

**M12 male 0° / M12 female 0° Y-cod. shielded**

PUR AWG20/26 shielded gn UL/CSA+drag ch. 5m

Art.No.: 7000-47051-8310500

Weight: 0.569 kg

Country of origin: CZ

Model designation: MSYBL0-YA-08D831\_5.0-ZS

Ethernet CAT5

Male straight – female straight

M12 – M12, 8-pole

Y-coded

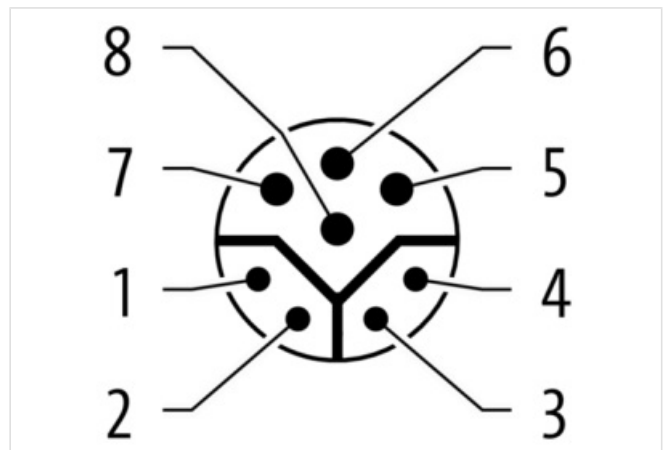
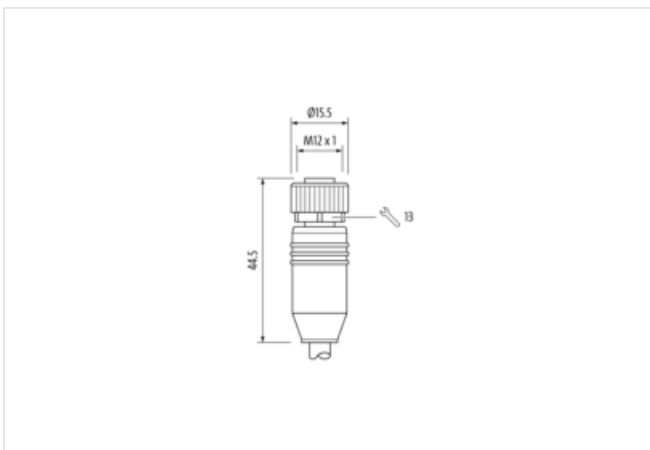
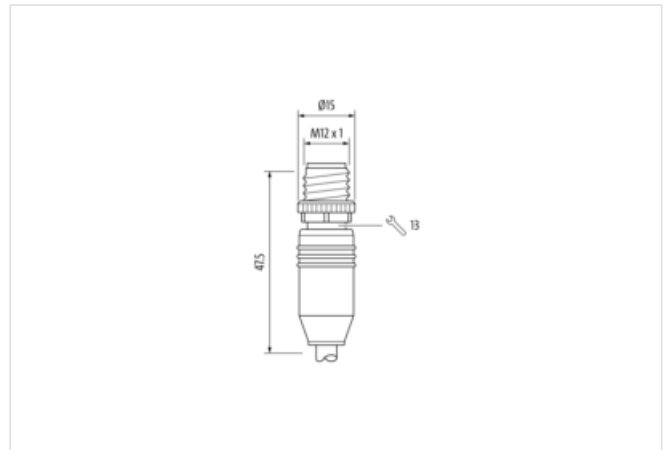
Shielded

