

1425084
<https://www.phoenixcontact.com/us/products/1425084>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, 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
- Our standard: robust halogen-free PUR cable

Commercial data

Item number	1425084
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	AF1CCR
GTIN	4055626384221
Weight per piece (including packing)	465.4 g
Weight per piece (excluding packing)	465 g
Customs tariff number	85444290
Country of origin	PL

SAC-4P-M12MSL/3,0-PUR/FSL - Power cable



1425084

<https://www.phoenixcontact.com/us/products/1425084>

Technical data

Product properties

Product type	Power cable
Application	Energy supply
Number of positions	4
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
-----------------------------	------------

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
--------------	-----

PUR halogen-free black [PUR]

SAC-4P-M12MSL/3,0-PUR/FSL - Power cable



1425084

<https://www.phoenixcontact.com/us/products/1425084>

Dimensional drawing	
Cable weight	132 kg/km
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure, voltage supply	80x 0.20 mm
AWG power supply	14
Conductor cross section	4x 2.5 mm²
Wire diameter incl. insulation	2.65 mm ±0.1 mm
External cable diameter	7.90 mm ±0.25 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black
Thickness, insulation	≥ 0.31 mm
Thickness, outer sheath	approx. 0.70 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	40 mm
Smallest bending radius, movable installation	79 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
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: 500000, Torsional frequency: 35 cycles/min.
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 758/1581/2556 (horizontal, FT2) According to DIN EN 60332-2-2 (20 s)
Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C Hydrolysis and microbe resistant as per VDE 0282 section 10

SAC-4P-M12MSL/3,0-PUR/FSL - Power cable



1425084

<https://www.phoenixcontact.com/us/products/1425084>

Other resistance	Low adhesion
	abrasion-resistant
	Resistant to salt water
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) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

