

Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306


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>)



Bus system cable, FOUNDATION Fieldbus (31.25 kbps), 3-position, PVC, orange RAL 2003, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, cable length: 10 m



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 431781
GTIN	4046356431781

Technical data

Dimensions

Length of cable	10 m
-----------------	------

Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65/IP68/IP69K

General

Note	Further products with variable cable type and variable cable length can be found in the accessories section
Rated current at 40°C	4 A
Rated voltage	48 V AC 60 V DC
Number of positions	3
Color handle area	black
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Signal type/category	FOUNDATION Fieldbus, 31.25 kbps
Status display	No
Overvoltage category	II

Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306

Technical data

General

Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Flammability rating according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Stainless steel
Sealing material	NBR

Standards and Regulations

Flammability rating according to UL 94	HB
--	----

Cable

Cable type	FOUNDATION Fieldbus orange
Cable type (abbreviation)	960
Cable structure	2xAWG18/7 + 1xAWG20/7
Conductor cross section	2x 0.75 mm ² (Signal line) 1x 0.5 mm ² (Drain wire)
AWG signal line	18
Conductor structure signal line	7x 0.40 mm
Core diameter including insulation	2.24 mm ±0.05 mm
Thickness, insulation	0.5 mm
Wire colors	Blue, orange
Twisted pairs	2 cores to the pair
Overall twist	One pair with one drain wire and fillers for core
Shielding	Plastic-coated aluminum foil with a drain wire
Optical shield covering	100 %
External sheath, color	orange RAL 2003
Outer sheath thickness	1 mm
External cable diameter D	7.5 mm ±0.25 mm
Smallest bending radius, fixed installation	75 mm
Cable weight	56.552 kg/km
Tensile strength GRP	260 N
Outer sheath, material	PVC
Material conductor insulation	PO (Signal line)
Conductor material	Tin-plated Cu litz wires
Conductor resistance	≤ 19.35 Ω/km (Signal line) 26 Ω/km (shield)

Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306

Technical data

Cable

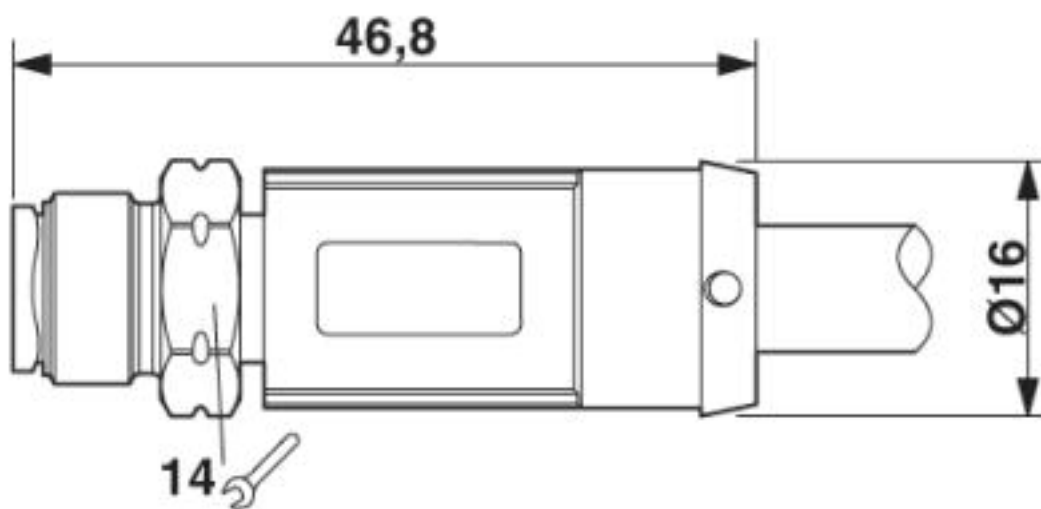
Working capacitance	78 nF (at 1 kHz)
Cable capacity	147 pF/m (at 1 kHz, core/shield) ≤ 3.94 pF/m (capacitance unbalance)
Signal speed	0.66 c
Shield attenuation	3 dB/km (at 39 kHz)
Cable impedance	100 Ω ±20 % (At 31.25 kHz)
Conductor inductance	0.6233 μH/m
Nominal voltage, cable	300 V
Special properties	UL standards PLTC-ER and ITC
Flame resistance	UL 1685 (CSA FT 4) UL 1685 (vertical tray) UL 1666 (riser)
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)

