

1036702

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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: S, on free cable end, cable length: 0.8 m, for AC current up to 12 A/690 V

### Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- · Protection against incorrect connection using special S-coding
- · Our standard: robust halogen-free PUR cable

#### Commercial data

Item number	1036702
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF05
Product key	BF1CCP
GTIN	4055626569505
Weight per piece (including packing)	110 g
Weight per piece (excluding packing)	110 g
Customs tariff number	85444290
Country of origin	DE



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### Technical data

#### Product properties

Product type	Power cable
Application	Power supply
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	S
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	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	690 V AC
Nominal current I <sub>N</sub>	12 A

### Mechanical properties

Med	hani	cal c	łata.

Insertion/withdrawal cycles	> 100

### Connector

#### Connection 1

Туре	Plug straight M12
Coding type	S (Power)

#### Connection 2

Туре	free cable end

#### Cable/line

Cable length	0.8 m
PUR halogen-free black [PUR]	
Cable weight	92 kg/km



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UL AWM Style	80°C/1000 V
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor cross section	4x 1.5 mm²
Wire diameter incl. insulation	2.35 mm ±0.05 mm
External cable diameter	7.40 mm ±0.25 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	РР
Single wire, color	black 1, black 2, black 3, green/yellow
Thickness, insulation	≥ 0.31 mm
Thickness, outer sheath	approx. 0.85 mm
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 14.1 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 1000 V AC
Test voltage	≥ 10000 V AC (Spark test)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	37 mm
Smallest bending radius, movable installation	74 mm
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Flame resistance	According to UL 758/1581 (Cable Flame)
	in accordance with UL 758/1581 FT2
	according to DIN EN 60332-2-2
Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C
	according to UL 758, 168 h at 60 °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 85 °C (cable, fixed installation)
	-30 °C 85 °C (Cable, flexible installation)

### Environmental and real-life conditions

Ambie	nt co	ondit	ions
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Degree of protection	IP65



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	IP67 (without preloading, as additional test in accordance with IEC 60529)	
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)	
Standards and regulations		
Standards and regulations		
Standards and regulations Standard designation	M12 connector	

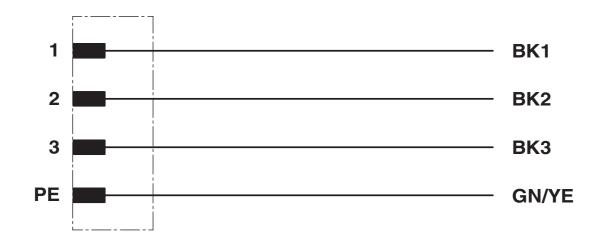


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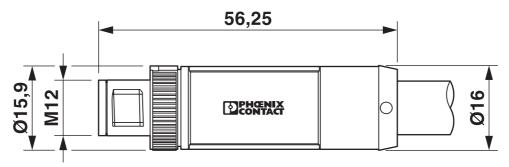
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### Drawings

### Circuit diagram



### Dimensional drawing



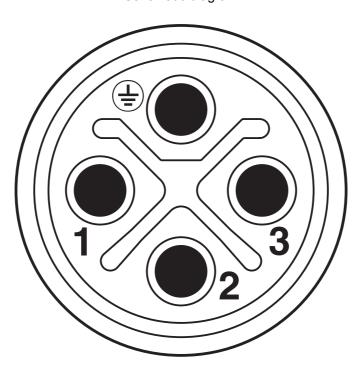
Plug, M12 x 1, straight



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### Schematic diagram



M12 plug pin assignment, 4-pos., S-coded, plug side view



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### Classifications

UNSPSC 21.0

#### **ECLASS**

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060327
ETIM	
ETIM 9.0	EC001855
UNSPSC	

26121600



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### 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	
DEACH candidate substance (CAS No.)	No substance above 0.1 wt%



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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

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

0801453

https://www.phoenixcontact.com/us/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, Number of individual labels: 30, text field height: 4 mm, text field width: 23 mm



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

0819411

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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, Number of individual labels: 24, text field height: 4 mm, text field width: 23 mm

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

0828769

https://www.phoenixcontact.com/us/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, Number of individual labels: 56, text field height: 4 mm, text field width: 23 mm



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#### WMTW (23X4)R - Cable marker

0831004

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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, Number of individual labels: 3000, text field height: 4 mm, text field width: 23 mm

#### PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

https://www.phoenixcontact.com/us/products/1430873

 $\,$  M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs





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

3240975

https://www.phoenixcontact.com/us/products/3240975



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

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

3240681

https://www.phoenixcontact.com/us/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



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

3240839

https://www.phoenixcontact.com/us/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 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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#### TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



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

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

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm



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

1212600

https://www.phoenixcontact.com/us/products/1212600



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

#### B-STIFT - Marker pen

1051993

https://www.phoenixcontact.com/us/products/1051993



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



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### CUTFOX-S VDE - Diagonal cutter

1212207

https://www.phoenixcontact.com/us/products/1212207



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

#### WIREFOX-D 16 - Stripping tool

1212173

https://www.phoenixcontact.com/us/products/1212173



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



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#### WIREFOX-D 40 - Stripping tool

1212161

https://www.phoenixcontact.com/us/products/1212161



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

#### WIREFOX 10 - Stripping tool

1212150

https://www.phoenixcontact.com/us/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

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