

1424733

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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: S, on Socket straight M12, coding: S, cable length: 4.4 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	1424733
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CCP
GTIN	4055626381046
Weight per piece (including packing)	527.1 g
Weight per piece (excluding packing)	527.1 g
Country of origin	DE



1424733

https://www.phoenixcontact.com/us/products/1424733

Technical data

Product properties

Product type	Power cable
Application	Energy 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 _N	690 V AC
Nominal current I _N	12 A

Mechanical properties

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Insertion/withdrawal cycles	> 100

Connector

Connection 1

Туре	Plug straight M12
Coding type	S (Power)

Connection 2

Туре	Socket straight M12
Coding type	S (Power)

Cable/line

Cable length	4.4 m
PUR halogen-free black [PUR]	



1424733

https://www.phoenixcontact.com/us/products/1424733

Cable weight	114 kg/km
UL AWM Style	20234 / 10492 (80°C/1000 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure, voltage supply	78x 0.15 mm
AWG power supply	16
Conductor cross section	4x 1.5 mm²
Wire diameter incl. insulation	2.45 mm ±0.05 mm
External cable diameter	8.80 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	≥ 0.36 mm
Thickness, outer sheath	approx. 1.30 mm
Overall twist	4 wires, twisted
Length of twist, overall twist	93 mm
Max. conductor resistance	≤ 13 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	44 mm
Smallest bending radius, movable installation	88 mm
Dynamic load capacity (bending)	Max. bending cycles: 2000000, 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)
	according to UL 758/1581 FT1
	According to DIN EN 60332-1-2
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C



1424733

https://www.phoenixcontact.com/us/products/1424733

	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 80 °C (cable, fixed installation)
	-30 °C 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

	ID05
Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C 85 °C (Plug / socket)

Standards and regulations

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

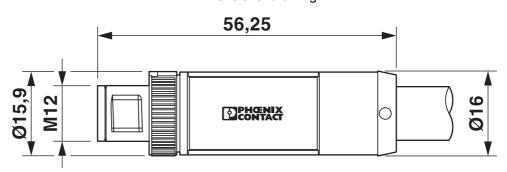


1424733

https://www.phoenixcontact.com/us/products/1424733

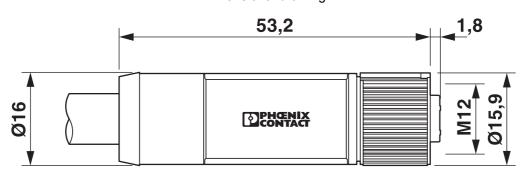
Drawings

Dimensional drawing



Plug, M12 x 1, straight

Dimensional drawing

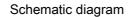


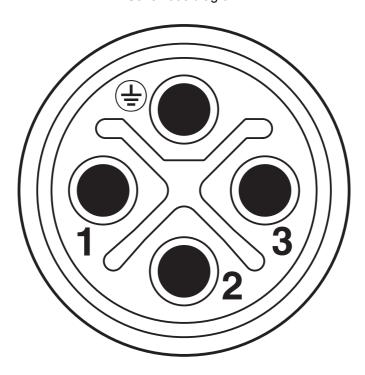
M12 x 1 socket, straight



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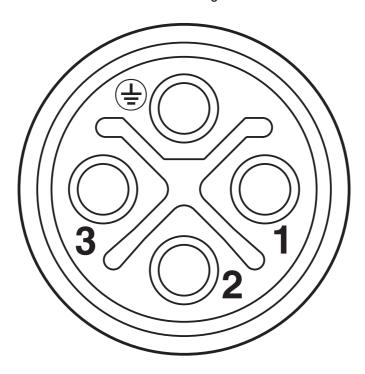
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M12 plug pin assignment, 4-pos., S-coded, plug side view

Schematic diagram

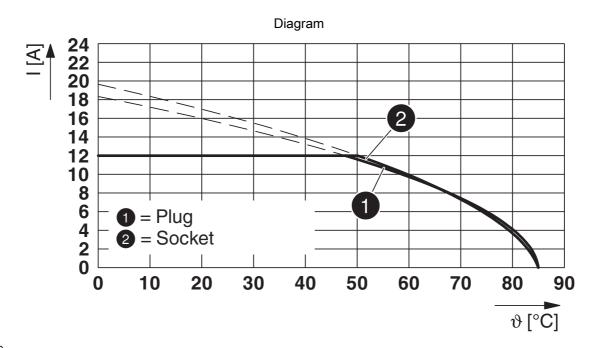


Pin assignment of M12 socket, 4-pos., S-coded, socket side view



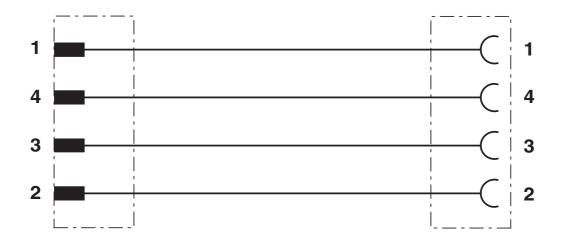
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Base curve

Circuit diagram



Contact assignment of the M12 connector and the M12 socket



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Classifications

ECLASS

ECLASS-13.0 27060327

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