

# SAC-4P-M12MRT/ 0,5-PUR/FRT SH - Power cable



1102085

<https://www.phoenixcontact.com/us/products/1102085>

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Power cable, 4-position halogen-free, shielded (Advanced Shielding Technology), Plug angled M12, coding: T, on Socket angled M12, coding: T, cable length: 0.5 m, For direct current up to 12 A/63 V

## Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Protection against incorrect connection using special T-coding
- Shield power reliably – 360° shielding to reduce electromagnetic loads
- Our standard: robust halogen-free PUR cable

## Commercial data

Item number	1102085
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	BF05
Product key	BF1CCQ
GTIN	4055626962344
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	US

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## Technical data

### Product properties

Product type	Power cable
Number of positions	4
Application	Power supply
No. of cable outlets	1
Shielded	yes
Coding	T

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Material specifications

Color Handle area	black
Flammability rating according to UL 94	V0
Material of grip body	PP
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated

### Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	63 V DC
Nominal current $I_N$	12 A
Protective circuit	unwired

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	> 100
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### Connector

#### Connection 1

Type	Plug angled M12
Coding type	T (Power)

#### Connection 2

Type	Socket angled M12
Coding type	T (Power)


### Cable/line

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Cable length	0.5 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	133 kg/km
UL AWM Style	20233 / 10493 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	PUR halogen-free black [PUR]
Conductor cross section	4x 1.5 mm <sup>2</sup>
Wire diameter incl. insulation	2.4 mm
External cable diameter	9.7 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black
Thickness, insulation	1.2 mm (Outer cable sheath)
Overall twist	4 wires optimally twisted
Max. conductor resistance	≤ 13.3 Ω/km (at 20 °C)
Insulation resistance	≥ 10 MΩ*km (at 20 °C)
Nominal voltage, cable	300 V AC
Test voltage	1500 V AC (5 min.)
Smallest bending radius, fixed installation	49 mm
Smallest bending radius, movable installation	73 mm
Max. bending cycles	4000000
Torsion force	± 25 °/m
Halogen-free	in accordance with DIN VDE 0472 part 815 according to IEC 60754-1
Flame resistance	in accordance with EN 60332-1-2 in acc. to UL 1581 VW1
Resistance to oil	in accordance with DIN EN 60811-2-1 According to DIN EN 50363-10-2
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation) -30 °C ... 90 °C (Cable, flexible installation)

## Environmental and real-life conditions

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## Ambient conditions

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

## Standards and regulations

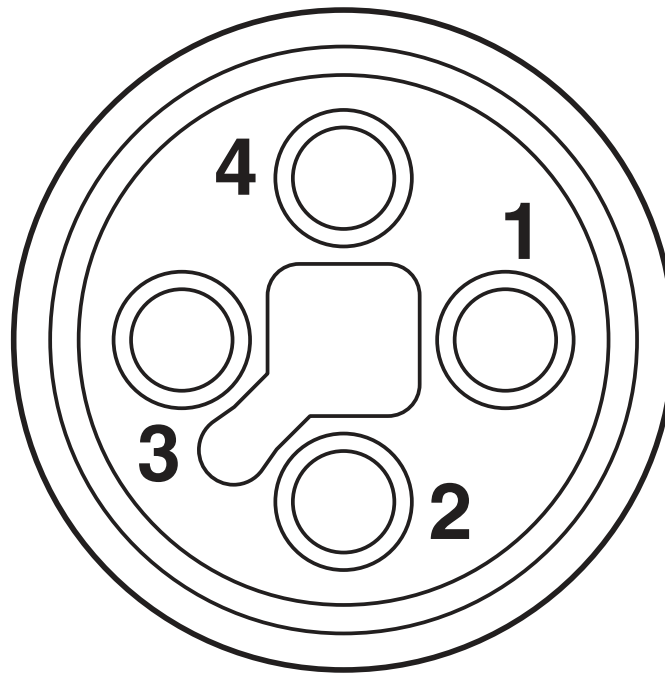
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111

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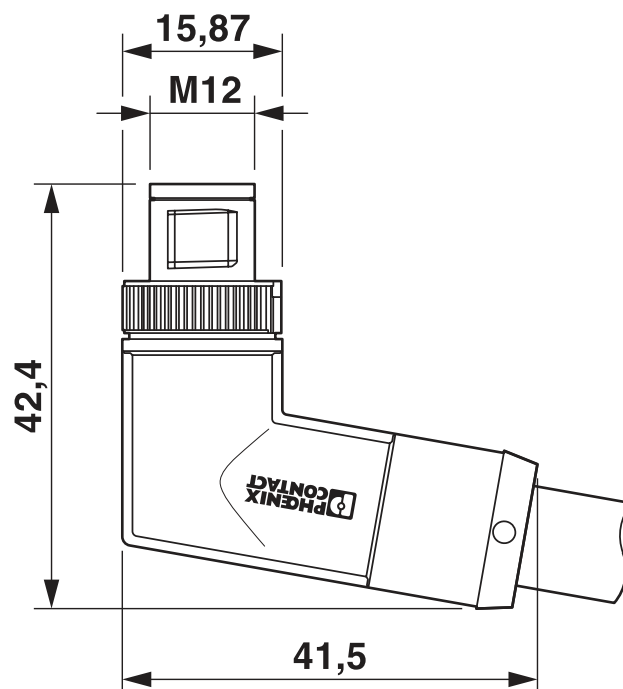
## Drawings

