

**M12 fem. recept. D-cod. rear/RJ45 male 0° shielded**

TPE 2x2x24AWG SF/UTP CAT5e bu UL/CSA. CM 3m

Art.No.: 7700-44851-S4U0300

Weight: 0.187

Country of origin: DE

Model designation: MSDBFH-RA-TS4U\_3.0-ZS

Ethernet CAT5

Flange female straight – male straight

M12 – RJ45, 4-pole

D-coded

shielded

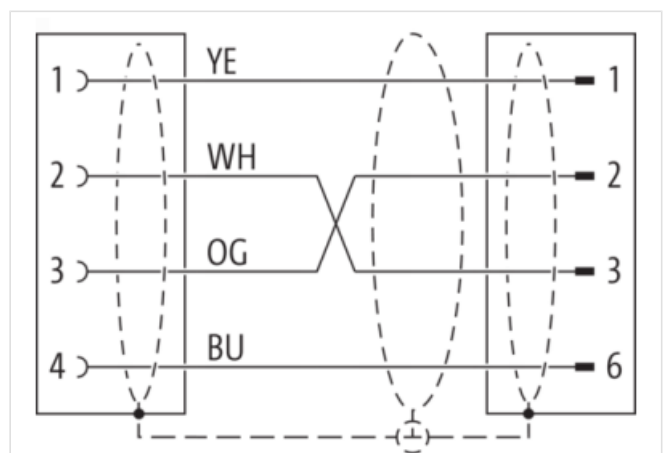
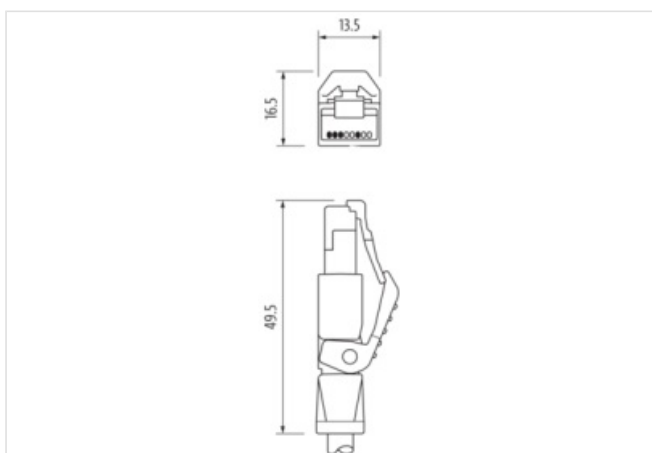
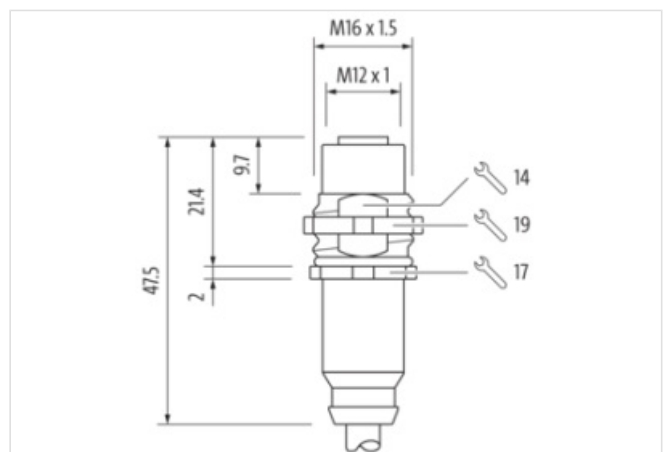
8-pole partly used

