

## Bus system cable - SAC-4P-M12MSD/16,0-931/M12FSD - 1569582

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Bus system cable, Ethernet CAT5 (100 Mbps), Ethernet CAT5e (100 Mbps), Ethernet, 4-position, PUR halogen-free, water blue RAL 5021, shielded, Plug straight M12, D-coded, on Socket straight M12, D-coded, Cable length: 16 m



### Ethernet

#### Key commercial data

Packing unit	1 1
Weight per Piece (excluding packing)	787.1 GRM
Custom tariff number	85444290
Country of origin	Germany

#### Technical data

##### Dimensions

Length of cable	16 m
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##### Ambient conditions

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

##### General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	4
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	D - data
Signal type/category	Ethernet CAT5, 100 Mbps
	Ethernet CAT5e, 100 Mbps
Status display	No

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### Technical data

#### General

Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100

#### Material

Inflammability class according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

#### Cable

Cable type	PUR ETHERNET 2x2 FLEX
Cable type (abbreviation)	93E
UL AWM style	20963 (80°C/30 V)
Cable structure	2x2xAWG26/7; SF/UTP
Conductor cross section	2x 2x 0.14 mm <sup>2</sup>
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	0.98 mm
Wire colors	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
External cable diameter D	6.4 mm ± 0.2 mm
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Cable weight	42 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 500 MΩ*km (at 20 °C)
Conductor resistance	≤ 290 Ω/km (at 20 °C)
Transmission characteristics (category)	CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)

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### Technical data

#### Cable

Working capacitance	45 nF (At 1 kHz)
Wave impedance	100 Ω ± 5 Ω (At 100 MHz)
Signal runtime	5.3 ns/m
Nominal voltage, cable	≤ 100 V
	300 V (Outer cable sheath)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Flame resistance	IEC 60332-1-2
Halogen-free	According to IEC 60754-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (cable, flexible installation)

### 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

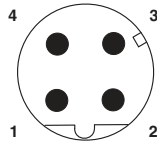
#### UNSPSC

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

### Drawings

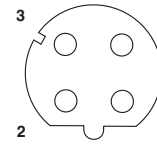
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Schematic diagram



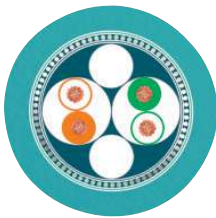
Pin assignment M12 male connector, 4-pos., D-coded, male side

Schematic diagram



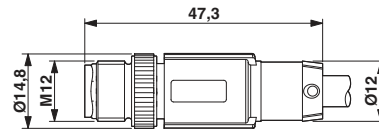
Pin assignment M12 socket, 4-pos., D-coded, female side

Cable cross section



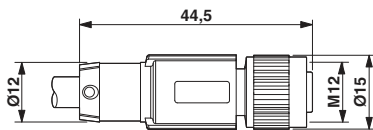
Ethernet [93E]

Dimensioned drawing



Plug, M12 x 1, straight, shielded

Dimensioned drawing



M12 x 1 socket, straight, shielded

Circuit diagram