Schematic diagram



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

Dimensional drawing



M12 x 1 male plug, angled

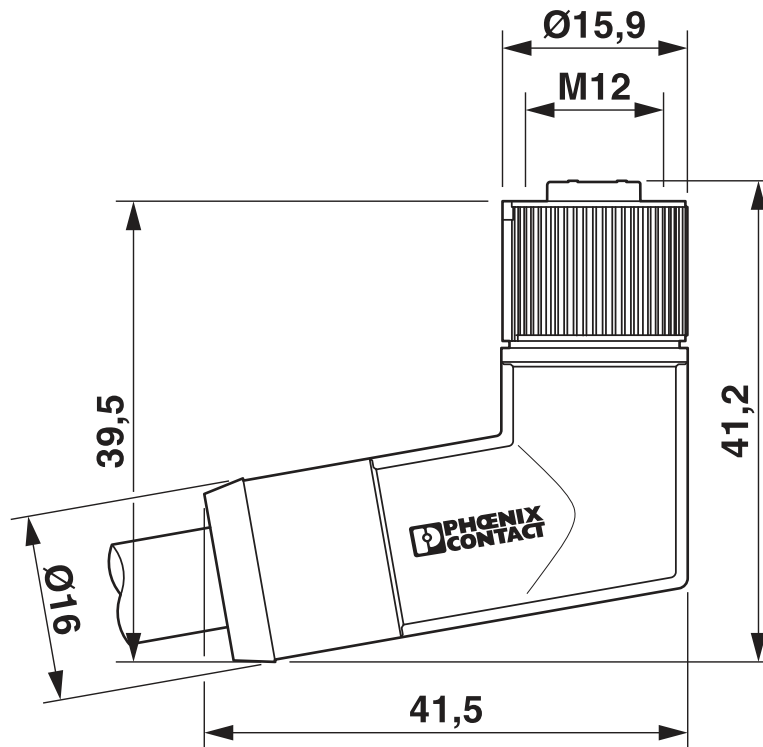
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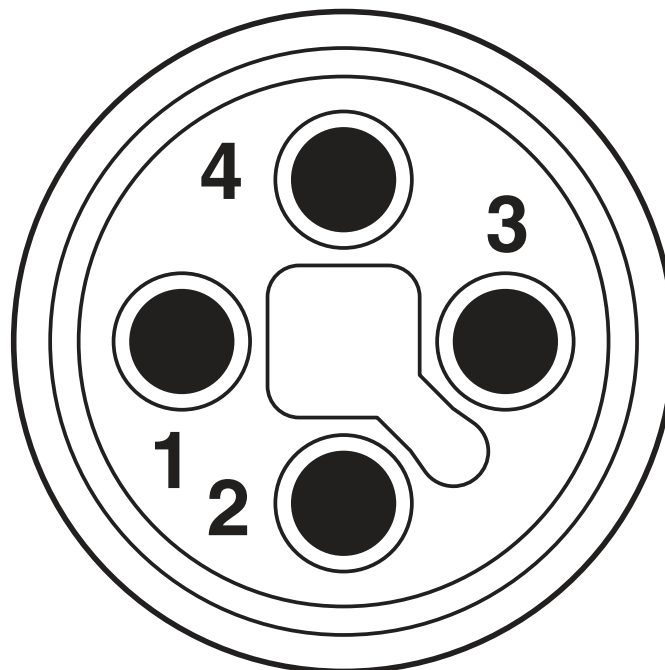


Dimensional drawing



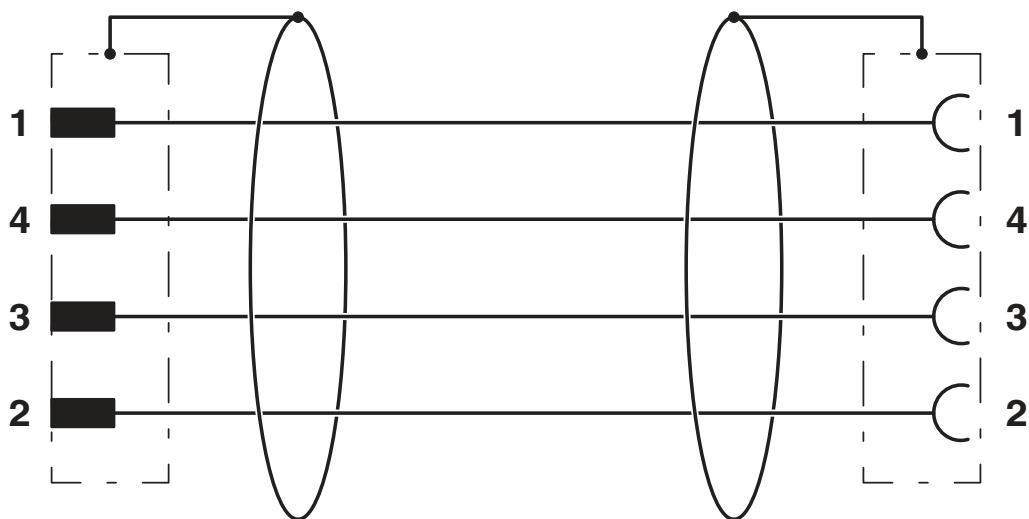
M12 x 1 socket, angled

Schematic diagram



Pin assignment for M12 plug, 4-pos., T-coded, view of plug side

Circuit diagram



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## Approvals

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**EAC**

Approval ID: RU C-DE.BL08.B.00286



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## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

### ETIM

ETIM 8.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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## Accessories

### PROT-M12 FS - Sealing cap

1560251

<https://www.phoenixcontact.com/us/products/1560251>



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

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### PROT M12 MS PWR - Screw plug

1092802

<https://www.phoenixcontact.com/us/products/1092802>



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

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## SAC BIT M12-D16 - Tool

1200305

<https://www.phoenixcontact.com/us/products/1200305>

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



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