

## Bus system cable - SAC-8P-M12MS/10,0-940/M12MS - 1543207

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, 8-position, PUR halogen-free, water blue RAL 5021, shielded, Plug straight M12, A-coded, on Plug straight M12, A-coded, Cable length: 10 m



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	500.0 GRM
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

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

#### Ambient conditions

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

#### General

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	No
Surge voltage category	II

## Bus system cable - SAC-8P-M12MS/10,0-940/M12MS - 1543207

### Technical data

#### General

Pollution degree	3
Insertion/withdrawal cycles	≥ 100

#### 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	Zinc die-cast, nickel-plated
Sealing material	NBR

#### Cable

Cable type	Ethernet
Cable type (abbreviation)	94F
Cable structure	4x2xAWG26/7; S/FTP
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	1.04 mm
Thickness, insulation	0.28 mm (signal line)
	0.65 mm (Outer cable sheath)
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	4 pairs
Shielding	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
Smallest bending radius, fixed installation	25.6 mm
Smallest bending radius, movable installation	51.2 mm
Cable weight	43 kg/km
Outer sheath, material	PUR
Material conductor insulation	PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 500 MΩ*km (at 20 °C)
Conductor resistance	≤ 290 Ω/km (at 20 °C)

## Bus system cable - SAC-8P-M12MS/10,0-940/M12MS - 1543207

### Technical data

#### Cable

Transmission characteristics (category)	CAT6 <sub>A</sub>
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Signal runtime	5.3 ns/m
Shield attenuation	≥ 80 dB (at 30 ... 100 MHz)
Nominal voltage, cable	≤ 100 V (at 20 °C)
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 ... 70 °C (cable, fixed installation)
	-10 °C ... 50 °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

#### 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

### Approvals

#### Approvals

# Bus system cable - SAC-8P-M12MS/10,0-940/M12MS - 1543207

## Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

## Approval details

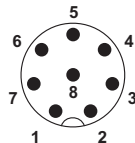
UL Listed	
Nominal current IN	2 A
Nominal voltage UN	30 V

cUL Listed	
Nominal current IN	2 A
Nominal voltage UN	30 V

cULus Listed	
--------------	--

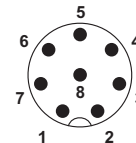
## Drawings

Schematic diagram



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

Schematic diagram



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

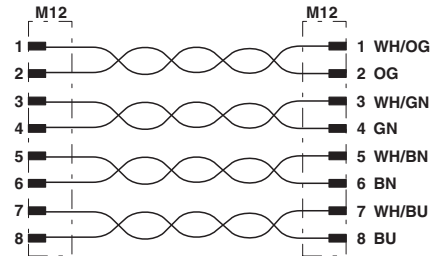
# Bus system cable - SAC-8P-M12MS/10,0-940/M12MS - 1543207

Cable cross section



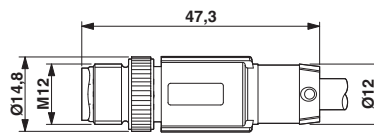
Ethernet [94F]

Circuit diagram



Contact assignment of the M12 plugs

Dimensioned drawing



Plug, M12 x 1, straight, shielded