

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

PUR AWG20/26 shielded gn UL/CSA+drag ch. 3m

Art.No.: 7000-47051-8310300

Weight: 0.324 kg

Country of origin: CZ

Model designation: MSYBL0-YA-08D831_3.0-ZS

Ethernet CAT5

Male straight – female straight

M12 – M12, 8-pole

Y-coded

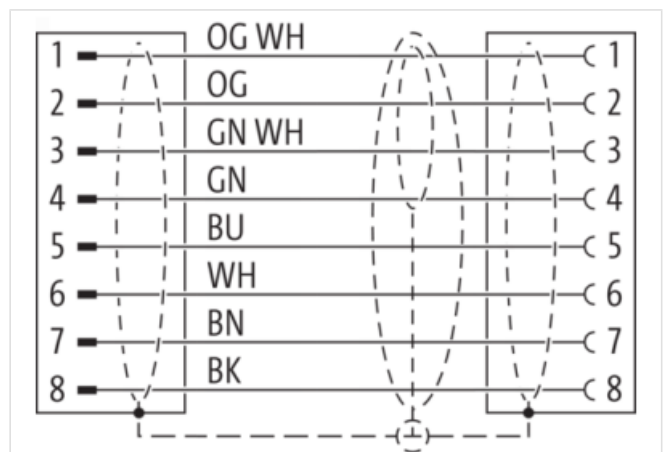
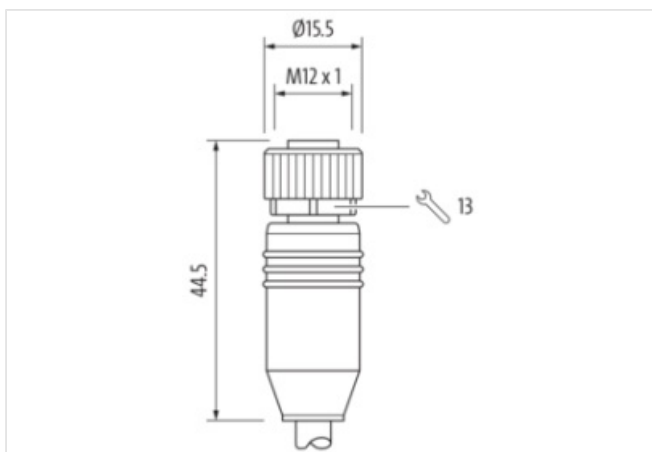
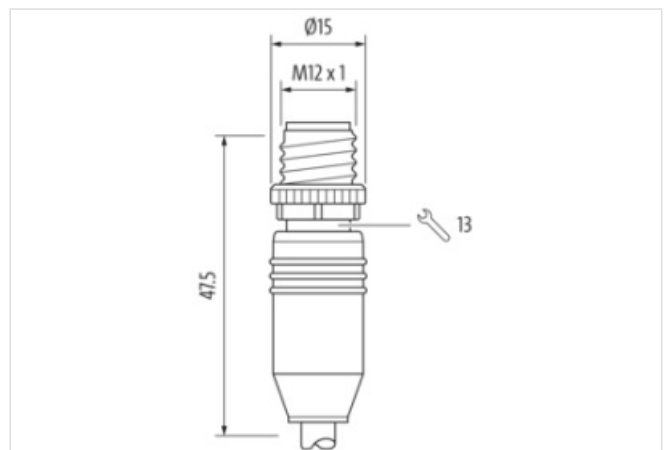
Shielded

