

Bus system cable - VS-M12MSD-M12MSD-93E-LI/ 3,0 - 1404122

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Bus system cable



Ethernet

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 046356 680325
GTIN	4046356680325

Technical data

Cable

Cable type	Ethernet
Cable type (abbreviation)	93E
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
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	1 mm -0.2 mm
Wire colors	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Shielding	Plastic-coated aluminum foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	water blue RAL 5021
External cable diameter D	5.75 mm ±0.15 mm
Smallest bending radius, fixed installation	30 mm (cable, fixed installation)

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Smallest bending radius, movable installation	78 mm (cable, flexible installation)
Tensile strength GRP	≤ 50 N (temporary)
	≤ 10 N (Permanent)
Cable weight	43 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foam-Skin PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 5 GΩ*km
Conductor resistance	≤ 284 Ω/km
Cable capacity	nom. 48 nF/km (At 800 Hz)
Wave impedance	100 Ω ±15 % (at 1 ... 100 MHz)
Near end crosstalk attenuation (NEXT)	66 dB/m (with 1 MHz)
	57 dB/m (at 4 MHz)
	52 dB/m (at 10 MHz)
	50 dB/m (at 16 MHz)
	47 dB/m (at 20 MHz)
	45 dB/m (at 31.25 MHz)
	40 dB/m (at 62.5 MHz)
	36 dB/m (at 100 MHz)
Attenuation	0.028 dB/m (with 1 MHz)
	0.06 dB/m (at 4 MHz)
	0.085 dB/m (at 10 MHz)
	0.115 dB/m (at 16 MHz)
	0.128 dB/m (at 20 MHz)
	0.162 dB/m (at 31.25 MHz)
	0.23 dB/m (at 62.5 MHz)
	0.29 dB/m (at 100 MHz)
Crosstalk attenuation (ACR)	6.57 dB/m (with 1 MHz)
	5.64 dB/m (at 4 MHz)
	5.12 dB/m (at 10 MHz)
	4.89 dB/m (at 16 MHz)
	4.57 dB/m (at 20 MHz)
	4.34 dB/m (at 31.25 MHz)
	3.77 dB/m (at 62.5 MHz)
	3.31 dB/m (at 100 MHz)
Signal speed	0.77 c
Signal runtime	4.3 ns/m
Interference suppression	approx. 65 dB (at 30 MHz)
Coupling resistance	≤ 5.00 mΩ/m (at 20 MHz)
Nominal voltage, cable	50 V _{rms}

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	125 V (Peak value, not for high-power applications)
Test voltage Core/Core	1000 V _{rms}
Test voltage Core/Shield	500 V _{rms}
Flame resistance	according to VDE 0482 Part 265-2-1
	according to IEC 332-1
Ambient temperature (installation)	-5 °C ... 60 °C

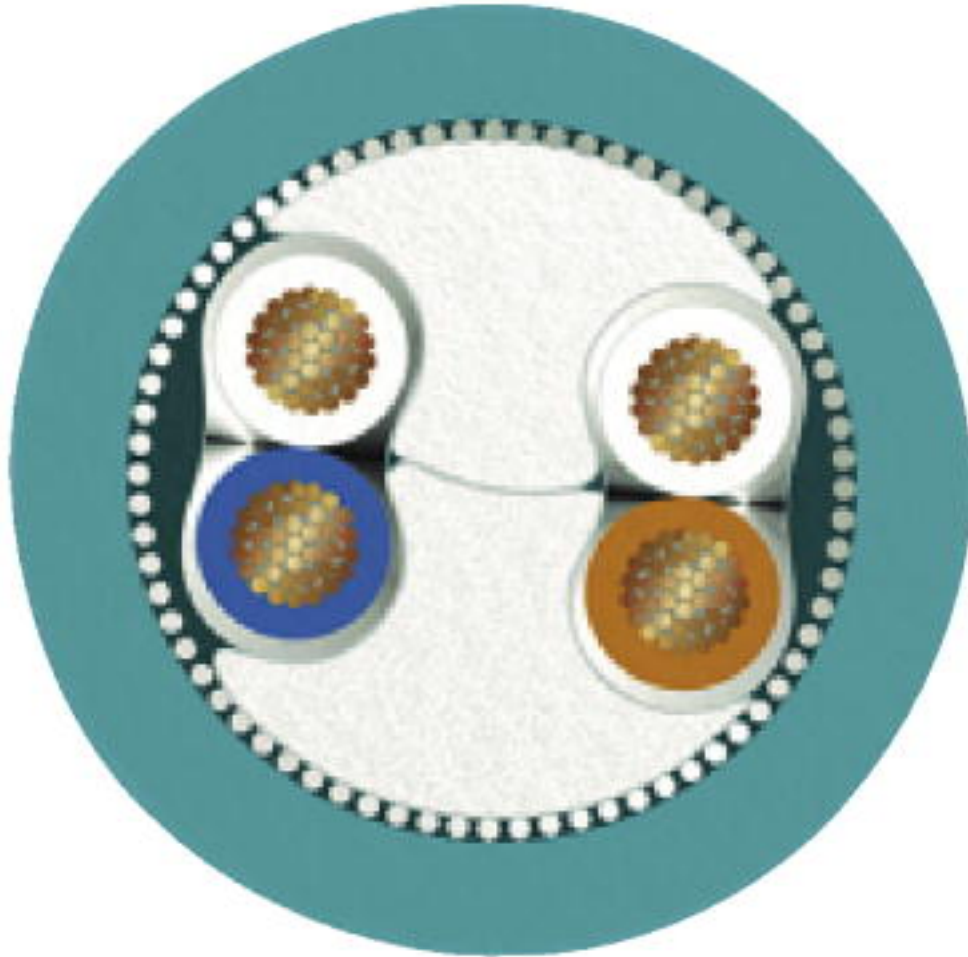
Environmental Product Compliance

	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

Bus system cable - VS-M12MSD-M12MSD-93E-LI/ 3,0 - 1404122

Cable cross section



Ethernet [93E]

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