

## Power cable - SAC-5P- 5,0-PUR/M12FRK PE SH - 1414801

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Power cable, 5-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), Socket angled M12, coding: K, on free cable end, cable length: 5 m, for AC current up to 16 A/690 V

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: AC connectors for up to 16 A and 690 V AC
- ✓ Protection against mismatching, thanks to special K-coding
- ✓ Shield power reliably – 360° shielding to reduce electromagnetic loads
- ✓ Our standard: robust halogen-free PUR cable

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 034355
GTIN	4055626034355

### Technical data

#### Dimensions

Length of cable	5 m
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#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP65
	IP67 (without preloading, as additional test in accordance with IEC 60529)

#### General

Rated current at 40°C	16 A
Rated voltage	690 V AC
Number of positions	5
Color handle area	black

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## Technical data

### General

Insulation resistance	≥ 100 MΩ
Coding	K - 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 orange
Cable type (abbreviation)	PUR
UL AWM style	22078 / 11560 (90 °C / 1000 V)
Conductor cross section	5x 2.5 mm <sup>2</sup>
AWG power supply	14
Conductor structure, voltage supply	141x 0.15 mm
Core diameter including insulation	2.8 mm ±0.1 mm
Thickness, insulation	≥ 0.36 mm
Wire colors	Black 1, black 2, black 3, black 4, green/yellow
External sheath, color	orange RAL 2003
Outer sheath thickness	approx. 1.15 mm
External cable diameter D	10.3 mm ±0.3 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>

## Power cable - SAC-5P- 5,0-PUR/M12FRK PE SH - 1414801

### Technical data

#### Cable

Cable weight	209 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 1 \text{ G}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	$\leq 8 \text{ }\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	$\leq 1000 \text{ V AC}$
Test voltage, cable	$\geq 10000 \text{ V AC}$ (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)	-50 °C ... 90 °C (cable, fixed installation)
	-30 °C ... 90 °C (cable, flexible installation)

