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SAC-6P- 3,0-PUR/M12FSM PE SH - Power cable

1414911

https://www.phoenixcontact.com/gb/products/1414911

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Power cable, 6-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), free cable end, on Socket straight M12, coding: M, cable length: 3 m, for AC current up to 8 A/690 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against mismatching, thanks to special M-coding
- Shield power reliably – 360° shielding to reduce electromagnetic loads
- Our standard: robust halogen-free PUR cable

Commercial data

Item number	1414911
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF1CGP
Product key	BF1CGP
Catalog page	Page 298 (C-2-2019)
GTIN	4055626035413
Weight per piece (including packing)	529.5 g
Weight per piece (excluding packing)	529.5 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	6
No. of cable outlets	1
Shielded	yes
Coding	M

Data management status

Article revision	04

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	8 A

Connector

Connection 1

Type	free cable end

Connection 2

Type	Socket straight M12
Coding type	M (Power)

Cable/line

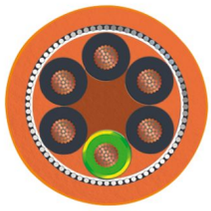
Cable length	3 m

PUR halogen-free orange shielded [PUR]

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Dimensional drawing	
Cable weight	144 kg/km
UL AWM Style	20234 / 10492 (80°C/1000 V)
Number of positions	6
Shielded	yes
Cable type	PUR halogen-free orange shielded [PUR]
Conductor cross section	6x 1.5 mm²
Wire diameter incl. insulation	2.35 mm ±0.05 mm
External cable diameter	10.40 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	black 1, black 2, black 3, black 4, black 5, green/yellow
Thickness, insulation	≥ 0.36 mm
Thickness, outer sheath	approx. 1.15 mm
Max. conductor resistance	≤ 15 Ω/m (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	52 mm
Smallest bending radius, movable installation	104 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 60811-404, 168 h at 100 °C
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
	Low adhesion
	abrasion-resistant
	Resistant to salt water

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Ambient temperature (operation)	-50 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

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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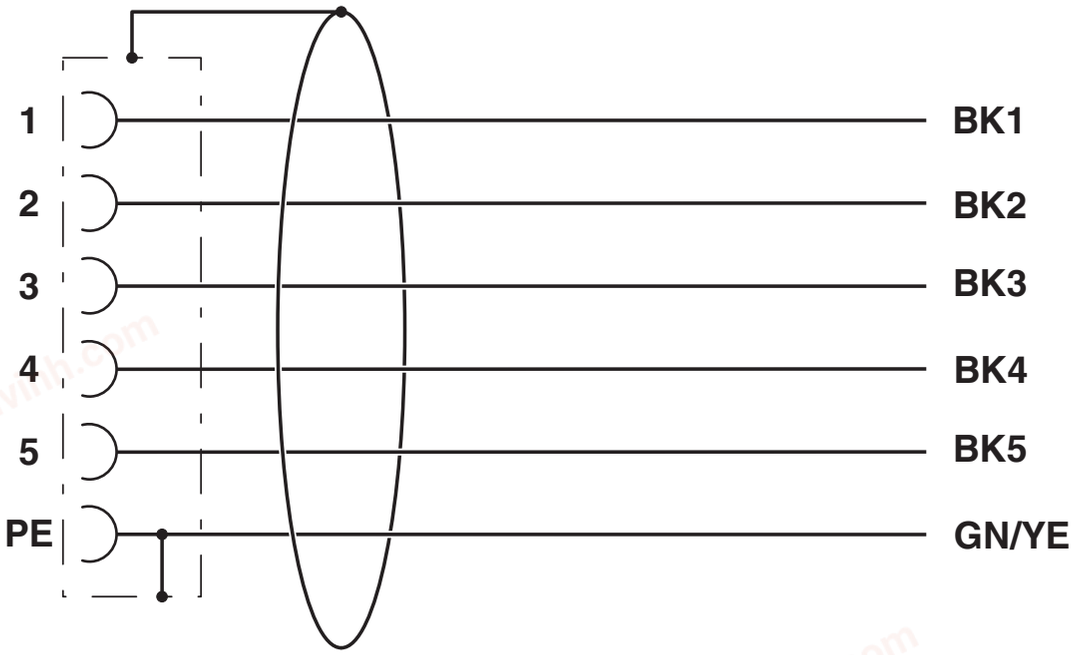
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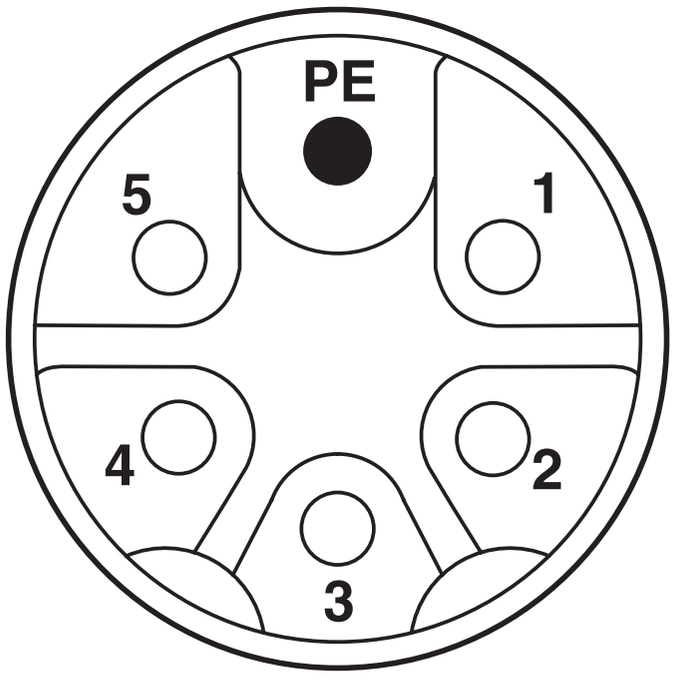
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Drawings

