

### M12 Power male 0° K-cod. with cable

PUR 5x1.5 bk UL/CSA+drag ch. 10m

Art.No.: 7000-P3201-P051000

Weight: 1.322

Country of origin: DE

Model designation: MSWAKL0-UP05\_10.0

#### 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 K-coded connectors are available in 5-pin versions and offer a current carrying capacity of 12A per pin at 630V AC. They are ideal for supplying power to linear motors, stepper motors, frequency converters and control and lighting 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 ensured 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 available [on request](#). Are you missing technical information? Please use our technical [dictionary](#), where you will find explanations of coding and other technical details.

#### Product details:Power

Male straight

M12, 5-pole

K-coded

with cable sleeves

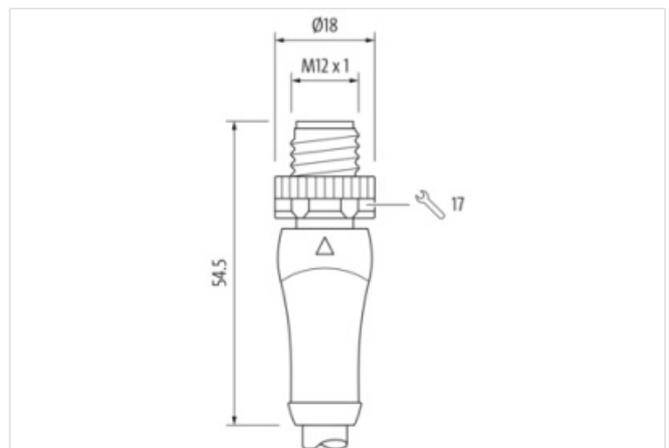
Plastic housings with good resistance against chemicals and oils.

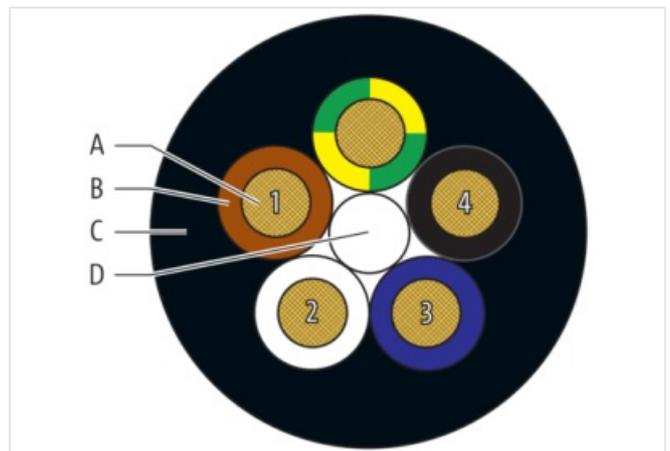
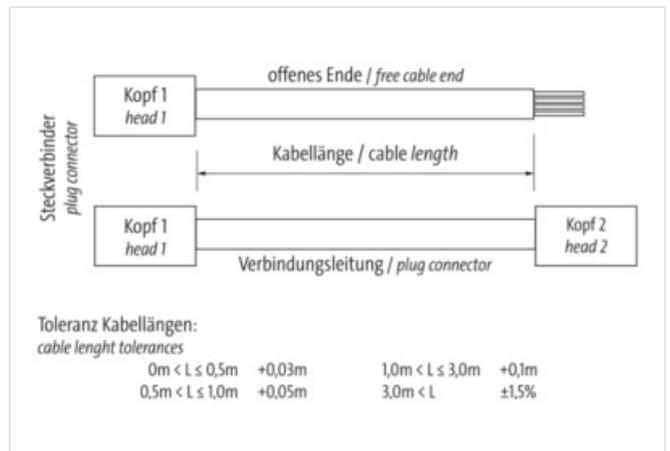
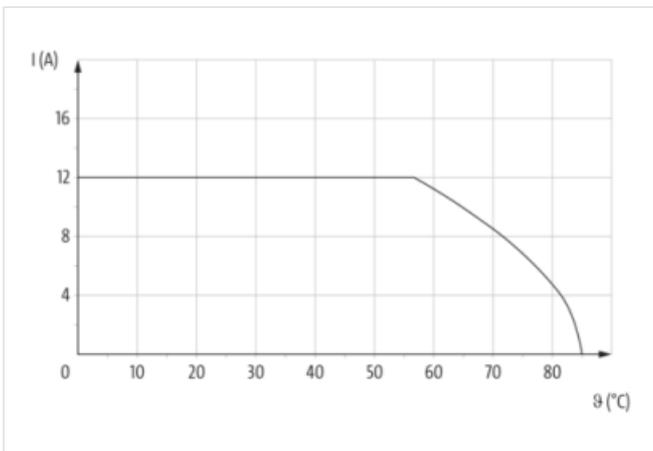
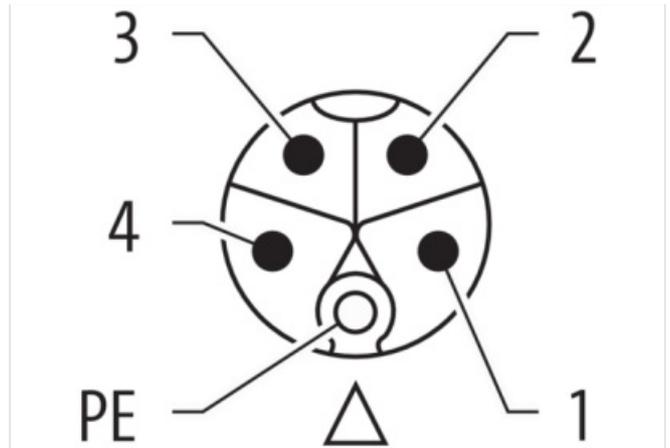
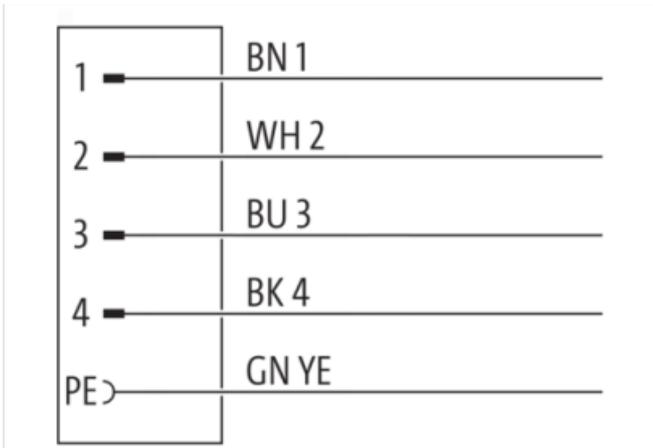
The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

