

# M12 fem. recept. X-cod. / RJ45 male 0° shielded

PUR 4x2xAWG26 shielded gn UL/CSA 10m

Art.No.: 7000-51551-7901000

Weight: 0.506 kg Country of origin: DE

Model designation: MSXBFH-RA-08D790 10.0-ZS

# Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available on request

If you are missing technical information? Please feel free to use our dictionary to find more technical details.

#### **Product details:**

Product fulfills requirements according to UN/ECE R118

Ethernet CAT6A

Flange female straight - male straight

RJ45 - M12, 8-pole

X-coded

Shielded

Rear mounting

Transmission properties with channel transmission up to 50 m

Further cable lengths on request.

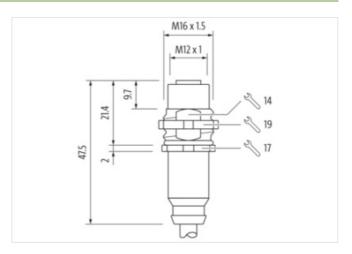
Plastic housings with good resistance against chemicals and oils.

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

# **Link to Product**

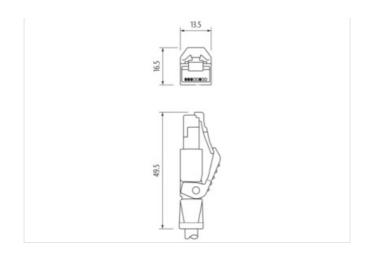
### Illustration

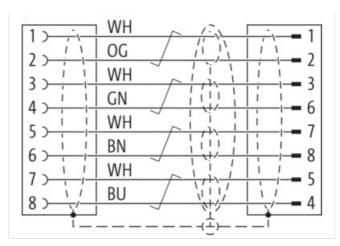


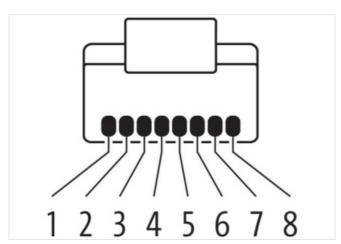


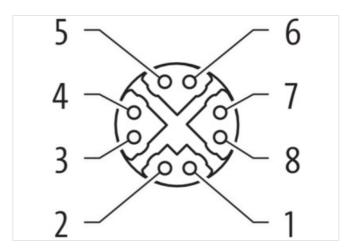


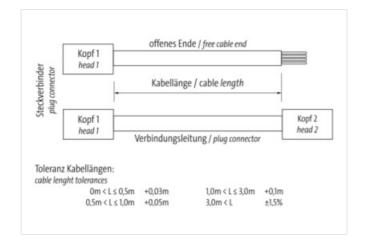
# stay connected

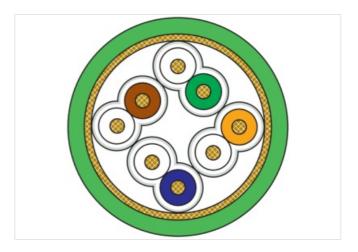






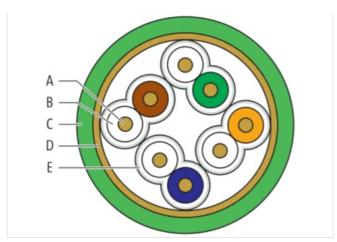








stay connected



Product may differ from Image









| Header                              |  |
|-------------------------------------|--|
| Material short text                 | MSXBFH-RA-08D790_10.0-ZS                           |
| Cable length                        | 10,00 m  |
| Side 1                              |  |
| Family construction form            | M12  |
| No. of poles                        | 8  |
| Coding                              | Х  |
| Gender                              | Female   |
| Mounting method                     | inserted, screwed                                  |
| Cable outlet                        | straight   |
| Material                            | PUR  |
| Degree of protection (EN IEC 60529) | IP67   |
| Side 2                              |  |
| Family construction form            | RJ45   |
| No. of poles                        | 8  |
| Gender                              | male   |
| Mounting method                     | inserted   |
| Cable outlet                        | straight   |
| Material                            | Brass  |
| Degree of protection (EN IEC 60529) | IP20   |
| Commercial data                     |  |
| URL Webshop                         | https://shop.murrelektronik.com/7000-51551-7901000 |
| GTIN                                | 4048879648622                                      |
| 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   |