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

SAC-4P-M12MSL/3,0-PUR/FSL - Power cable



1425084

<https://www.phoenixcontact.com/us/products/1425084>

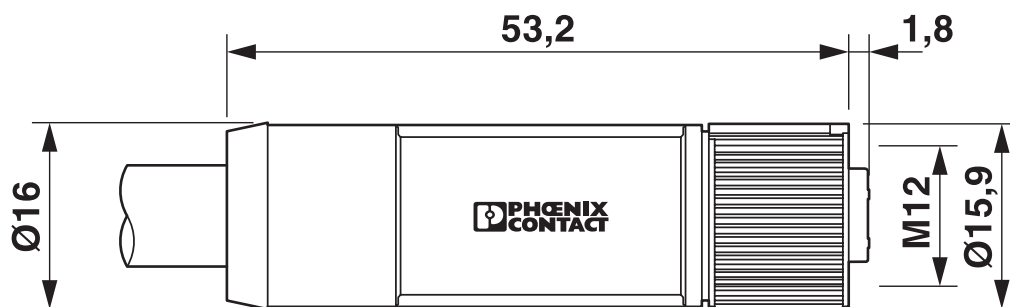
Drawings

Dimensional drawing



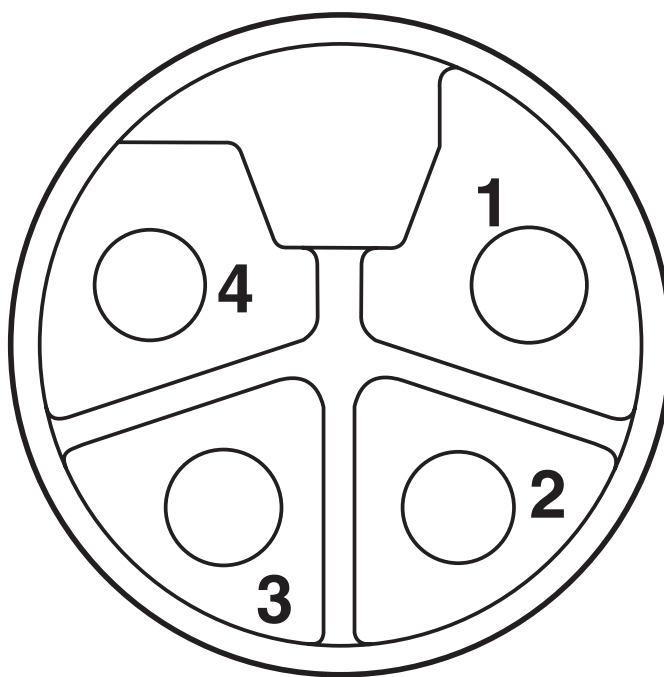
Plug, M12 x 1, straight, shielded

Dimensional drawing



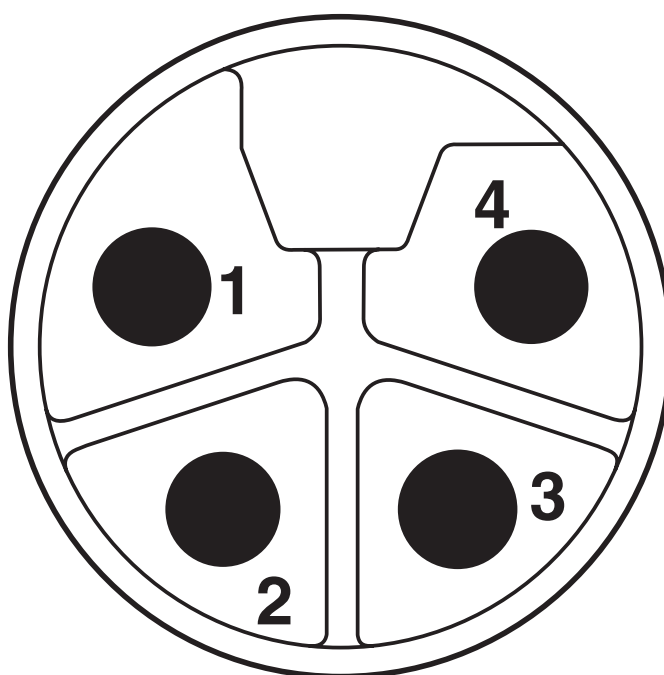
M12 x 1 socket, straight

Schematic diagram



Pin assignment of M12 socket, 4-pos.

Schematic diagram



Pin assignment M12 male connector, 4-pos.

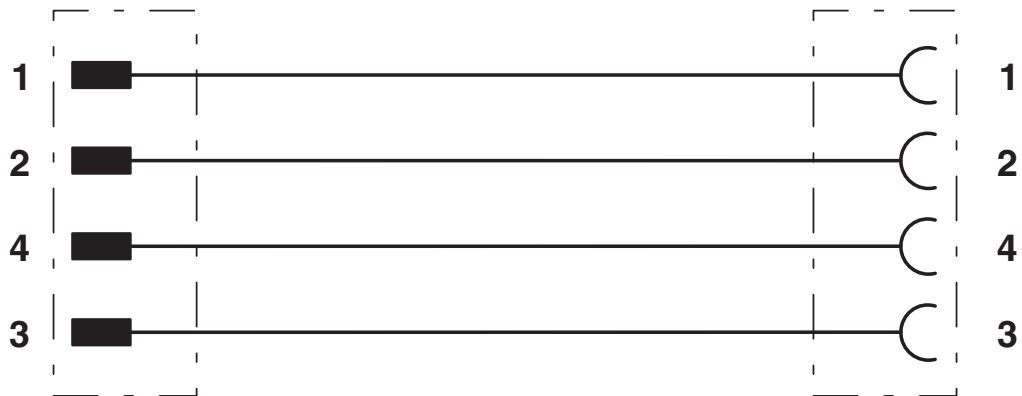
SAC-4P-M12MSL/3,0-PUR/FSL - Power cable



1425084

<https://www.phoenixcontact.com/us/products/1425084>

Circuit diagram



Contact assignment of M12 connector/socket

SAC-4P-M12MSL/3,0-PUR/FSL - Power cable



1425084

<https://www.phoenixcontact.com/us/products/1425084>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1425084>



UL Listed

Approval ID: E468743



cUL Listed

Approval ID: E468743



EAC-RoHS

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

SAC-4P-M12MSL/3,0-PUR/FSL - Power cable



1425084

<https://www.phoenixcontact.com/us/products/1425084>

Classifications

ECLASS

ECLASS-13.0	27060327
ECLASS-15.0	27060327

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

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	6.591 kg CO2e