

7/8" male 0° / M12 Power female 0° L-cod.

PUR 5x1.5 bk UL/CSA+drag ch. 5m

Art.No.: 7000-P4541-P040500

Weight: 0.720 kg

Country of origin: CZ

Model designation: MSWBLL0-CA-UP04_5.0

Advantages of our M12 power connectors:

Our M12 power connectors are ideal for supplying power to your industrial applications and are specially optimised for harsh environments.

The L-coded connectors are available in 4- and 5-pin versions and offer a current carrying capacity of 16A per pin at 63V DC. They are ideal for supplying power to decentralised devices such as I/O & fieldbus modules, power supply units, fuses, engines and motors. The Profinet User Organisation (PNO) has also described the L-coding as the future standard for the low-voltage supply of automation components, which ensures compatibility across different systems.

All Murrelektronik connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability. The contacts are gold-plated, which ensures excellent conductivity. Thanks to the high IP67 protection rating and the integrated protective conduit connection, they are ideal for demanding industrial environments. They are also vibration-resistant - this is guaranteed by the integrated vibration protection.

The M12 power connectors are designed in accordance with the IEC 61076-2-111 standard and UL-approved in accordance with 2237 (PVVA - E492831). Our connectors are resistant to oils and cooling lubricants. However, resistance to aggressive media should be tested for each specific application.

Different cable lengths are possible [on request](#). Are you missing technical information? Feel free to use our technical [dictionary](#), where you will find explanations of coding and other technical details.

Product details:

Power

Male straight – female straight

7/8" – M12, 5-pole

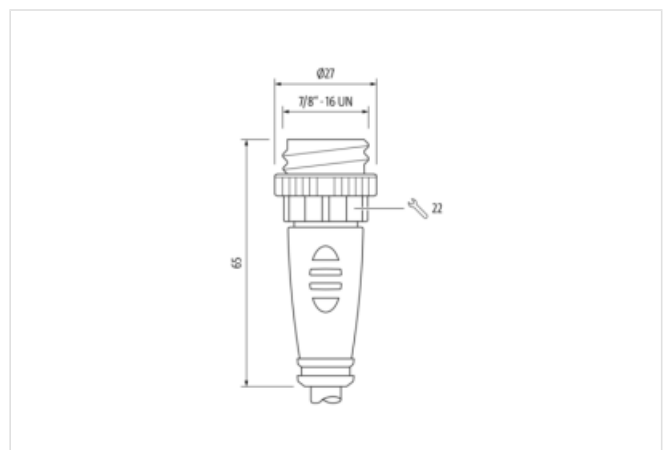
L-coded

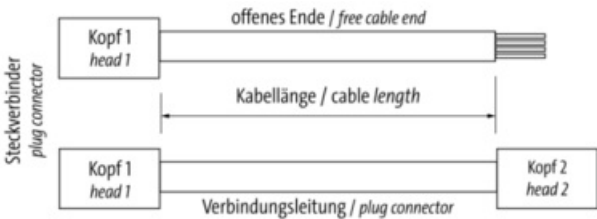
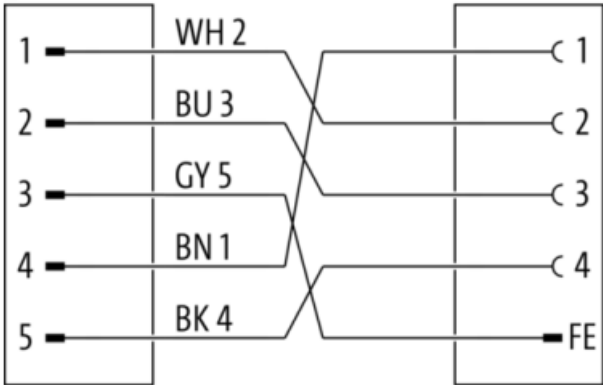
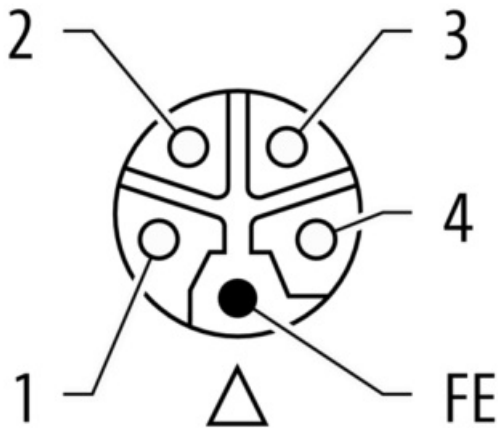
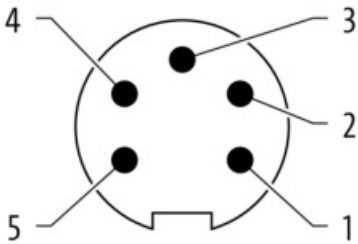
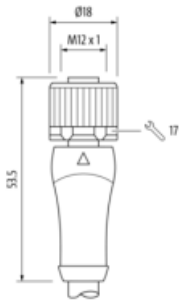
with cable sleeves

Further cable lengths on request.

Plastic housings with good resistance against chemicals and oils.

