

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

PUR 4x2xAWG26 shielded gn UL/CSA 1m

Art.No.: 7000-51551-7900100

Weight: 0.082 kg

Country of origin: DE

Model designation: MSXBFH-RA-08D790_1.0-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

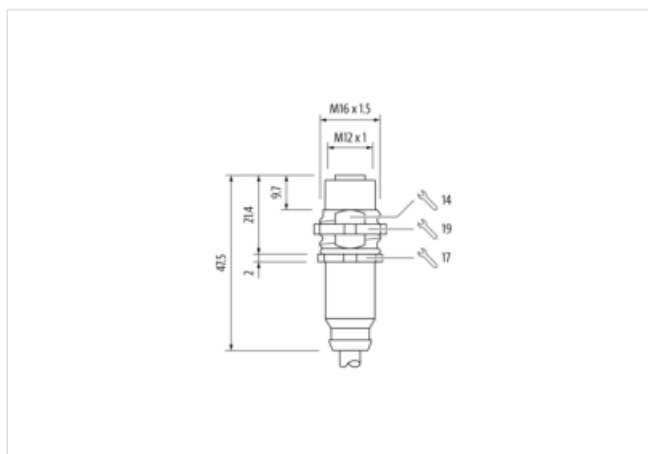
Further cable lengths on request.

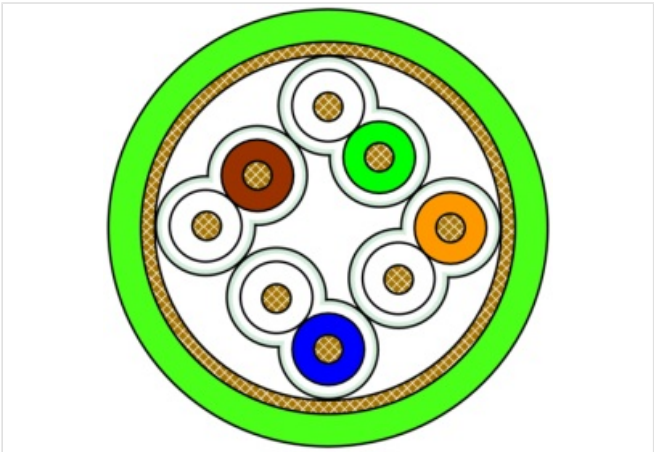
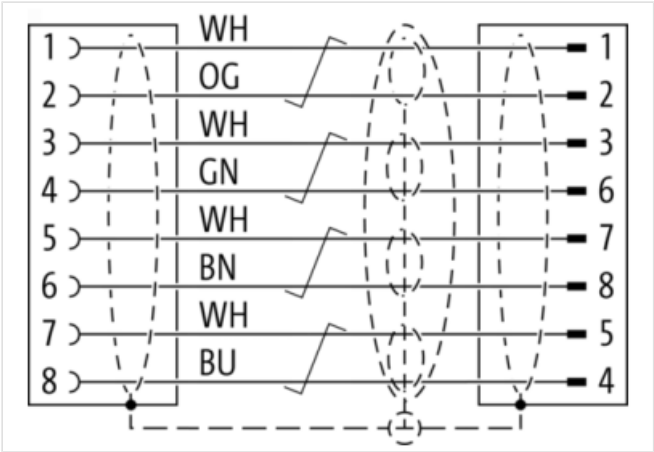
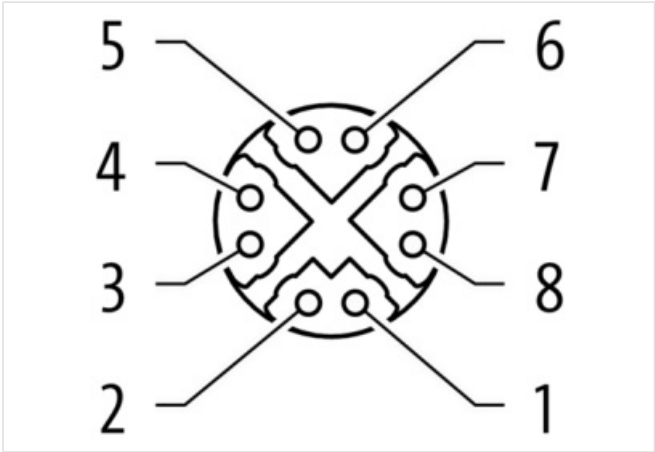
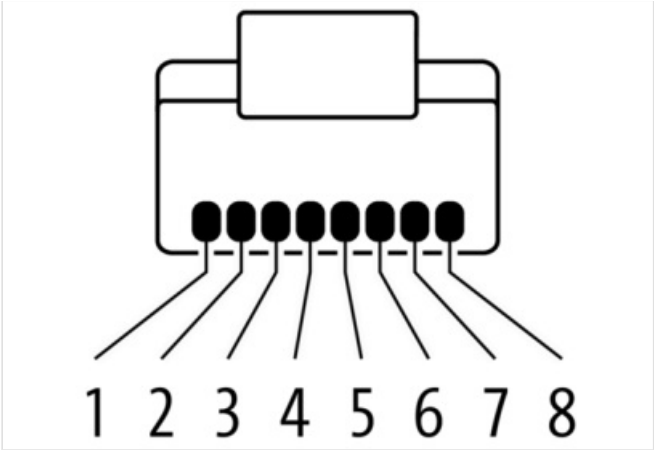
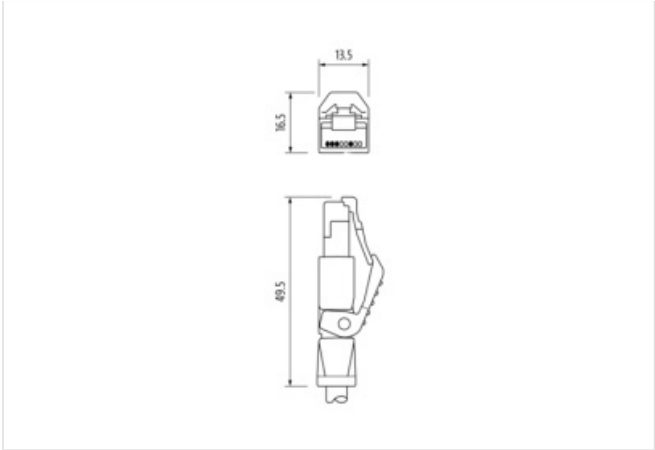
Plastic housings with good resistance against chemicals and oils.

