

## Bus system cable - SAC-8P-M12MS/ 5,0-940/M12FS - 1554021

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, Ethernet CAT5 (1 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 5 m



**Ethernet**

### Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	280.0 g
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	5 m
-----------------	-----

#### Ambient conditions

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

#### General

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Signal type/category	Ethernet CAT5 (IEC 11801), 1 Gbps
Status display	No

## Bus system cable - SAC-8P-M12MS/ 5,0-940/M12FS - 1554021

### Technical data

#### General

Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

#### Material

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

#### Standards and Regulations

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

#### Cable

Cable type	Ethernet, flexible, CAT5
Cable type (abbreviation)	94B
Cable abbreviation	02YS(ST)C11Y
UL AWM style	20963 (80°C/30 V)
Cable structure	4x2xAWG26/7; SF/UTP
Conductor cross section	4x 2x 0.14 mm <sup>2</sup>
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	0.96 mm
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
Outer sheath thickness	1.05 mm
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	47 kg/km
Outer sheath, material	PUR

# Bus system cable - SAC-8P-M12MS/ 5,0-940/M12FS - 1554021

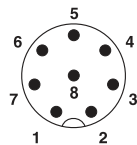
## Technical data

### Cable

Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Loop resistance	$\leq 290 \text{ }\Omega \text{ (per km)}$
Cable capacity	48 nF/km (at 1 kHz)
Wave impedance	$100 \text{ }\Omega \pm 5 \text{ }\Omega \text{ (at 100 MHz)}$
Signal runtime	5.3 ns/m
Coupling resistance	$\leq 100.00 \text{ m}\Omega/\text{m} \text{ (At 10 MHz)}$
Nominal voltage, cable	$\leq 100 \text{ V}$
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Flame resistance	According to IEC 60332-1-2
Halogen-free	According to IEC 60754-1
Resistance to oil	according to EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (cable, flexible installation)

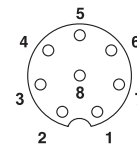
## Drawings

Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side

Schematic diagram



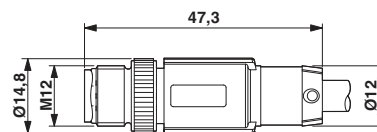
Pin assignment M12 socket, 8-pos., A-coded, view female side

Cable cross section



Ethernet, flexible, CAT5 [94B]

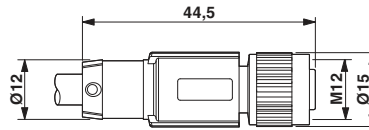
Dimensional drawing



Plug, M12 x 1, straight, shielded

## Bus system cable - SAC-8P-M12MS/ 5,0-940/M12FS - 1554021

Dimensional drawing



M12 x 1 socket, straight, shielded

### 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	27279218
eCl@ss 9.0	27060311

### 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