Environmental Product Compliance

	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

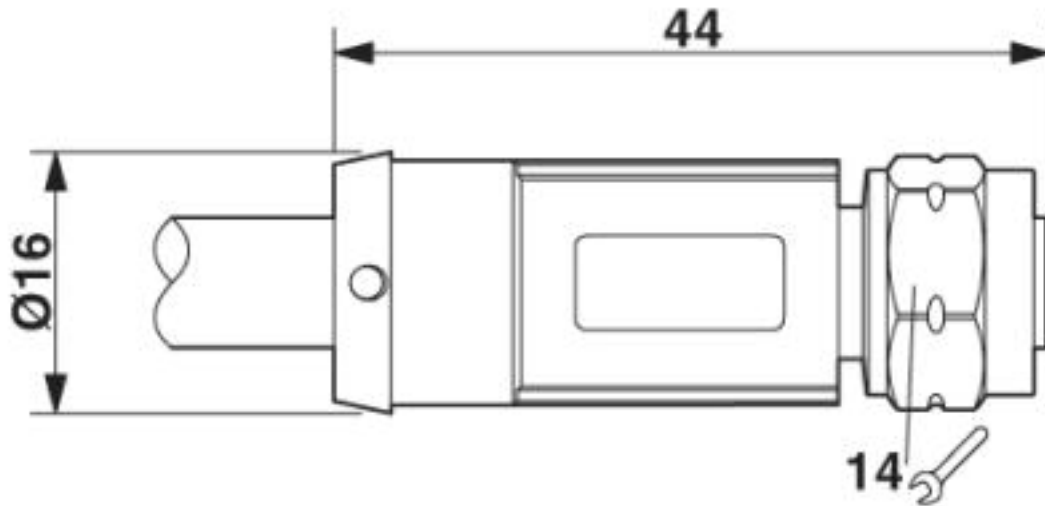
Dimensional drawing



Plug, M12 x 1, straight, shielded

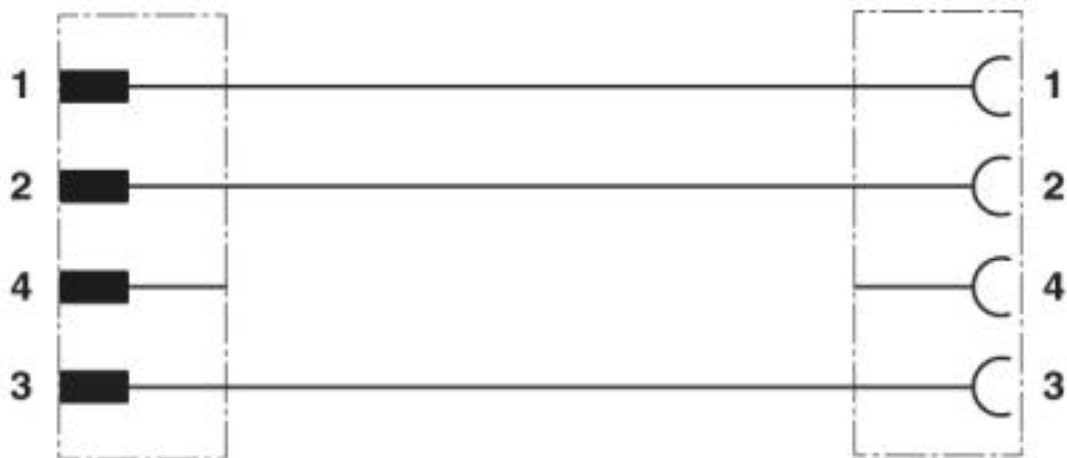
Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306