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| 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<br>ETIM-7.0   | EC002599  |
| ETIM-7.0   | EC002599<br>EC002599  |
| customs tariff number  | 85444290  |
| EAN  | 4048879648622   |
| Packaging unit   | 1   |
| Electrical data   Supply   |   |
|  | COV   |
| Operating voltage DC max.  | 60 V  |
| Current operating per contact max.   | 0,5 A   |
| Industrial Communication   |   |
| Data transmission rate max.  | 10 Gbit/s   |
| Transfer parameters  | CAT6, Class EA (ISO/IEC 11801:2002), (EN 50173-1)   |
| Diagnostics  |   |
| Status indication LED  | No  |
| Device protection   Electrical   |   |
| Protection NEMA  | 6P, 4, 3  |
| Pollution Degree   | 3   |
| Rated surge voltage  | 0,8 kV  |
| Material group (IEC 60664-1)   |   |
| Mechanical data  |   |
| Contour for corrugated hose  | without   |
| Mechanical data   Material data  |   |
| Locking material   | Brass   |
| Coating locking  | nickel plated   |
|  | moker placed  |
| Mechanical data   Mounting data  |   |
| Mounting method  | inserted, screwed, Shaking protection   |
|  |   |
| Environmental characteristics   Climatic   |   |
| Environmental characteristics   Climatic Operating temperature min.  | -30 °C  |
| Operating temperature min.  Operating temperature max.   | -30 °C<br>85 °C   |
| Operating temperature min.   | -30 °C  |
| Operating temperature min.  Operating temperature max.   | -30 °C<br>85 °C   |
| Operating temperature min.  Operating temperature max.  Additional condition temperature range   | -30 °C<br>85 °C   |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be   |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes Note on bending radius   | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.   |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief   | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard   | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.   |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard  Approvals  | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  EN/IEC 61076-2-109 (M12)                |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard  Approvals  UL 50E  | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard  Approvals  UL 50E Installation   Cable   | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  EN/IEC 61076-2-109 (M12)  Yes           |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard  Approvals  UL 50E Installation   Cable  Cable identification                                   | -30 °C  85 °C  depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  EN/IEC 61076-2-109 (M12)  Yes           |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard  Approvals  UL 50E Installation   Cable  Cable identification  Function cable                   | -30 °C 85 °C depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  EN/IEC 61076-2-109 (M12)  Yes  790 Data   |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard  Approvals  UL 50E Installation   Cable  Cable identification  Function cable  Amount stranding | -30 °C 85 °C depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  EN/IEC 61076-2-109 (M12)  Yes  790 Data 4 |
| Operating temperature min. Operating temperature max. Additional condition temperature range Important installation notes  Note on bending radius  Note on strain relief  Conformity  Product standard  Approvals  UL 50E Installation   Cable  Cable identification  Function cable                   | -30 °C 85 °C depending on cable quality  Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.  Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.  EN/IEC 61076-2-109 (M12)  Yes  790 Data   |

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| Stranding (type 2)                              | 4 stranding combinations stranded              |
|---|--|
| Cable shielding (type)                          | copper braid, tinned                           |
| Cable shielding (coverage)                      | 65 %   |
| Pair shielding (type)                           | Metal foil                                     |
| Banding   | Foil   |
| Cable weigth                                    | 48 g/m   |
| Material wire insulation                        | PE   |
| Amount wires                                    | 8  |
| Outer diameter insulation                       | 1,05 mm  |
| Outer diameter tolerance core insulation        | - 0,02 mm                                      |
| Shore hardness wire insulation                  | 65 ± 5 Shore D                                 |
| Ingredient freeness wire insulation             | lead-free, CFC-free, halogen-free              |
| Amount strands (wire)                           | 7  |
| Diameter of single wires                        | 34 AWG   |
| Conductor crosssection (wire)                   | 26 AWG   |
| Material conductor wire                         | Stranded copper wire, bare                     |
| Outer-diameter (jacket)                         | 6,4 mm   |
| Tolerance outer diameter (sheath)               | ± 5 %  |
| Material jacket                                 | PUR  |
| Shore hardness jacket                           | 89 ± 5 Shore A                                 |
| Freedom from ingredients (jacket)               | lead-free, CFC-free, halogen-free              |
| Conductor resistance (wire)                     | 140 Ω/km @ 20 °C                               |
| Electrical capacity line constant (wire - wire) | 44.000 pF/km                                   |
| Isolation resistance                            | $5.000 \text{ M}\Omega \times \text{km}$       |
| Nominal voltage AC max.                         | 125 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 (standard)                | to DIN VDE 0298-4                              |
| Current load capacity min. wire                 | 2 A  |
| Min. operating temperature (static)             | -40 °C   |
| Max. operating temperature (static)             | 80 °C  |
| Operating temperature min. (dynamic)            | -30 °C   |
| Operating temperature max. (dynamic)            | 70 °C  |
| Flame resistance                                | UL 1581 § 1090, UL 1581 § 1100, IEC 60332-1-2  |
| Oil resistance                                  | IEC 60811-404, IRM 902                         |
| Ozone resistance                                | EN 50396                                       |
| Other resistances                               | resistant to microbes, MUD-resistant (NEK 606) |
| Bending radius (fixed)                          | 8 × Outer diameter                             |
| Bending radius (dynamic)                        | 10 × Outer diameter                            |