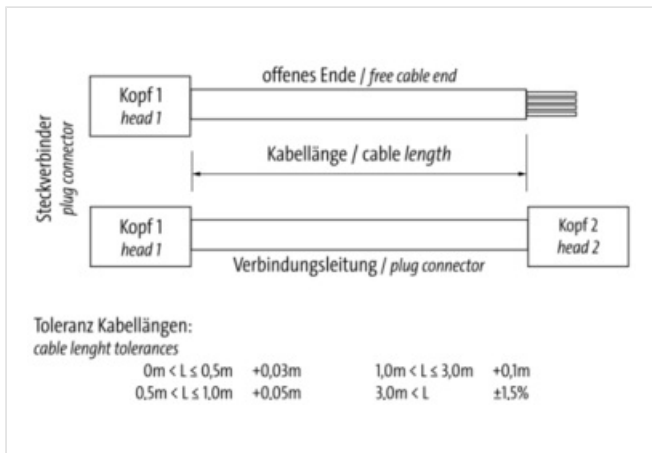
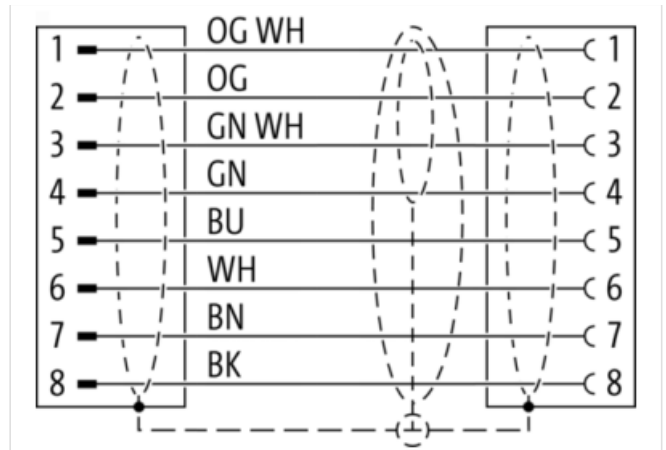
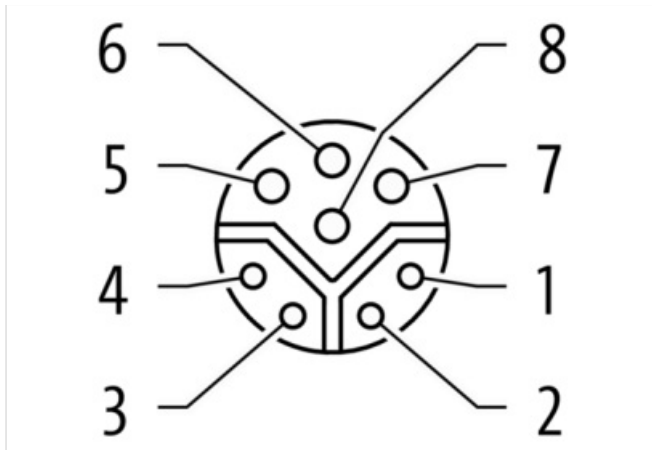
Transmission properties with channel transmission up to 50 m

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                        | 5,00 m            |
| <b>Side 1</b>                       |                   |
| Family construction form            | M12               |
| No. of poles                        | 8                 |
| Coding                              | Y                 |
| Gender                              | male              |
| Mounting method                     | inserted, screwed |
| Threaded hole                       | M12 x 1           |
| Tightening torque                   | 0,6 Nm            |
| Width across flats                  | SW13              |
| Cable outlet                        | straight          |
| Material                            | PUR               |
| Material contact                    | Copper alloy      |
| Coating contact                     | gold plated       |
| Degree of protection (EN IEC 60529) | IP65, IP66K, IP67 |
| <b>Side 2</b>                       |                   |
| Family construction form            | M12               |
| No. of poles                        | 8                 |

|                                     |                   |
|-------------------------------------|-------------------|
| Coding                              | Y                 |
| Gender                              | female            |
| Mounting method                     | inserted, screwed |
| Threaded hole                       | M12 x 1           |
| Tightening torque                   | 0,6 Nm            |
| Width across flats                  | SW13              |
| Cable outlet                        | straight          |
| Material                            | PUR               |
| Material contact                    | Copper alloy      |
| Coating contact                     | gold plated       |
| Degree of protection (EN IEC 60529) | IP65, IP66K, IP67 |

#### Commercial data

|                       |   |
|-----------------------|---|
| URL Webshop           | <a href="https://shop.murrelektronik.com/7000-47051-8310500">https://shop.murrelektronik.com/7000-47051-8310500</a> |
| GTIN                  | 4048879716192   |
| Customs tariff number | 85444290  |
| ECLASS-6.0            | 27279218  |
| 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              | EC000830  |
| ETIM-6.0              | EC000830  |
| customs tariff number | 85444290  |
| EAN                   | 4048879716192   |
| Packaging unit        | 1   |

#### Electrical data | Supply

|  |       |
|--|-------|
| Operating voltage AC max.                | 50 V  |
| Operating voltage DC max.                | 50 V  |
| Operating current per data contact max.  | 0,5 A |
| Operating current per power contact max. | 6 A   |

#### Industrial Communication

|                             |                                |
|-----------------------------|--------------------------------|
| Data transmission rate max. | 100 Mbit/s                     |
| Transfer parameters         | CAT5e, Class D (ISO/IEC 11801) |

#### Industrial communication | Ethernet functionality

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

#### Device protection | Electrical

|  |                   |
|--|-------------------|
| Additional condition protection degree | inserted, screwed |
| Pollution Degree                       | 3                 |
| Rated surge voltage                    | 0,8 kV            |
| Material group (IEC 60664-1)           | I                 |

