

**RJ45 male 0° / RJ45 male 0° shielded**

PUR 1x4xAWG22 shielded bu UL/CSA+drag ch. 3m

Art.No.: 7000-74301-6770300

Weight: 0.210 kg

Country of origin: DE

Model designation: MSRAL0-RA-8p4c677\_3.0

Ethernet CAT5

Male straight – male straight

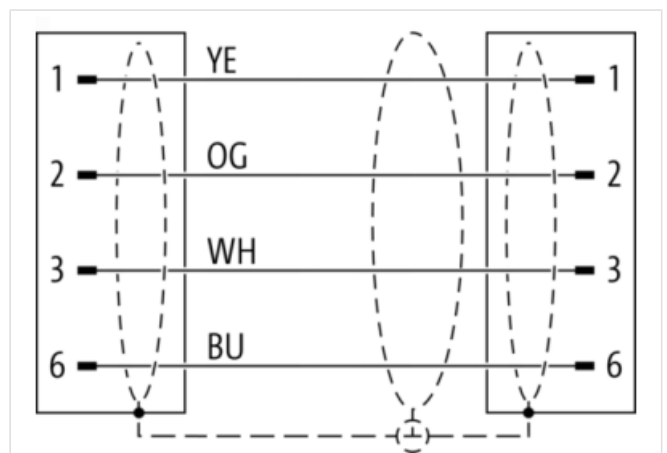
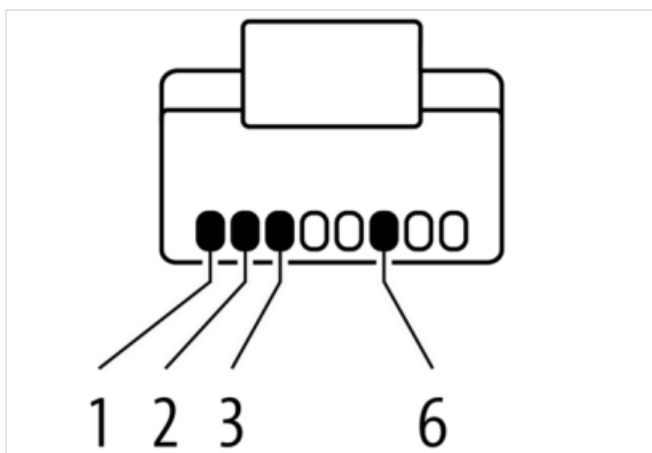
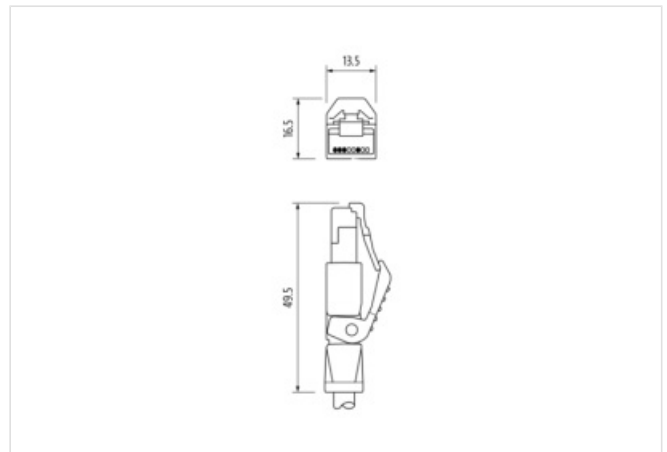
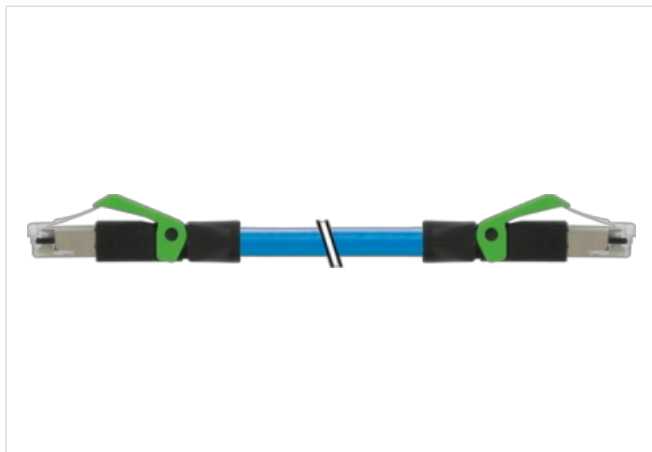
RJ45 – RJ45, 4-pole

