

SAC-5P-M12MSL/3,0-500/FSL FE - Power cable



1425016

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Power cable, 5-position, PVC, gray RAL 7001, Plug straight M12, coding: L, on Socket straight M12, coding: L, 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

Commercial data

Item number	1425016
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	AF1CDP
GTIN	4055626383538
Weight per piece (including packing)	671.5 g
Weight per piece (excluding packing)	650 g
Customs tariff number	85444290
Country of origin	PL

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	16 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	Socket straight M12
Coding type	L (Power)

Cable/line

Cable length	3 m
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PVC gray [500]

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Dimensional drawing	
Cable weight	205 kg/km
UL AWM Style	2464 (80°C/300 V)
Number of positions	5
Shielded	no
Cable type	PVC gray [500]
Conductor structure, voltage supply	141x 0.15 mm
AWG power supply	14
Conductor cross section	5x 2.5 mm²
Wire diameter incl. insulation	3 mm ±0.1 mm
External cable diameter	10.10 mm ±0.3 mm
Outer sheath, material	PVC
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, white, blue, black, pink
Thickness, insulation	≥ 0.36 mm
Thickness, outer sheath	approx. 0.76 mm
Max. conductor resistance	≤ 8 Ω/km (at 20 °C)
Insulation resistance	≥ 100 MΩ*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	51 mm
Smallest bending radius, movable installation	101 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
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 60 °C
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -20 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

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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

Dimensional drawing



M12 x 1 socket, straight

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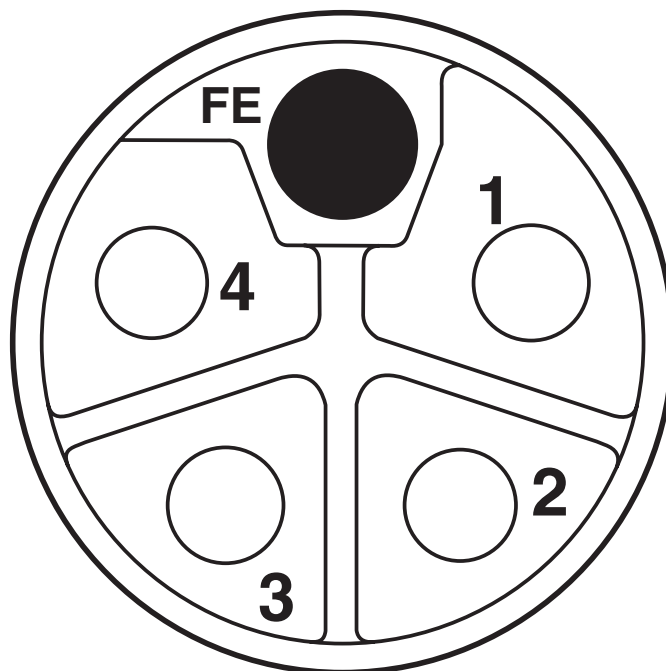
<https://www.phoenixcontact.com/us/products/1425016>

Schematic diagram

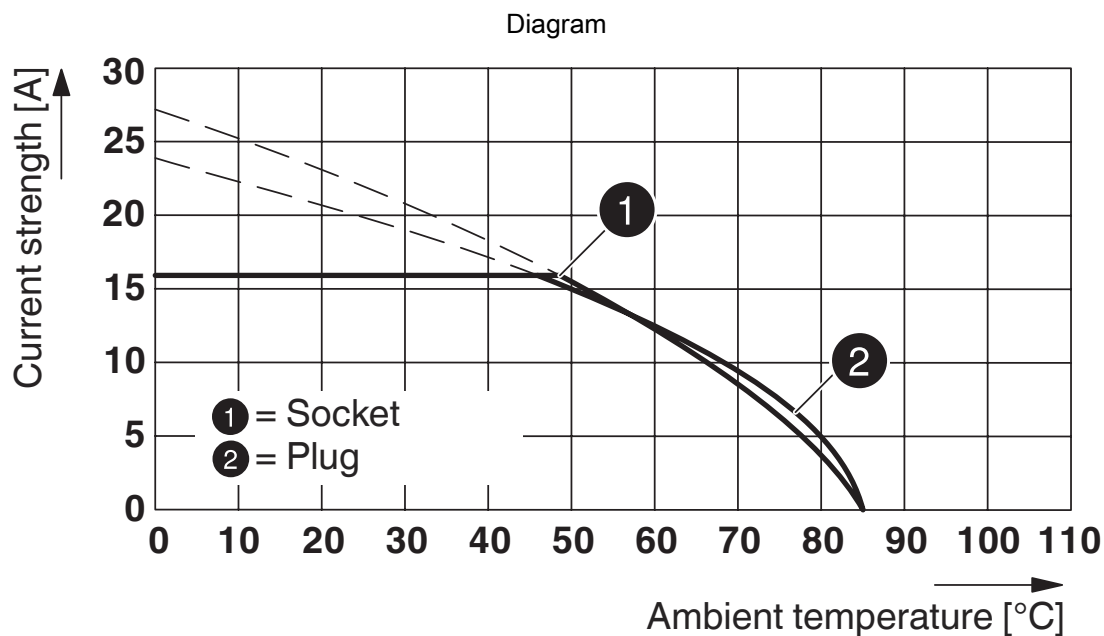


Pin assignment of M12 connector, 5-pos., L-coded, pin side view

Schematic diagram



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



Base curve

Circuit diagram



Contact assignment of M12 connector/socket

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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
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	4.656 kg CO2e

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