

Power cable - SAC-5P- 3,0-280/M12FRL FE SH - 1414787

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Power cable, 5-position, PUR halogen-free, gray RAL 7001, shielded (Advanced Shielding Technology), Socket angled M12, coding: L, on free cable end, cable length: 3 m, for direct current up to 16 A/63 V

Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: DC connectors for up to 16 A and 63 V DC
- ✓ Protection against mismatching, thanks to special L-coding
- ✓ Shield power reliably – 360° shielding to reduce electromagnetic loads
- ✓ Our standard: robust halogen-free PUR cable

Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 034218
GTIN	4055626034218

Technical data

Dimensions

Length of cable	3 m
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Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

General

Rated current at 40°C	16 A
Rated voltage	63 V DC
Number of positions	5
Insulation resistance	≥ 100 MΩ

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Technical data

General

Coding	L - Power
Standards/regulations	M12 connector IEC 61076-2-111
Status display	No
Protective circuit/component	unwired
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA
Material of grip body	PP
Material, knurls	Zinc die-cast, nickel-plated

Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-111
Flammability rating according to UL 94	V0

Cable

Cable type	PUR halogen-free gray
Cable type (abbreviation)	280
UL AWM style	20233 / 10493 (80°C/300 V)
Conductor cross section	5x 2.5 mm ²
AWG power supply	14
Conductor structure, voltage supply	141x 0.15 mm
Core diameter including insulation	2.85 mm ±0.1 mm
Thickness, insulation	≥ 0.31 mm
Wire colors	Brown, white, blue, black, gray
External sheath, color	gray RAL 7001
Outer sheath thickness	approx. 0.76 mm
External cable diameter D	10.4 mm ±0.3 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Cable weight	202 kg/km

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Technical data

Cable

Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Conductor resistance	≤ 8 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
Flame resistance	According to UL 758/1581 (Cable Flame)
	according to UL 758/1581 FT1
	According to DIN EN 60332-1-2
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
	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)

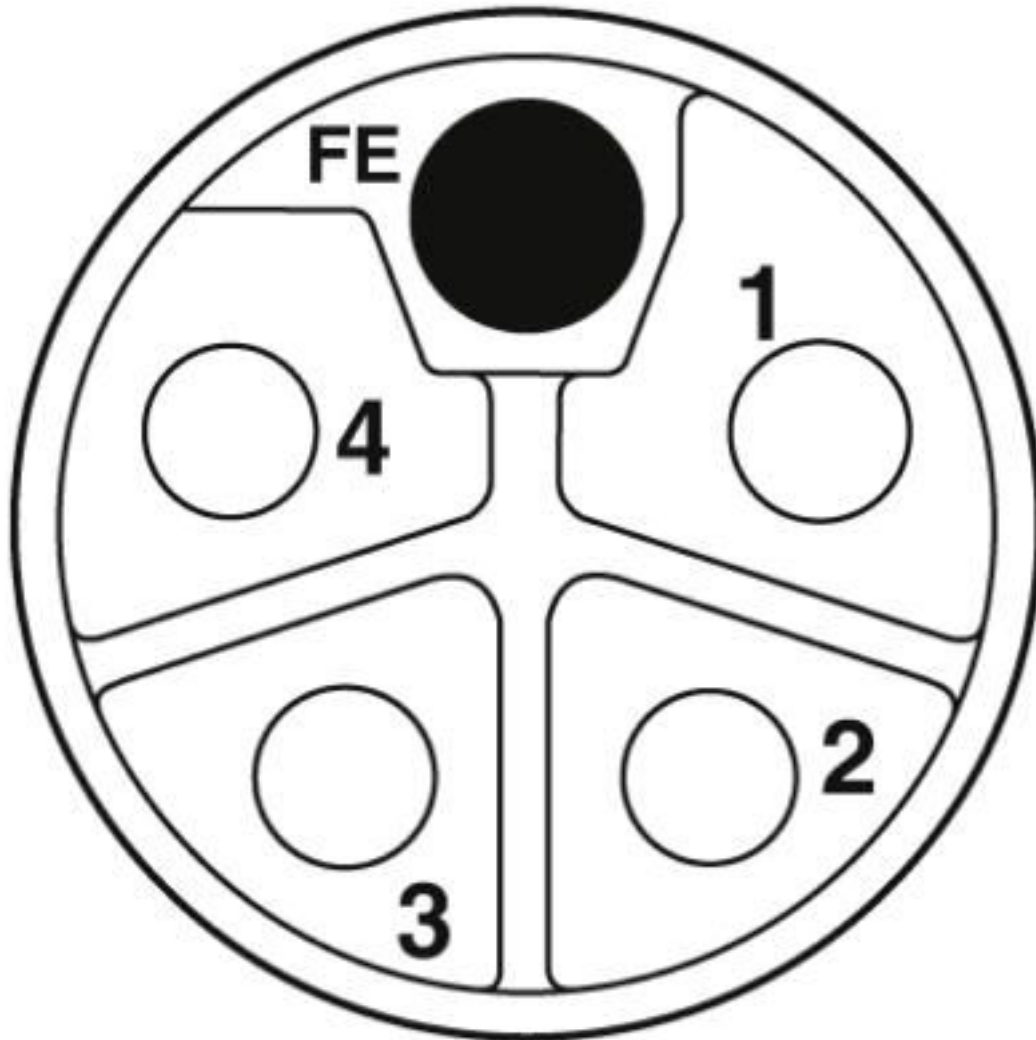
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Power cable - SAC-5P- 3,0-280/M12FRL FE SH - 1414787