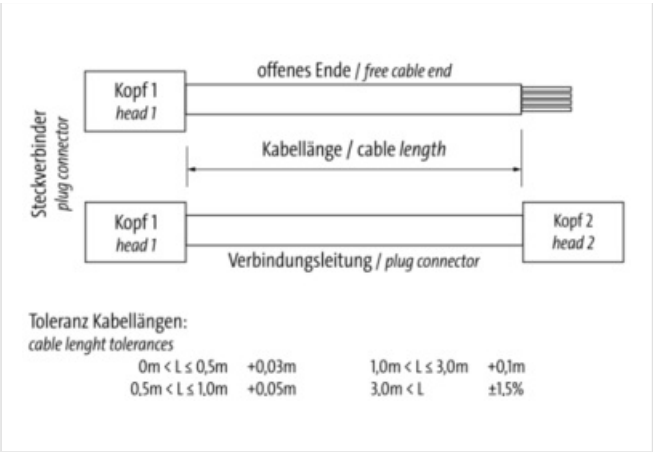
Shielded

Further cable lengths on request.

Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

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



Product may differ from Image



|                                     |                                                                                                                     |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Cable length                        | 3,00 m                                                                                                              |
| Side 1                              |                                                                                                                     |
| Family construction form            | RJ45                                                                                                                |
| No. of poles                        | 4                                                                                                                   |
| Gender                              | male                                                                                                                |
| Mounting method                     | pluggable                                                                                                           |
| Cable outlet                        | straight                                                                                                            |
| Material                            | PUR                                                                                                                 |
| Degree of protection (EN IEC 60529) | IP20                                                                                                                |
| Side 2                              |                                                                                                                     |
| Family construction form            | RJ45                                                                                                                |
| No. of poles                        | 4                                                                                                                   |
| Gender                              | male                                                                                                                |
| Mounting method                     | pluggable                                                                                                           |
| Cable outlet                        | straight                                                                                                            |
| Material                            | PUR                                                                                                                 |
| Degree of protection (EN IEC 60529) | IP20                                                                                                                |
| Commercial data                     |                                                                                                                     |
| URL Webshop                         | <a href="https://shop.murrelektronik.com/7000-74301-6770300">https://shop.murrelektronik.com/7000-74301-6770300</a> |
| GTIN                                | 4048879616324                                                                                                       |
| EU-Customs tariff number            | 85444210                                                                                                            |
| US-Customs tariff number            | 8544422000                                                                                                          |
| 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      |
| ETIM-9.0              | EC002599      |
| ETIM-10.0             | EC002599      |
| customs tariff number | 85444210      |
| EAN                   | 4048879616324 |
| 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         | CAT5e, 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    |

#### Mechanical data

|                             |         |
|-----------------------------|---------|
| Contour for corrugated hose | without |
|-----------------------------|---------|

#### Mechanical data | Material data

|                  |    |
|------------------|----|
| Locking material | PA |
|------------------|----|

