

SAC-4P-M12MST/3,0-PUR/FST SH - Power cable



1416447

<https://www.phoenixcontact.com/pc/products/1416447>

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Power cable, 4-position, PUR halogen-free, black RAL 9005, shielded (Advanced Shielding Technology), Plug straight M12, coding: T, on Socket straight M12, coding: T, cable length: 3 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
- Our standard: robust halogen-free PUR cable
- Shield power reliably – 360° shielding to reduce electromagnetic loads

Commercial data

Item number	1416447
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	BF1CCQ
GTIN	4055626075525
Weight per piece (including packing)	479.6 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	PL

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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	yes
Coding	T

Data management status

Article revision	05
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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
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Connector

Connection 1

Type	Plug straight M12
Coding type	T (Power)

Connection 2

Type	Socket straight M12
Coding type	T (Power)

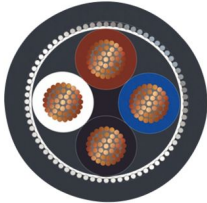
Cable/line

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Cable length	3 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 mm²
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
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 97 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
Dynamic load capacity (torsion)	Torsion: ±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)

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Environmental and real-life conditions

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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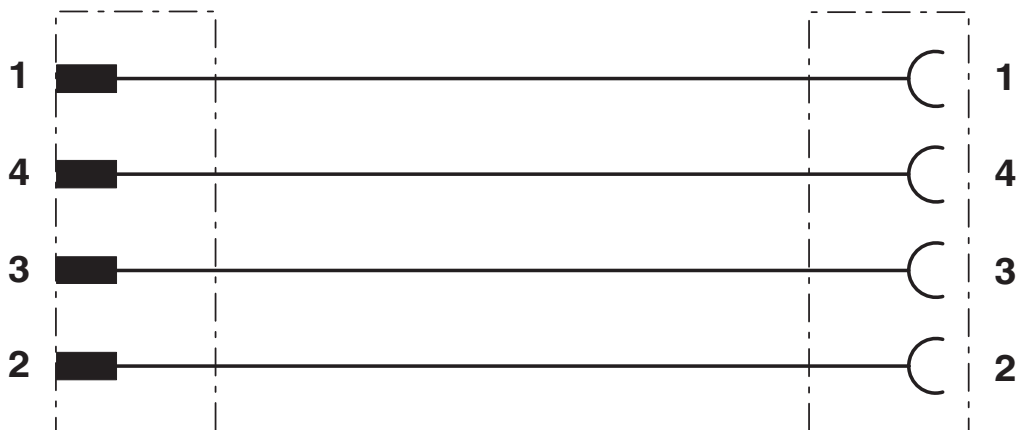


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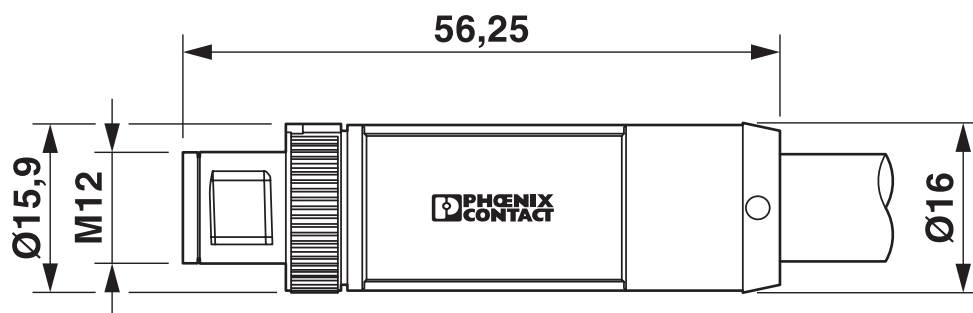
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Drawings

