

1425405

https://www.phoenixcontact.com/in/products/1425405

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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: 3.3 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	1425405
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	****
Product key	AF1CCP
GTIN	4055626399430
Weight per piece (including packing)	384.4 g
Weight per piece (excluding packing)	380 g
Customs tariff number	85444290
Country of origin	PL



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Technical data

Product properties

upply

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 _N	690 V AC
Nominal current I _N	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	3.3 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 structure, voltage supply	44x 0.20 mm
AWG power supply	16
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	PP
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: 5000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: 500000, Torsional frequency 35 cycles/min.
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



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Ambient conditions

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

Standards and regulations

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

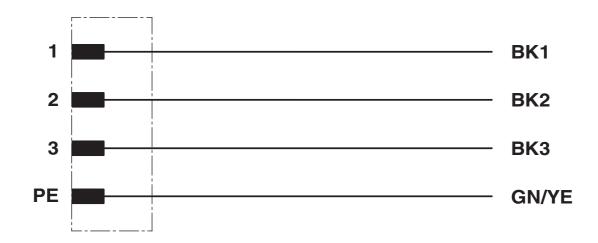


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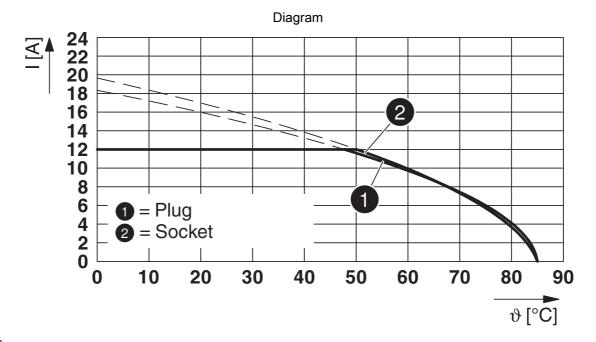
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Drawings

Circuit diagram



Contact assignment of the M12 plug



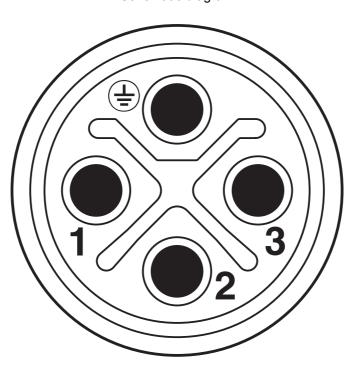
Base curve



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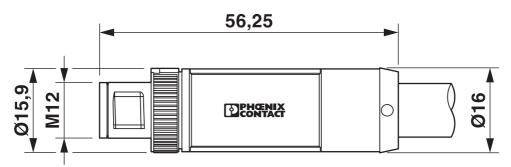
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Schematic diagram



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

Dimensional drawing



Plug, M12 x 1, straight



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/in/products/1425405

<u> </u>	UL Listed Approval ID: FILE E 468743				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	12 A	-	- 16

• <u>®</u>	cUL Listed Approval ID: FILE E 46874	13			
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	12 A	- 16	-

cULus Listed



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Classifications

ECLASS

	ECLASS-11.0	27060311		
	ECLASS-12.0	27060311		
	ECLASS-13.0	27060327		
ETIM				
	ETIM 9.0	EC001855		
UNSPSC				
	UNSPSC 21.0	26121600		



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Environmental product compliance

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%			



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Accessories

PROT-M12 FS - Sealing cap

1560251

https://www.phoenixcontact.com/in/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/in/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/in/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

https://www.phoenixcontact.com/in/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, Number of individual labels: 3000, text field height: 4 mm, text field width: 23 mm

PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

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 $\,$ 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/in/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/in/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, inside diameter: 10 mm, Total length: 50 m



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

3240839

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

SAC BIT M12-D16 - Tool

1200305

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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

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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/in/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/in/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/in/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/in/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/in/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/in/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/in/products/1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

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