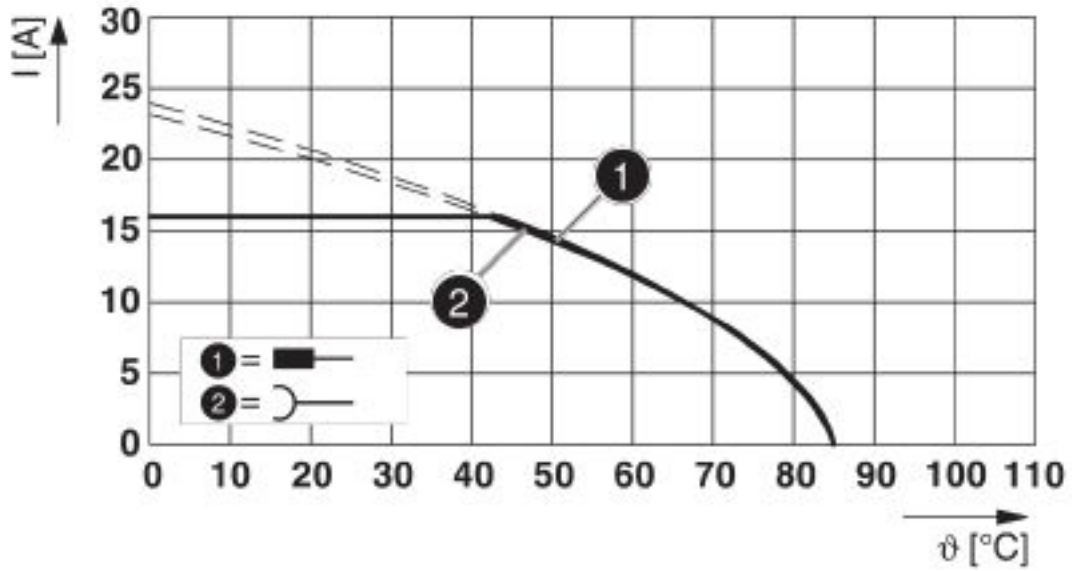
Schematic diagram



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

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