

M12 female 0° A-cod. with cable shielded

PUR 5x0.34 shielded bk UL/CSA+drag ch. 15m

Art.No.: 7000-13221-6431500

Weight: 0.960 kg

Country of origin: US

Model designation: MSBL0-U643_15.0-ZE

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:

M12, 5-pole

Female straight

Shielded

with cable sleeves

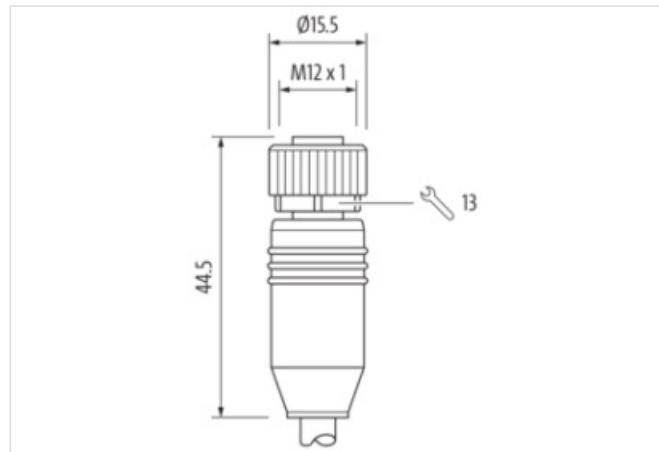
Plastic housings with good resistance against chemicals and oils.

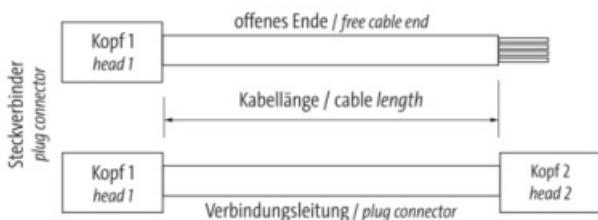
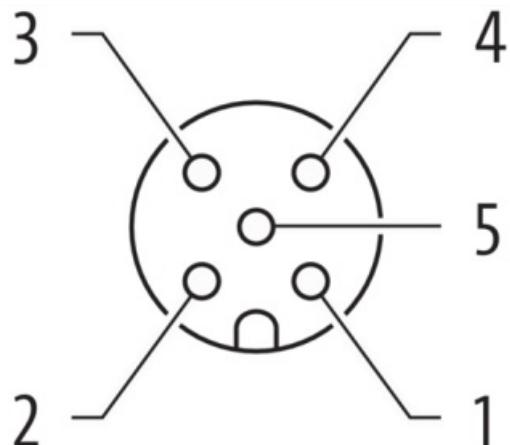
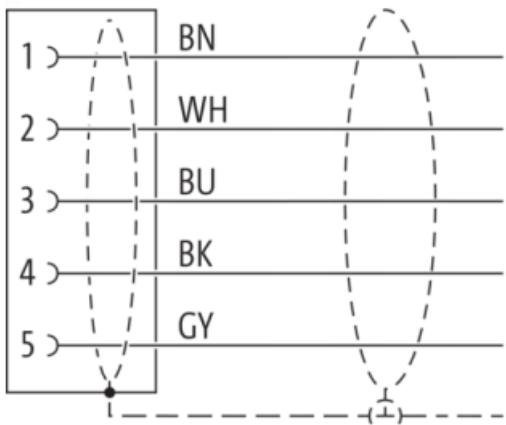
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

[Link to Product](#)

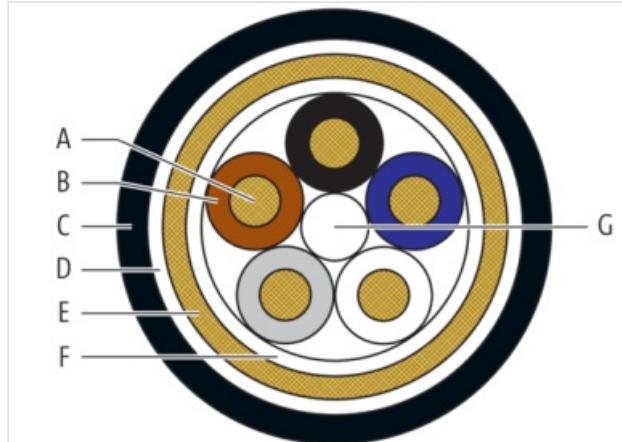
Illustration





Toleranz Kabellängen:
cable length tolerances

0m < L ≤ 0,5m	+0,03m	1,0m < L ≤ 3,0m	+0,1m
0,5m < L ≤ 1,0m	+0,05m	3,0m < L	±1,5%



Product may differ from Image



Header

Cable length 15,00 m

Side 1

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
Material contact	Copper alloy
Coating contact	gold plated
Degree of protection (EN IEC 60529)	IP67, IP66K, IP65
Side 2	
Family construction form	free cable end
Stripping length (jacket)	20 mm
Commercial data	
URL Webshop	https://shop.murrelektronik.com/7000-13221-6431500
customs tariff number	85444290
EAN	4048879449939
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
Installation Connection	
Gender	female
Mounting set	M12 x 1
Device protection Electrical	
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
Mechanical data Material data	
Material screw connection	Zinc die-casting
Coating of fitting	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 61076-2-101 (M12)

Installation | Cable

Cable identification	643
Cable Type	3
Amount stranding	1
Stranding	5 wires around core filler twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	80 %
Banding	Foil, Fleece
Filler	Yes
Wire arrangement	brown, black, blue, white, gray
Cable weight	52 g/m
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	1,25 mm
Outer diameter tolerance core insulation	± 0,05 mm
Shore hardness wire insulation	70 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Amount strands (wire)	42
Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,34 mm ²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Outer-diameter (jacket)	5,6 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)	57 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 (standard)	to DIN VDE 0298-4
Current load capacity max. (wire)	4,5 A
Operating temperature min. (static)	-40 °C
Operating temperature max. (static)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (drag chain)	-25 °C
Operating temperature max. (drag chain)	80 °C / 90 °C @ 10000 h Operation
Flame resistance	UL 1581 § 1090, CSA FT2, IEC 60332-2-2
Oil resistance	IEC 60811-404
Chemical resistance	good
Other resistances	good resistance to gasoline, resistant to hydrolysis, resistant to microbes
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 horizontal
Travel speed (C-track)	3.3 m/s @ 25 °C
Acceleration (C-track)	5 m/s ² @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	± 30 °/m
Torsion speed	35 cycles/min