#### Mechanical data

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

| Mechanical data   Material data              |   |
|--|---|
| Color housing                                | black   |
| Color contact carrier                        | green   |
| Screw connection                             | Zinc die-casting  |
| Coating of fitting                           | nickel plated   |
| Gasket                                       | FKM   |
| 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 61076-2-113 (M12)  |
| Installation   Cable                         |   |
| Cable identification                         | 831   |
| Function cable                               | Hybrid, Data, Power   |
| Cable weight                                 | 98 g/m  |
| UL AWM Style                                 | 20549 / 10493   |
| Stranding                                    | 1 × 4 wires around core filler star-shaped twisted  |
| Stranding (type 2)                           | 1 × 4 wires stranded with stranding combination with 3 filler   |
| Cable shielding (type)                       | copper braid, tinned  |
| Cable shielding (coverage)                   | 85 %  |
| Pair shielding (type)                        | copper braid, tinned  |
| Pair shielding (coverage)                    | 85 %  |
| Banding                                      | Foil, Fleece  |
| Filler                                       | Yes   |
| Wire arrangement                             | (OGWH, GN, OG, GNWH), BK, BN, WH, BU  |
| Shield                                       | shielded  |
| Electrical function wire                     | Data  |
| Material wire insulation                     | PP  |
| Amount wires                                 | 4   |
| Outer diameter insulation                    | 1.5 mm ± 0.1 mm   |
| Conductor crosssection (wire)                | 26 AWG  |
| Material conductor wire                      | Stranded copper wire, bare  |
| Core construction (wire)                     | 19  |
| Ingredient freeness wire insulation          | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  |
| Electrical function wire (type 2)            | Power   |
| Material wire insulation (type 2)            | PP  |
| Amount wires (type 2)                        | 4   |
| Outer diameter wire insulation (type 2)      | 1.1 mm ± 0.1 mm   |
| Conductor crosssection (wire type 2)         | 20 AWG  |
| Material conductor wire (type 2)             | Stranded copper wire, bare  |
| Core construction (wire type 2)              | 19  |
| Ingredient freeness wire insulation (type 2) | lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  |
| Material jacket                              | PUR   |
| Outer-diameter (jacket)                      | 8.1 mm ± 5 %  |
| Jacket Color                                 | green / RAL 6018  |
| 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 %  |
| Pair shielding (type)                           | copper braid, tinned  |
| Pair shielding (coverage)                       | 85 %  |
| Conductor resistance (wire)                     | 140 Ω/km @ 20 °C  |
| Conductor resistance (wire type 2)              | 35 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)               | 2,4 A   |
| Current load capacity max. Wire (type 2)        | 7,2 A   |
| Current load capacity (standard)                | to DIN VDE 0298-4   |
| Electrical capacity line constant (wire - wire) | 52.000 pF/km  |
| Isolation resistance                            | 5 GΩ × km   |
| Characteristic impedance                        | 100 Ω ± 15 % @ 1 MHz  |
| Cable type                                      | Industrial Ethernet Hybrid  |
| Operating temperature (static)                  | -40 °C ... 80 °C  |
| Operating temperature (dynamic)                 | -30 °C ... 70 °C / 90 °C @ 10000 h  |
| Operating temperature (drag chain)              | -30 °C ... 70 °C  |
| Flame resistance                                | UL 1581 § 1090, UL 1581 § 1100, IEC 60332-1-2   |
| Oil resistance                                  | IEC 60811-404, NEMA WC55, IRM 901   |
| Ozone resistance                                | EN 50396  |
| UV resistance                                   | UL 1581 § 1200  |
| Other resistances                               | good resistance to saturated hydrocarbons (diesel, kerosene, petrol ether), resistant to hydrolysis, resistant to microbes, MUD-resistant (NEK 606) |
| Notes   | application-related testing   |
| Bending radius (fixed)                          | 5 × Outer diameter  |
| Bending radius (dynamic)                        | 10 × Outer diameter   |
| No. of bending cycles (C-track)                 | 2 Mio. @ 25 °C  |
| Traversing distance (C-track)                   | 5 m @ 25 °C   horizontal  |
| Travel speed (C-track)                          | 3.3 m/s @ 25 °C   |
| Acceleration (C-track)                          | 5 m/s <sup>2</sup> @ 25 °C  |
| No. of torsion cycles                           | 2 Mio.  |
| Torsion stress                                  | ± 30 °/m  |
| Torsion speed                                   | 35 cycles/min   |