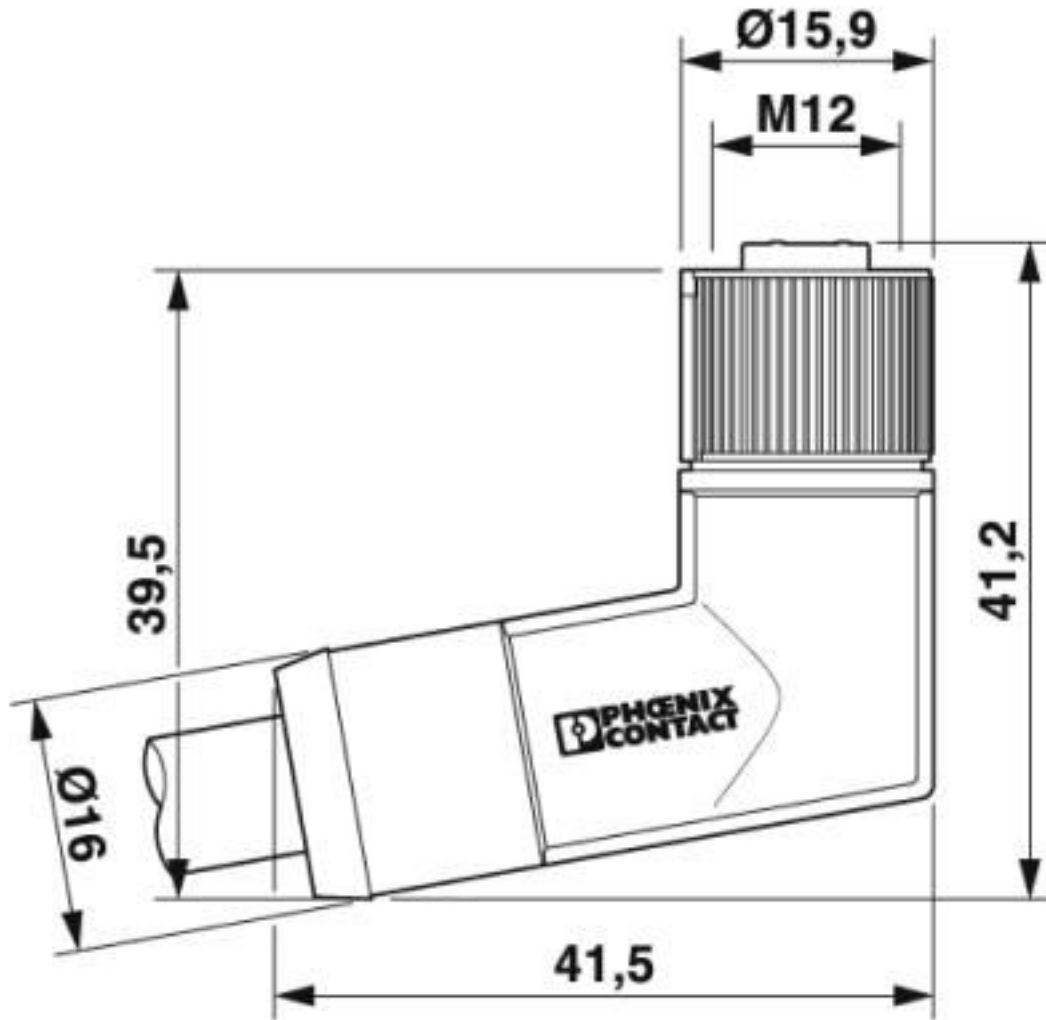
Diagram



Current carrying capacity

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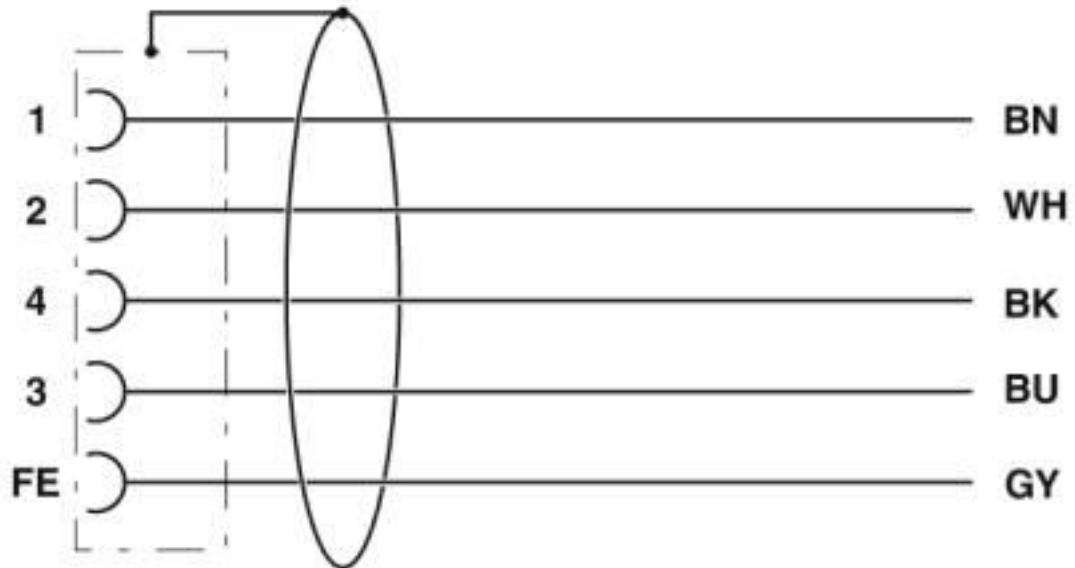
Dimensional drawing



