SAC-4P- 5,0-PUR/M12FRS PE SH - Power cable

1424102

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Power cable, 4-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), free cable end, on Socket angled M12, coding: S, cable length: 5 m, for AC current up to 12 A/690 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against incorrect connection using special S-coding
- Shield power reliably – 360° shielding to reduce electromagnetic loads
- Our standard: robust halogen-free PUR cable

Commercial data

Item number	1424102
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	AF1CCP
GTIN	4046356693073
Weight per piece (including packing)	608.2 g
Weight per piece (excluding packing)	743 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Power cable
Application	Energy supply
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	S

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	≥ 100 MΩ
Nominal voltage U_N	690 V AC
Nominal current I_N	12 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Connector

Connection 1

Type	free cable end

Connection 2

Type	Socket angled M12
Coding type	S (Power)

Cable/line

Cable length	5 m

PUR halogen-free orange shielded [PUR]

UL AWM Style	80°C/1000 V

Number of positions	4
Shielded	yes
Cable type	PUR halogen-free orange shielded [PUR]
Conductor structure, voltage supply	44x 0.20 mm
AWG power supply	16
Conductor cross-section	4x 1.5 mm²
Wire diameter incl. insulation	≤ 2.35 mm
External cable diameter	8.20 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	black 1, black 2, black 3, green/yellow
Thickness, insulation	0.36 mm
Thickness, outer sheath	0.90 mm
Overall twist	4 wires optimally twisted
Max. conductor resistance	≤ 14.1 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*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
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
Flame resistance	According to DIN EN 60332-2-2 (20 s)
	UL 1581, FT2
Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C
Other resistance	UV resistant
	Low adhesion
Ambient temperature (operation)	-50 °C ... 85 °C (cable, fixed installation)
	-30 °C ... 85 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

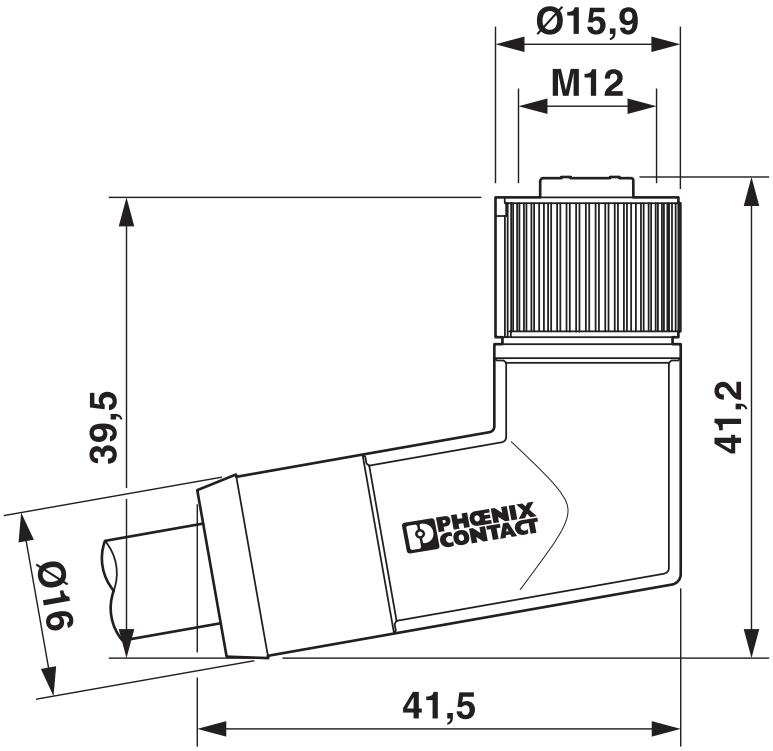
Degree of protection	IP65
	IP67 (without preloading, as additional test in accordance with IEC 60529)
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