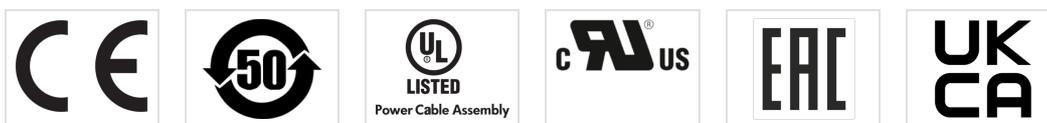
#### Link to Product

##### Illustration





Product may differ from Image



**Header**

Material short text MSWAKL0-UP05\_10.0

Cable length 10,00 m

**Side 1**

Family construction form	M12P
No. of poles	5
Coding	K
Gender	male
Mounting method	inserted, screwed
Thread	M12 x 1
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

**Side 2**

Family construction form	free cable end
Stripping length (jacket)	100 mm

**Commercial data**

URL Webshop	<a href="https://shop.murrelektronik.com/7000-P3201-P051000">https://shop.murrelektronik.com/7000-P3201-P051000</a>
GTIN	4048879749718
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	4048879749718
Packaging unit	1

**Electrical data | Supply**

Operating voltage AC max.	600 V
Current operating per contact max.	12 A

**Diagnostics**

Status indication LED	no
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**Installation | Connection**

Width across flats	SW17
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**Device protection | Electrical**

Degree of protection (EN IEC 60529)	IP65, IP67, IP69K
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Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	6 kV
Material group (IEC 60664-1)	I

**Mechanical data | Material data**

Material housing	PUR
Material screw connection	Brass
Coating of fitting	nickel plated

**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	<b>Attention:</b> 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**

Cable identification	P05
Cable Type	3
Function cable	Power
Amount stranding	1
Stranding	5 wires around core filler twisted
Filler	yes
Cable weight	118 g/m
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	2.3 mm
Outer diameter tolerance core insulation	± 0.1 mm
Shore hardness wire insulation	60 ± 5 Shore D
Ingredient freeness wire insulation	CFC-free, cadmium-free, silicone-free, halogen-free, lead-free
Printing color of wire insulation	white (isolation blue), white (isolation brown), white (isolation black), black (white isolation)
Amount strands (wire)	84
Diameter of single wires	0.15 mm
Conductor crossection (wire)	1.5 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Outer-diameter (jacket)	8.2 mm
Tolerance outer diameter (sheath)	± 5 %
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	CFC-free, cadmium-free, silicone-free, halogen-free, lead-free
Material property (jacket)	matte, good machinability, abrasion-resistant, low adhesion
Conductor resistance (wire)	13.3 Ω/km @ 20 °C
Nominal voltage AC max.	1,000 V
Withstand voltage (wire - wire)	10 kV @ 60 s
Withstand voltage (wire - jacket)	10 kV @ 60 s
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	13.5 A

Min. operating temperature (static)	-50 °C
Max. operating temperature (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
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 <sup>2</sup> @ 25 °C
No. of torsion cycles	5 Mio.
Torsion stress	180 °C
Torsion speed	35 cycles/min