

M12 male 0° / M12 female 0° A-cod.

PUR AWG24+22 shielded vt UL/CSA+drag ch. 10m

Art.No.: 7000-40531-8031000

Weight: 0.670 kg

Country of origin: CZ

Model designation: MSBL0-A-U803_10.0

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:

DeviceNet, CANopen

Male straight – female straight

M12 – M12, 5-pole

A-coded

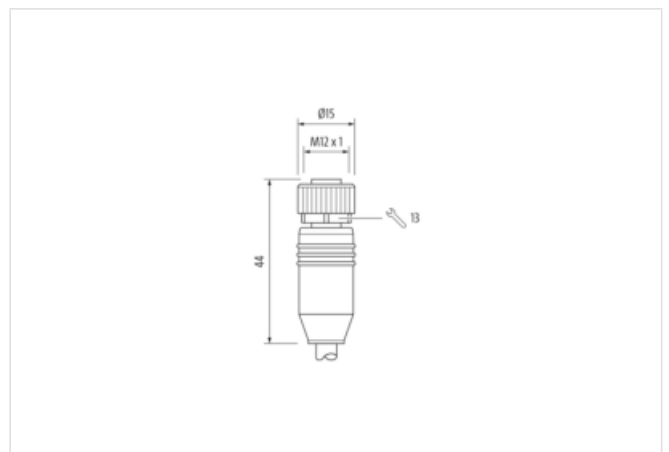
Shielded

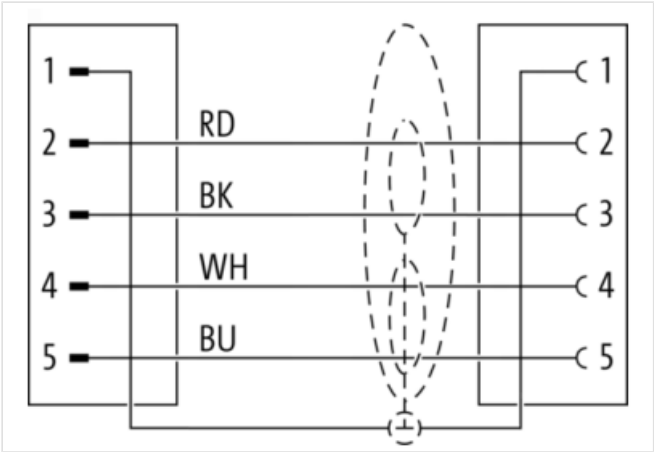
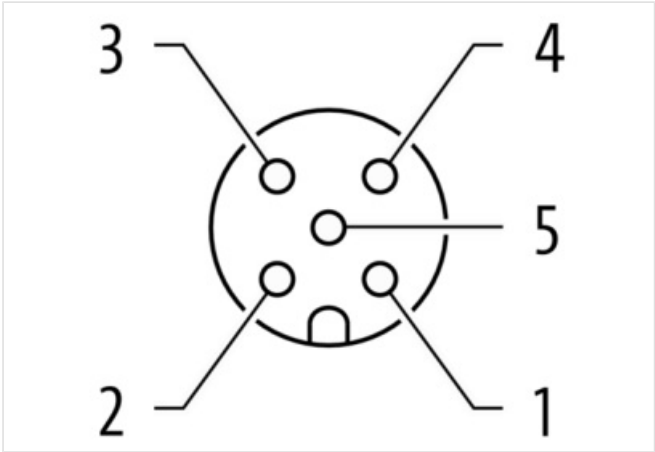
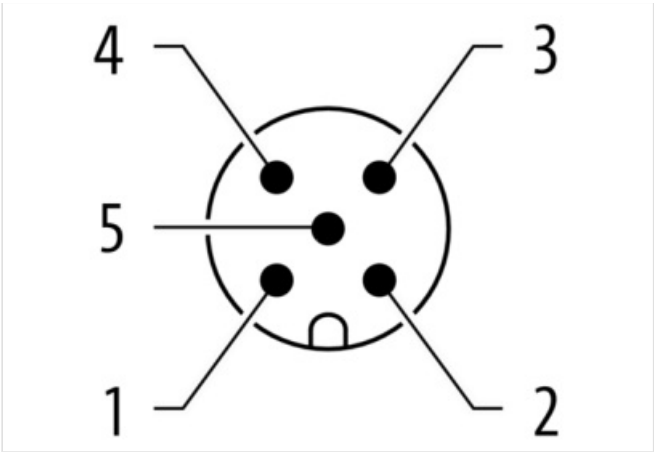
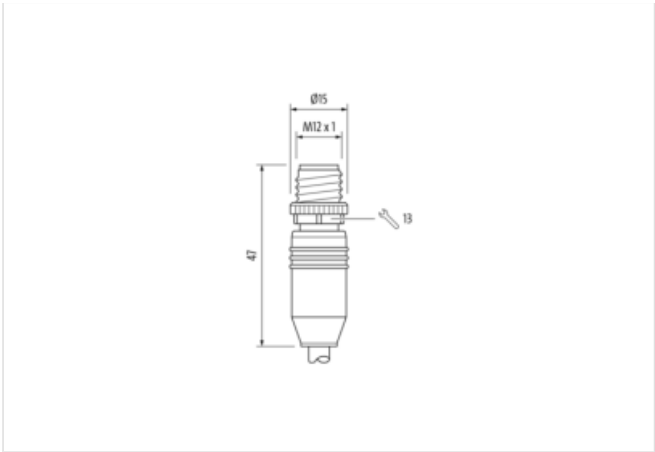
Product fulfills requirements according to UN/ECE R118

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.

