

## Power cable - SAC-6P-M12MSM/ 1,5-PUR PE - 1414949

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Power cable, 6-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, M-coded, on free cable end, cable length: 1.5 m, For AC current up to 8 A/690 V

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: AC connectors for up to 8 A and 630 V AC
- ✓ Protection against mismatching, thanks to special M-coding
- ✓ Our standard: robust halogen-free PUR cable

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 035765
GTIN	4055626035765
Weight per Piece (excluding packing)	250.030 g
Custom tariff number	85444290
Country of origin	Poland
Note	Made to Order (non-returnable)

### Technical data

#### Dimensions

Length of cable	1.5 m
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#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General

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## Technical data

### General

Rated current at 40°C	8 A
Rated voltage	690 V AC
Number of positions	6
Insulation resistance	≥ 100 MΩ
Coding	M - Power
Standards/regulations	M12 connector IEC 61076-2-111
Status display	No
Protective circuit/component	unwired
Overvoltage category	III
Degree of pollution	3
Torque	0.4 Nm (M12 connector)

### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA
Material of grip body	PA
Material, knurls	Zinc die-cast, nickel-plated

### Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-111
Flammability rating according to UL 94	V0

### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
UL AWM style	20234 / 10492 (80°C/1000 V)
Conductor cross section	6x 1.5 mm <sup>2</sup>
AWG power supply	16
Conductor structure, voltage supply	78x 0.15 mm
Core diameter including insulation	2.35 mm ±0.05 mm
Thickness, insulation	≥ 0.36 mm
Wire colors	black 1, black 2, black 3, black 4, black 5, green/yellow
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 1.15 mm
External cable diameter D	9.75 mm ±0.25 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Minimum bending radius, drag chain applications	10 x D

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## Technical data

### Cable

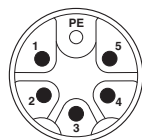
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	144 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Conductor resistance	≤ 15 Ω/m (at 20 °C)
Nominal voltage, cable	≤ 1000 V AC
Test voltage, cable	≥ 10000 V AC (Spark test)
Flame resistance	According to UL 758/1581 (Cable Flame)
	according to UL 758/1581 FT1
	According to DIN EN 60332-1-2
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
	Low adhesion
	abrasion-resistant
	Resistant to salt water
Ambient temperature (operation)	-30 °C ... 80 °C (cable, flexible installation)

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

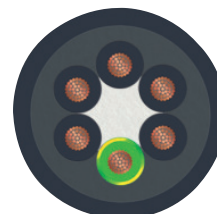
## Drawings

Schematic diagram



Pin assignment of M12 connector, 6-pos., M-coded, pin side view

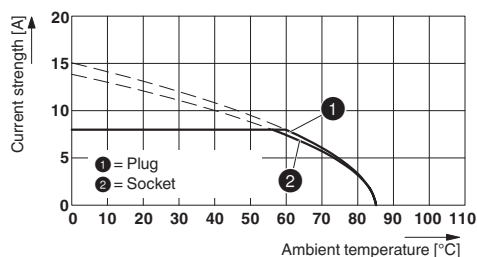
Cable cross section



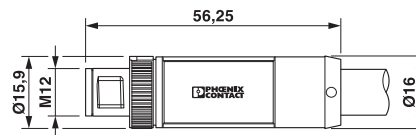
PUR halogen-free black [PUR]

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Diagram



Dimensional drawing



Plug, M12 x 1, straight, shielded

Derating diagram

Circuit diagram



Contact assignment of the M12 plug

## Classifications

### eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27440203
eCl@ss 9.0	27440203

### ETIM

ETIM 5.0	EC002311
ETIM 6.0	EC001855

## Approvals

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UL Listed / cUL Listed / cULus Listed

### Ex Approvals

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## Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E468743
Nominal voltage UN		600 V	
Nominal current IN		10 A	
mm <sup>2</sup> /AWG/kcmil		16	

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E468743
Nominal voltage UN		600 V	
Nominal current IN		10 A	
mm <sup>2</sup> /AWG/kcmil		16	

cULus Listed			
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## Accessories

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#### Protective cap

Sealing cap - PROT-M12 FS - 1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

### Screwdriver tools

Tool - SAC BIT M12-D16 - 1200305



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, knurl diameter: 16 mm, for 4 mm hexagonal drive

