

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Power cable, 4-position, PUR halogen-free, black RAL 9005, shielded (Tinned copper-braided shield, approx. 85% covering), Advanced Shielding Technology, free cable end, on Socket angled M12, coding: T, cable length: 15 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	1019901
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	BF1CCQ
GTIN	4055626507484
Weight per piece (including packing)	2,180 g
Weight per piece (excluding packing)	2,098.6 g
Customs tariff number	85444290
Country of origin	PL

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Material specifications

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

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	63 V DC
Nominal current $I_N$	12 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	> 100
-----------------------------	-------

### Connector

#### Connection 1

Type	free cable end
------	----------------

#### Connection 2

Type	Socket angled M12
Coding type	T (Power)

### Cable/line

Cable length	15 m
--------------	------

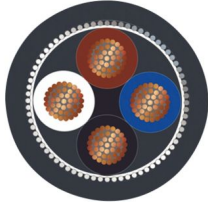
PUR halogen-free black [PUR]

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

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	9.70 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	1.20 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

### Ambient conditions

Degree of protection	IP65
----------------------	------

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

	IP67
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

## Standards and regulations

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

# SAC-4P-15,0-PUR/M12FRT SH - Power cable

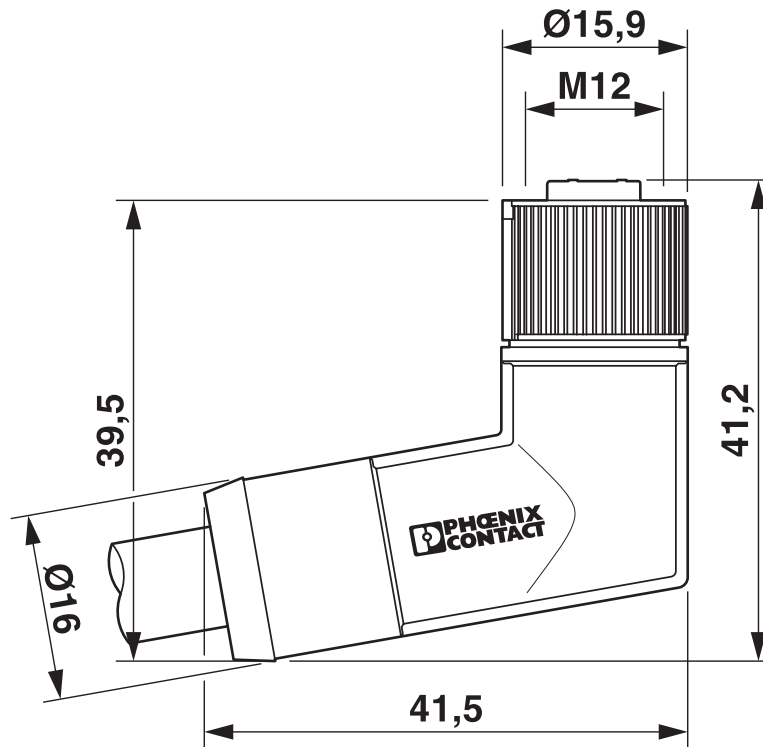
1019901

<https://www.phoenixcontact.com/pc/products/1019901>



## Drawings

Dimensional drawing

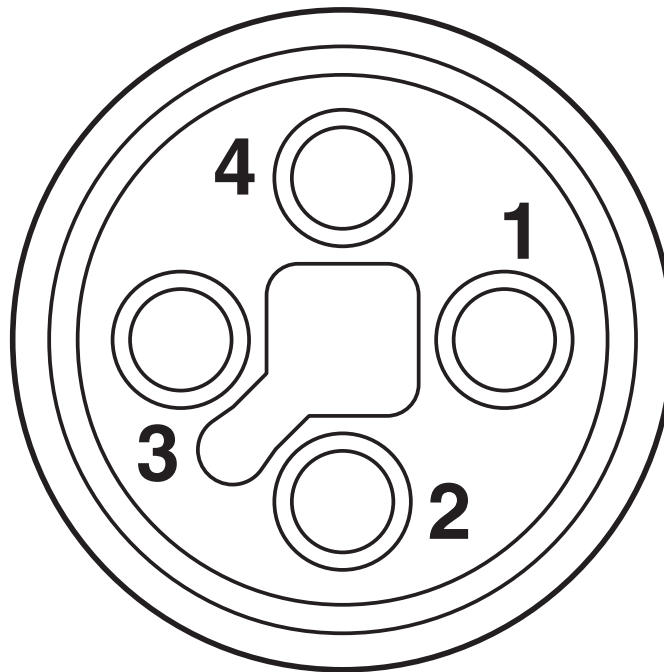


M12 x 1 socket, angled

1019901

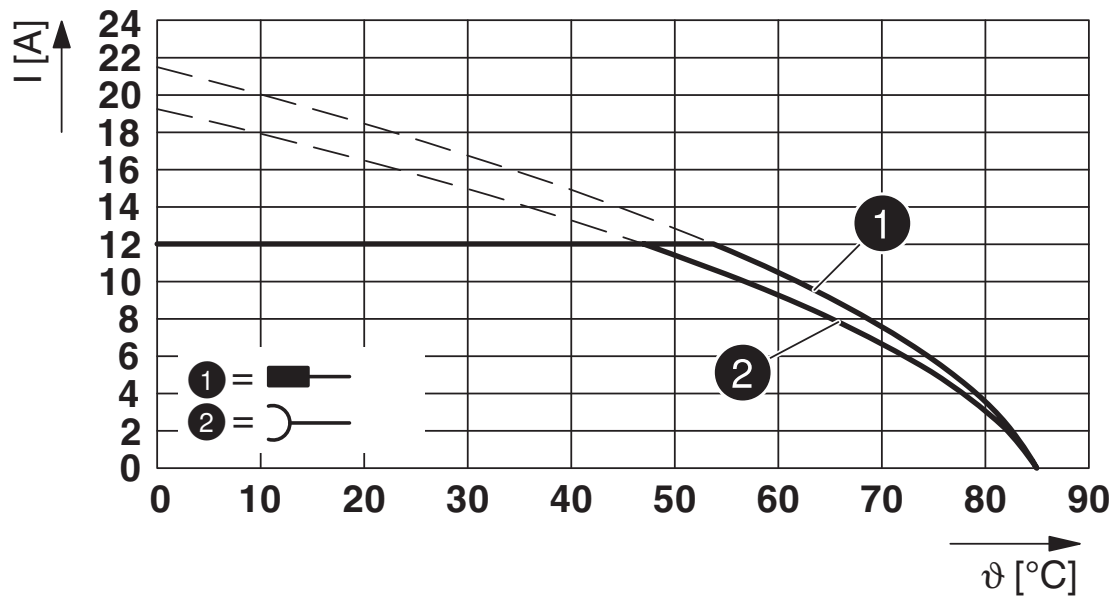
<https://www.phoenixcontact.com/pc/products/1019901>

Schematic diagram



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

Diagram



Base curve

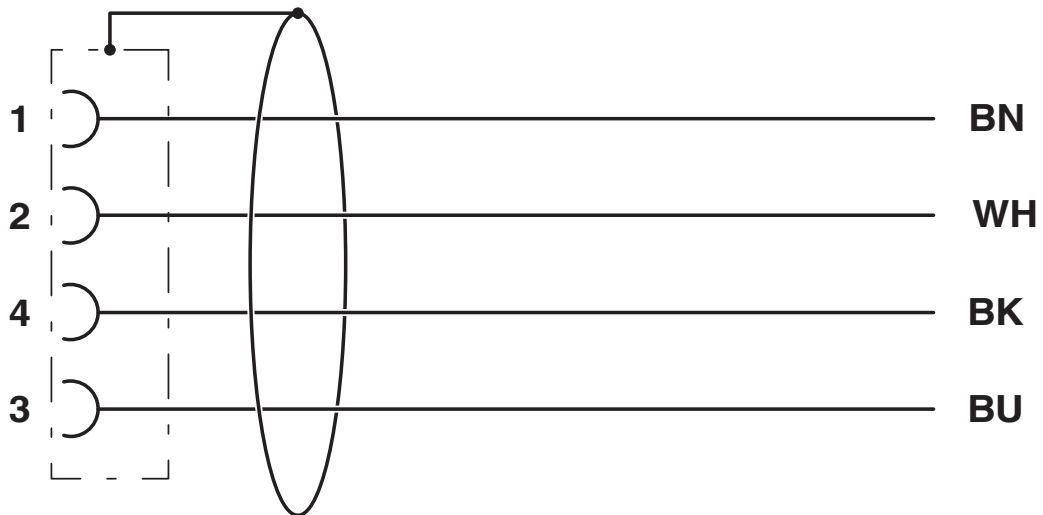
# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

