

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

TPE 2x2x24AWG SF/UTP CAT5e bu UL/CSA. CM 5m

Art.No.: 7700-44711-S4U0500

Weight: 0.275 kg

Country of origin: US

Model designation: MSRAL0-DA-TS4U\_5.0-ZS

Ethernet CAT5

Male straight – male straight

M12 – RJ45, 4-pole

D-coded

Shielded

8-pole partly used

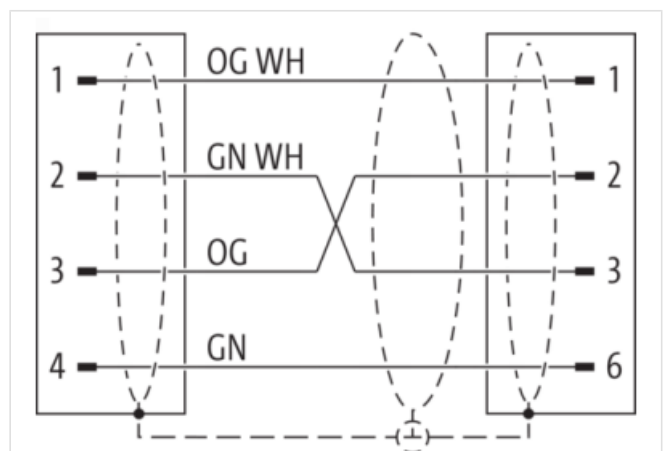
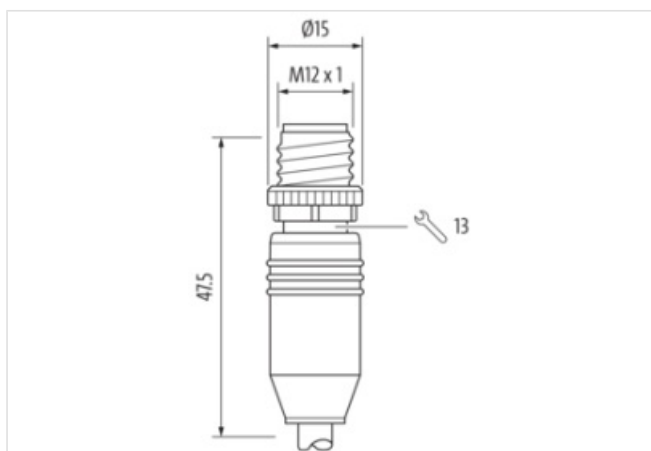
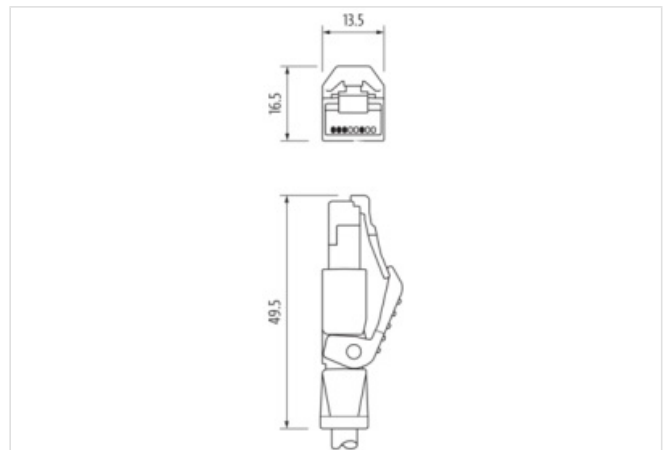
USA