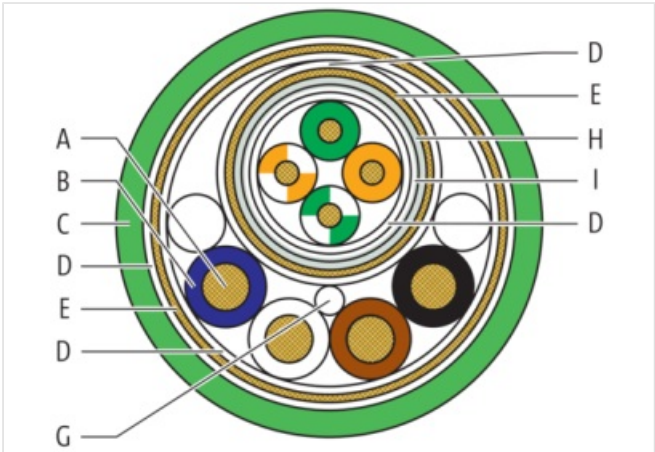
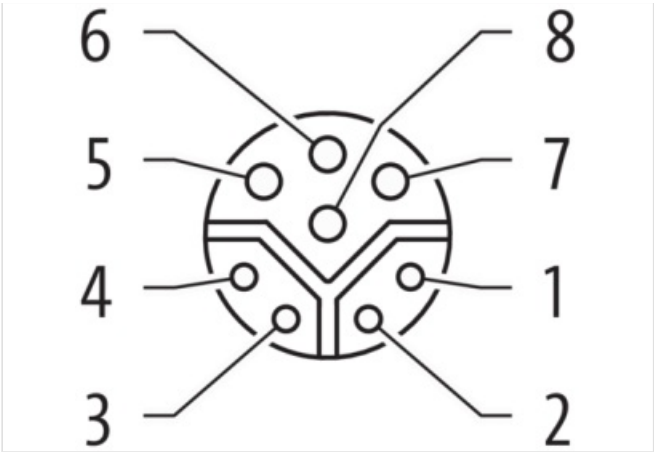
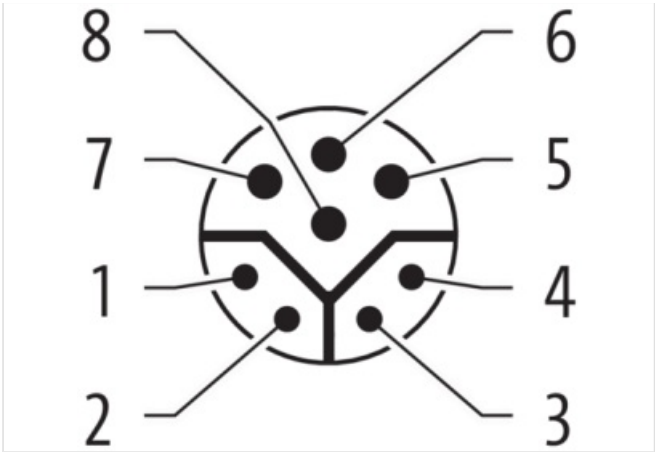
Transmission properties with channel transmission up to 50 m

Further cable lengths on request.

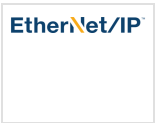
Plastic housings with good resistance against chemicals and oils.

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



Header

Material short text

MSYBL0-YA-08D831_3.0-ZS

Cable length

3,00 m

Side 1

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

Side 2

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	https://shop.murrelektronik.com/7000-47051-8310300
GTIN	4048879680684
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	4048879680684
Packaging unit	1

Electrical data | Supply

Operating voltage AC max.	50 V
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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
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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
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Mechanical data | Material data

Material screw connection	Zinc die-casting
Coating of fitting	nickel plated
Material 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	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 61076-2-113 (M12)
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Installation | Cable

Cable identification	831
Function cable	Hybrid, Data, Power
Amount stranding	1
Stranding	4 wires around core filler star-shaped twisted
Amount stranding (type 2)	1
Stranding (type 2)	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	(orange-white, green, orange, green-white), black, brown, white, blue
Cable weighth	98 g/m
Material wire insulation	PP
Amount wires	4
Outer diameter insulation	1,5 mm
Outer diameter tolerance core insulation	± 0,1 mm
Shore hardness wire insulation	55 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Amount strands (wire)	19

Diameter of single wires	38 AWG
Conductor crossection (wire)	26 AWG
Material conductor wire	Stranded copper wire, bare
Electrical function wire	Data
Material wire insulation (type 2)	PP
Outer diameter wire insulation (type 2)	1,1 mm
Tolerance outer diameter wire insulation (type 2)	± 0,1 mm
Shore hardness wire insulation (type 2)	55 ± 5 Shore D
Ingredient freeness wire insulation (type 2)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Amount wires (type 2)	4
Amount strands wire (type 2)	19
Diameter of single wires (type 2)	38 mm
Conductor crossection wire (type 2)	20 AWG
Material conductor wire (type 2)	Stranded copper wire, bare
Electrical function wire (type 2)	Power
Outer-diameter (jacket)	8,1 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material property (jacket)	abrasion-resistant, low adhesion, good machinability, matte
Conductor resistance (wire)	35 Ω/km @ 20 °C
Conductor resistance (wire type 2)	140 Ω/km @ 20 °C
Electrical capacity line constant (wire - wire)	52.000 pF/km
Isolation resistance	5.000 MΩ × km
Nominal voltage AC max.	60 V
Withstand voltage (wire - wire)	1 kV @ 60 s
Withstand voltage (wire - jacket)	1 kV @ 60 s
Withstand voltage (wire - shield)	1 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	2,4 A
Current load capacity min. Wire (type 2)	2,4 A
Current carrying capacity min. wire (type 3)	7,2 A
Characteristic impedance	100 Ω ± 15 % @ 15 MHz
Min. operating temperature (static)	-40 °C
Max. operating temperature (static)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-30 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (drag chain)	-40 °C
Operating temperature max. (drag chain)	80 °C / 90 °C @ 10000 h Operation
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)
Bending radius (fixed)	5 × Outer diameter
Bending radius (dynamic)	10 × Outer diameter
No. of bending cycles (C-track)	5 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	3.3 m/s @ 25 °C
Acceleration (C-track)	5 m/s² @ 25 °C
No. of torsion cycles	2 Mio.

Torsion stress	$\pm 30\text{ }^{\circ}/\text{m}$
Torsion speed	35 cycles/min