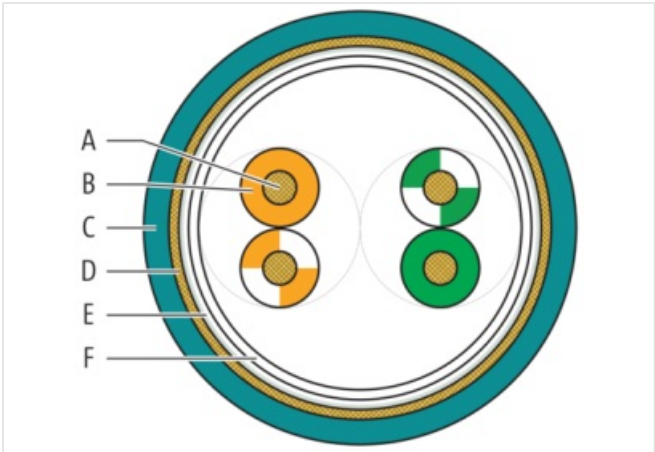
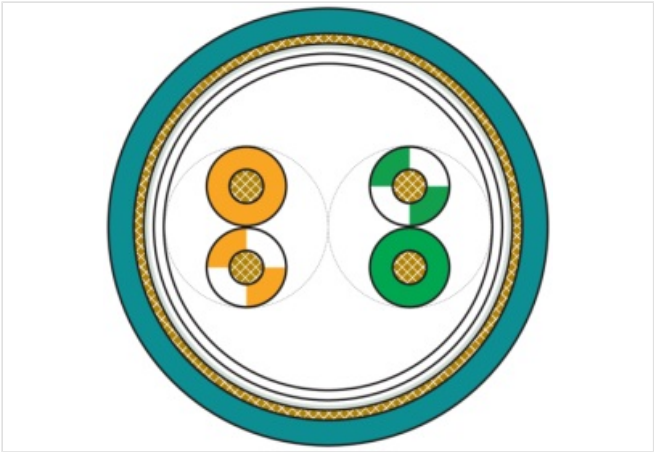
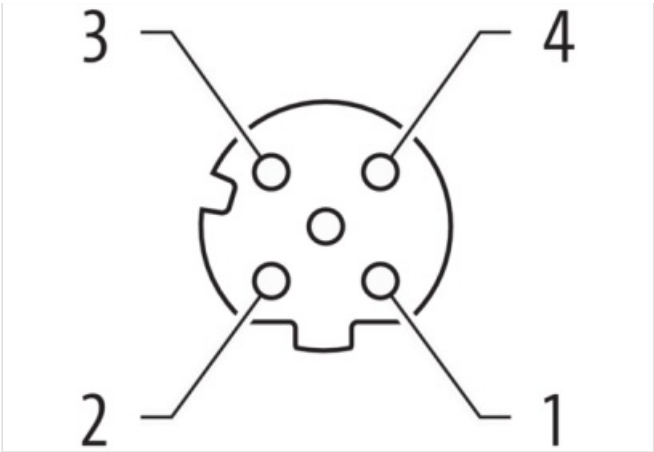
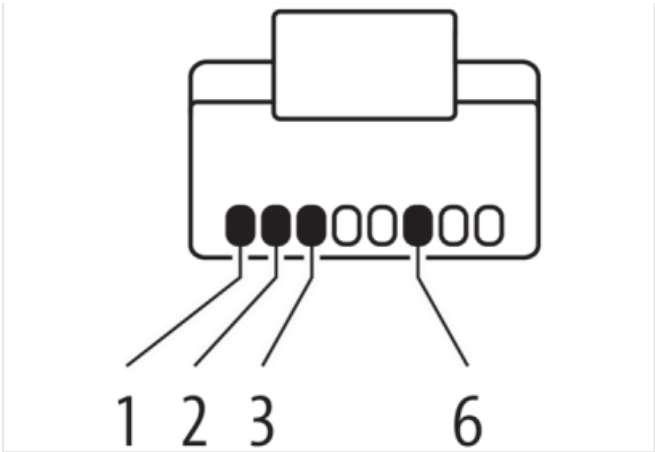
Rear mounting

USA

Cable is approved for 600 V

Further cable lengths on request.

**[Link to Product](#)****Illustration**



Product may differ from Image



Header

|                     |                       |
|---------------------|-----------------------|
| Material short text | MSDBFH-RA-TS4U_3.0-ZS |
| Cable length        | 3.0 m                 |

**Side 1**

|                                           |       |
|-------------------------------------------|-------|
| Family construction form                  | M12   |
| No. of poles                              | 4     |
| Coding                                    | D     |
| suitable for corrugated tube (internal Ø) | 10 mm |
| Degree of protection (EN IEC 60529)       | IP67  |

**Side 2**

|                                     |           |
|-------------------------------------|-----------|
| Family construction form            | RJ45      |
| No. of poles                        | 4         |
| Mounting method                     | pluggable |
| Degree of protection (EN IEC 60529) | IP20      |

**Commercial data**

|                       |                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| URL Webshop           | <a href="https://shop.murrelektronik.com/7700-44851-S4U0300">https://shop.murrelektronik.com/7700-44851-S4U0300</a> |
| GTIN                  | 4048879619813                                                                                                       |
| ECLASS-6.0            | 27279220                                                                                                            |
| ECLASS-6.1            | 27279220                                                                                                            |
| ECLASS-7.0            | 27440103                                                                                                            |
| ECLASS-7.1            | 27440103                                                                                                            |
| ECLASS-8.0            | 27440103                                                                                                            |
| ECLASS-8.1            | 27440103                                                                                                            |
| ECLASS-9.0            | 27440103                                                                                                            |
| ECLASS-9.1            | 27440109                                                                                                            |
| ECLASS-10.0.1         | 27440109                                                                                                            |
| ECLASS-10.1           | 27440103                                                                                                            |
| ECLASS-11.0           | 27440109                                                                                                            |
| ECLASS-11.1           | 27440103                                                                                                            |
| ECLASS-12.0           | 27440103                                                                                                            |
| ECLASS-13.0           | 27440109                                                                                                            |
| ECLASS-14.0           | 27440109                                                                                                            |
| ETIM-5.0              | EC002599                                                                                                            |
| ETIM-6.0              | EC002599                                                                                                            |
| ETIM-7.0              | EC002599                                                                                                            |
| ETIM-8.0              | EC002599                                                                                                            |
| customs tariff number | 85444290                                                                                                            |
| EAN                   | 4048879619813                                                                                                       |
| Packaging unit        | 1                                                                                                                   |

