

Network cable - VS-M12FSBP-IP20-94B-LI/0,5 - 1403535

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Assembled Ethernet cable, shielded, 4-pair, 26 AWG stranded (7-wire), RAL 5021 (water blue), M12 flush-type socket, rear/screw mounting with M16 thread to RJ45 male connector/IP20, line, length: 0.5 m

RoHS

Ethernet

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 656924
GTIN	4046356656924
Weight per Piece (excluding packing)	80.000 g
Custom tariff number	85444210
Country of origin	Germany

Technical data

Dimensions

Length of cable	0.5 m
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Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C (cable, fixed installation)
	-5 °C ... 60 °C (cable, flexible installation)

General data

Number of positions	8
Signal type/category	Ethernet CAT5
Degree of pollution	3
Alternative short product description	Ethernet cable

Characteristics head 1

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Technical data

Characteristics head 1

Head type	Flush-type socket straight M12 / IP20
No. of positions (pin connector pattern)	8

Characteristics head 2

Head type	Plug straight RJ45 / IP20
No. of positions (pin connector pattern)	8

Standards and Regulations

Flammability rating according to UL 94	V2
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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 mm ²
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
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	≤ 290.00 Ω/km
Cable capacity	48 nF/km (at 1 kHz)

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Technical data

Cable

Wave impedance	100 Ω $\pm$ 5 Ω (at 100 MHz)
Near end crosstalk attenuation (NEXT)	71.3 dB (with 1 MHz)
	62.3 dB (at 4 MHz)
	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)
	51.8 dB (at 20 MHz)
	48.9 dB (at 31.25 MHz)
	44.4 dB (at 62.5 MHz)
	41.3 dB (at 100 MHz)
Power-summed near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
Attenuation	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
Return loss (RL)	23 dB (at 4 MHz)
	24.1 dB (at 8 MHz)
	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (at 100 MHz)
Signal runtime	5.3 ns/m
Coupling resistance	$\leq$ 100.00 m Ω /m (at 10 MHz)
Nominal voltage, cable	$\leq$ 100 V
Test voltage Core/Core	700 V (50 Hz, 1 min.)

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Technical data

Cable

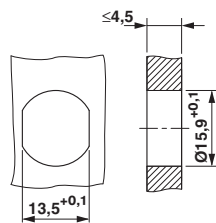
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Flame resistance	according to IEC 60332-1-2
Halogen-free	According to IEC 60754-1
Resistance to oil	according to EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (cable, flexible installation)
Ambient 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

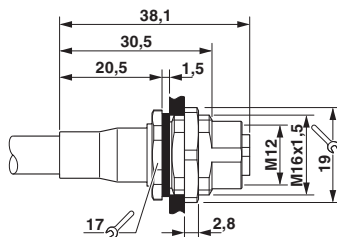


Cable cross section

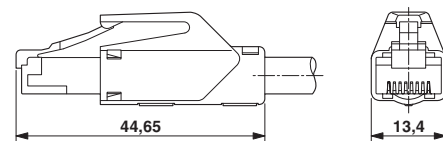


Housing cutout for M16 fastening thread, mounting panel with feed-through Ethernet, flexible, CAT5 [94B] hole (alternatively with surface as protection against rotation)

Dimensional drawing



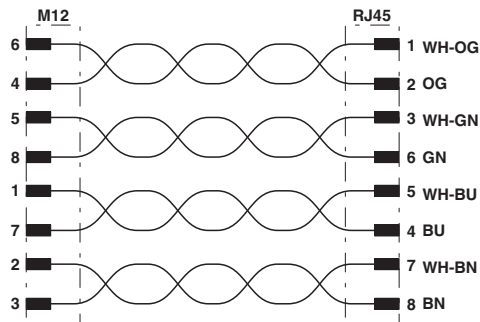
Dimensional drawing



M12 flush-type connector

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Circuit diagram



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	27060308
eCl@ss 9.0	27060308

ETIM

ETIM 3.0	EC000830
ETIM 4.0	EC002599
ETIM 5.0	EC002599

UNSPSC

UNSPSC 6.01	26121616
UNSPSC 7.0901	26121616
UNSPSC 11	26121604
UNSPSC 12.01	31261501
UNSPSC 13.2	26121604

Approvals

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EAC

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Approvals

Ex Approvals

Approval details

EAC		B.00767
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