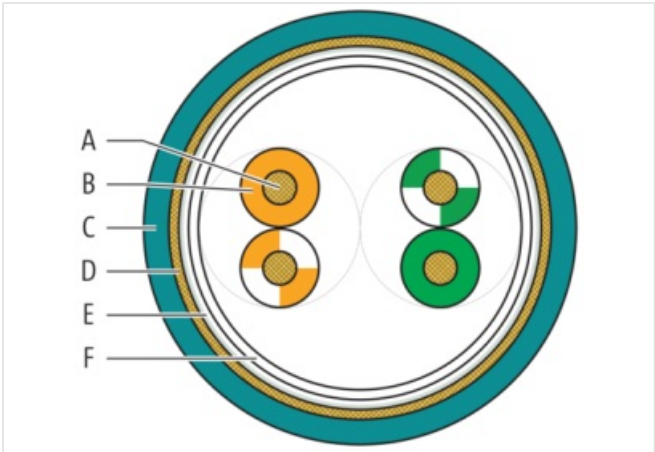
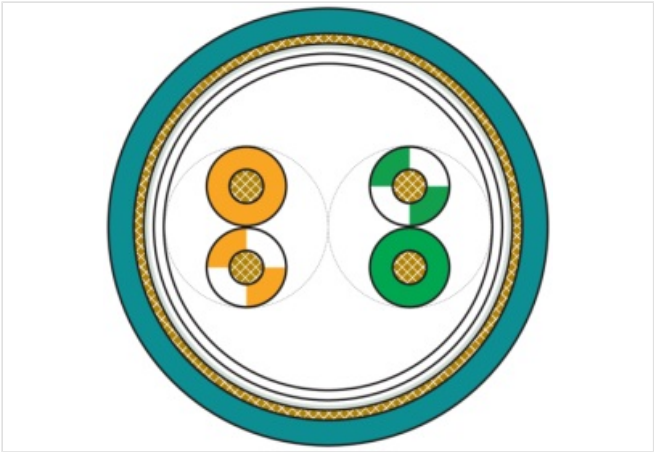
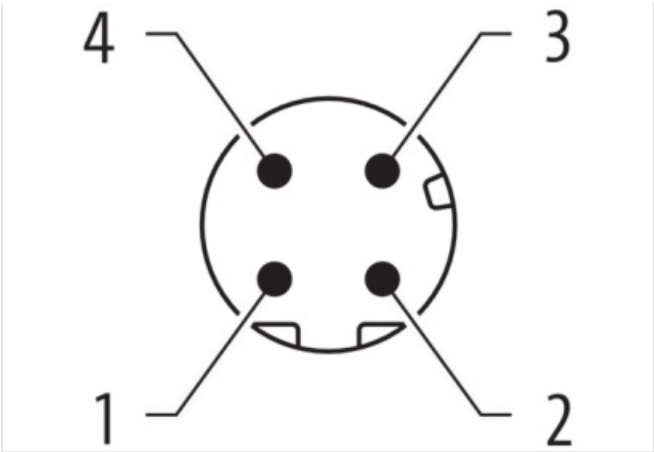
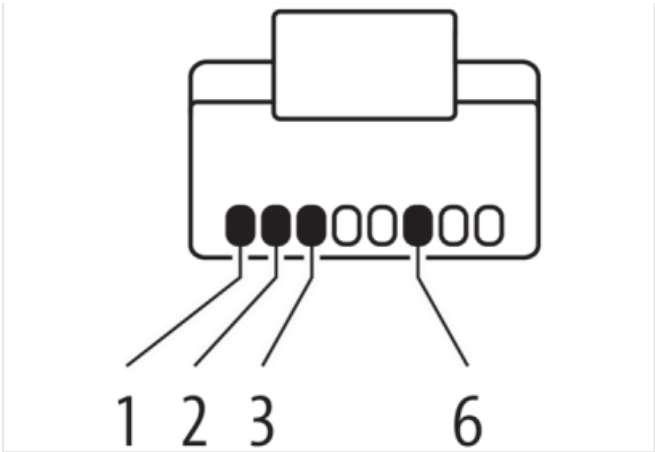
without cable sleeves

Cable is approved for 600 V

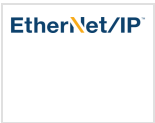
Further cable lengths on request.

