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Power cable, 5-position, PUR halogen-free, Orange (RAL 2003), matt, shielded, Plug straight M12, K-coded, on free cable end, cable length: 1.5 m, for AC current up to 16 A/690 V

#### Your advantages

- ☑ Protection against mismatching, thanks to special K-coding
- Shield power reliably 360° shielding to reduce electromagnetic loads



# **Key Commercial Data**

Packing unit	1 pc
GTIN	4 055626 034997
GTIN	4055626034997
Weight per Piece (excluding packing)	344.530 g
Custom tariff number	85444290
Country of origin	Poland
Note	Made to Order (non-returnable)

#### Technical data

#### **Dimensions**

Length of cable	1.5 m

#### Ambient conditions

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

General



# Technical data

### General

Rated current at 40°C	16 A
Rated voltage	690 V AC
Number of positions	5
Color handle area	black
Insulation resistance	≥ 100 MΩ
Coding	K - 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	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA
Material of grip body	PA
Material, knurls	Zinc die-cast, nickel-plated

# Standards and Regulations

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

#### Cable

Cable type	PUR halogen-free orange
Cable type (abbreviation)	PUR
UL AWM style	22078 / 11560 (90 °C / 1000 V)
Conductor cross section	5x 2.5 mm²
AWG power supply	14
Conductor structure, voltage supply	141x 0.15 mm
Core diameter including insulation	2.8 mm ±0.1 mm
Thickness, insulation	≥ 0.36 mm
Wire colors	Black 1, black 2, black 3, black 4, green/yellow
External sheath, color	orange RAL 2003
Outer sheath thickness	approx. 1.15 mm
External cable diameter D	10.3 mm ±0,3 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D



# Technical data

### Cable

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 <sup>2</sup>
Cable weight	209 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	$\leq$ 8 $\Omega$ /km (at 20 °C)
Nominal voltage, cable	≤ 1000 V AC
Test voltage, cable	≥ 10000 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 90 °C (cable, fixed installation)
	-30 °C 90 °C (cable, flexible installation)

# **Environmental Product Compliance**

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

# Drawings



Schematic diagram



Connector pin assignment of M12 plug, 5-pos., K-coded, pin side view

Cable cross section



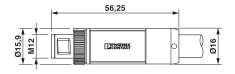
PUR halogen-free orange [PUR]

Diagram

State of the plug and the plug and

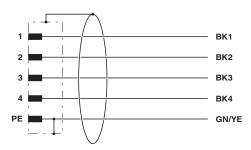
Ambient temperature [°C]

Dimensional drawing



Plug, M12 x 1, straight, shielded

#### Circuit diagram



Contact assignment of the M12 plug

### Classifications

### eCl@ss

eCl@ss 5.1	19030300
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27440203
eCl@ss 9.0	27440203

#### **ETIM**

ETIM 5.0	EC002311
ETIM 6.0	EC001855



# Approvals Approvals Approvals EAC / UL Listed / cUL Listed / cULus Listed Ex Approvals Approval details EHE RU C-EAC DE.AI30.B.01102 UL) LISTED **UL** Listed http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E468743 Nominal voltage UN 600 V Nominal current IN 16 A mm²/AWG/kcmil 14 cUL Listed http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E468743 Nominal voltage UN 600 V Nominal current IN 16 A

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#### Accessories

cULus Listed

CUL US

mm²/AWG/kcmil

Accessories

Protective cap



### Accessories

Sealing cap - PROT-M12 FS - 1560251



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

#### 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

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