

SAC-5P-M12MSL/10,0-290 FE - Power cable



1424596

<https://www.phoenixcontact.com/us/products/1424596>

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Power cable, 5-position, PUR halogen-free, gray RAL 7001, Plug straight M12, coding: L, on free cable end, cable length: 10 m, For direct current up to 12 A/63 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against mismatching, thanks to special L-coding
- Our standard: robust halogen-free PUR cable

Commercial data

Item number	1424596
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	AF1CDP
GTIN	4055626375212
Weight per piece (including packing)	1,271.64 g
Weight per piece (excluding packing)	1,271.64 g
Customs tariff number	85444290
Country of origin	DE

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Technical data

Product properties

Product type	Power cable
Application	Energy supply
Number of positions	5
No. of cable outlets	1
Shielded	no
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	$\geq 100 \text{ M}\Omega$
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	L (Power)

Connection 2

Type	free cable end
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Cable/line

Cable length	10 m
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PUR halogen-free gray [290]

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Dimensional drawing		
Cable weight	127 kg/km	
UL AWM Style	20233 / 10493 (80°C/300 V)	
Number of positions	5	
Shielded	no	
Cable type	PUR halogen-free gray [290]	
Conductor structure, voltage supply	78x 0.15 mm	
AWG power supply	16	
Conductor cross section	5x 1.5 mm²	
Wire diameter incl. insulation	2.35 mm ±0.05 mm	
External cable diameter	9.10 mm ±0.25 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	≥ 0.25 mm	
Thickness, outer sheath	approx. 1.30 mm	
Max. conductor resistance	≤ 13 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	46 mm	
Smallest bending radius, movable installation	91 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	

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Ambient temperature (operation)	abrasion-resistant
	Resistant to salt water
	-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) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

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

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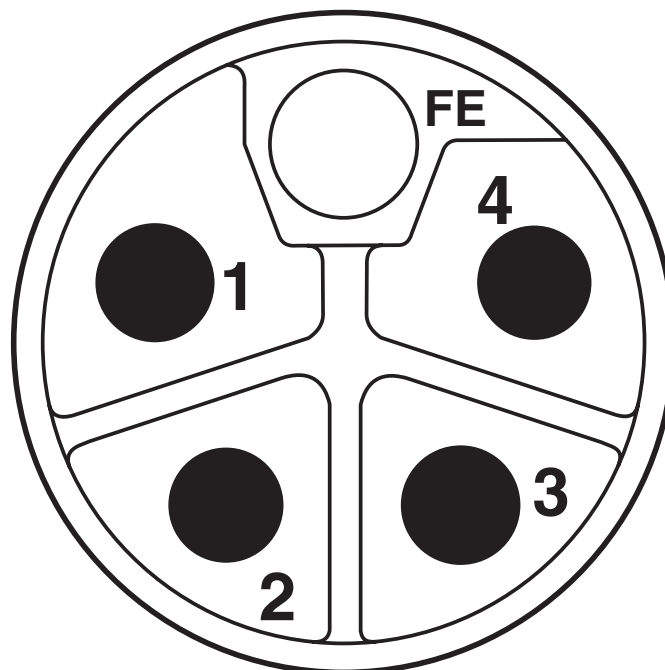
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram

