

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

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, 6-position, PVC, orange RAL 2003, shielded (Advanced Shielding Technology), Plug angled M12, coding: M, on free cable end, cable length: 5 m, for AC current up to 8 A/690 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against mismatching, thanks to special M-coding
- Shield power reliably – 360° shielding to reduce electromagnetic loads

Commercial data

Item number	1414944
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	BF1CGP
Catalog page	Page 299 (C-2-2019)
GTIN	4055626035710
Weight per piece (including packing)	1,036.06 g
Weight per piece (excluding packing)	1,036.06 g
Customs tariff number	85444290
Country of origin	PL

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

Technical data

Product properties

Product type	Power cable
Application	Power supply
Number of positions	6
No. of cable outlets	1
Shielded	yes
Coding	M

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	690 V AC
Nominal current I_N	8 A

Connector

Connection 1

Type	Plug angled M12
Coding type	M (Power)

Connection 2

Type	free cable end
------	----------------

Cable/line

Cable length	5 m
--------------	-----

PVC orange [PVC]

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

Dimensional drawing	
Cable weight	192 kg/km
UL AWM Style	2570 / 10914 (80°C/1000 V)
Number of positions	6
Shielded	yes
Cable type	PVC orange [PVC]
Conductor cross section	6x 1.5 mm²
Wire diameter incl. insulation	2.4 mm ±0.05 mm
External cable diameter	10.40 mm ±0.25 mm
Outer sheath, material	PVC
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	black 1, black 2, black 3, black 4, black 5, green/yellow
Thickness, insulation	≥ 0.36 mm
Thickness, outer sheath	approx. 0.76 mm
Max. conductor resistance	≤ 15 Ω/m (at 20 °C)
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 1000 V AC
Test voltage	≥ 10000 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
Max. bending cycles	1000000
Minimum bending radius, drag chain applications	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

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

Ambient conditions

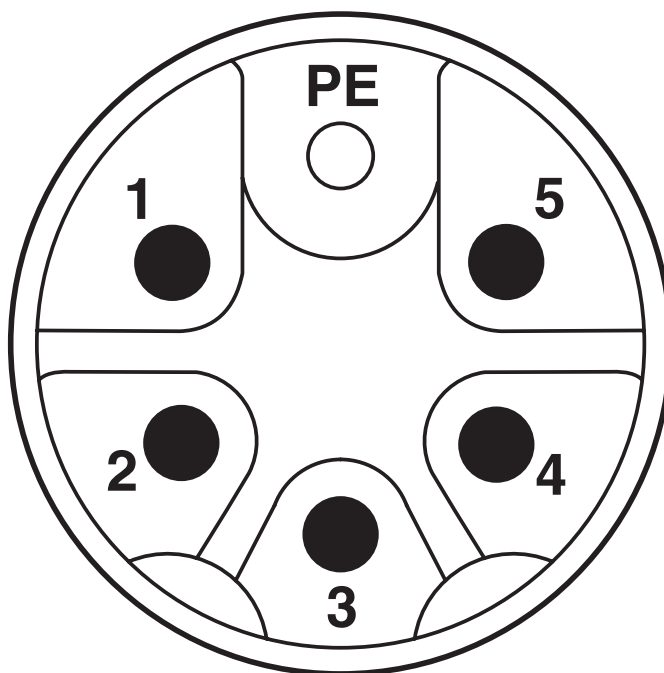
Degree of protection	IP65
	IP67 (without preloading, as additional test in accordance with IEC 60529)
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

