

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

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 7/8"-16UNF, coding: A, on Socket angled 7/8"-16UNF, coding: A, cable length: 1 m



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 319010
GTIN	4046356319010
Weight per Piece (excluding packing)	222.220 g
Custom tariff number	85444290
Country of origin	Germany

Technical data

Dimensions

Length of cable	1 m
-----------------	-----

Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
Degree of protection	IP67

General

Rated current at 40°C	5.2 A
Rated voltage	300 V
Number of positions	3
Color handle area	black
Insulation resistance	≥ 10 MΩ

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

Technical data

General

Coding	A - standard
Status display	No
Overvoltage category	II
Degree of pollution	2
Torque	0.8 Nm (7/8" connectors)

Material

Flammability rating according to UL 94	HB
Contact material	CuZn
Contact surface material	AU
Contact carrier material	PA 6.6
Material of grip body	TPU
Material, knurls	Stainless steel

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

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

Technical data

Cable

Material conductor insulation	PO (Signal line)
Conductor material	Tin-plated Cu litz wires
Conductor resistance	$\leq 19.35 \Omega/\text{km}$ (Signal line)
	$26 \Omega/\text{km}$ (shield)
Working capacitance	78 nF (at 1 kHz)
Cable capacity	147 pF/m (at 1 kHz, core/shield)
	$\leq 3.94 \text{ pF/m}$ (capacitance unbalance)
Signal speed	0.66 c
Shield attenuation	3 dB/km (at 39 kHz)
Cable impedance	$100 \Omega \pm 20 \%$ (At 31.25 kHz)
Conductor inductance	$0.6233 \mu\text{H/m}$
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)

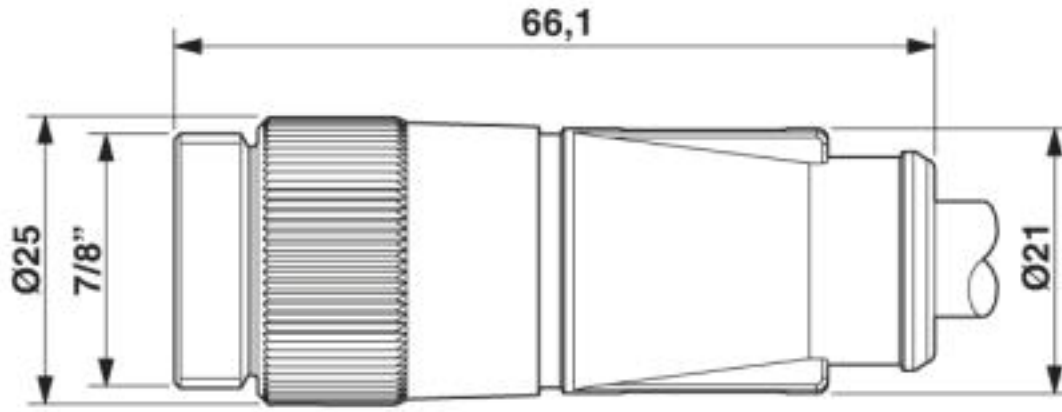
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

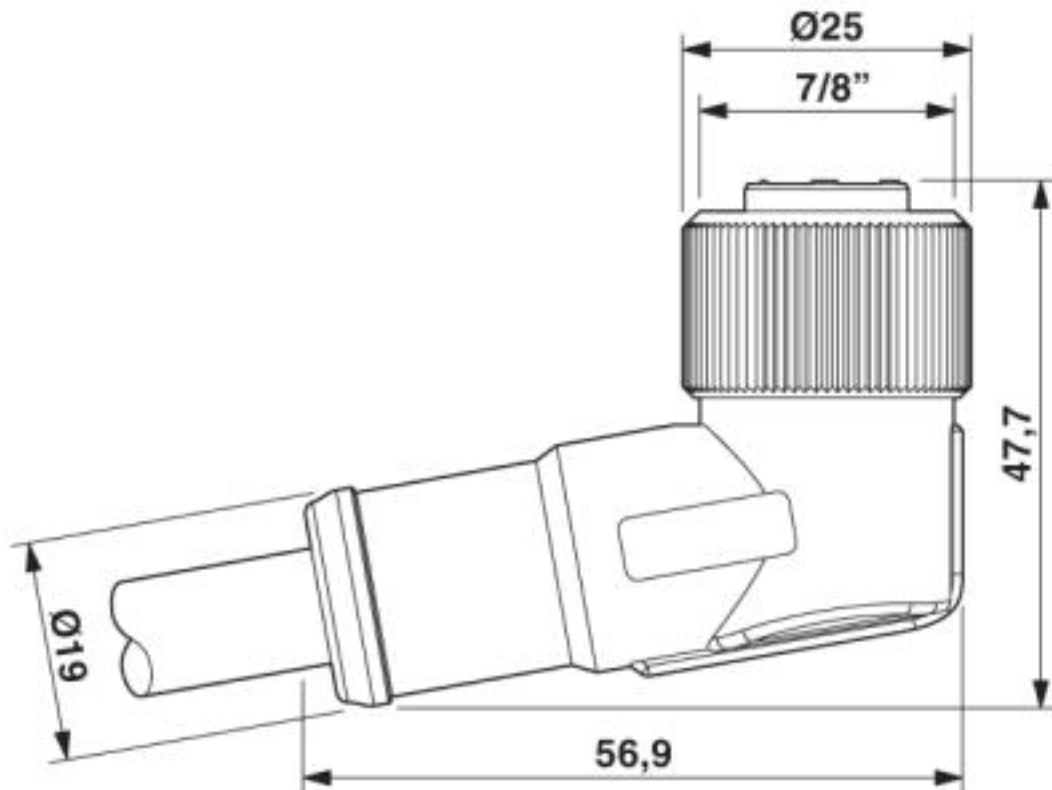
Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