Further cable lengths on request.

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



Product may differ from Image



Cable length 10,00 m

Side 1	
Family construction form	M12
No. of poles	5
Coding	A
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
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65

Side 2	
Family construction form	M12
No. of poles	5
Coding	A
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
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65

Commercial data	
URL Webshop	https://shop.murrelektronik.com/7000-40531-8031000
GTIN	4048879164870
EU-Customs tariff number	85444290
US-Customs tariff number	8544429090
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	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
ETIM-9.0	EC001855
ETIM-10.0	EC001855
customs tariff number	85444290
EAN	4048879164870

Packaging unit 1

Electrical data | Supply

Operating voltage AC max.	60 V
Operating voltage DC max.	60 V
Current operating per contact max.	4 A
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V

Diagnostics

Status indication LED	No
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Installation | Connection

Mounting set	M12 x 1
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Device protection | Electrical

Degree of protection (EN IEC 60529)	IP67, IP66K, IP65
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	1,5 kV
Material group (IEC 60664-1)	I

Mechanical data

Contour for corrugated hose	without
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Mechanical data | Material data

Screw connection	Zinc die-casting
Coating of fitting	nickel plated
Locking material	Zinc die-casting
Coating locking	Nickel
Gasket	FKM

Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
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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 61076-2-101 (M12)
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Installation | Cable

Cable identification	803
Function cable	Hybrid, Data, Power
Cable weight	57,38 g/m
UL AWM Style	20549 / 10578
Stranding	2 x 2 wires stranded
Stranding (type 2)	1 x 2 stranding combinations stranded
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	65 %
Pair shielding (type)	Metal foil
Banding	Foil
Drain wire (cross-section)	22 AWG
Wire arrangement	(WH, BU), (BK, RD)

Shield	shielded
Cable type	CAN DeviceNet
Electrical function wire	Data
Material wire insulation	PE
Amount wires	2
Outer diameter insulation	2.1 mm ± 0.05 mm
Conductor crosssection (wire)	24 AWG
Material conductor wire	copper stranded wire, tinned
Core construction (wire)	19 x 36 AWG
Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free
Electrical function wire (type 2)	Power
Material wire insulation (type 2)	PE
Amount wires (type 2)	2
Outer diameter wire insulation (type 2)	1.5 mm ± 0.05 mm
Conductor crosssection (wire type 2)	22 AWG
Material conductor wire (type 2)	copper stranded wire, tinned
Core construction (wire type 2)	19 x 34 AWG
Ingredient freeness wire insulation (type 2)	lead-free, CFC-free, halogen-free
Material jacket	PUR
Outer-diameter (jacket)	6.9 mm ± 5 %
Jacket Color	violet / RAL 4001
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)	94.2 Ω/km @ 20 °C
Conductor resistance (wire type 2)	59.4 Ω/km @ 20 °C
Nominal voltage max.	300 V
Withstand voltage (wire - wire)	2 kV @ 60 s
Withstand voltage (wire - shield)	2 kV @ 60 s
Current load capacity max. (wire)	3 A
Current load capacity max. Wire (type 2)	6 A
Current load capacity (standard)	to DIN VDE 0298-4
Electric capacitance	40.000 pF/km
Isolation resistance	5 GΩ × km
Characteristic impedance	120 Ω ± 10 % @ 10 MHz
Operating temperature (static)	-40 °C ... 80 °C
Operating temperature (dynamic)	-30 °C ... 70 °C
Flame resistance	IEC 60332-1-2, UL 1581 § 1060, UL 1581 § 1090, UL 1581 § 1100
Oil resistance	IEC 60811-404, IRM 902
Ozone resistance	IEC 60811-403, EN 50396
UV resistance	UL 1581 § 1200 @ 300 h
Other resistances	good resistance to saturated hydrocarbons (diesel, kerosene, petrol ether), resistant to microbes, MUD-resistant (NEK 606)
Notes	application-related testing
Bending radius (fixed)	6 × Outer diameter
Bending radius (dynamic)	10 × Outer diameter
No. of bending cycles (C-track)	1 Mio. @ 25 °C
Traversing distance (C-track)	5 m @ 25 °C
Travel speed (C-track)	3 m/s @ 25 °C
Acceleration (C-track)	5 m/s² @ 25 °C