**Electrical data | Supply**

|                                    |       |
|------------------------------------|-------|
| Operating voltage DC max.          | 60 V  |
| Current operating per contact max. | 1.5 A |

**Industrial communication**

|                             |                                                  |
|-----------------------------|--------------------------------------------------|
| Data transmission rate max. | 100 Mbit/s                                       |
| Transfer parameters         | CAT5, Class D (ISO/IEC 11801:2002), (EN 50173-1) |

**Industrial communication | Ethernet functionality**

|        |             |
|--------|-------------|
| duplex | Full duplex |
|--------|-------------|

**Device protection | Electrical**

|                              |          |
|------------------------------|----------|
| Protection NEMA              | 6P, 4, 3 |
| Pollution Degree             | 3        |
| Rated surge voltage          | 1 kV     |
| Material group (IEC 60664-1) | I        |

**Mechanical data | Material data**

|                  |       |
|------------------|-------|
| Locking material | Brass |
|------------------|-------|

Coating locking nickel plated

#### Environmental characteristics | Climatic

|                                        |                            |
|----------------------------------------|----------------------------|
| Operating temperature min.             | -30 °C                     |
| Operating temperature max.             | 85 °C                      |
| Additional condition temperature range | depending on cable quality |

#### Important installation notes

|                        |                                                                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note on bending radius | <b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |
| Note on strain relief  | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.                                                   |

#### Installation | Cable

|                                          |                                                |
|------------------------------------------|------------------------------------------------|
| Cable identification                     | S4U                                            |
| Function cable                           | Data                                           |
| Amount stranding                         | 2                                              |
| Stranding                                | 2 wires stranded                               |
| Amount stranding (type 2)                | 1                                              |
| Stranding (type 2)                       | 2 stranding combinations stranded              |
| Cable shielding (type)                   | copper braid, tinned                           |
| Cable shielding (coverage)               | 75 %                                           |
| Banding                                  | Foil                                           |
| Wire arrangement                         | (, orange-white, orange, ), green-white, green |
| Cable weight                             | 55.66 g/m                                      |
| Material wire insulation                 | HDPE                                           |
| Amount wires                             | 4                                              |
| Outer diameter insulation                | 1.22 mm                                        |
| Outer diameter tolerance core insulation | ± 0.05 mm                                      |
| Ingredient freeness wire insulation      | CFC-free, lead-free                            |
| Amount strands (wire)                    | 7                                              |
| Diameter of single wires                 | 32 AWG                                         |
| Conductor crosssection (wire)            | 24 AWG                                         |
| Material conductor wire                  | copper stranded wire, tinned                   |
| Outer-diameter (jacket)                  | 6.6 mm                                         |
| Tolerance outer diameter (sheath)        | ± 5 %                                          |
| Material jacket                          | TPE                                            |
| Shore hardness jacket                    | 80 5 Shore A                                   |
| Freedom from ingredients (jacket)        | CFC-free, lead-free                            |
| Cable length max.                        | 83 m                                           |
| Conductor resistance (wire)              | 93.8 Ω/km @ 20 °C                              |
| Nominal voltage AC max.                  | 600 V                                          |
| Loop resistance                          | 280 Ω/km                                       |
| Withstand voltage (wire - wire)          | 1.5 kV @ 2 s                                   |
| Withstand voltage (wire - jacket)        | 1.5 kV @ 2 s                                   |
| Current load capacity (standard)         | to DIN VDE 0298-4                              |
| Current load capacity min. wire          | 2.4 A                                          |
| Characteristic impedance                 | 100 Ω                                          |
| Min. operating temperature (static)      | -40 °C                                         |
| Max. operating temperature (fixed)       | 80 °C                                          |
| Operating temperature min. (dynamic)     | -40 °C                                         |
| Operating temperature max. (dynamic)     | 80 °C                                          |
| Storage temperature min.                 | -40 °C                                         |
| Storage temperature max.                 | 80 °C                                          |
| Bending radius (fixed)                   | 8 × Outer diameter                             |
| Bending radius (dynamic)                 | 8 × Outer diameter                             |
| No. of bending cycles (C-track)          | 35 Mio.                                        |

|                               |                      |
|-------------------------------|----------------------|
| Traversing distance (C-track) | 0.6 m                |
| Travel speed (C-track)        | 1.2 m/s              |
| Acceleration (C-track)        | 2.4 m/s <sup>2</sup> |
| No. of torsion cycles         | 3 Mio.               |
| Torsion stress                | 270 °/m              |
| Torsion speed                 | 60 cycles/min        |