Dimensional drawing



7/8"-16UNF plug, straight

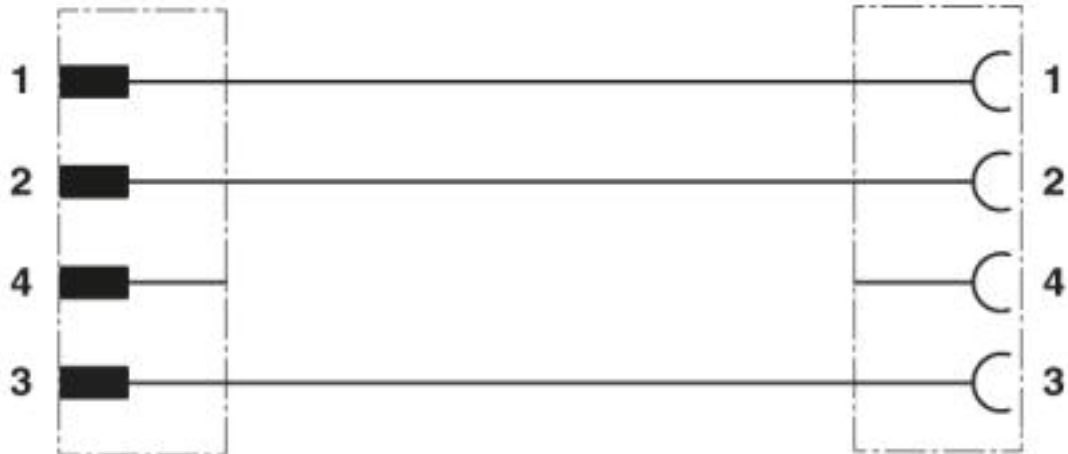
Dimensional drawing



7/8"-16UNF socket, angled

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

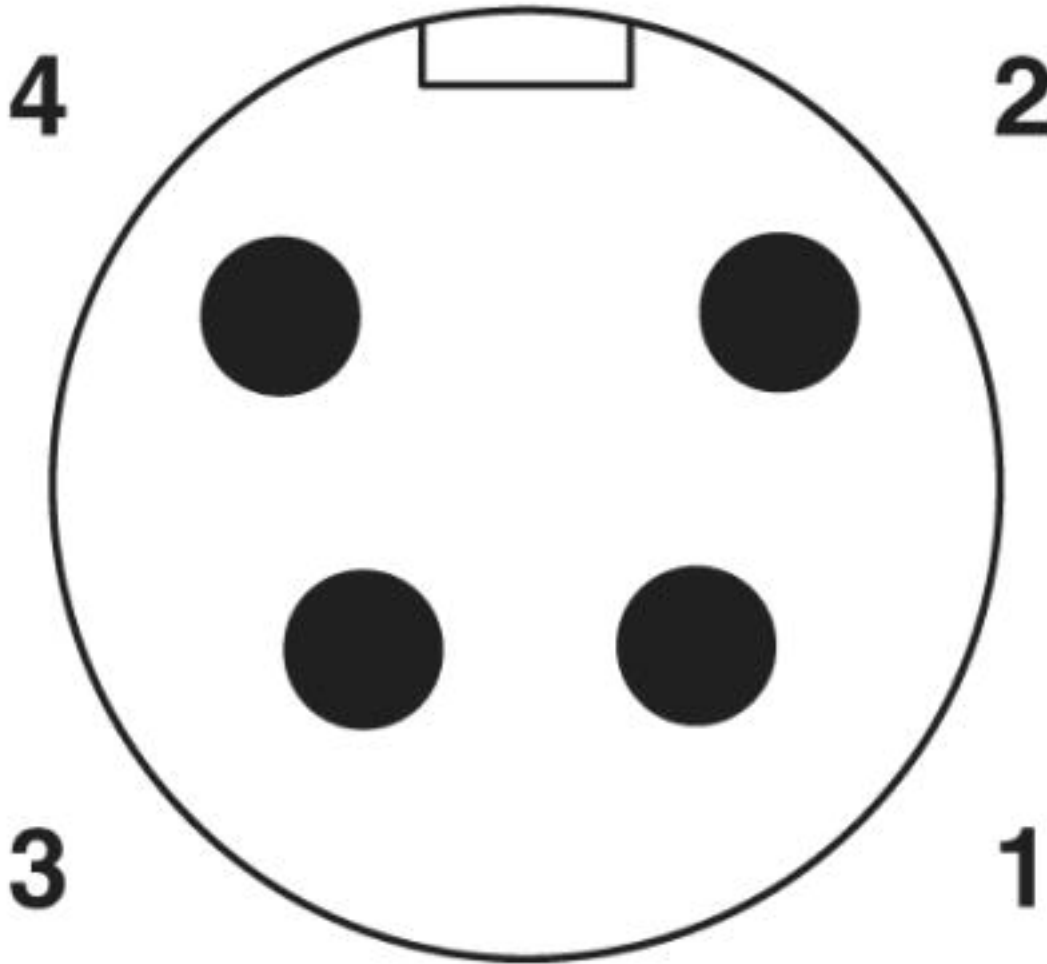
Circuit diagram



Contact assignment of the 7/8" connector and the 7/8" socket

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

