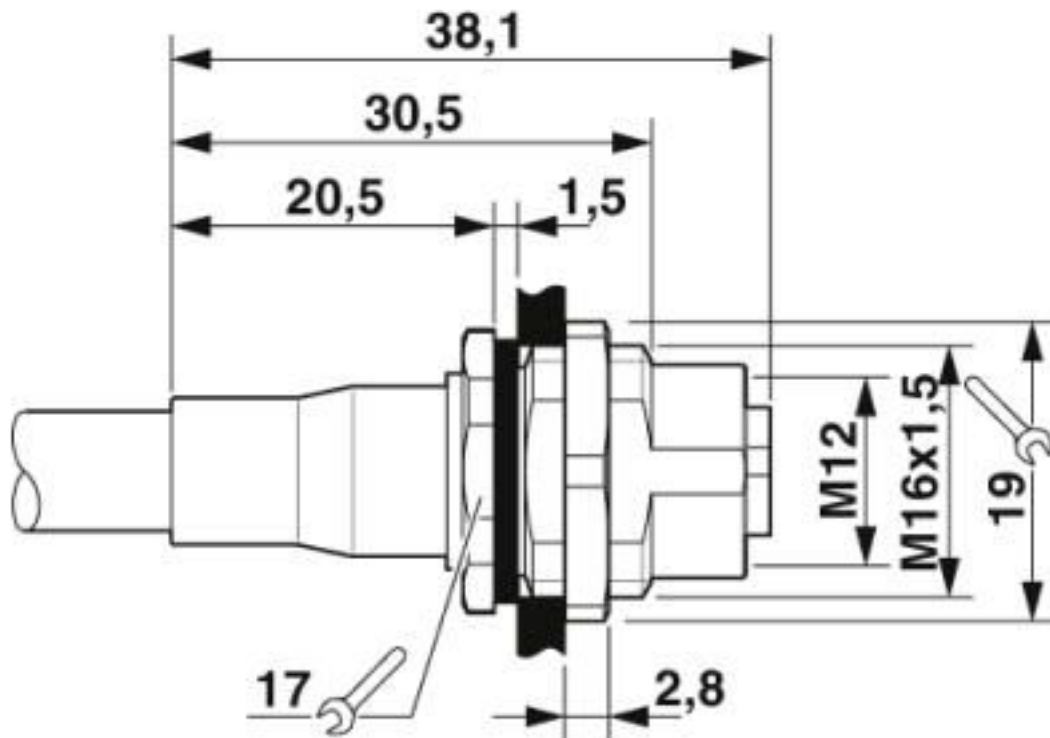
Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with feed-through hole (alternatively with area as anti-rotation protection for panel thicknesses > 2 mm up to max. 4.5 mm)

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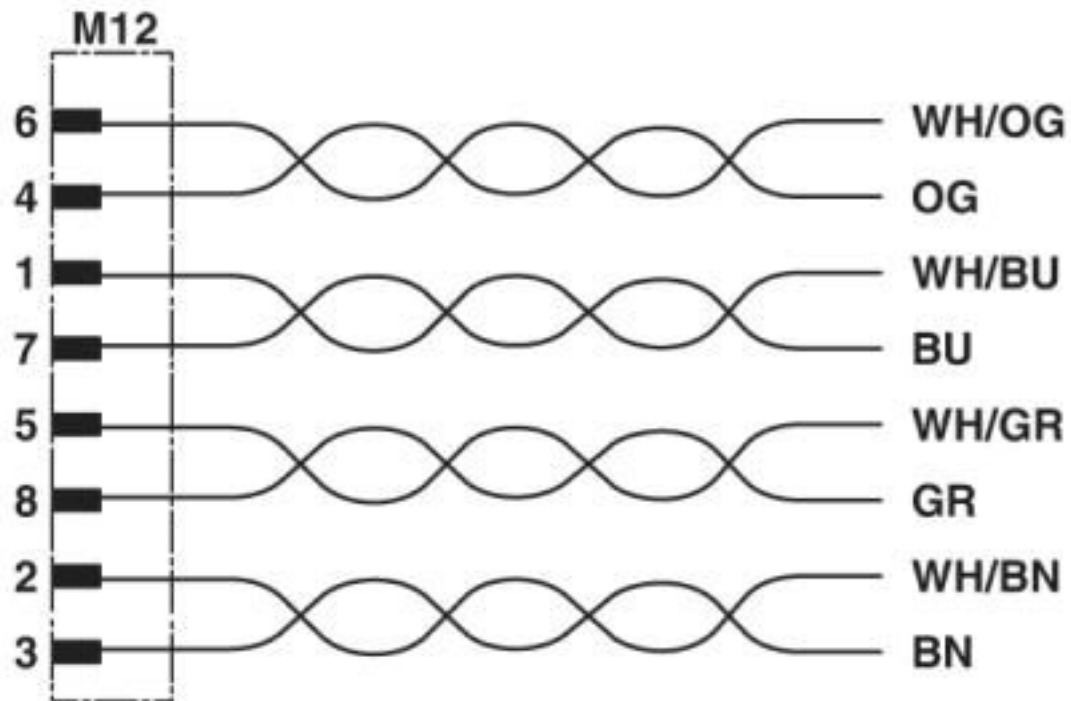
Dimensional drawing



M12 flush-type connector

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Circuit diagram



Contact assignment of the M12 plug and the M12 socket



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Cable cross section



Ethernet flexible CAT5, 4-pair [94B]

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440102 |
| eCl@ss 8.0    | 27440103 |
| eCl@ss 9.0    | 27440102 |

ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC002061 |
| ETIM 6.0 | EC002061 |

## Bus system flat-type plug - SACCBP-FS-8CON-M16/0,5-940 BK - 1425298

### Approvals

#### Approvals

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#### Approvals

EAC

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#### Ex Approvals

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#### Approval details

|     |   |         |
|-----|---|---------|
| EAC |  | B.01687 |
|-----|---|---------|

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