

Network cable - VS-M12MS-IP20-93E-LI/2,0 - 1406056

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://phoenixcontact.com/download>)



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

RoHS

Ethernet

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 476034
GTIN	4046356476034
Weight per Piece (excluding packing)	113.400 g
Custom tariff number	85444210
Country of origin	Poland
Note	Made to Order (non-returnable)

Technical data

Dimensions

Length of cable	2 m
-----------------	-----

Ambient conditions

Degree of protection	IP20
	IP67

General data

Number of positions	4
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Overvoltage category	I
Degree of pollution	3
	3
Alternative short product description	Ethernet cable
Rated voltage (III/3)	60 V

Network cable - VS-M12MS-IP20-93E-LI/2,0 - 1406056

Technical data

Characteristics head 1

Head type	Plug straight M12
No. of positions (pin connector pattern)	4 (4)
Coding	D (Data)
Material (component)	TPU, hardly inflammable, self-extinguishing (Grip)
	Zinc die-cast, nickel-plated (Screw connection)
Shielded	yes
Insulation resistance	$\geq 100 \text{ M}\Omega$
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm
Ambient temperature (operation)	-25 °C ... 90 °C

Characteristics head 2

Head type	Plug straight RJ45
No. of positions (pin connector pattern)	4 (8)
Shielded	yes

Standards and Regulations

Flammability rating according to UL 94	V2
--	----

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), 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	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
Outer sheath thickness	1.2 mm
External cable diameter D	6.4 mm $\pm$ 0.2 mm
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Tensile strength short-term/long-term	$\leq 80\text{N}$
Cable weight	42 kg/km
Outer sheath, material	PUR

Network cable - VS-M12MS-IP20-93E-LI/2,0 - 1406056

Technical data

Cable

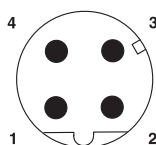
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Standards/specifications	Electrical requirements EN 50288-2-2
Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Loop resistance	$\leq 290 \text{ }\Omega \text{ (per km)}$
Cable capacity	approx. 45 nF/km (at 1 kHz)
Wave impedance	$100 \text{ }\Omega \pm 5 \text{ }\Omega$ (at 100 MHz)
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.)
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)	$-40 \text{ }^{\circ}\text{C} \dots 80 \text{ }^{\circ}\text{C}$ (cable, fixed installation)
	$-20 \text{ }^{\circ}\text{C} \dots 80 \text{ }^{\circ}\text{C}$ (cable, flexible installation)
Ambient temperature (installation)	$-20 \text{ }^{\circ}\text{C} \dots 80 \text{ }^{\circ}\text{C}$
Ambient temperature (storage/transport)	$-20 \text{ }^{\circ}\text{C} \dots 80 \text{ }^{\circ}\text{C}$

Environmental Product Compliance

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

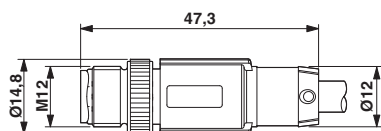
Cable cross section



PUR ETHERNET 2x2 FLEX [93E]

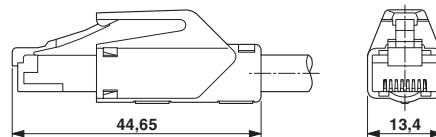
Network cable - VS-M12MS-IP20-93E-LI/2,0 - 1406056

Dimensional drawing



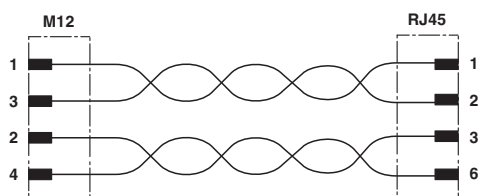
Plug, M12 x 1, straight, shielded

Dimensional drawing

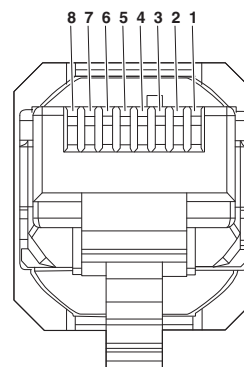


RJ45 connector, IP20

Circuit diagram



Schematic diagram



Connector pin assignment plug RJ45

Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27060307
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27060308
eCl@ss 9.0	27060308

ETIM

ETIM 3.0	EC000830
ETIM 4.0	EC002599
ETIM 5.0	EC002599
ETIM 6.0	EC002599

UNSPSC

UNSPSC 6.01	31261501
-------------	----------

Network cable - VS-M12MS-IP20-93E-LI/2,0 - 1406056

Classifications

UNSPSC

UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	26121604

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC		EAC-Zulassung
-----	---	---------------