Power cable - SAC-4P-M12MST/ 5,0-PUR - 1408814

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: T, on free cable end, cable length: 5 m, For direct current up to 12 A/63 V

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- High-performance: DC connectors for up to 12 A and 63 V DC
- Protection against incorrect connection using special T-coding
- Our standard: robust halogen-free PUR cable

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 838986
GTIN	4046356838986
Weight per Piece (excluding packing)	520.000 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	5 m

Ambient conditions

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

Power cable - SAC-4P-M12MST/ 5,0-PUR - 1408814

Technical data

Ambient conditions

	IP67

General

Rated current at 40°C	12 A
Rated voltage	63 V DC
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	T 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 black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9YV1-11Y
UL AWM style	20233 / 10493 (80°C/300 V)
Conductor cross section	4x 1.5 mm²
AWG power supply	16
Conductor structure, voltage supply	78x 0.15 mm
Core diameter including insulation	2.35 mm ±0.05 mm
Thickness, insulation	≥ 0.25 mm
Wire colors	brown, white, blue, black

Power cable - SAC-4P-M12MST/ 5,0-PUR - 1408814

Technical data

Cable

Overall twist	4 wires, twisted
Length of twist, overall twist	90 mm
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 1.3 mm
External cable diameter D	8.4 mm ±0.25 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	109 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Conductor resistance	≤ 13 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
	Low adhesion
	abrasion-resistant
	Resistant to salt water
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 60811-2-1, 168 h at 100°C
	According to UL 758, 168 h at 60°C
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

Power cable - SAC-4P-M12MST/ 5,0-PUR - 1408814

Technical data

Environmental Product Compliance

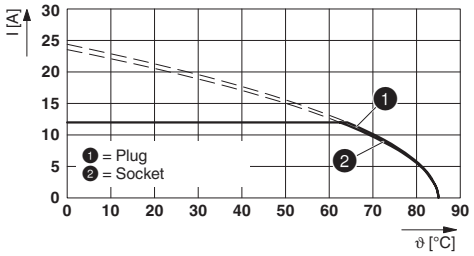
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Schematic diagram

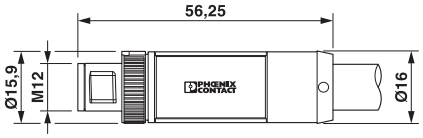
Pin assignment for M12 plug, 4-pos., T-coded, view of plug side

Diagram



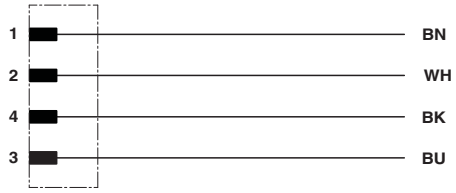
Current carrying capacity

Dimensional drawing



Plug, M12 x 1, straight

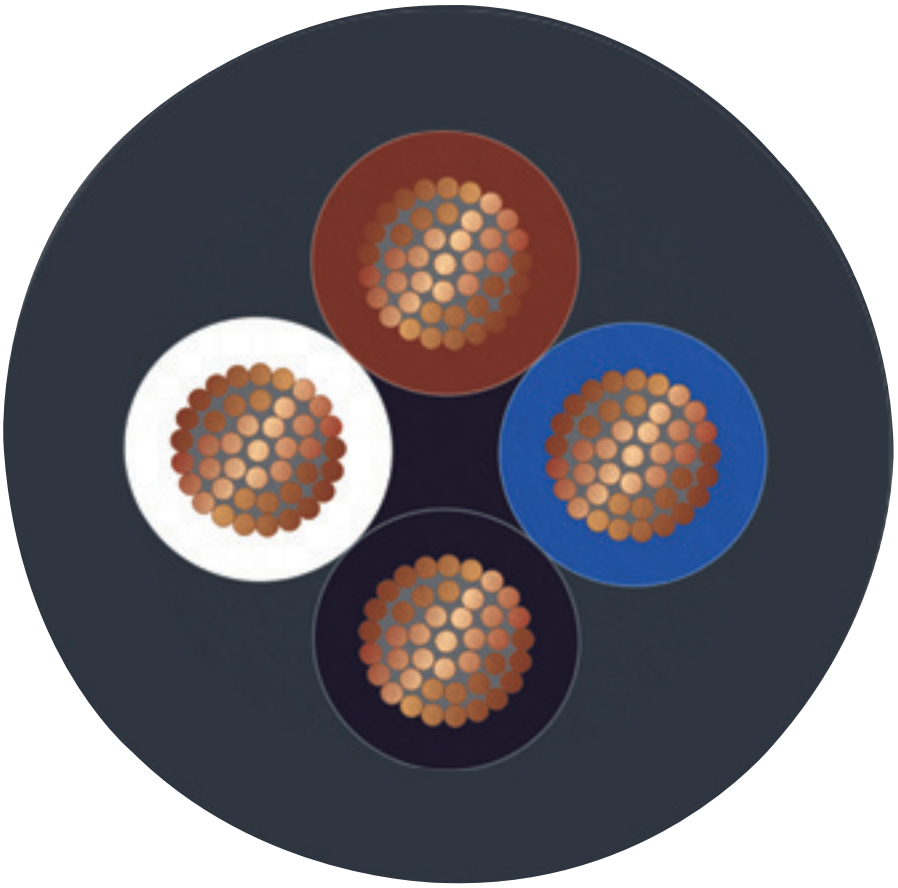
Circuit diagram



Contact assignment of the M12 plug

Power cable - SAC-4P-M12MST/ 5,0-PUR - 1408814

Cable cross section



PUR halogen-free black [PUR]

Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 11.0	27060311
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 9.0	27060311

Power cable - SAC-4P-M12MST/ 5,0-PUR - 1408814

Classifications

ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

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	12 A
mm²/AWG/kcmil	16

Power cable - SAC-4P-M12MST/ 5,0-PUR - 1408814

Approvals

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E468743

Nominal voltage UN	63 V
Nominal current IN	12 A
mm²/AWG/kcmil	16

EAC-RoHS		RU D-DE.HB35.B.00387

EAC		RU C-DE.BL08.B.00286

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