Circuit diagram



Schematic diagram



Pin assignment of M12 socket, 6-pos., M-coded, socket side view

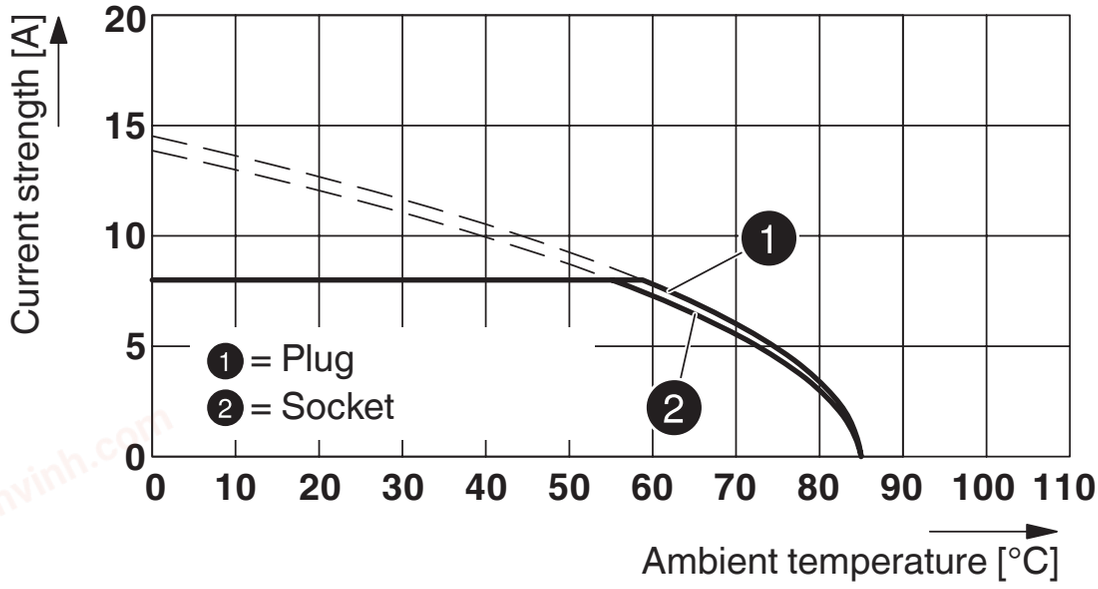
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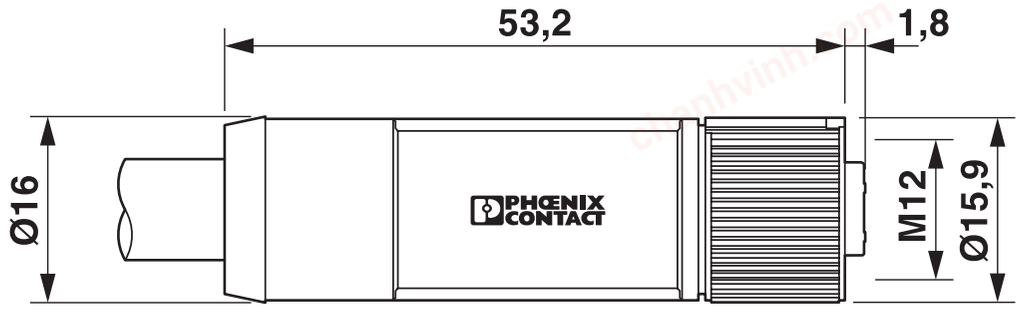
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Diagram



Derating diagram

Dimensional drawing



M12 x 1 socket, straight

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1414911

UL Listed
Approval ID: E468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	10 A	-	- 16

cUL Listed
Approval ID: E468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	10 A	- 16	-

EAC-RoHS
Approval ID: RU D-DE.HB35.B.00387

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

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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