

## Network cable - VS-MSD-IP20-93E/5,0 - 1403500

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



Assembled Ethernet cable, CAT5e, shielded, 2-pair, 26 AWG, stranded (7-wire), RAL 5021 (aqua blue), M12 plug to RJ45 plug/IP20, line, length 5 m



### Key commercial data

Packing unit	1 pc
GTIN	 4 046356 656207
Weight per Piece (excluding packing)	240.6 g
Custom tariff number	85444210
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	5 m
-----------------	-----

#### Ambient conditions

Degree of protection	IP20 (RJ45 connector)
	IP67 (M12 connector)

#### General data

Number of positions	4
Signal type/category	Ethernet CAT5 (IEC 11801:2002)
	Ethernet CAT5e (TIA 568B:2001)
Surge voltage category	I
Pollution degree	3

#### Characteristics head 1

Head type	Plug Straight M12 / IP67
No. of positions (pin connector pattern)	4
Coding	D (Data)
Color	black

# Network cable - VS-MSD-IP20-93E/5,0 - 1403500

## Technical data

### Characteristics head 1

Material (component)	CuZn (Contact)
	Ni/Au (Contact surface)
	TPU GF (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
	Zinc die-cast, nickel-plated (Screw connection)
Shielded	Yes
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm
Ambient temperature (operation)	-25 °C ... 90 °C

### Characteristics head 2

Head type	Plug Straight RJ45 / IP20
No. of positions (pin connector pattern)	4 (8)
Color	Gray
Material (component)	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carriers)
	PA (Housing)
Shielded	Yes
Insertion/withdrawal cycles	≥ 750
Ambient temperature (operation)	-40 °C ... 60 °C

### Cable

Cable type	PUR ETHERNET 2x2 FLEX
Cable type (abbreviation)	93E
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT5 (IEC 11801:2002), 100 Mbps
	Ethernet CAT5e (TIA 568B:2001), 100 Mbps
Cable structure	2x2xAWG26/7; SF/UTP
Conductor cross section	2x 2x 0.14 mm <sup>2</sup>
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	0.98 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	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
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

## Network cable - VS-MSD-IP20-93E/5,0 - 1403500

### Technical data

#### Cable

Tensile strength short-term/long-term	≤ 80N
Cable weight	42 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 500 MΩ*km (at 20 °C)
Conductor resistance	≤ 290000000 Ω/km (at 20 °C)
Working capacitance	45 nF (At 1 kHz)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Signal runtime	5.3 ns/m
Nominal voltage, cable	≤ 100 V
	300 V (Outer cable sheath)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Flame resistance	IEC 60332-1-2
Halogen-free	According to IEC 60754-1
Resistance to oil	in accordance with DIN 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

### 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	27061801

#### ETIM

ETIM 4.0	EC000830
ETIM 5.0	EC000830

#### UNSPSC

UNSPSC 6.01	26121609
UNSPSC 7.0901	26121609
UNSPSC 11	26121609

# Network cable - VS-MSD-IP20-93E/5,0 - 1403500

## Classifications

### UNSPSC

UNSPSC 12.01	26121609
UNSPSC 13.2	26121609

## Approvals

### Approvals

---

### Approvals

### GOST

---

### Ex Approvals

---

### Approvals submitted

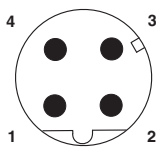
---

## Approval details



## Drawings

Schematic diagram



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

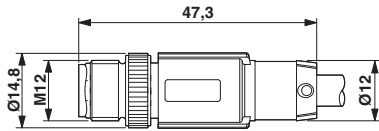
Cable cross section



PUR ETHERNET 2x2 FLEX [93E]

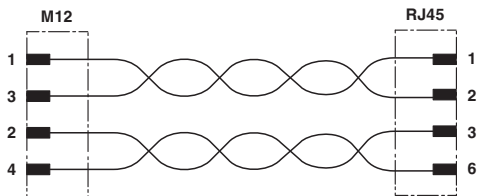
# Network cable - VS-MSD-IP20-93E/5,0 - 1403500

Dimensioned drawing

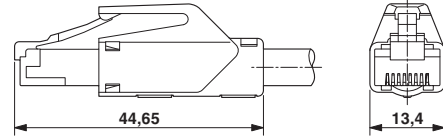


Plug, M12 x 1, straight, shielded

Circuit diagram

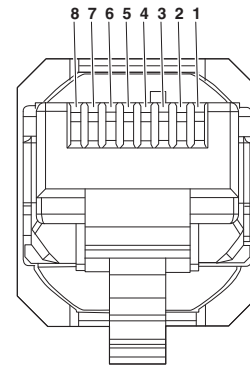


Dimensioned drawing



RJ45 connector, IP20

Schematic diagram



Connector pin assignment plug RJ45