maximum length at channel transmission corresponds to 70 m

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



Product may differ from Image



Header

Material short text

MSRAL0-DA-TS4U\_5.0-ZS

Cable length

5,00 m

**Side 1**

|                                     |                   |
|-------------------------------------|-------------------|
| Family construction form            | M12               |
| No. of poles                        | 4                 |
| Coding                              | D                 |
| Mounting method                     | inserted, screwed |
| Threaded hole                       | M12 x 1           |
| Width across flats                  | SW13              |
| Cable outlet                        | straight          |
| Degree of protection (EN IEC 60529) | IP67              |

**Side 2**

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

**Commercial data**

|                       |                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| URL Webshop           | <a href="https://shop.murrelektronik.com/7700-44711-S4U0500">https://shop.murrelektronik.com/7700-44711-S4U0500</a> |
| GTIN                  | 4048879619721                                                                                                       |
| ECLASS-6.0            | 27061801                                                                                                            |
| ECLASS-6.1            | 27060307                                                                                                            |
| ECLASS-7.0            | 27060307                                                                                                            |
| ECLASS-7.1            | 27060307                                                                                                            |
| ECLASS-8.0            | 27060307                                                                                                            |
| ECLASS-8.1            | 27060307                                                                                                            |
| ECLASS-9.0            | 27060307                                                                                                            |
| ECLASS-9.1            | 27060307                                                                                                            |
| ECLASS-10.0.1         | 27060307                                                                                                            |
| ECLASS-10.1           | 27060307                                                                                                            |
| ECLASS-11.0           | 27060307                                                                                                            |
| ECLASS-11.1           | 27060307                                                                                                            |
| ECLASS-12.0           | 27060307                                                                                                            |
| ECLASS-13.0           | 27060307                                                                                                            |
| ECLASS-14.0           | 27060307                                                                                                            |
| ETIM-5.0              | EC002599                                                                                                            |
| ETIM-6.0              | EC002599                                                                                                            |
| ETIM-7.0              | EC002599                                                                                                            |
| ETIM-8.0              | EC002599                                                                                                            |
| customs tariff number | 85444290                                                                                                            |
| EAN                   | 4048879619721                                                                                                       |
| 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**

|                              |      |
|------------------------------|------|
| Pollution Degree             | 3    |
| Rated surge voltage          | 1 kV |
| Material group (IEC 60664-1) | I    |

**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.                                                   |

**Conformity**

|                  |                          |
|------------------|--------------------------|
| Product standard | EN IEC 61076-2-101 (M12) |
|------------------|--------------------------|

**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                              |
| Cable weight                             | 50,6 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      | lead-free, CFC-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)        | lead-free, CFC-free               |
| Cable length max.                        | 83 m                              |
| Conductor resistance (wire)              | 93.8 Ω/km @ 20 °C                 |
| Nominal voltage 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 max. (wire)        | 2,4 A                             |
| Characteristic impedance                 | 100 Ω ± 5 % @ 100 MHz             |
| Operating temperature min. (static)      | -40 °C                            |
| Operating temperature max. (static)      | 80 °C                             |
| Operating temperature min. (dynamic)     | -40 °C                            |
| Operating temperature max. (dynamic)     | 80 °C                             |
| Storage temperature min.                 | -40 °C                            |
| Storage temperature max.                 | 80 °C                             |
| Oil resistance                           | good                              |
| UV resistance                            | UL 444 § 7.22                     |

|                                 |                             |
|---------------------------------|-----------------------------|
| Other resistances               | resistant to welding sparks |
| Bending radius (fixed)          | 8 × Outer diameter          |
| Bending radius (dynamic)        | 8 × Outer diameter          |
| No. of bending cycles (C-track) | 35 Mio. @ 25 °C             |
| Traversing distance (C-track)   | 0.6 m @ 25 °C               |
| Travel speed (C-track)          | 1.2 m/s @ 25 °C             |
| Acceleration (C-track)          | 2.4 m/s² @ 25 °C            |
| No. of torsion cycles           | 3 Mio.                      |
| Torsion stress                  | ± 270 °/m                   |
| Torsion speed                   | 60 cycles/min               |