

## Bus system cable - VS-MSDBPS-OE-93K-LI/5,0 - 1419161

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Assembled Sercos III cable, shielded, star quad, AWG 22 stranded (7-wire), RAL 3020 (traffic red), M12 flush-type plug, rear mounting, SPEEDCON 4-pos. on free conductor end, length: 5 m



### Key commercial data

|                      |          |
|----------------------|----------|
| Packing unit         | 1 pc     |
| Custom tariff number | 85444290 |
| Country of origin    | Germany  |

### Technical data

#### Dimensions

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

#### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP67 |
|----------------------|------|

#### General data

|                        |            |
|------------------------|------------|
| Rated current at 40°C  | 4 A        |
| Rated voltage          | 250 V      |
| Number of positions    | 4          |
| Signal type/category   | Sercos III |
| Surge voltage category | II         |
| Pollution degree       | 3          |

#### Characteristics head 1

|  |                                       |
|--|---------------------------------------|
| Head type                                | Flush-type plug Straight M12 SPEEDCON |
| No. of positions (pin connector pattern) | 4                                     |

#### Characteristics head 2

|           |                |
|-----------|----------------|
| Head type | free cable end |
|-----------|----------------|

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## Technical data

### Characteristics head 2

|  |   |
|--|---|
| No. of positions (pin connector pattern) | 4 |
|--|---|

### Cable

|   |  |
|---|--|
| Cable type                                    | Sercos III   |
| Cable type (abbreviation)                     | 93K  |
| UL AWM style                                  | 21694 (60°C / 600 V)   |
| Signal type/category                          | Sercos III CAT5 (IEC 11801:2002), 100 Mbps<br>Sercos III CAT5e (TIA 568B:2001), 100 Mbps |
| Cable structure                               | 1x4xAWG22/7; SF/TQ   |
| Conductor cross section                       | 4x 0.34 mm <sup>2</sup>  |
| AWG signal line                               | 22   |
| Conductor structure signal line               | 7x 0.25 mm   |
| Core diameter including insulation            | approx. 1.55 mm  |
| Wire colors                                   | White, yellow, blue, orange  |
| Type of pair shielding                        | Aluminum-lined polyester foil  |
| Overall twist                                 | Star quad  |
| Shielding                                     | Tinned copper braided shield   |
| External sheath, color                        | signal red RAL 3020  |
| Outer sheath thickness                        | approx. 0.9 mm   |
| External cable diameter D                     | 6.5 mm ±0.2 mm   |
| Minimum bending radius, fixed installation    | 3 x D  |
| Minimum bending radius, flexible installation | 7 x D  |
| Cable weight                                  | 68 kg/km   |
| Outer sheath, material                        | PVC  |
| Material, inner sheath                        | PVC  |
| Material conductor insulation                 | PE   |
| Conductor material                            | Tin-plated Cu litz wires   |
| Insulation resistance                         | ≥ 0.5 GΩ*km  |
| Conductor resistance                          | ≤ 120 Ω/km   |
| Wave impedance                                | 100 Ω ±15 Ω (at 100 MHz)   |
| Signal runtime                                | 5.3 ns/m   |
| Coupling resistance                           | ≤ 20.00 mΩ/m (at 10 Hz)  |
| Test voltage Core/Core                        | 2000 V (50 Hz, 1 min.)   |
| Test voltage Core/Shield                      | 2000 V (50 Hz, 1 min.)   |
| Flame resistance                              | According to UL 1685 (CSA FT 4)  |
| Resistance to oil                             | Resistant to oil to a limited extent   |
| Other resistance                              | UV resistant According to UL 1581, Section 1200  |
| Ambient temperature (operation)               | -40 °C ... 70 °C (cable, fixed installation)   |

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### Technical data

#### Cable

|   |   |
|---|---|
|   | -40 °C ... 70 °C (cable, flexible installation) |
| Ambient temperature (installation)      | -20 °C ... 60 °C                                |
| Ambient temperature (storage/transport) | -50 °C ... 70 °C                                |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060307 |
| eCl@ss 4.1 | 27060307 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27060307 |
| eCl@ss 6.0 | 27279218 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC000830 |
| ETIM 4.0 | EC002599 |
| ETIM 5.0 | EC000830 |

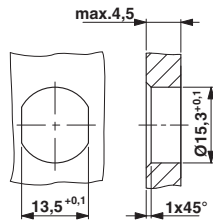
#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 26121616 |
| UNSPSC 7.0901 | 26121616 |
| UNSPSC 11     | 26121604 |
| UNSPSC 12.01  | 26121616 |
| UNSPSC 13.2   | 26121616 |

### Drawings

## Bus system cable - VS-MSDBPS-OE-93K-LI/5,0 - 1419161

Dimensioned drawing



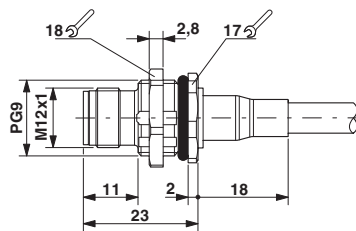
Housing cutout for Pg9 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

Cable cross section



Sercos III [93K]

Dimensioned drawing



M12 panel feed-through