

Network cable - VS-M12MSD-RJ45X-931/ 2,0 - 1561797

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Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 2 m, customer version

RoHS

Ethernet

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 046356 288637
GTIN	4046356288637

Technical data

Mechanical characteristics

Number of positions	4
Shielded	yes
Cable diameter	6.70 mm
Cable structure	2x2xAWG26/7; S-FTP
Length of cable	2 m
Degree of protection	IP67/IP20

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C (cable, fixed installation)
	0 °C ... 50 °C (cable, flexible installation)
	Plug / socket
Degree of protection	IP20
	IP67

Material data

Housing material	TPU/PA
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021

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Technical data

Electrical characteristics

Transmission characteristics (category)	CAT5 (IEC 11801:2002)
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Line characteristics

Cable type	PUR ETHERNET 2x2 FLEX
Cable abbreviation	02YS(ST)C11Y
UL AWM style	20963 (80°C/30 V)
Cable structure	2x2xAWG26/7; SF/UTP
Conductor cross section	2x 2x 0.14 mm ²
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	0.98 mm
External cable diameter	6.4 mm ±0.2 mm
Wire colors	white/orange-orange, white/green-green
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)	65.3 dB (with 1 MHz)
	56.3 dB (at 4 MHz)
	50.3 dB (at 10 MHz)
	47.2 dB (at 16 MHz)
	45.8 dB (at 20 MHz)
	42.9 dB (at 31.25 MHz)
	38.4 dB (at 62.5 MHz)
	35.3 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)

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Technical data

Line characteristics

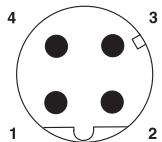
Signal runtime	5.3 ns/m
Coupling resistance	$\leq 100.00 \text{ m}\Omega/\text{m}$ (at 10 MHz)
Nominal voltage, cable	$\leq 100 \text{ V}$ (Peak value, not for high-power applications)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the 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	42 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
	in acc. to UL VW1
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 = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

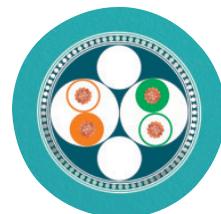
Drawings

Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side

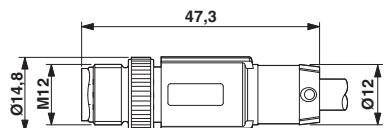
Cable cross section



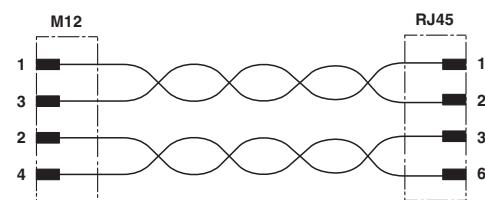
PUR ETHERNET 2x2 FLEX [93E]

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Dimensional drawing

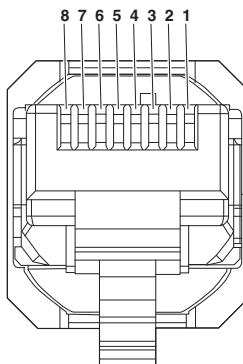


Circuit diagram



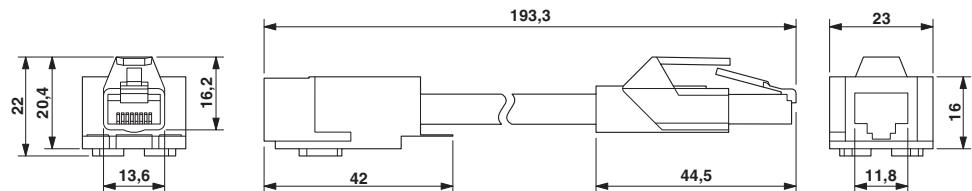
Plug, M12 x 1, straight, shielded

Schematic diagram



Connector pin assignment plug RJ45

Dimensional drawing



RJ45 connector, IP20

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