#### 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 60603-7 (RJ45) |
|------------------|-----------------------|

#### Installation | Cable

|                            |                                                    |
|----------------------------|----------------------------------------------------|
| Cable identification       | 677                                                |
| Function cable             | Data                                               |
| Cable weight               | 63 g/m                                             |
| UL AWM Style               | 20549 / 11602                                      |
| Stranding                  | 1 × 4 wires around core filler star-shaped twisted |
| Cable shielding (type)     | copper braid, tinned                               |
| Cable shielding (coverage) | 85 %                                               |
| Banding                    | Fleece, Foil                                       |
| Filler                     | Yes                                                |
| Wire arrangement           | WH, YE, BU, OG                                     |
| Shield                     | shielded                                           |

|                                                 |                                                                         |
|-------------------------------------------------|-------------------------------------------------------------------------|
| Cable type                                      | Industrial Ethernet Profinet Typ C, CAT5e                               |
| Material wire insulation                        | PE                                                                      |
| Amount wires                                    | 4                                                                       |
| Outer diameter insulation                       | 1.4 mm ± 0.05 mm                                                        |
| Conductor crosssection (wire)                   | 22 AWG                                                                  |
| Material conductor wire                         | Stranded copper wire, bare                                              |
| Core construction (wire)                        | 7 x 30 AWG                                                              |
| Ingredient freeness wire insulation             | lead-free, CFC-free, halogen-free                                       |
| Material jacket                                 | PUR                                                                     |
| Outer-diameter (jacket)                         | 6.7 mm ± 5 %                                                            |
| Jacket Color                                    | blue / RAL 5015                                                         |
| Material inner jacket                           | FRNC                                                                    |
| Color (inner jacket)                            | natural                                                                 |
| Freedom from ingredients (jacket)               | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free          |
| Material property (jacket)                      | abrasion-resistant, low adhesion, good machinability, matte             |
| Cable shielding (type)                          | copper braid, tinned                                                    |
| Cable shielding (coverage)                      | 85 %                                                                    |
| Conductor resistance (wire)                     | 55.4 Ω/km @ 20 °C                                                       |
| Nominal voltage max.                            | 300 V                                                                   |
| Withstand voltage (wire - wire)                 | 2 kV @ 60 s                                                             |
| Withstand voltage (wire - jacket)               | 2 kV @ 60 s                                                             |
| Withstand voltage (wire - shield)               | 2 kV @ 60 s                                                             |
| Current load capacity max. (wire)               | 4,8 A                                                                   |
| Current load capacity (standard)                | to DIN VDE 0298-4                                                       |
| Electrical capacity line constant (wire - wire) | 50.000 pF/km                                                            |
| Isolation resistance                            | 5.000 MΩ × km                                                           |
| Characteristic impedance                        | 100 Ω ± 15 %                                                            |
| Operating temperature (static)                  | -40 °C ... 80 °C                                                        |
| Operating temperature (dynamic)                 | -30 °C ... 70 °C                                                        |
| Operating temperature (drag chain)              | -30 °C ... 70 °C                                                        |
| Flame resistance                                | IEC 60332-1-2, UL 1581 § 1090, UL 1581 § 1100                           |
| Oil resistance                                  | IEC 60811-404, IRM 901, NEMA WC55                                       |
| Ozone resistance                                | IEC 60811-403                                                           |
| UV resistance                                   | UL 1581 § 1200                                                          |
| Other resistances                               | resistant to hydrolysis, resistant to microbes, MUD-resistant (NEK 606) |
| Notes                                           | application-related testing                                             |
| Bending radius (fixed)                          | 5 × Outer diameter                                                      |
| Bending radius (dynamic)                        | 12 × Outer diameter                                                     |
| No. of bending cycles (C-track)                 | 3 Mio. @ 25 °C                                                          |
| Traversing distance (C-track)                   | 5 m @ 25 °C                                                             |
| Travel speed (C-track)                          | 3.3 m/s @ 25 °C                                                         |
| Acceleration (C-track)                          | 2 m/s² @ 25 °C                                                          |
| No. of torsion cycles                           | 1 Mio.                                                                  |
| Torsion stress                                  | ± 180 °/m                                                               |
| Torsion speed                                   | 35 cycles/min                                                           |