

1414838

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Power cable, 5-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), Plug angled M12, coding: K, on free cable end, cable length: 3 m, for AC current up to 16 A/690 V

Your advantages

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

Commercial data

Item number	1414838
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF1CDQ
Product key	BF1CDQ
Catalog page	Page 292 (C-2-2019)
GTIN	4055626034713
Weight per piece (including packing)	636.66 g
Weight per piece (excluding packing)	636.66 g
Customs tariff number	85444290
Country of origin	PL

SAC-5P-M12MRK/ 3,0-PUR PE SH - Power cable



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Technical data

Product properties

Product type	Power cable
Application	Power supply
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	K

Data management status

Article revision	07
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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	690 V AC
Nominal current I_N	16 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Connector

Connection 1

Type	Plug angled M12
Coding type	K (Power)

Connection 2

Type	free cable end
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Cable/line

Cable length	3 m
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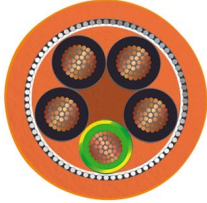
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PUR halogen-free orange [PUR]

Dimensional drawing	
Cable weight	195 kg/km
UL AWM Style	90 °C / 1000 V
Number of positions	5
Shielded	yes
Cable type	PUR halogen-free orange [PUR]
Conductor cross section	5x 2.5 mm²
Wire diameter incl. insulation	2.8 mm ±0.1 mm
External cable diameter	9.90 mm ±0.3 Nm
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, green/yellow
Thickness, insulation	≥ 0.26 mm
Thickness, outer sheath	approx. 0.75 mm
Overall twist	5 cores, twisted
Max. conductor resistance	≤ 8 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	49 mm
Smallest bending radius, movable installation	99 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
Hydrolysis and microbe resistant as per VDE 0282 section 10	

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Other resistance	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

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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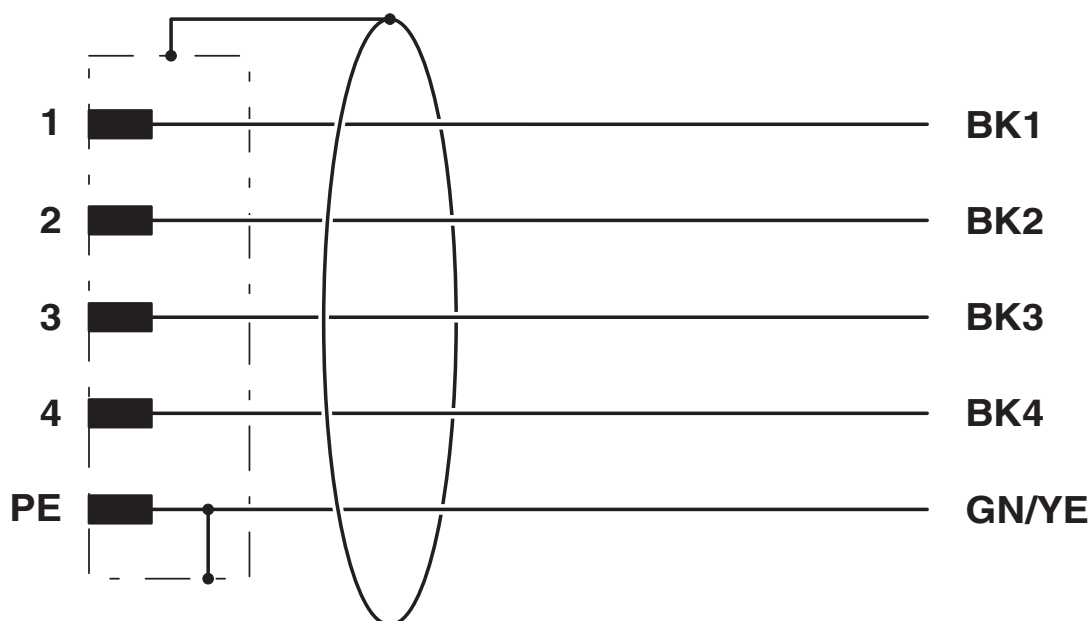
Drawings

Dimensional drawing

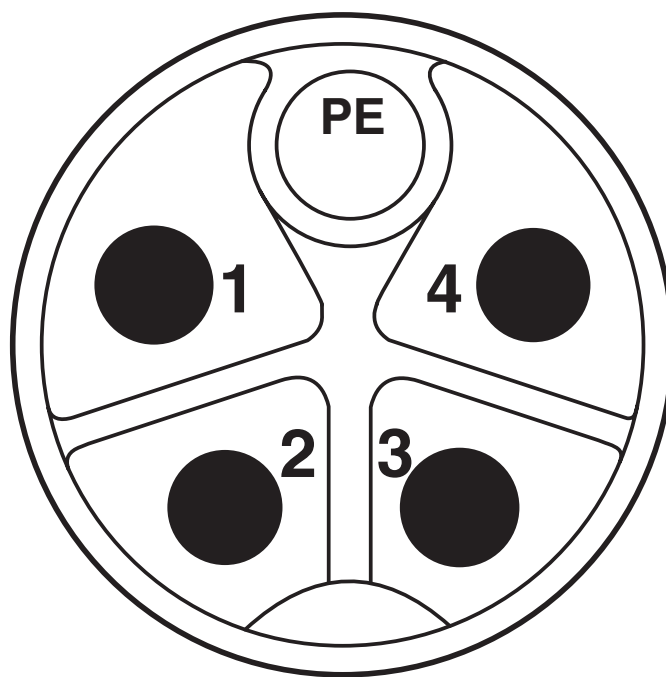


M12 x 1 male plug, angled

Circuit diagram



Schematic diagram



Connector pin assignment of M12 plug, 5-pos., K-coded, pin side view

Diagram



Base curve

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1414838>

	UL Listed Approval ID: E468743			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	600 V	16 A	-	- 14

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	600 V	16 A	- 14	-

	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
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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%
EF3.0 Climate Change	
CO2e kg	4.844 kg CO2e

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