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

Link to Product

Illustration





Product may differ from Image



Cable length 1,00 m

Side 1

Family construction form M12

No. of poles	8
Coding	X
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/7000-51551-7900100
GTIN	4048879689540
EU-Customs tariff number	85444290
US-Customs tariff number	8544429090
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
ETIM-9.0	EC002599
ETIM-10.0	EC002599
customs tariff number	85444290
EAN	4048879689540
Packaging unit	1

Electrical data | Supply

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
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Device protection Electrical	
Protection NEMA	6P, 4, 3
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	
Locking material	Brass
Coating locking	nickel plated
Mechanical data Mounting data	
Mounting method	inserted, screwed, Shaking protection
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	Attention: 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 61076-2-109 (M12)
Approvals	
UL 50E	Yes
Installation Cable	
Cable identification	790
Function cable	Data
Cable weight	48 g/m
UL AWM Style	20549 / 10532
Stranding	4 × 2 wires stranded
Stranding (type 2)	1 × 4 stranding combinations stranded
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	65 %
Pair shielding (type)	Metal foil
Banding	Foil
Wire arrangement	(WH, BN), (WH, GN), (WH, OG), (WH, BU)
Shield	shielded
Cable type	Industrial Ethernet Profinet Typ B, CAT6A
Material wire insulation	PE
Amount wires	8
Outer diameter insulation	1.05 mm - 0.02 mm
Conductor crosssection (wire)	26 AWG
Material conductor wire	Stranded copper wire, bare
Core construction (wire)	7 × 34 AWG
Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free
Material jacket	PUR
Outer-diameter (jacket)	6.4 mm ± 5 %
Jacket Color	green / RAL 6018
Freedom from ingredients (jacket)	lead-free, CFC-free, halogen-free
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	65 %

Pair shielding (type)	Metal foil
Conductor resistance (wire)	140 Ω /km @ 20 °C
Nominal voltage 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 max. (wire)	2 A
Current load capacity (standard)	to DIN VDE 0298-4
Electrical capacity line constant (wire - wire)	44.000 pF/km
Isolation resistance	5.000 M Ω × km
Characteristic impedance	100 Ω ± 15 % @ 15 MHz
Operating temperature (static)	-40 °C ... 80 °C
Operating temperature (dynamic)	-30 °C ... 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)
Notes	application-related testing
Bending radius (fixed)	8 × Outer diameter
Bending radius (dynamic)	10 × Outer diameter