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SAC-5P-M12MRL/ 3,0-280 FE SH - Power cable

1414855

https://www.phoenixcontact.com/gb/products/1414855

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Power cable, 5-position, PUR halogen-free, gray RAL 7001, shielded (Advanced Shielding Technology), Plug angled M12, coding: L, on free cable end, cable length: 3 m, for direct current up to 16 A/63 V

Your advantages

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

Commercial data

Item number	1414855
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF1CDP
Product key	BF1CDP
GTIN	4055626034874
Weight per piece (including packing)	666.52 g
Weight per piece (excluding packing)	666.52 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	5
No. of cable outlets	1
Shielded	yes
Coding	L

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	63 V DC
Nominal current I_N	16 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Connector

Connection 1

Type	Plug angled M12
Coding type	L (Power)

Connection 2

Type	free cable end

Cable/line

Cable length	3 m

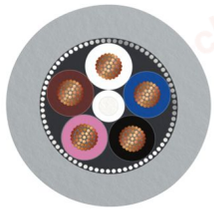
PUR halogen-free gray [280]

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Dimensional drawing	
Cable weight	202 kg/km
UL AWM Style	20233 / 10493 (80°C/300 V)
Number of positions	5
Shielded	yes
Cable type	PUR halogen-free gray [280]
Conductor cross section	5x 2.5 mm²
Wire diameter incl. insulation	2.85 mm ±0.1 mm
External cable diameter	10.40 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black, pink
Thickness, insulation	≥ 0.31 mm
Thickness, outer sheath	approx. 0.76 mm
Max. conductor resistance	≤ 8 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 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: 5000000, 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
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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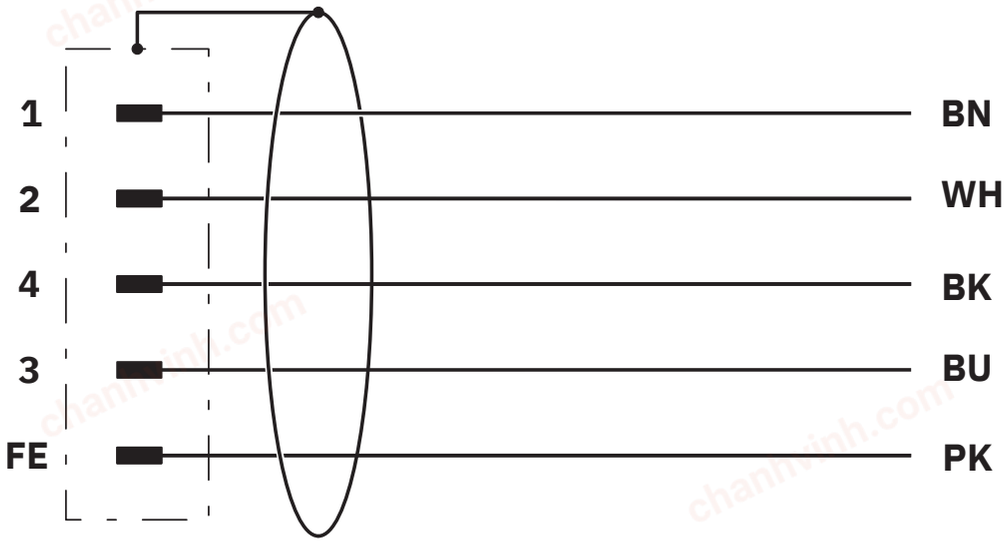
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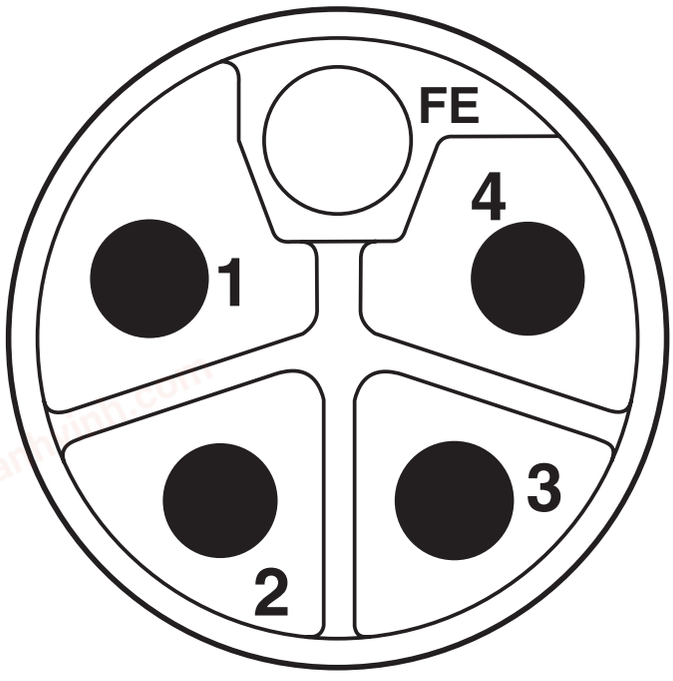
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Drawings