Dimensional drawing



M12 x 1 socket, straight

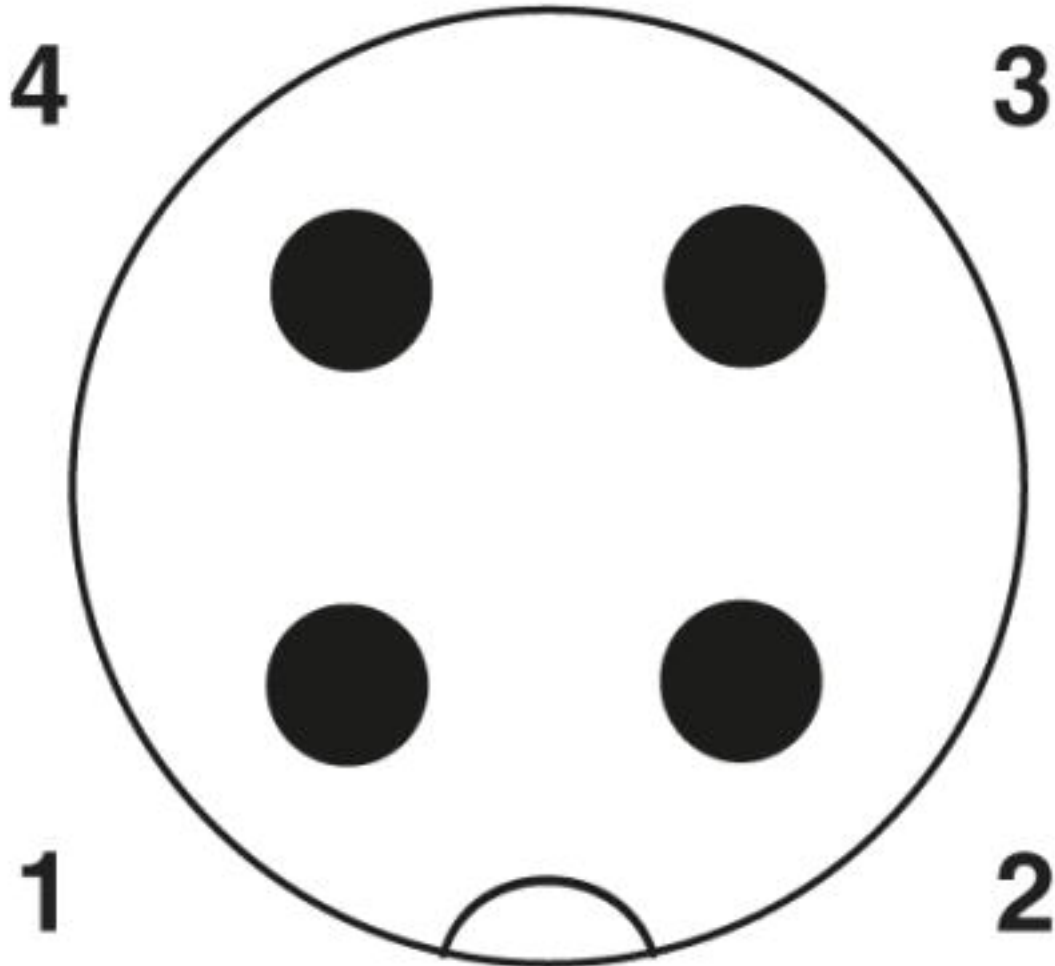
Circuit diagram



Contact assignment of the M12 connector and the M12 socket

Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306

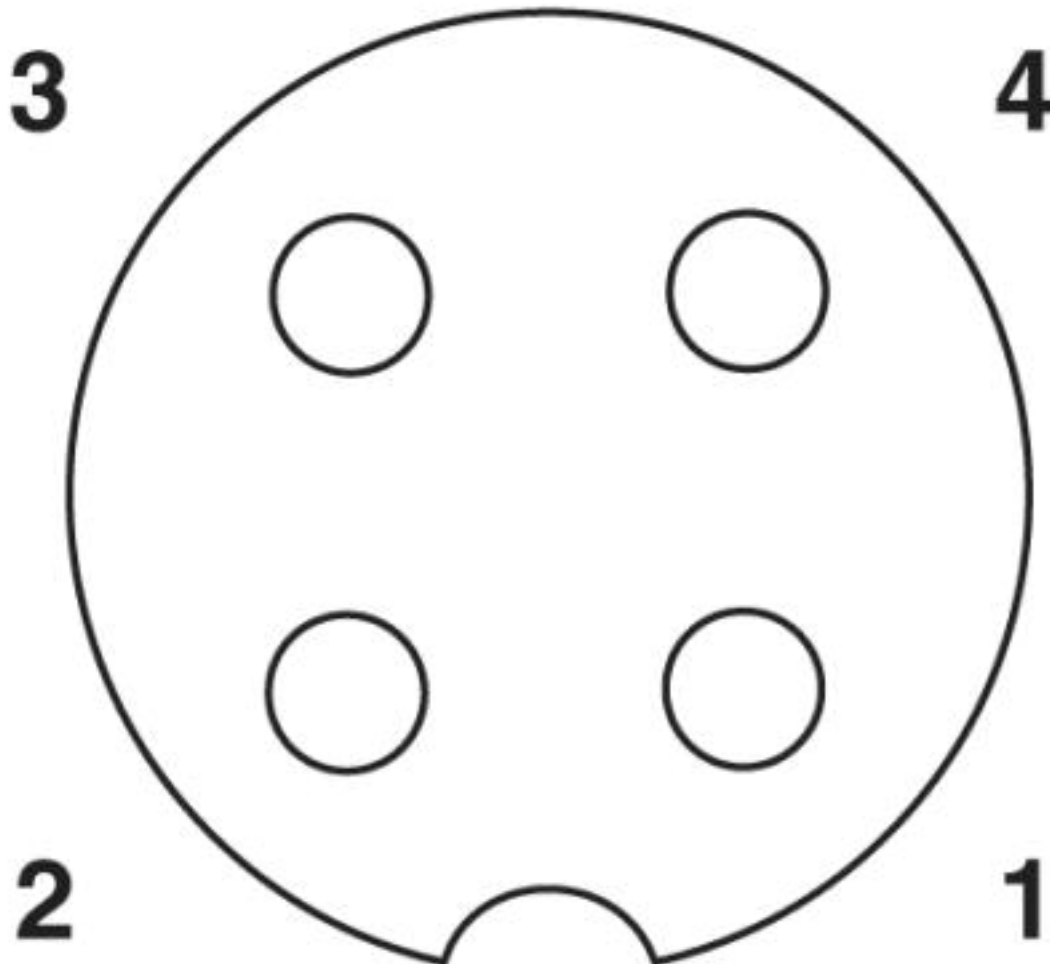
Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306