Circuit diagram



Dimensional drawing

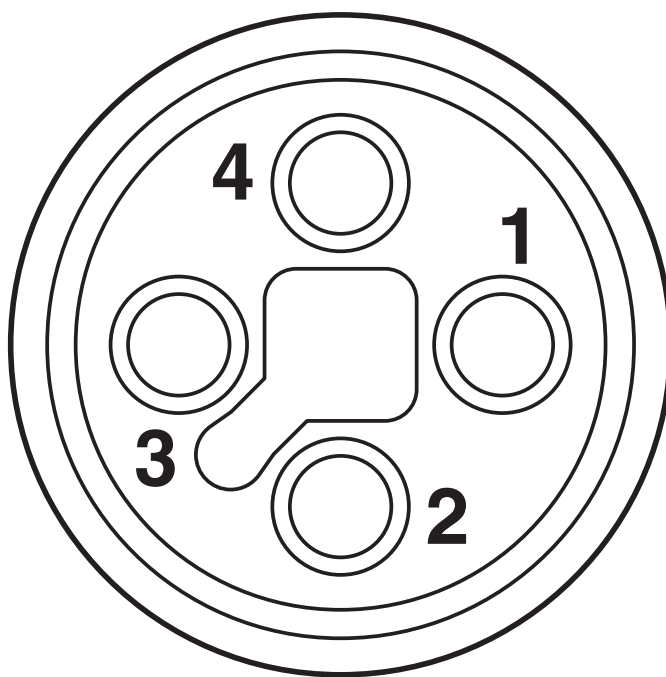


Plug, M12 x 1, straight

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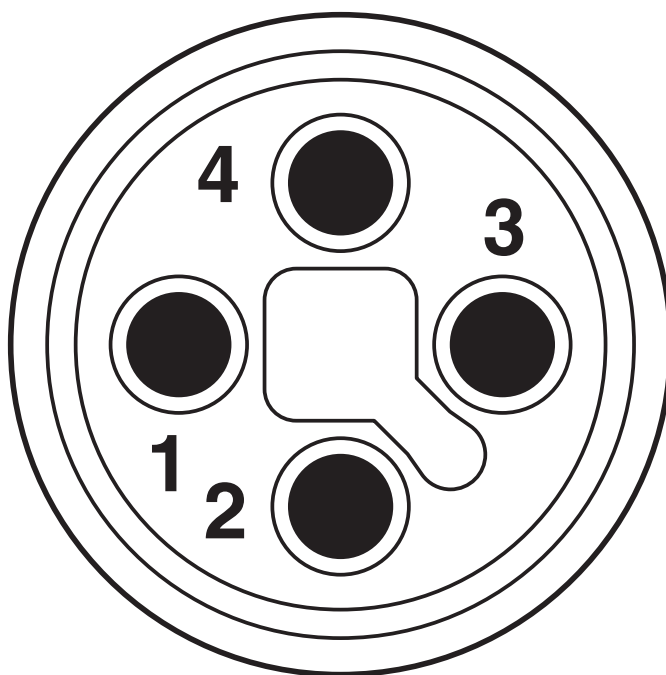
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Schematic diagram



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

Schematic diagram



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

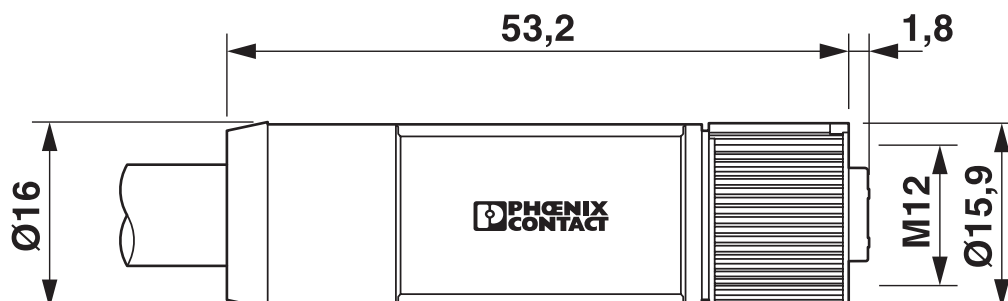
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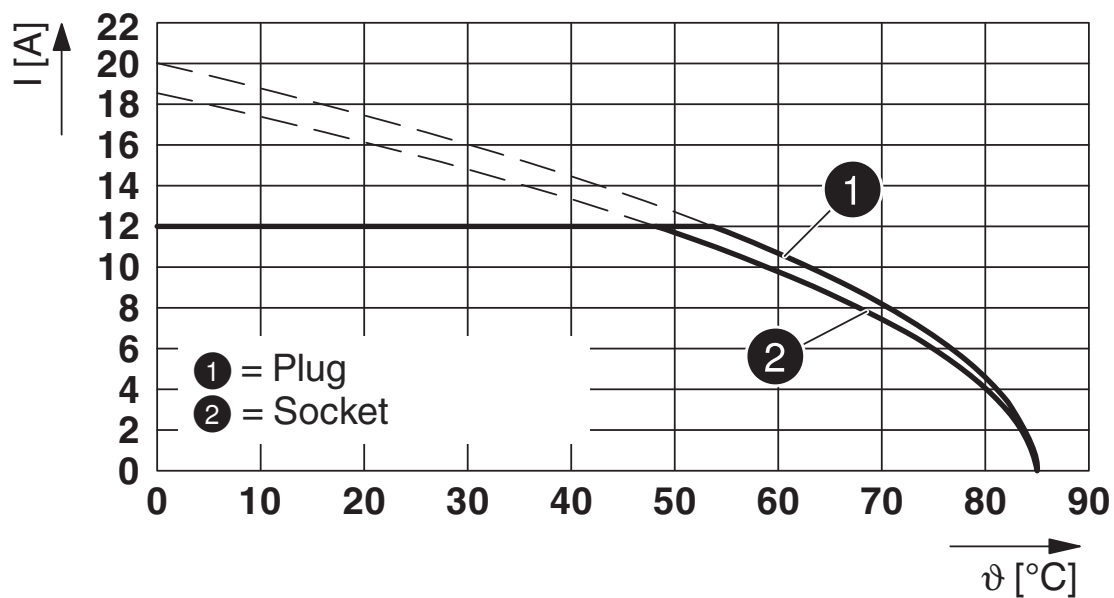
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Dimensional drawing



M12 x 1 socket, straight

Diagram



Base curve

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Approvals

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 UL Listed Approval ID: E468743				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	63 V	12 A	-	- 16

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	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	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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