Circuit diagram



Schematic diagram



Pin assignment of M12 connector, 5-pos., L-coded, pin side view

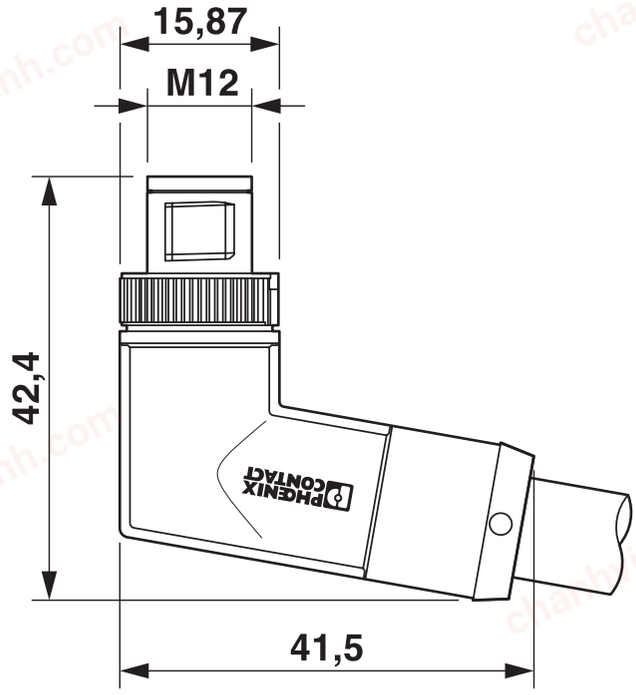
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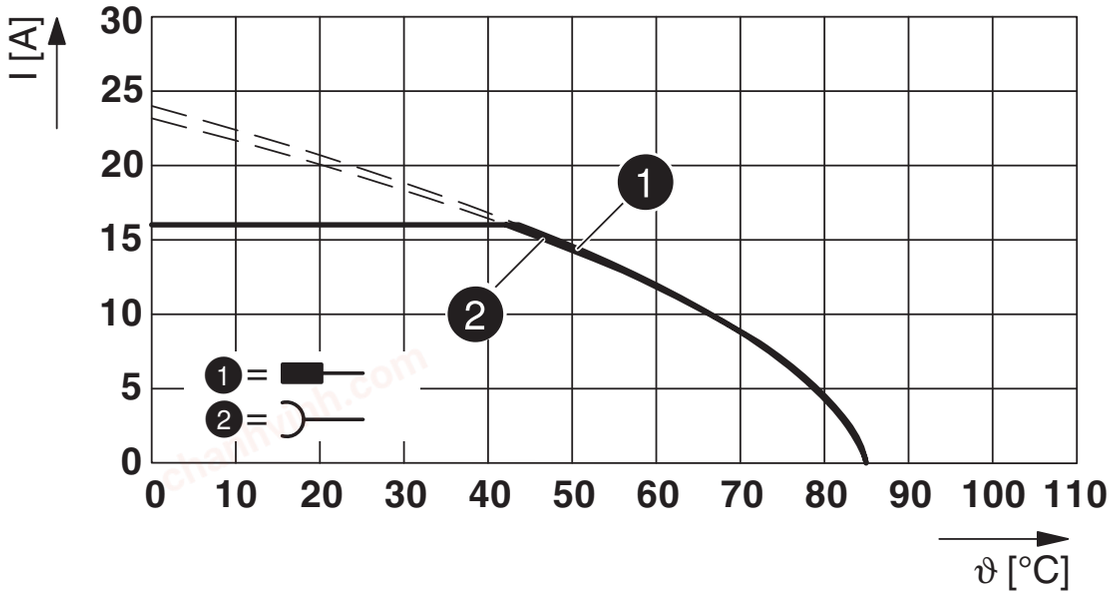
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Dimensional drawing



M12 x 1 male plug, angled

Diagram



Base curve

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1414855

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

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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%

EF3.0 Climate Change

CO2e kg	8.078 kg CO2e

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