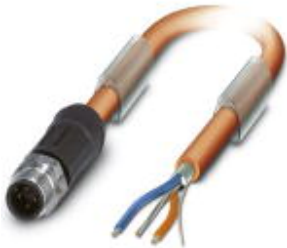


## Bus system cable - SAC-4P-M12MS/ 5,0-960 VA - 1431186

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://download.phoenixcontact.com>)



Bus system cable, FOUNDATION Fieldbus, Foundation Fieldbus, 3-position, PVC, orange RAL 2003, shielded, Plug straight M12, A-coded, on Free cable end, Cable length: 5 m



### Key commercial data

Packing unit	1 1
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	5 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68
	IP69K

#### General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	3
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ

## Bus system cable - SAC-4P-M12MS/ 5,0-960 VA - 1431186

### Technical data

#### General

Coding	A - standard
Signal type/category	FOUNDATION Fieldbus
Status display	No
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

#### Material

Inflammability class 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	High-grade steel
Sealing material	NBR

#### Cable

Cable type	FOUNDATION Fieldbus orange
Cable type (abbreviation)	960
Cable structure	2xAWG18/7 + 1xAWG20/7
Conductor cross section	2x 0.75 mm <sup>2</sup> (signal line)
	1x 0.5 mm <sup>2</sup> (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 (Core insulation)
	1 mm (Outer cable sheath)
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
External cable diameter	7.42 mm
External cable diameter D	7.5 mm ±0.25 mm
Smallest bending radius, fixed installation	75 mm
Cable weight	56.552 kg/km

## Bus system cable - SAC-4P-M12MS/ 5,0-960 VA - 1431186

### Technical data

#### Cable

Outer sheath, material	PVC
Material conductor insulation	PO (signal line)
Conductor material	Tin-plated Cu litz wires
Conductor resistance	19.2 Ω/km (signal line)
	26 Ω/km (shield)
Working capacitance	148 nF (core-shield)
	78 nF (core-core)
Wave impedance	100 Ω (At 31.25 kHz)
Signal speed	0.66 c
Nominal voltage, cable	300 V
Special properties	UL standards PLTC-ER and ITC
Flame resistance	UL 1685 (CSA FT 4)
Ambient temperature (operation)	-30 °C ... 105 °C (Cable)

### Classifications

#### eCl@ss

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

#### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

#### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

# Bus system cable - SAC-4P-M12MS/ 5,0-960 VA - 1431186

## Approvals

Approvals

---

Approvals

GOST

---

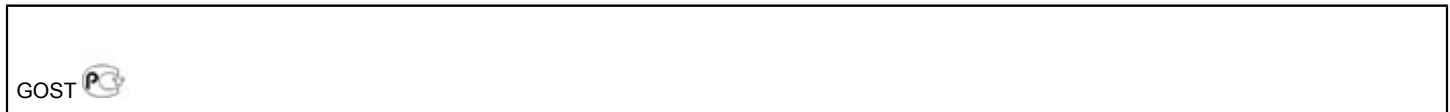
Ex Approvals

---

Approvals submitted

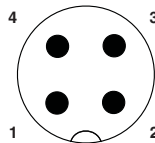
---

## Approval details



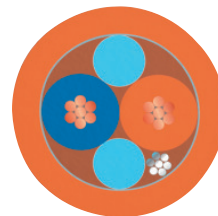
## Drawings

Schematic diagram



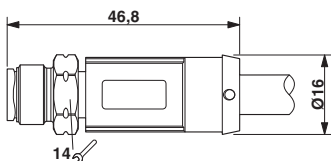
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Cable cross section



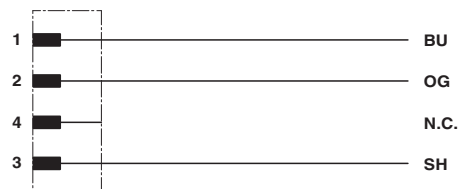
FOUNDATION Fieldbus orange [960]

Dimensioned drawing



M12 x 1 plug, straight

Circuit diagram



Contact assignment of the M12 plug