M12 x 1 socket, angled

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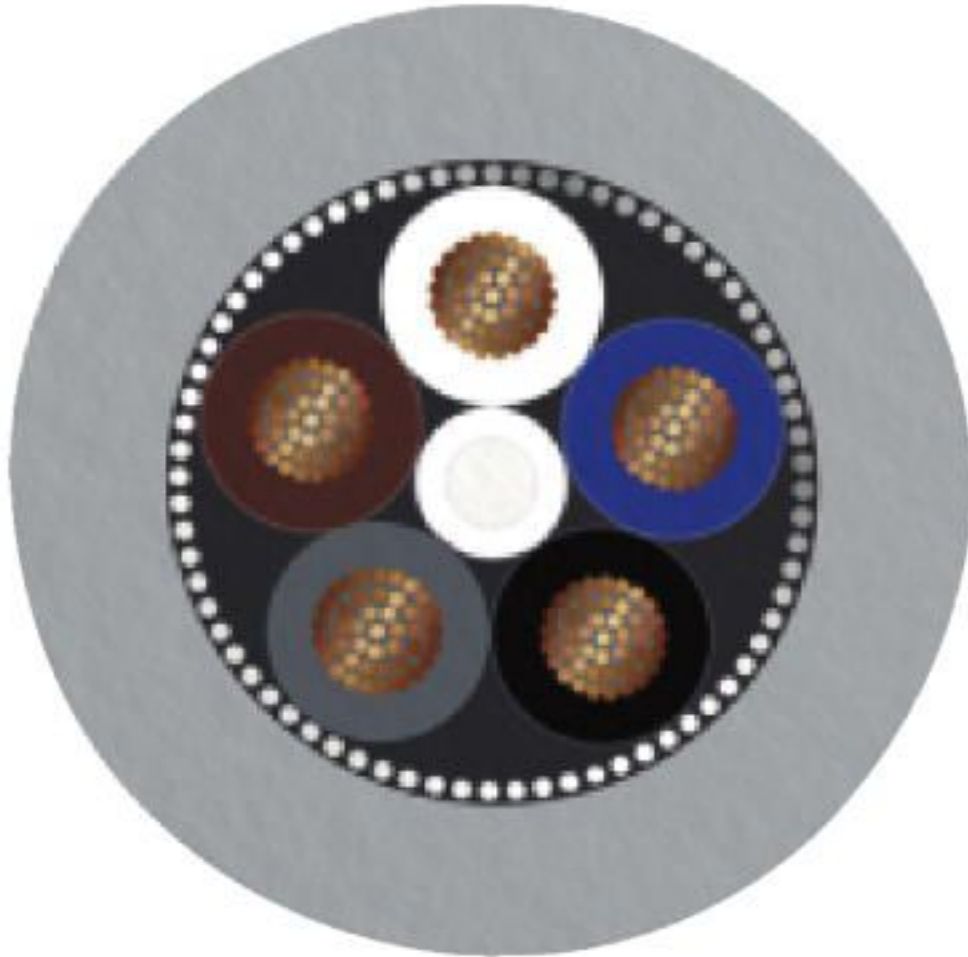
Circuit diagram



Contact assignment of the M12 socket

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Cable cross section



PUR halogen-free gray [280]

Classifications

eCl@ss

eCl@ss 10.0.1	27440203
eCl@ss 5.1	27061801
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27440203
eCl@ss 9.0	27440203

ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC001855

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Classifications

ETIM

ETIM 5.0	EC002311
ETIM 6.0	EC002311
ETIM 7.0	EC002311

Approvals


Approvals


Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / cULus Listed


Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E468743
Nominal voltage UN		63 V	
Nominal current IN		16 A	
mm ² /AWG/kcmil		14	

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E468743
Nominal voltage UN		63 V	
Nominal current IN		16 A	
mm ² /AWG/kcmil		14	

EAC-RoHS		RU D- DE.HB35.B.00387
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EAC		RU C- DE.BL08.B.00286
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Approvals

cULus Listed



Accessories

Accessories

Screwdriver tools

Tool - SAC BIT M12-D16 - 1200305



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

Screw plug - PROT M12 MS PWR - 1092802



An M12 screw plug for the unoccupied M12 females of the M12 POWER connectors, boxes, and flush-type connectors

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