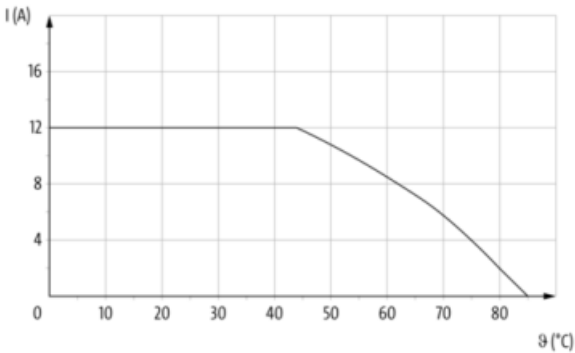
The resistance to aggressive media should be individually tested for your application. Further details on request.

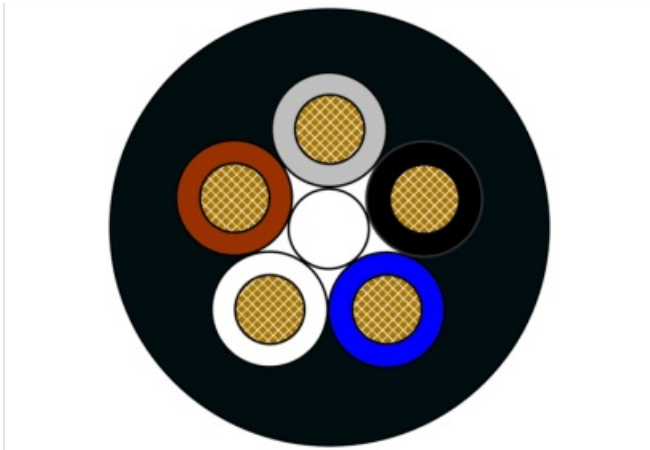
[Link to Product](#)**Illustration**



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



Cable length	5,00 m
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Side 1

Family construction form	7/8"
No. of poles	5
Gender	male
Mounting method	inserted, screwed
Threaded hole	7/8"
Tightening torque	1,5 Nm
Width across flats	SW22
Cable outlet	straight
suitable for corrugated tube (internal Ø)	15,8 mm
Degree of protection (EN IEC 60529)	IP67

Side 2

Family construction form	M12P
No. of poles	5
Coding	L
Gender	female
Mounting method	inserted, screwed
Threaded hole	M12
Tightening torque	0,6 Nm
Width across flats	SW17
Cable outlet	straight
suitable for corrugated tube (internal Ø)	12 mm
Material	PUR
Material contact	Copper alloy
Coating contact	gold plated
Degree of protection (EN IEC 60529)	IP65, IP67, IP69K

Commercial data

URL Webshop	https://shop.murrelektronik.com/7000-P4541-P040500
GTIN	4048879862103
EU-Customs tariff number	85444290
US-Customs tariff number	8544429090

ECLASS-6.0	27279218
ECLASS-6.1	27279218
ECLASS-7.0	27279218
ECLASS-7.1	27279218
ECLASS-8.0	27279218
ECLASS-8.1	27279218
ECLASS-9.0	27060327
ECLASS-9.1	27060311
ECLASS-10.0.1	27060311
ECLASS-10.1	27060311
ECLASS-11.0	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060327
ECLASS-13.0	27060311
ECLASS-14.0	27060311
ETIM-5.0	EC001855
ETIM-6.0	EC001855
ETIM-7.0	EC001855
ETIM-8.0	EC001855
customs tariff number	85444290
EAN	4048879862103
Packaging unit	1

Electrical data | Supply

Operating voltage DC max.	63 V
Current operating per contact max.	12 A

Installation | Connection

Mating cycles min.	100
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Device protection | Electrical

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

Mechanical data | Material data

housing	PUR
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.	-25 °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 61076-2-111
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Installation | Cable

Stranding	1 × 5 wires around core filler twisted
Filler	Yes
Wire arrangement	BN 1, GY 5, BK 4, BU 3, WH 2
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	2.3 mm ± 0.1 mm
Conductor crosssection (wire)	1,5 mm ²
Material conductor wire	Stranded copper wire, bare
Core construction (wire)	84 × 0.15 mm
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Material jacket	PUR
Outer-diameter (jacket)	8.2 mm ± 5 %
Jacket Color	black / RAL 9005
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)	13.3 Ω/km @ 20 °C
Nominal voltage max.	1.000 V
Withstand voltage (wire - wire)	10 kV @ 60 s
Withstand voltage (wire - jacket)	10 kV @ 60 s
Current load capacity max. (wire)	13,5 A
Current load capacity (standard)	to DIN VDE 0298-4
Operating temperature (static)	-50 °C ... 80 °C / 90 °C @ 10000 h Operation
Operating temperature (dynamic)	-25 °C ... 80 °C / 90 °C @ 10000 h Operation
Flame resistance	IEC 60332-1-2, IEC 60332-2-2, UL 1581 § 1080, CSA FT2
Oil resistance	IEC 60811-404
Chemical resistance	good
Other resistances	good resistance to gasoline, resistant to hydrolysis, resistant to microbes
Notes	application-related testing
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/s ² @ 25 °C
No. of torsion cycles	5 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min