

SAC-5P-M12MSL FE SH/.../... - Power cable



1276578

<https://www.phoenixcontact.com/us/products/1276578>

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, 5-position, Variable cable type, shielded (Advanced Shielding Technology), Plug straight M12, coding: L, on free cable end, cable length: Free input (0.2 ... 40.0 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

Commercial data

Item number	1276578
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF17
Product key	AF1CDP
Customs tariff number	85444290
Country of origin	PL

SAC-5P-M12MSL FE SH/.../... - Power cable



1276578

<https://www.phoenixcontact.com/us/products/1276578>

Technical data

Product properties

Product type	Power cable
Application	Energy 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	$\geq 100 \text{ M}\Omega$
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	free cable end
------	----------------

Cable/line

Cable length	Free input (0.2 ... 40.0 m)
--------------	-----------------------------

PUR halogen-free gray [280]

Cable weight	185 kg/km
--------------	-----------

SAC-5P-M12MSL FE SH/.../... - Power cable



1276578

<https://www.phoenixcontact.com/us/products/1276578>

UL AWM Style	80°C/300 V
Number of positions	5
Shielded	yes
Cable type	PUR halogen-free gray [280]
	PUR halogen-free gray 280
Conductor structure, voltage supply	80x 0.20 mm
AWG power supply	14
Conductor cross-section	5x 2.5 mm ²
Wire diameter incl. insulation	2.65 mm ±0.1 mm
External cable diameter	9.50 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	≥ 0.14 mm
Thickness, outer sheath	approx. 0.75 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	48 mm
Smallest bending radius, movable installation	95 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/s ²
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	in accordance with UL 758/1581 FT2
	According to DIN EN 60332-2-2 (20 s)
Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C
Other resistance	hydrolysis and microbe resistant
	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)

PVC gray [500]

Cable weight	231 kg/km
UL AWM Style	20233 / 10493 (80°C/300 V)

SAC-5P-M12MSL FE SH/.../... - Power cable



1276578

<https://www.phoenixcontact.com/us/products/1276578>

Number of positions	5
Shielded	yes
Cable type	PVC gray [500]
	PVC gray 500
Conductor structure, voltage supply	141x 0.15 mm
AWG power supply	14
Conductor cross-section	5x 2.5 mm ²
Wire diameter incl. insulation	3 mm ±0.1 mm
External cable diameter	10.80 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, gray
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	54 mm
Smallest bending radius, movable installation	108 mm
Dynamic load capacity (bending)	Max. bending cycles: 1000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
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

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-5P-M12MSL FE SH/.../... - Power cable

1276578

<https://www.phoenixcontact.com/us/products/1276578>

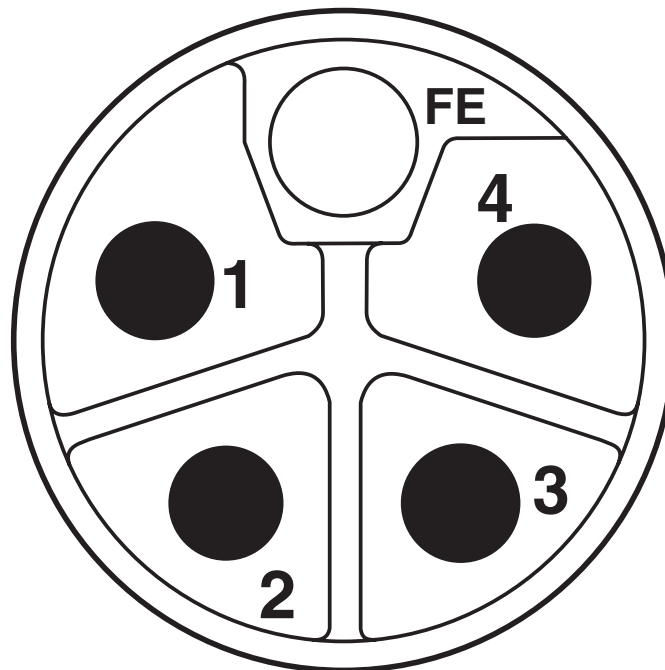
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram

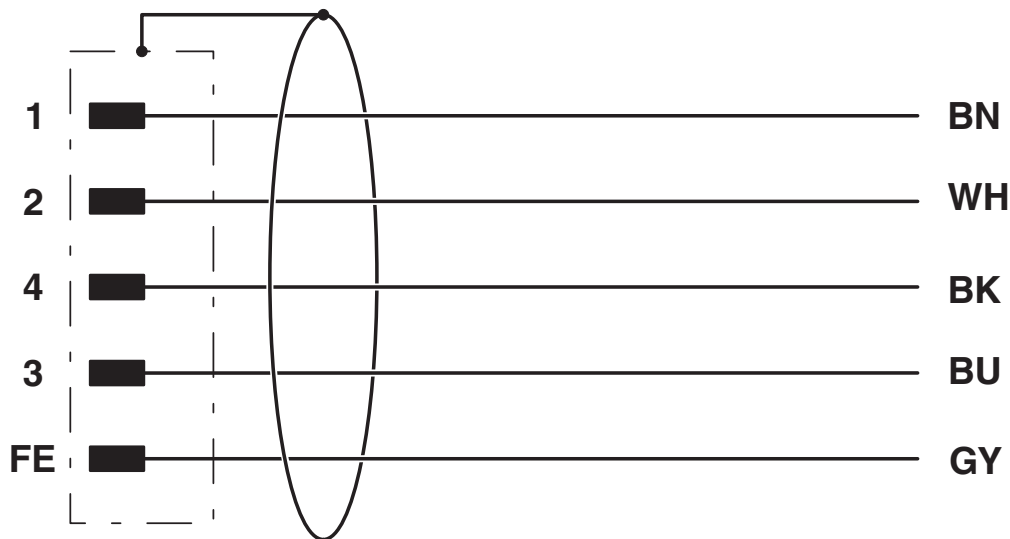


Pin assignment of M12 connector, 5-pos., L-coded, pin side view



Base curve

Circuit diagram



Contact assignment of the M12 plug

SAC-5P-M12MSL FE SH/.../... - Power cable



1276578

<https://www.phoenixcontact.com/us/products/1276578>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1276578>

 **UL Listed**
Approval ID: E468743

 **cUL Listed**
Approval ID: E468743

SAC-5P-M12MSL FE SH/.../... - Power cable



1276578

<https://www.phoenixcontact.com/us/products/1276578>

Classifications

ECLASS

ECLASS-13.0	27060327
ECLASS-15.0	27060327

ETIM

ETIM 10.0	EC001855
-----------	----------

UNSPSC

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

SAC-5P-M12MSL FE SH/.../... - Power cable



1276578

<https://www.phoenixcontact.com/us/products/1276578>

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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com