

## Power cable - SAC-4P- 2,0-PUR/M12FRS PE - 1408852

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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12, coding: S, cable length: 2 m, for AC current up to 12 A/690 V

### Your advantages

- Easy and safe: 100% electrically tested plug-in components
- High-performance: AC connectors for up to 12 A and 690 V AC
- Protection against incorrect connection using special S-coding
- Our standard: robust halogen-free PUR cable

**RoHS**

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 839938
GTIN	4046356839938
Weight per Piece (excluding packing)	240.000 g
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	2 m
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#### Ambient conditions

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

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## Technical data

### Ambient conditions

	IP67 (without preloading, as additional test in accordance with IEC 60529)
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### General

Rated current at 40°C	12 A
Rated voltage	690 V AC
Number of positions	4
Color handle area	black
Insulation resistance	≥ 100 MΩ
Coding	S power
Standards/regulations	M12 connector IEC 61076-2-111
Status display	No
Protective circuit/component	unwired
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	> 100
Torque	0.4 Nm (M12 connector)

### Material

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

### Standards and Regulations

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

### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9YV1-11Y
UL AWM style	20234 / 10492 (80°C/1000 V)
Conductor cross section	4x 1.5 mm <sup>2</sup>
AWG power supply	16
Conductor structure, voltage supply	78x 0.15 mm
Core diameter including insulation	2.45 mm ±0.05 mm
Thickness, insulation	≥ 0.36 mm

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## Technical data

### Cable

Wire colors	Black 1, black 2, black 3, green/yellow
Overall twist	4 wires, twisted
Length of twist, overall twist	93 mm
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 1.3 mm
External cable diameter D	8.8 mm $\pm$ 0.25 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	114 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq$ 1 G $\Omega$ *km (at 20 °C)
Conductor resistance	$\leq$ 13 $\Omega$ /km (at 20 °C)
Nominal voltage, cable	$\leq$ 1000 V AC
Test voltage, cable	$\geq$ 10000 V AC (Spark test)
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
	Low adhesion
	abrasion-resistant
	Resistant to salt water
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 60811-2-1, 168 h at 100°C
	According to UL 758, 168 h at 60°C
Ambient temperature (operation)	-50 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 80 °C (cable, flexible installation)

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years

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## Technical data

### Environmental Product Compliance

For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

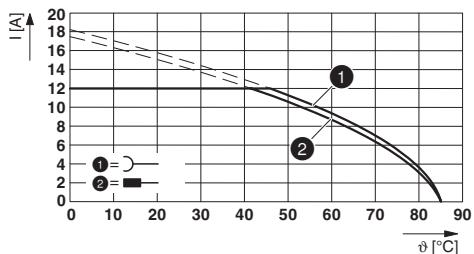
## Drawings

Schematic diagram



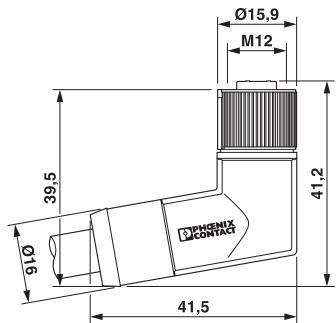
Pin assignment of M12 socket, 4-pos., S-coded, socket side view

Diagram



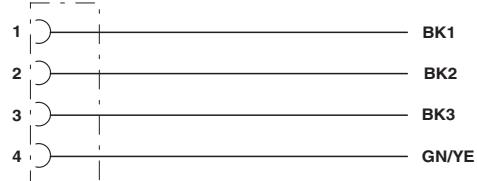
Current carrying capacity

Dimensional drawing



M12 x 1 socket, angled

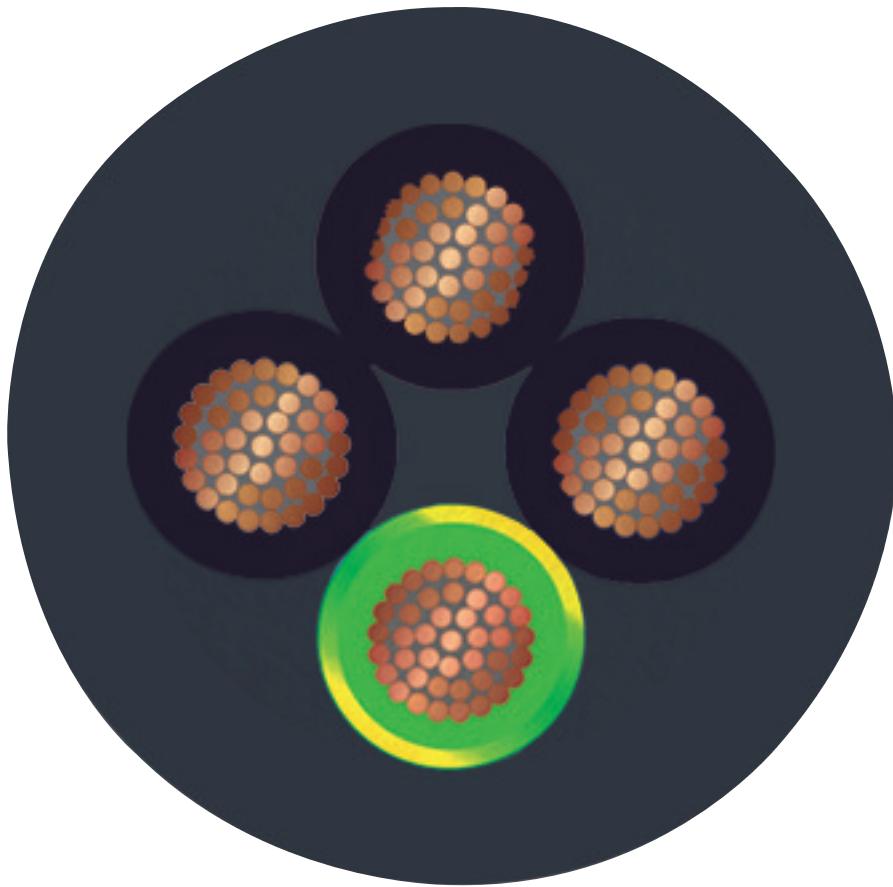
Circuit diagram



Contact assignment of the M12 socket

## Power cable - SAC-4P- 2,0-PUR/M12FRS PE - 1408852

Cable cross section



PUR halogen-free black [PUR]

### Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 11.0	27060311
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 9.0	27060311

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### Classifications

#### ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855

#### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

### Approvals

#### Approvals

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#### Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / cULus Listed

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#### Ex Approvals

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#### 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>	FILE E 468743
Nominal voltage UN		600 V	
Nominal current IN		12 A	
mm <sup>2</sup> /AWG/kcmil		16	

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EAC-RoHS		RU D- DE.HB35.B.00387
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EAC		RU C- DE.BL08.B.00286
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cULus Listed		
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### Accessories

Accessories  
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

Screw plug - PROT M12 MS PWR - 1092802



An M12 screw plug for the unoccupied M12 females of the M12 POWER connectors, boxes, and flush-type connectors

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### Accessories

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