

## Network cable - VS-M12MS-IP20-94B-LI/3,0 - 1403492


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Network cable, Ethernet CAT5 (1 Gbps), 8-position, Plug straight M12, on Plug straight RJ45, cable length: 3 m



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 656122
GTIN	4046356656122

### Technical data

#### Mechanical characteristics

Number of positions	8
Shielded	yes
Insertion/withdrawal cycles	≥ 100
Cable outlet	straight
Length of cable	3 m
No. of cable outlets	1

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C (cable, fixed installation)
	-5 °C ... 60 °C (cable, flexible installation)
Degree of protection	IP65 (M12 connector)
	IP20 (RJ45 connector)

#### Material data

Flammability rating according to UL 94	HB
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#### Standards and Regulations

Flammability rating according to UL 94	HB
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#### Line characteristics

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## Technical data

### Line characteristics

Cable type	Ethernet, flexible, CAT5
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
External cable diameter	6.4 mm ±0.2 mm
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
External sheath, color	water blue RAL 5021
Transmission medium	Copper
Insulation resistance	≥ 500 MΩ*km
Wave impedance	100 Ω ±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)
Wave 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	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	≤ 100.00 mΩ/m (at 10 MHz)

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## Technical data

### Line characteristics

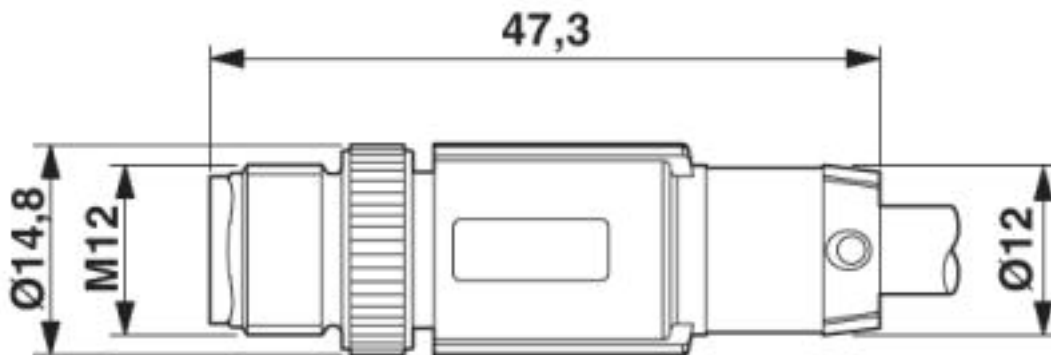
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Cable weight	47 kg/km
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
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)

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

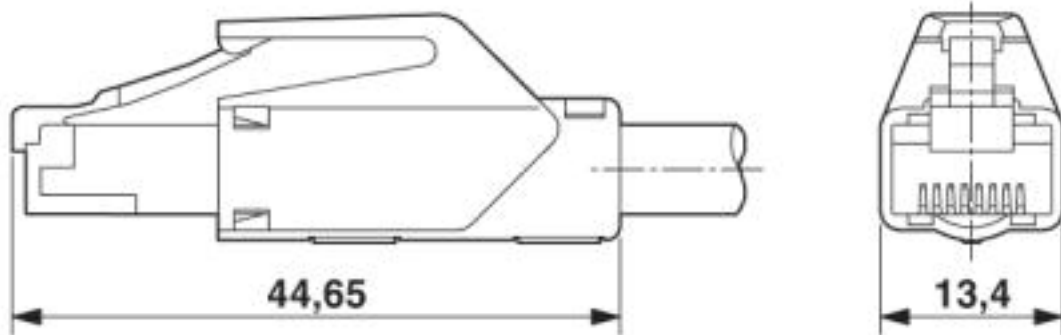
Dimensional drawing



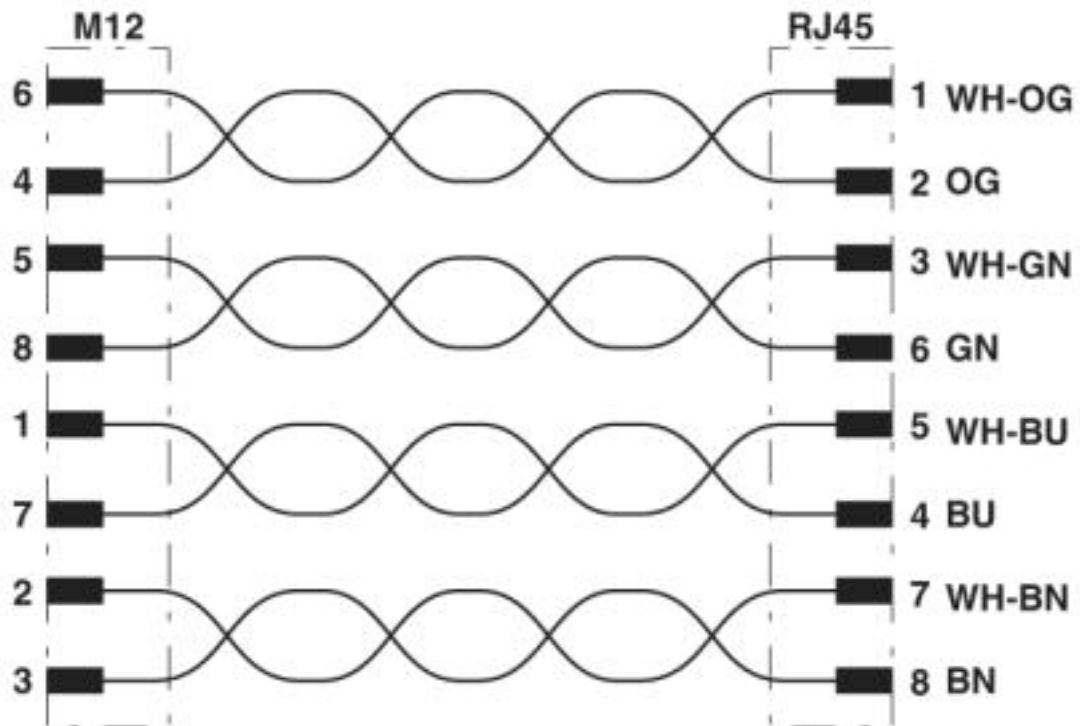
Plug, M12 x 1, straight, shielded

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Dimensional drawing



Circuit diagram



## Network cable - VS-M12MS-IP20-94B-LI/3,0 - 1403492

Cable cross section



Ethernet, flexible, CAT5 [94B]

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