

SAC-5P-M12MR/ 0,5-924/M12FR - Bus system cable



1405975

<https://www.phoenixcontact.com/us/products/1405975>

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Bus system cable, CANopen®, DeviceNet™, 5-position, PVC, gray, shielded, Plug angled M12, coding: A, on Socket angled M12, coding: A, cable length: 0.5 m, Connector unshielded

Commercial data

Item number	1405975
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF15
Product key	AF1IHE
GTIN	4046356800532
Weight per piece (including packing)	54.3 g
Weight per piece (excluding packing)	54.3 g
Customs tariff number	85444290
Country of origin	US

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Technical data

Product properties

Product type	Data cable preassembled
Application	Standard, U.S. cables
Sensor type	CANopen®
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

Bus system	CANopen®/DeviceNet™
Signal type/category	CANopen®
	DeviceNet™

Signaling

Status display	no
Status display present	no

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	4 A
Transmission medium	Copper

Material specifications

Flammability rating according to UL 94	HB
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Connector

Connection 1

Type	Plug angled M12
Number of positions	5

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Coding type	A (Standard)
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Connection 2

Type	Socket angled M12
Number of positions	5
Coding type	A (Standard)

Cable/line

Cable length	0.5 m
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CANopen®/DeviceNet™, PVC, gray [924]

Dimensional drawing		
Cable weight	64.51 kg/km	
UL AWM Style	2464 (80°C/300 V)	
Number of positions	4	
Shielded	yes	
Cable type	CANopen®/DeviceNet™, PVC, gray [924]	
Conductor structure	2xAWG22 (Signal) + 2xAWG22 (Power)	
Signal runtime	4.46 ns/m	
Conductor structure signal line	19x 0.15 mm	
AWG signal line	22	
Conductor structure, voltage supply	19x 0.15 mm	
AWG power supply	22	
Conductor cross section	2x 0.34 mm² (Signal line)	
	2x 0.34 mm² (Power supply)	
Wire diameter incl. insulation	1.27 mm ±0.05 mm (Signal line)	
	2.24 mm ±0.13 mm (Power supply)	
External cable diameter	6.90 mm ±0.13 mm	
Outer sheath, material	PVC	
External sheath, color	gray	
Conductor material	Bare Cu litz wires	
Material wire insulation	Foamed PE (Signal line)	
	PVC (Power supply)	
Single wire, color	red-black, blue-white	
Twisted pairs	2 cores to the pair	
Type of pair shielding	Plastic-coated aluminum foil, aluminum side inside	
Overall twist	2 pairs around a drain wire in the center to the core	
Insulation resistance	≥ 59.38 Ω*m (Signal line)	

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	$\geq 57.41 \text{ G}\Omega\cdot\text{km}$ (Power supply)
Wave impedance	$120 \text{ }\Omega \pm 12 \text{ }\Omega$
Working capacitance	nom. 78.74 pF (per meter)
Minimum bending radius, flexible installation	$15 \times D$
Smallest bending radius, movable installation	104 mm
Shield attenuation	0.95 dB ($f = 125 \text{ kHz}$)
	1.64 dB ($f = 500 \text{ kHz}$)
	2.30 dB ($f = 1 \text{ MHz}$)
Flame resistance	FT4
Resistance to oil	yes
Other resistance	UV resistant
Special properties	UL standards PLTC and ITC
Ambient temperature (operation)	$-30 \text{ }^{\circ}\text{C} \dots 75 \text{ }^{\circ}\text{C}$ (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	$-25 \text{ }^{\circ}\text{C} \dots 90 \text{ }^{\circ}\text{C}$ (Plug / socket)

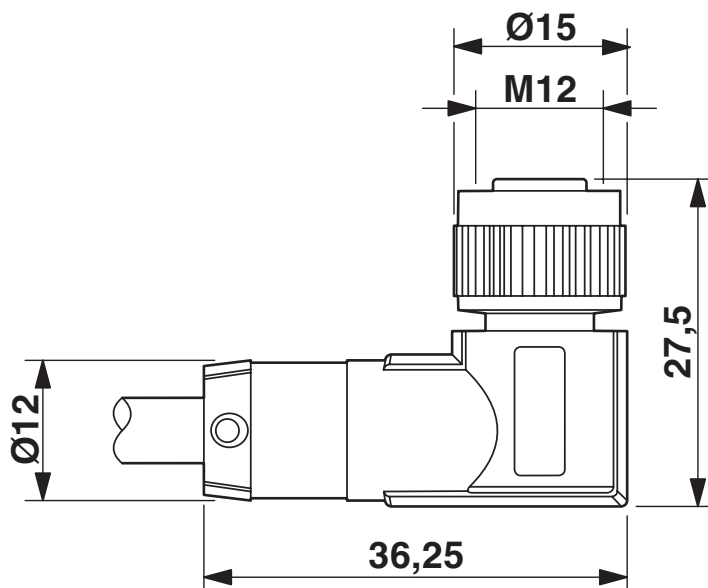
Drawings

Dimensional drawing



M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



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

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Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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Approvals

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 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	125 V	4 A	-	-

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Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)(CAS: 123-77-3)
SCIP	d491bf7f-4a14-40d0-8b2b-f84e4b2fe859

EF3.0 Climate Change

CO2e kg	0.085 kg CO2e
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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com