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

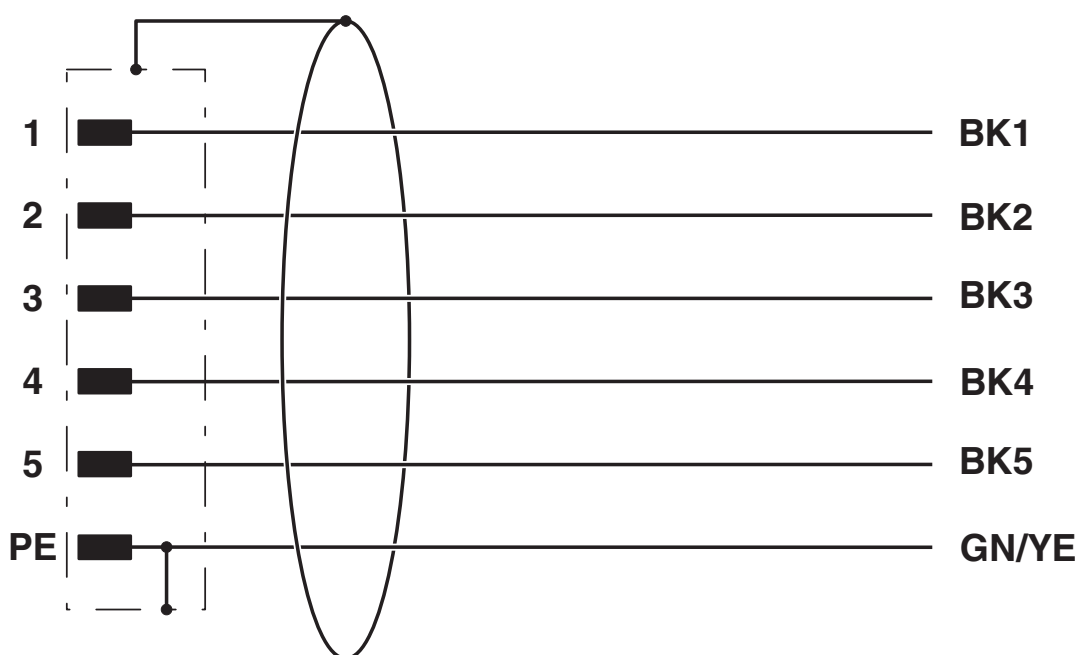
Drawings

Schematic diagram



Pin assignment of M12 connector, 6-pos., M-coded, pin side view

Circuit diagram



SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

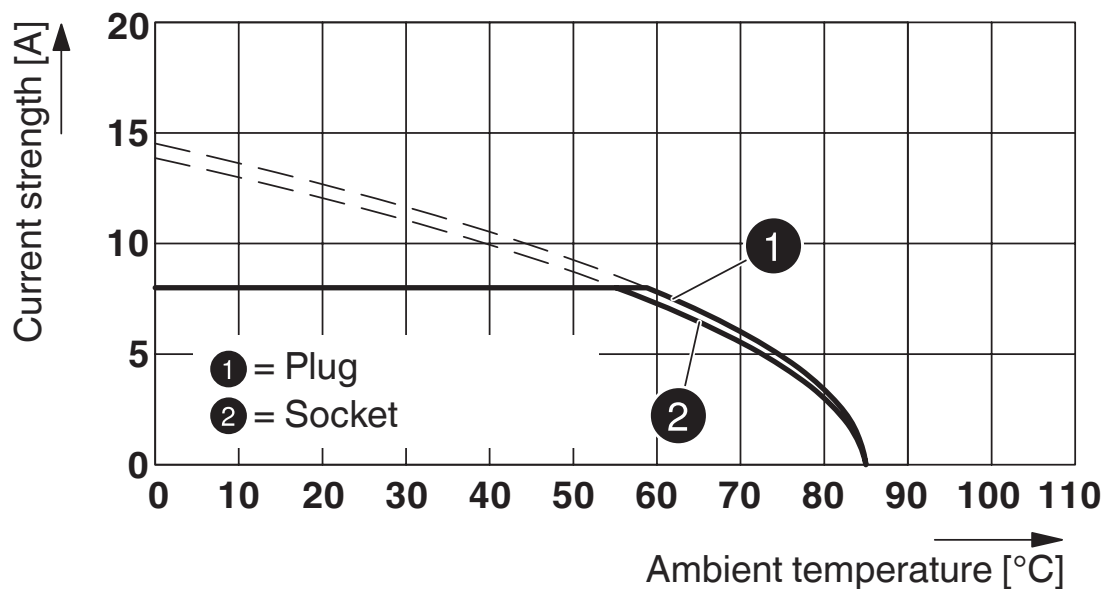
<https://www.phoenixcontact.com/us/products/1414944>

Dimensional drawing



M12 x 1 male plug, angled

Diagram



Current carrying capacity

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1414944>

 UL Listed Approval ID: E468743				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	10 A	-	- 16

 cUL Listed Approval ID: E468743				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	10 A	- 16	-

cULus Listed				
---------------------	--	--	--	--

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060327

ETIM

ETIM 8.0	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%

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

Accessories

PROT-M12 FS - Sealing cap

1560251

<https://www.phoenixcontact.com/us/products/1560251>



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

UCT-WMT (23X4) - Conductor marker

0801453

<https://www.phoenixcontact.com/us/products/0801453>



Conductor marker, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 30

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

UC-WMT (23X4) - Conductor marker

0819411

<https://www.phoenixcontact.com/us/products/0819411>



Conductor marker, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 24

US-WMT (23X4) - Cable marker

0828769

<https://www.phoenixcontact.com/us/products/0828769>



Cable marker, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 56

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable

1414944

<https://www.phoenixcontact.com/us/products/1414944>



WMTW (23X4)R - Cable marker

0831004

<https://www.phoenixcontact.com/us/products/0831004>



Cable marker, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 3000

PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

<https://www.phoenixcontact.com/us/products/1430873>

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable

1414944

<https://www.phoenixcontact.com/us/products/1414944>



WP-EC TPE HF 13,0 BK - Transition sleeve from hose to cable

3240975

<https://www.phoenixcontact.com/us/products/3240975>



Transition sleeve from hose to cable, material: TPE, color: black, flammability rating in acc. with UL 94: HB

WP-PA HF 13,0 BK - Protective hose

3240681

<https://www.phoenixcontact.com/us/products/3240681>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

WP-PA HF-HB 13,0 BK - Protective hose

3240839

<https://www.phoenixcontact.com/us/products/3240839>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

SAC BIT M12-D16 - Tool

1200305

<https://www.phoenixcontact.com/us/products/1200305>



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, knurl diameter: 16 mm, for 4 mm hexagonal drive

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

TSD 04 SAC - Torque screwdriver

1208429

<https://www.phoenixcontact.com/us/products/1208429>



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

TSD-M 1,2NM - Torque screwdriver

1212224

<https://www.phoenixcontact.com/us/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable

1414944

<https://www.phoenixcontact.com/us/products/1414944>



TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

<https://www.phoenixcontact.com/us/products/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/us/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

CUTFOX-S VDE - Diagonal cutter

1212207

<https://www.phoenixcontact.com/us/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

WIREFOX-D 16 - Stripping tool

1212173

<https://www.phoenixcontact.com/us/products/1212173>



Stripping tool, for stripping lines (specially for fiber optics lines) of Ø 4 - 16 mm

SAC-6P-M12MRM/ 5,0-PVC PE SH - Power cable



1414944

<https://www.phoenixcontact.com/us/products/1414944>

WIREFOX-D 40 - Stripping tool

1212161

<https://www.phoenixcontact.com/us/products/1212161>



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

WIREFOX 10 - Stripping tool

1212150

<https://www.phoenixcontact.com/us/products/1212150>



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

Phoenix Contact 2024 © - 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