

SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable



1102081

<https://www.phoenixcontact.com/us/products/1102081>

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, 4-position, PUR halogen-free, black RAL 9005, shielded (Advanced Shielding Technology), Plug angled M12, coding: T, on Socket angled M12, coding: T, cable length: 1 m, For direct current up to 12 A/63 V

Your advantages

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

Commercial data

Item number	1102081
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF05
Product key	AF1CCQ
GTIN	4055626962337
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 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	T

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	63 V DC
Nominal current I_N	12 A

Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	> 100

Connector

Connection 1	
Type	Plug angled M12
Coding type	T (Power)

Connection 2

Type	Socket angled M12
Coding type	T (Power)

Cable/line

Cable length	1 m
PUR halogen-free black [PUR]	

SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable



1102081

<https://www.phoenixcontact.com/us/products/1102081>

Dimensional drawing



Cable weight	133 kg/km
UL AWM Style	20233 / 10493 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	PUR halogen-free black [PUR]
Conductor structure, voltage supply	78x 0.15 mm
AWG power supply	16
Conductor cross section	4x 1.5 mm ²
Wire diameter incl. insulation	2.4 mm
External cable diameter	9.70 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black
Thickness, insulation	1.20 mm (Outer cable sheath)
Overall twist	4 wires optimally twisted
Max. conductor resistance	≤ 13.3 Ω/km (at 20 °C)
Insulation resistance	≥ 10 MΩ*km (at 20 °C)
Nominal voltage, cable	300 V AC
Test voltage	1500 V AC (5 min.)
Smallest bending radius, fixed installation	49 mm
Smallest bending radius, movable installation	73 mm
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 97 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±25 °/m
Halogen-free	in accordance with DIN VDE 0472 part 815 according to IEC 60754-1
Flame resistance	in accordance with EN 60332-1-2 in acc. to UL 1581 VW1
Resistance to oil	in accordance with DIN EN 60811-2-1
Ambient temperature (operation)	According to DIN EN 50363-10-2 -40 °C ... 90 °C (cable, fixed installation) -30 °C ... 90 °C (Cable, flexible installation)

SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable

1102081

<https://www.phoenixcontact.com/us/products/1102081>



Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
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

SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable

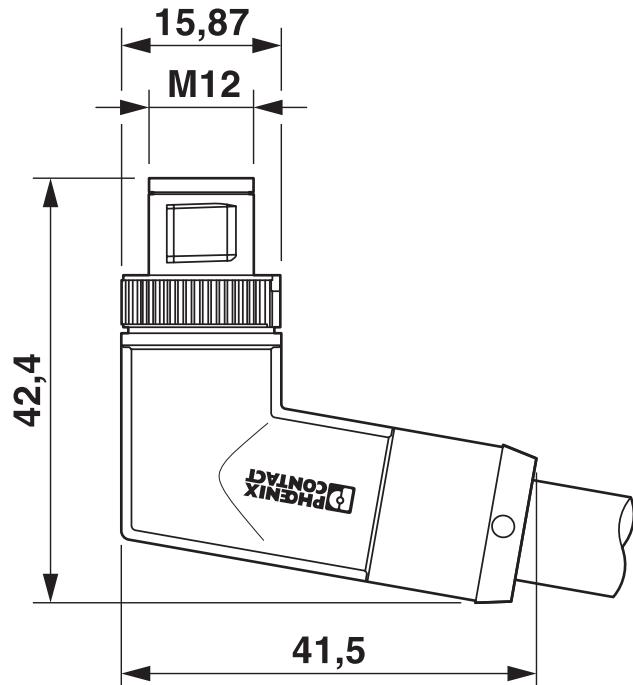


1102081

<https://www.phoenixcontact.com/us/products/1102081>

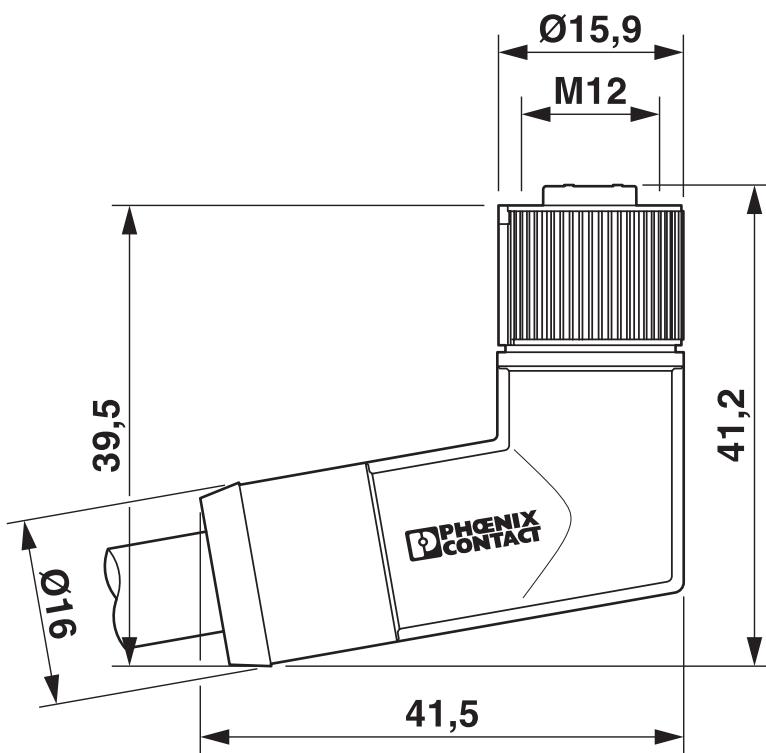
Drawings

Dimensional drawing



M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

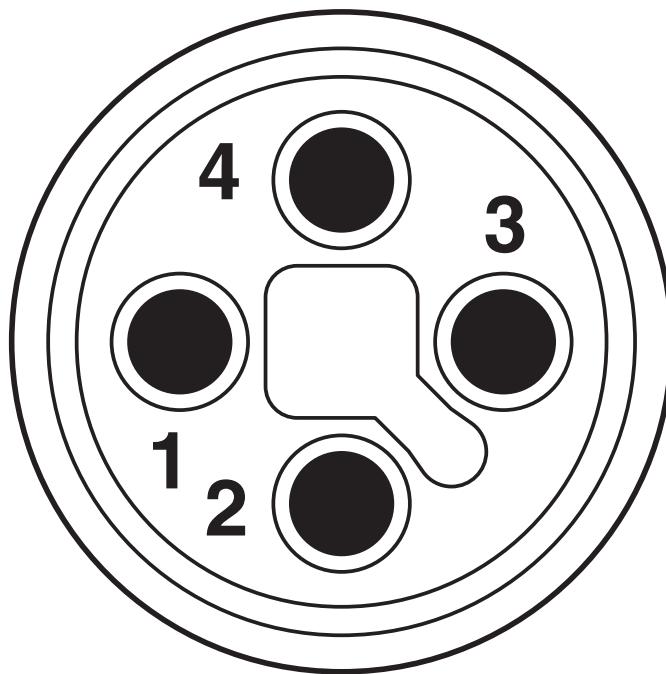
SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable

1102081

<https://www.phoenixcontact.com/us/products/1102081>

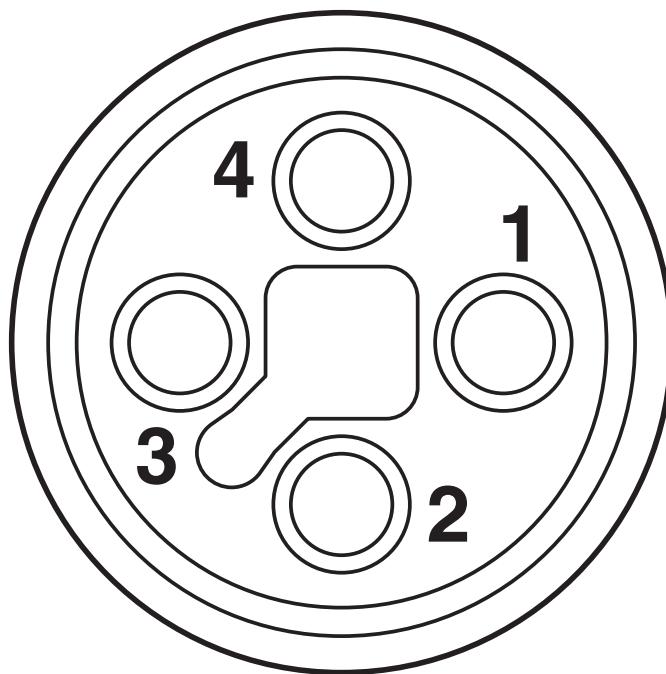


Schematic diagram



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

Schematic diagram



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

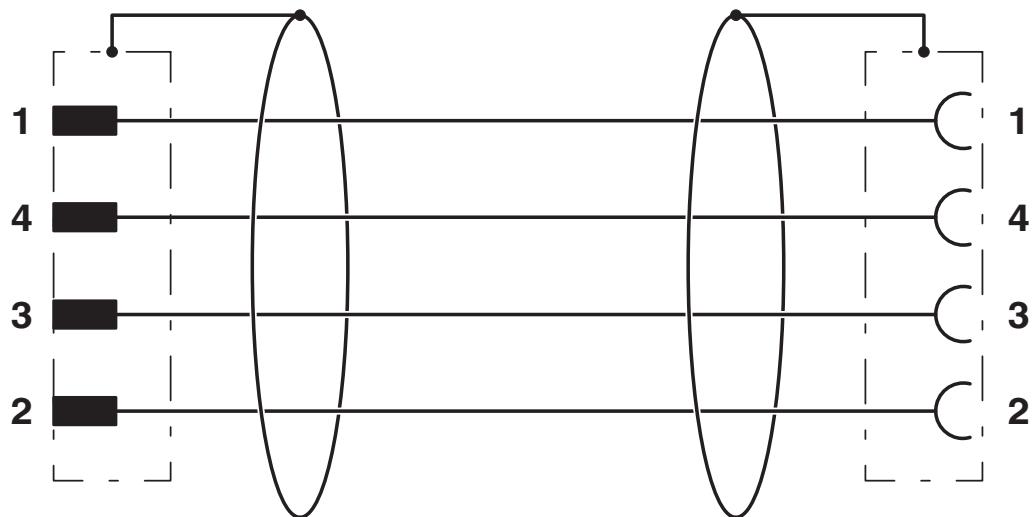
SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable



1102081

<https://www.phoenixcontact.com/us/products/1102081>

Circuit diagram



Contact assignment of M12 connector/socket

SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable

1102081

<https://www.phoenixcontact.com/us/products/1102081>



Classifications

ECLASS

ECLASS-13.0	27060327
ECLASS-15.0	27060327

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

SAC-4P-M12MRT/ 1,0-PUR/FRT SH - Power cable

1102081

<https://www.phoenixcontact.com/us/products/1102081>



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%
-------------------------------------	----------------------------

Phoenix Contact 2025 © - 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