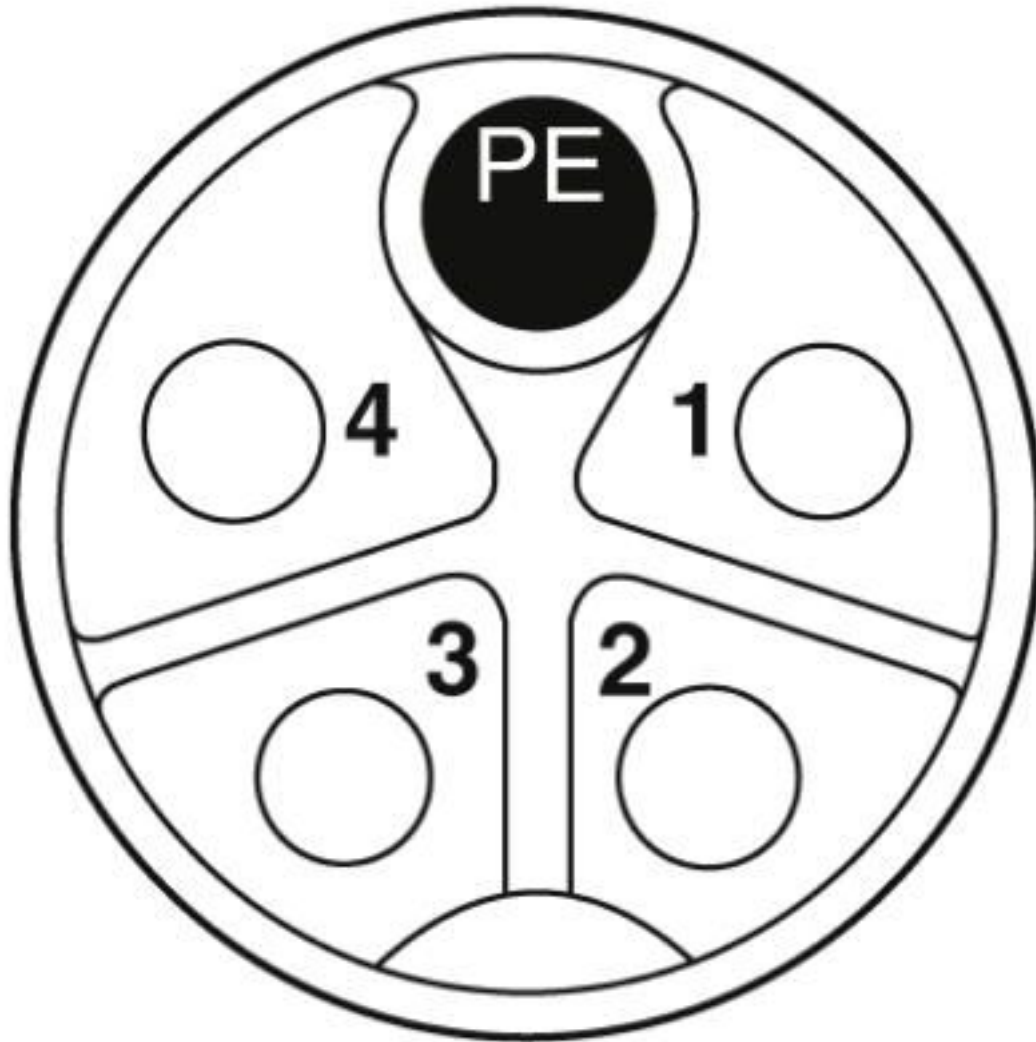
#### Environmental Product Compliance

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

#### Drawings

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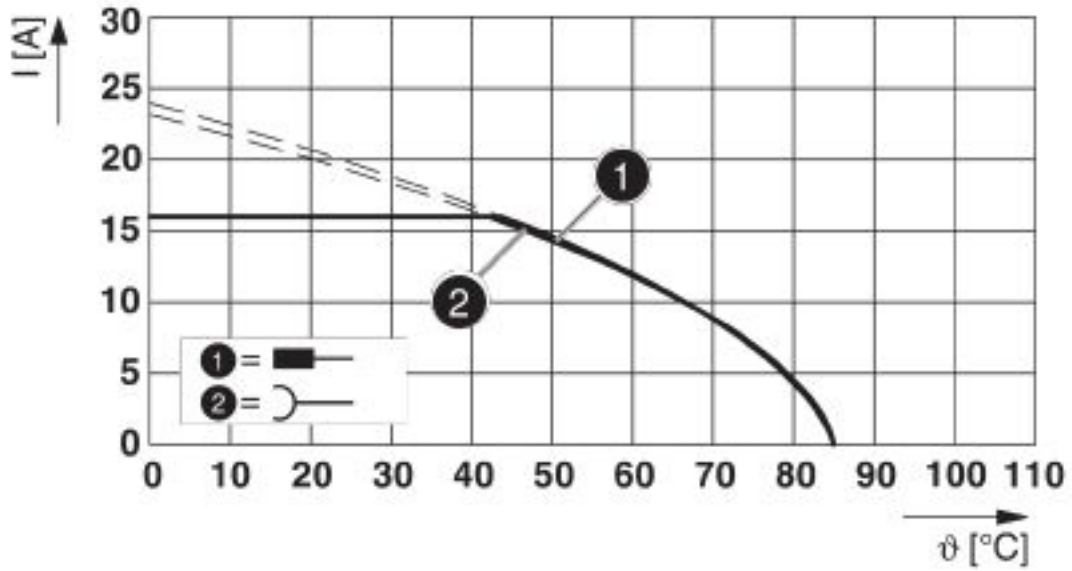
Schematic diagram



