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Assembled Ethernet cable, shielded, 4-pair, AWG 26 stranded (7-wire), RAL 5021 (sea blue), M12 flush-type socket, rear/screw mounting with M16 thread to free cable end, line, length 5 m

#### Why buy this product

- ☑ Pre-assembled with cables in various standard lengths for immediate use
- ☑ Customer-specific assemblies and cable lengths can be supplied
- Sealed on the cable side for optimum tightness of seal
- Cable designs for all common networks and fieldbuses
- For high transmission safety: shield connection to the housing with optional EMC nut



#### Ethernet

## **Key Commercial Data**

Packing unit	1 STK
GTIN	4 046356 475402
GTIN	4046356475402

#### Technical data

#### **Dimensions**

Length of cable	5 m

#### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 85 °C (cable, flexible installation)
	-40 °C 85 °C (cable, fixed installation)

### General data

Note	The electrical and mechanical data specified assume that the connector		
	pair is correctly locked and mounted. If the connector is unlocked and if		



# Technical data

## General data

	there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Signal type/category	Ethernet CAT5 (on the basis of IEC 11801), 1 Gbps
Overvoltage category	II
Degree of pollution	3
Alternative short product description	Ethernet cable

#### Characteristics head 1

Head type	Flush-type socket straight M12 SPEEDCON / IP67
No. of positions (pin connector pattern)	8
Coding	A (Standard)

#### Characteristics head 2

Head type	free cable end
No. of positions (pin connector pattern)	8

## Standards and Regulations

Flammability rating according to UL 94	V0
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#### Cable

Cable type	Ethernet, flexible, CAT5	
Cable type (abbreviation)	94B	
UL AWM style	20963 (80°C/30 V)	
Signal type/category	Ethernet CAT5 (IEC 11801), 1 Gbps	
Cable structure	4x2xAWG26/7; SF/UTP	
Conductor cross section	4x 2x 0.14 mm²	
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	
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	



# Technical data

## Cable

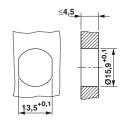
Tensile strength GRP	≤ 100 N			
Cable weight	47 kg/km			
Outer sheath, material	PUR			
Material conductor insulation	Foamed PE			
Conductor material	Bare Cu litz wires			
Insulation resistance	≥ 500 MΩ*km			
Loop resistance	$\leq$ 290 $\Omega$ (per km)			
Cable capacity	48 nF/km (at 1 kHz)			
Wave impedance	100 Ω ±5 Ω (at 100 MHz)			
Signal runtime	5.3 ns/m			
Coupling resistance	$\leq$ 100.00 m $\Omega$ /m (At 10 MHz)			
Nominal voltage, cable	≤ 100 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)			
Ambient temperature (installation)	-20 °C 80 °C			
Ambient temperature (storage/transport)	-20 °C 80 °C			

## **Environmental Product Compliance**

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

# **Drawings**

#### Dimensional drawing



## Schematic diagram



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

Housing cutout for M16 fastening thread, mounting panel with feedthrough hole (alternatively with surface as protection against rotation)

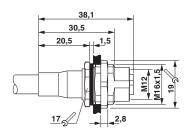


Cable cross section



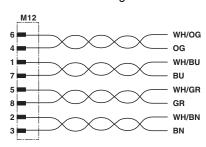
Ethernet, flexible, CAT5 [94B]

Dimensional drawing



M12 flush-type connector

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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Approvals		
Approvals EAC		
Ex Approvals		

Approval details

EAC B.00767



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