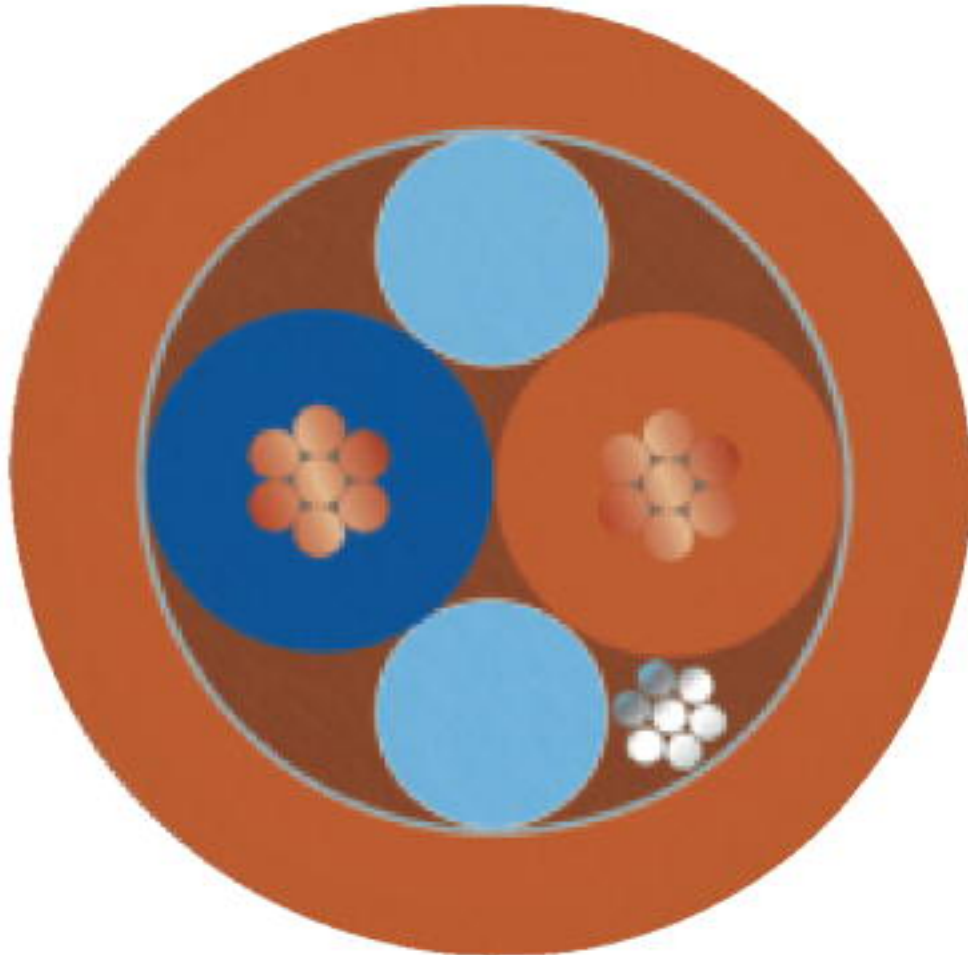
Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306

Cable cross section



FOUNDATION Fieldbus orange [960]

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

Bus system cable - SAC-4P-M12MS/10,0-960/M12FS VA - 1431306

Approvals

EAC



RU C-
DE.BL08.B.00286

Phoenix Contact 2019 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>