Pin assignment of M12 socket, 5-pos., K-coded, socket side view

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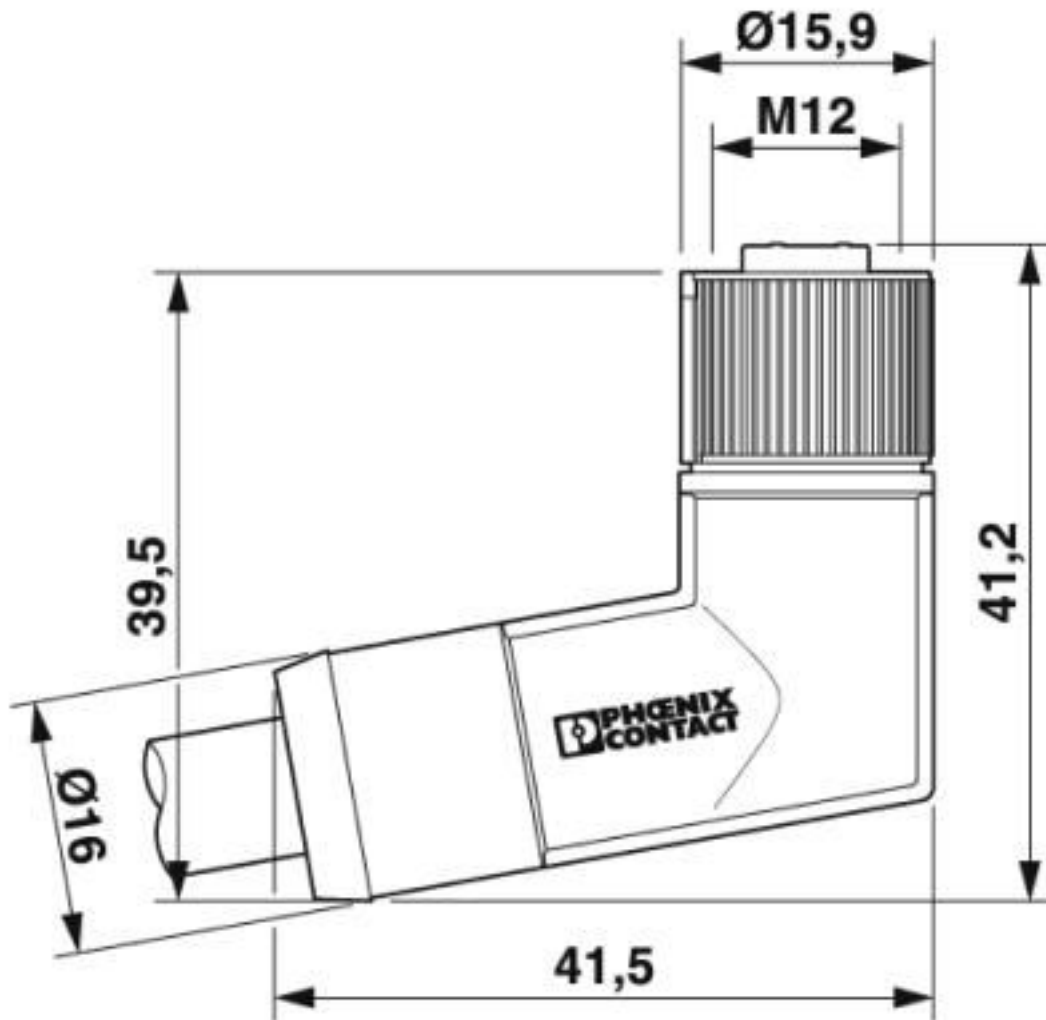
Diagram



Current carrying capacity

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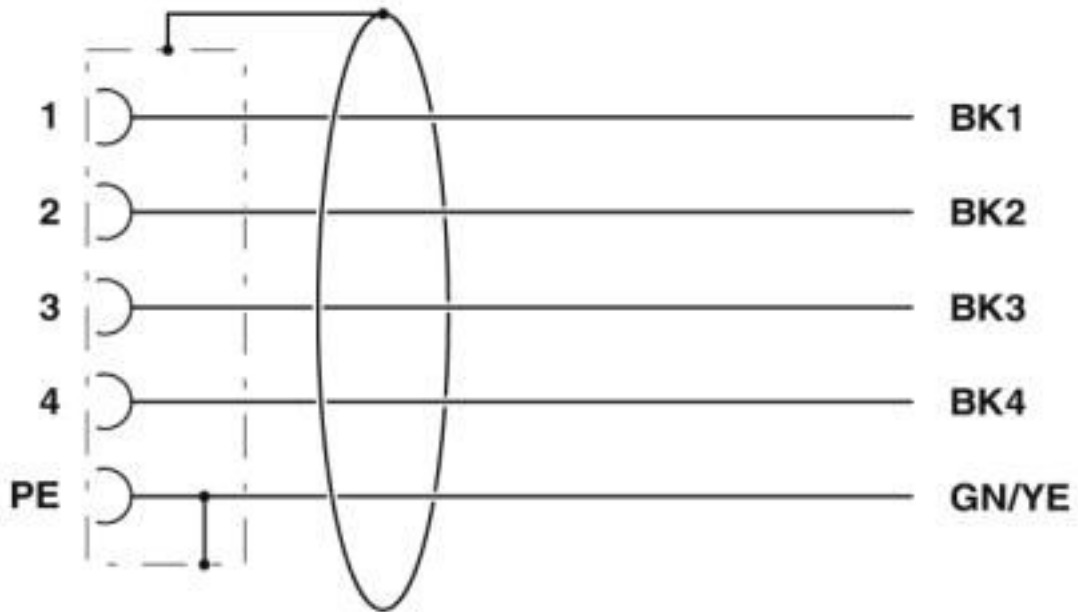
Dimensional drawing