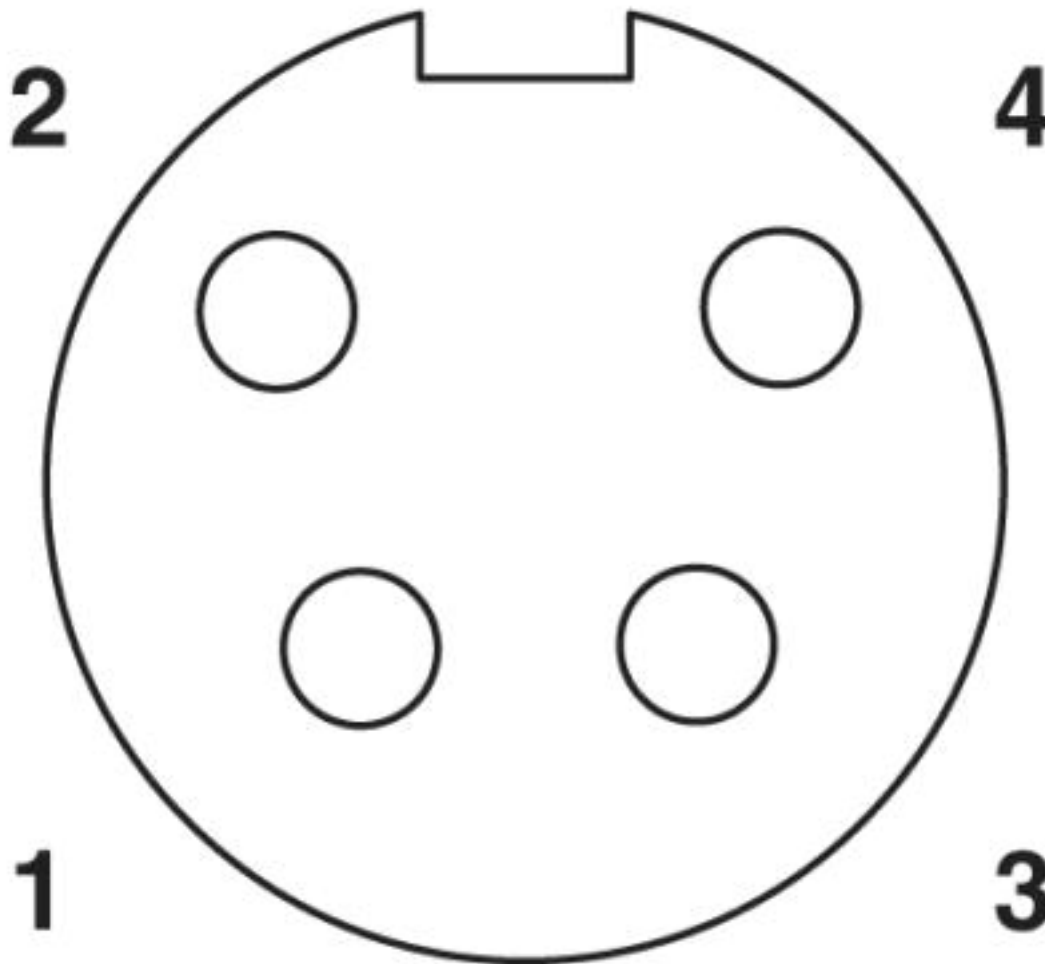
Schematic diagram



Pin assignment, plug, 7/8"-16UNF, 4-pos., view of male side

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

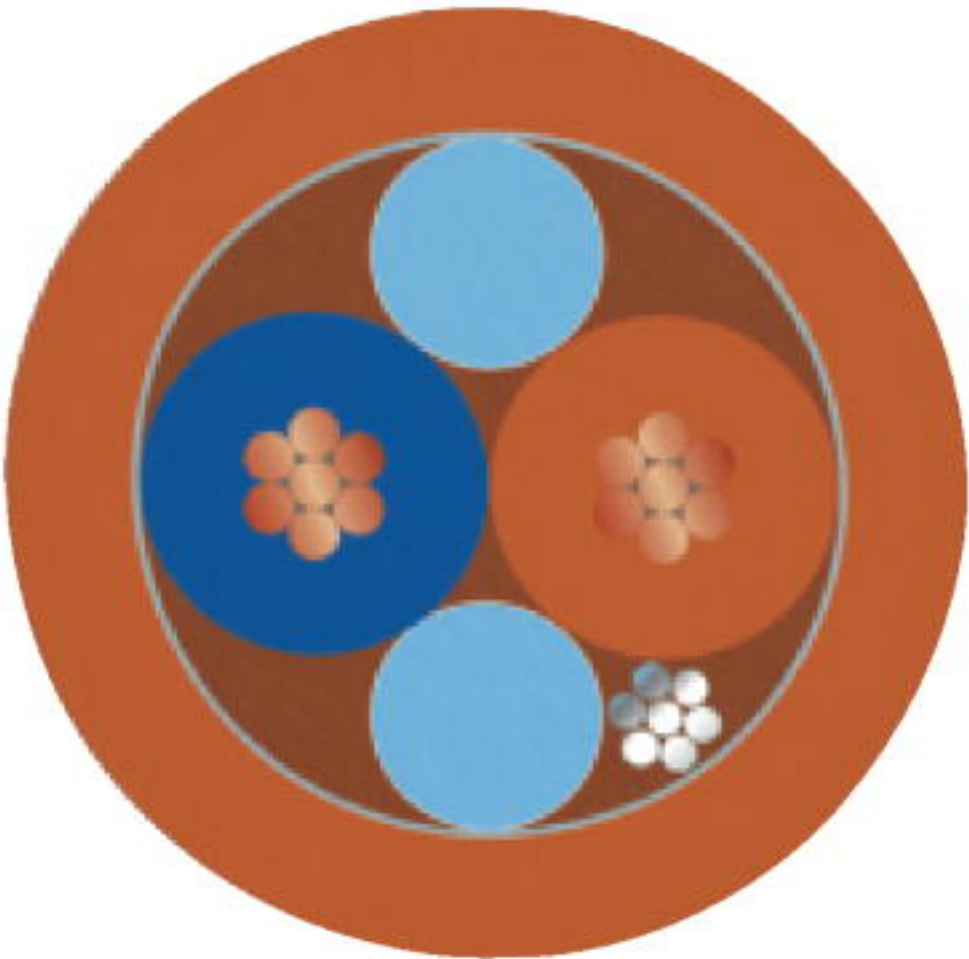
Schematic diagram



Pin assignment, socket, 7/8"-16UNF, 4-pos., view of female side

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

Cable cross section



FOUNDATION Fieldbus orange [960]

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218

Bus system cable - SAC-4P-MINMS/ 1,0-960/MINFRVAL - 1429800

Classifications

eCl@ss

eCl@ss 9.0	27060311
------------	----------

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	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