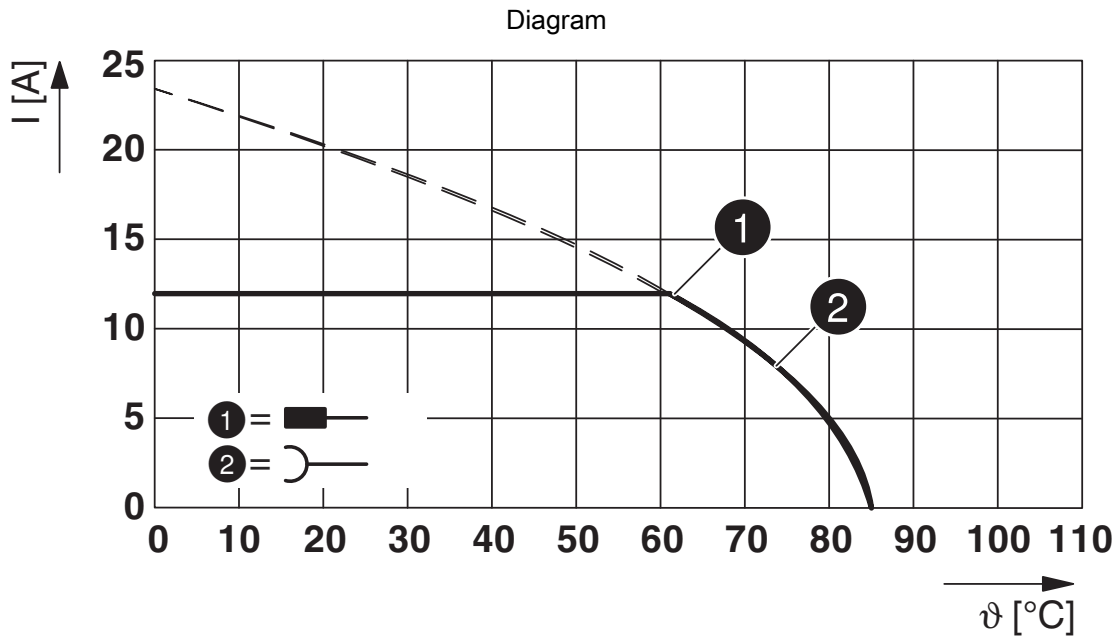


Pin assignment of M12 connector, 5-pos., L-coded, pin side view

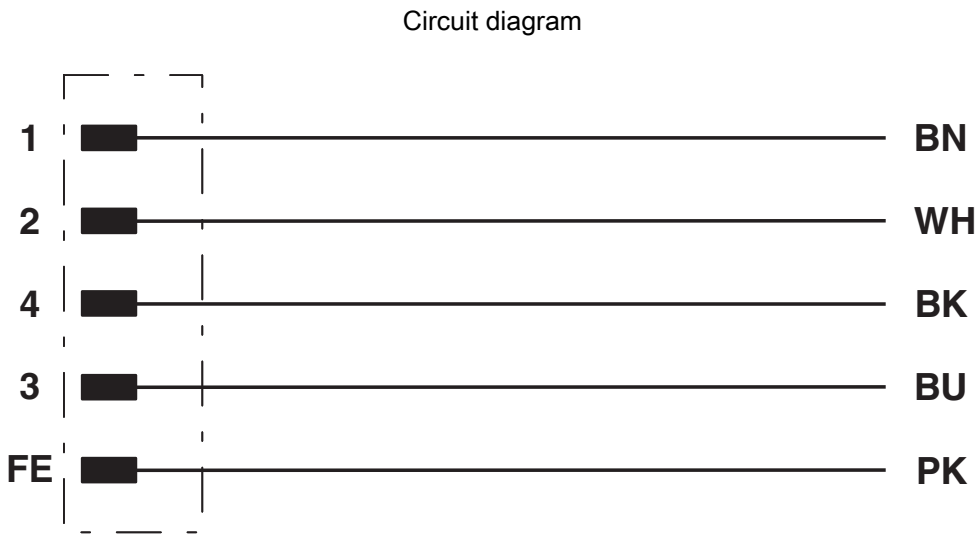
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Base curve



Contact assignment of the M12 plug

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Approvals

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UL Listed

Approval ID: E468743



cUL Listed

Approval ID: E468743



EAC-RoHS

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

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Classifications

ECLASS

ECLASS-13.0	27060327
ECLASS-15.0	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
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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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EF3.0 Climate Change

CO2e kg	7.437 kg CO2e
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