M12 x 1 socket, angled

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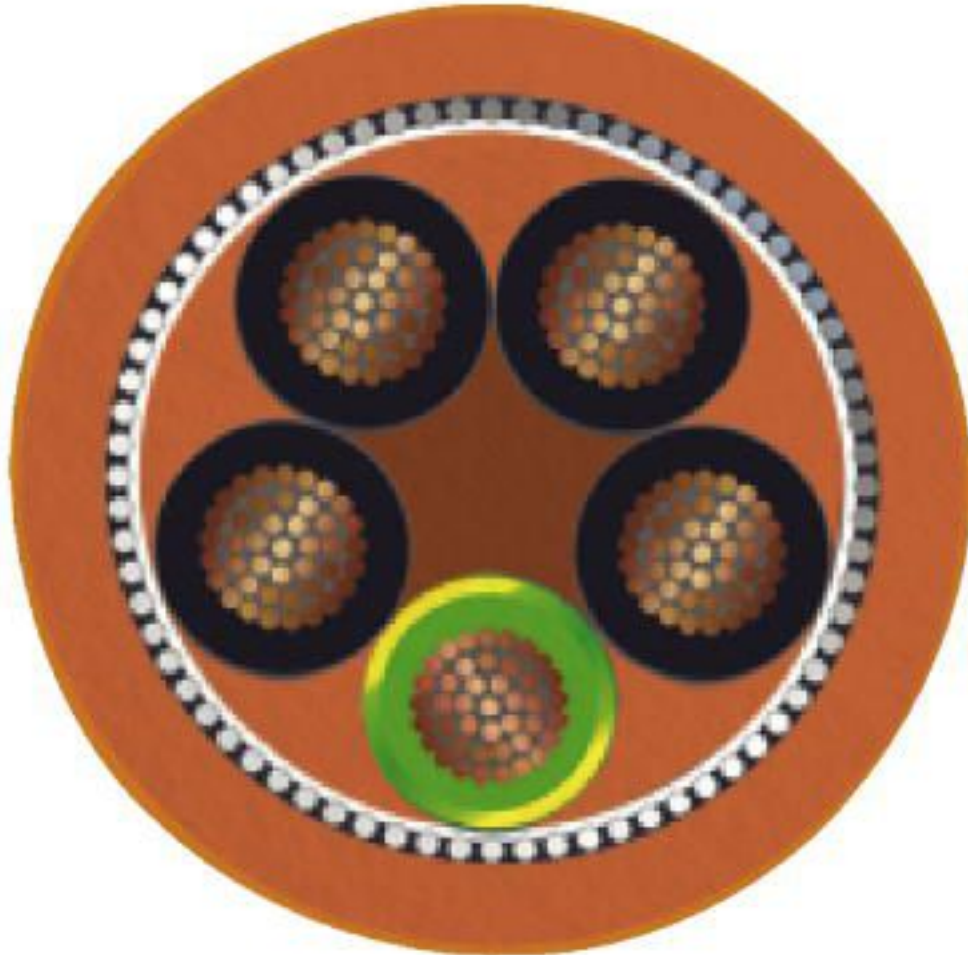
Circuit diagram



Contact assignment of the M12 socket

# Power cable - SAC-5P- 5,0-PUR/M12FRK PE SH - 1414801

Cable cross section



PUR halogen-free orange [PUR]

## Classifications

eCl@ss

eCl@ss 10.0.1	27440203
eCl@ss 4.0	24010400
eCl@ss 4.1	24010400
eCl@ss 5.0	19030300
eCl@ss 5.1	19030300
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27440203
eCl@ss 9.0	27440203



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## Classifications

### ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC001855
ETIM 5.0	EC002311
ETIM 6.0	EC002311
ETIM 7.0	EC002311

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 18.0	27112301
UNSPSC 19.0	27112301
UNSPSC 20.0	27112301
UNSPSC 21.0	27112301

## Approvals


### Approvals

#### Approvals

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

#### Ex 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	16 A		
mm <sup>2</sup> /AWG/kcmil	14		

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## Approvals

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Nominal voltage UN		600 V	
Nominal current IN		16 A	
mm²/AWG/kcmil		14	

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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