

VS-M12FSBP-IP20-93E-LI/2,0 - Network cable

1406085

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Network cable, cable length: 2 m, number of positions: 4, 100 Mbps, CAT5, cable outlet: straight, Ethernet

Commercial data

Item number	1406085
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	ABNPAB
Catalog page	Page 399 (C-2-2019)
GTIN	4046356476041
Weight per piece (including packing)	119 g
Weight per piece (excluding packing)	261.083 g
Customs tariff number	85444210
Country of origin	PL

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Technical data

Mounting

Mounting type	Screw mounting
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Product properties

Type	M12
Product type	Circular connectors (device side)
Sensor type	Ethernet
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	D
Cable outlet	straight

Insulation characteristics

Degree of pollution	3
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Material specifications

Flammability rating according to UL 94	V2
Seal material, flat gasket	FKM / FPM
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

Electrical properties

Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Transmission speed	100 Mbps

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Connector

Connection 1

Type	Flush-type female connector straight M12
Locking type	SPEEDCON
Shielded	yes

Connection 2

Type	Plug straight RJ45
Degree of protection	IP20

Cable/line

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Cable length	2.00 m
Ethernet flexible CAT5, 2-pair [93E]	
Dimensional drawing	
Shielded	yes
UL AWM Style	20963 (80°C/30 V)
Cable weight	42 kg/km
Cable type	Ethernet flexible CAT5, 2-pair
Short symbol	02YS(ST)C11Y
Cable type (abbreviation)	93E
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Cable structure	2x2xAWG26/7, SF/UTP
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Thickness, outer sheath	1.20 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	2x 2x 0.14 mm ²
Material wire insulation	Foamed PE
Wire diameter incl. insulation	0.98 mm
Single wire, color	white/orange-orange, white/green-green
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 %
Current carrying capacity of cable	2.00 A (according to DIN VDE 0891-1)
Nominal voltage, cable	≤ 100 V (Peak value, not for high-power applications)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700.00 V (50 Hz, 1 min.)
Cable insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Loop resistance	≤ 290.00 Ω/km
Cable capacity	approx. 45 nF/km (at 1 kHz)
Signal runtime	5.3 ns/m

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Tensile strength	≤ 80 N
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Damping	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)
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)
Power-summated 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)
Return attenuation (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)
Halogen-free	according to IEC 60754-1
Resistance to oil	in accordance with EN 60811-2-1
Flame resistance	according to IEC 60332-1-2
	in acc. to UL VW1
	in accordance with UN ECE-R 118.03
Ambient temperature (operation)	-20 °C ... 80 °C (Cable, flexible installation)
	-40 °C ... 80 °C (cable, fixed installation)

Environmental and real-life conditions

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Ambient conditions

Ambient temperature (operation)	-25 °C ... 80 °C (Plug / socket)
	-40 °C ... 80 °C (without mechanical actuation)
	-25 °C ... 80 °C (Cable, flexible installation)

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