Circuit diagram



# SAC-4P-15,0-PUR/M12FRT SH - Power cable





1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1019901>

 <b>UL Listed</b> Approval ID: E468743				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	63 V	12 A	-	- 16

 <b>cUL Listed</b> Approval ID: E468743				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	63 V	12 A	- 16	-

<b>cULus Listed</b>				
---------------------	--	--	--	--



# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060327

### ETIM

ETIM 8.0	EC001855
----------	----------

### UNSPSC

UNSPSC 21.0	26121600
-------------	----------

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## Accessories

### PROT-M12 MS-PA-CHAIN - Screw plug

1430899

<https://www.phoenixcontact.com/pc/products/1430899>

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



---

### UCT-WMT (23X4) - Conductor marker

0801453

<https://www.phoenixcontact.com/pc/products/0801453>

Conductor marker, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 30



# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## UC-WMT (23X4) - Conductor marker

0819411

<https://www.phoenixcontact.com/pc/products/0819411>



Conductor marker, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 24

---

## US-WMT (23X4) - Cable marker

0828769

<https://www.phoenixcontact.com/pc/products/0828769>



Cable marker, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 56

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## WMTW (23X4)R - Cable marker

0831004

<https://www.phoenixcontact.com/pc/products/0831004>



Cable marker, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 3000

---

## WP-EC TPE HF 13,0 BK - Transition sleeve from hose to cable

3240975

<https://www.phoenixcontact.com/pc/products/3240975>



Transition sleeve from hose to cable, material: TPE, color: black, flammability rating in acc. with UL 94: HB

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## WP-PA HF 13,0 BK - Protective hose

3240681

<https://www.phoenixcontact.com/pc/products/3240681>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

---

## WP-PA HF-HB 13,0 BK - Protective hose

3240839

<https://www.phoenixcontact.com/pc/products/3240839>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## SAC BIT M12-D16 - Tool

1200305

<https://www.phoenixcontact.com/pc/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



---

## TSD 04 SAC - Torque screwdriver

1208429

<https://www.phoenixcontact.com/pc/products/1208429>

Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors



# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## TSD-M 1,2NM - Torque screwdriver

1212224

<https://www.phoenixcontact.com/pc/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

---

## TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

<https://www.phoenixcontact.com/pc/products/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits



# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/pc/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

---

## CUTFOX-S VDE - Diagonal cutter

1212207

<https://www.phoenixcontact.com/pc/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## WIREFOX-D 16 - Stripping tool

1212173

<https://www.phoenixcontact.com/pc/products/1212173>



Stripping tool, for stripping lines (specially for fiber optics lines) of  $\varnothing$  4 - 16 mm

---

## WIREFOX-D 40 - Stripping tool

1212161

<https://www.phoenixcontact.com/pc/products/1212161>



Stripping tool, for stripping cables of 4.5 mm - 40 mm- $\varnothing$ , insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

# SAC-4P-15,0-PUR/M12FRT SH - Power cable



1019901

<https://www.phoenixcontact.com/pc/products/1019901>

## WIREFOX 10 - Stripping tool

1212150

<https://www.phoenixcontact.com/pc/products/1212150>



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

---

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

[info@phoenixcontact.com](mailto:info@phoenixcontact.com)