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

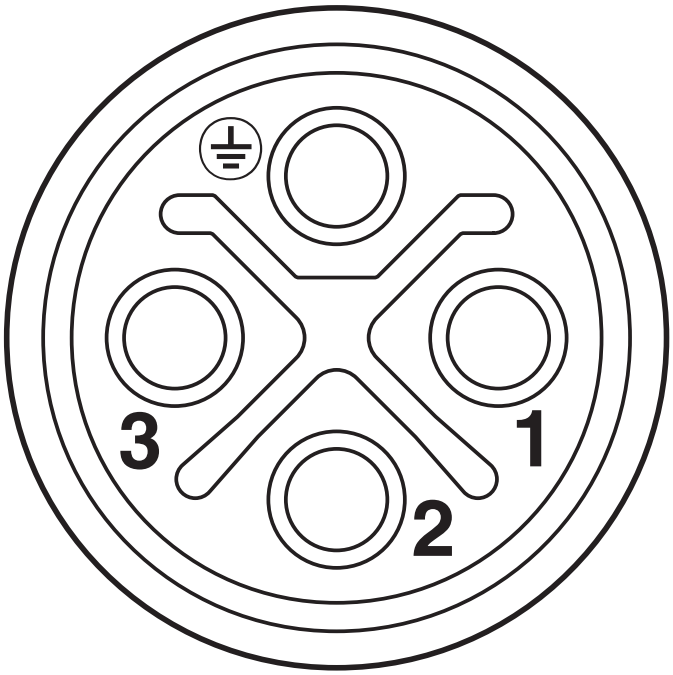
Drawings

Dimensional drawing



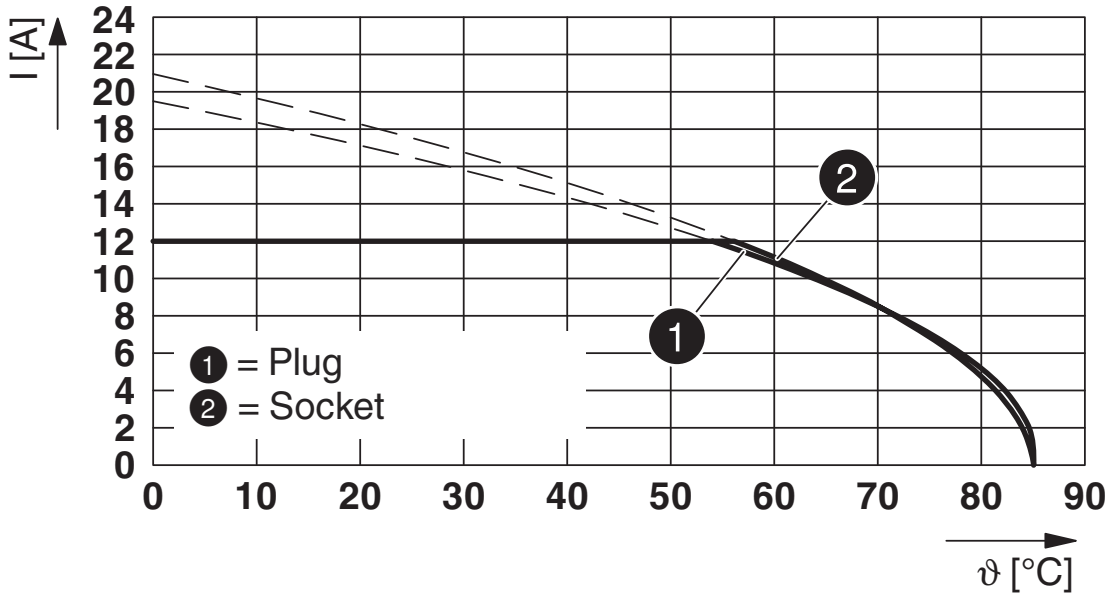
M12 x 1 socket, angled

Schematic diagram



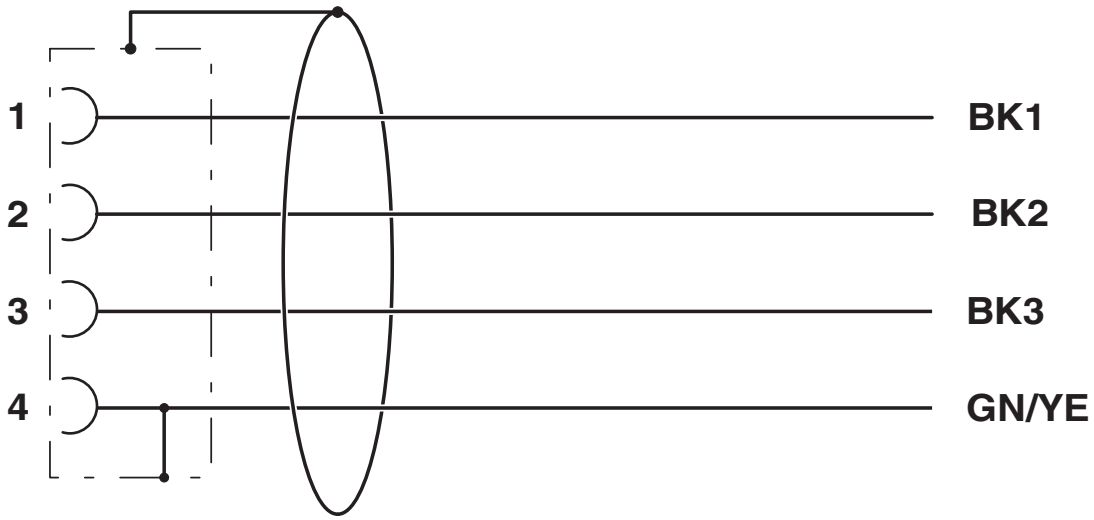
Pin assignment of M12 socket, 4-pos., S-coded, socket side view

Diagram



Base curve

Circuit diagram



Contact assignment of the M12 socket

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1424102

UL Listed
Approval ID: FILE E 468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	12 A	- 16	- 16

cUL Listed
Approval ID: FILE E 468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	600 V	12 A	- 16	-

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

Classifications

ECLASS

ECLASS-13.0	27060327
ECLASS-15.0	27060327

ETIM

ETIM 10.0	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%

EF3.1 Climate Change

CO2e kg	14.565 kg CO2e

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