

## Network cable - VS-M12MSS-IP20-94F/10,0/10G - 1440630

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, CAT6<sub>A</sub>, shielded, 4-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 plug on RJ45 plug, SPEEDCON, length 10 m



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	480.0 GRM
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	10 m
-----------------	------

#### Ambient conditions

Degree of protection	IP65 (M12 connector)
	IP67 (M12 connector)
	IP20 (RJ45 connector)

#### General data

Rated current at 40°C	0.5 A
Rated voltage	48 V
Number of positions	8
Signal type/category	Ethernet CAT6 <sub>A</sub>
Surge voltage category	I
Pollution degree	1

## Network cable - VS-M12MSS-IP20-94F/10,0/10G - 1440630

### Technical data

#### Characteristics head 1

Head type	Plug Straight M12 SPEEDCON / IP65
No. of positions (pin connector pattern)	8 (8)
Coding	X (Data)
Color	black
Shielded	Yes

#### Characteristics head 2

Head type	Plug Straight RJ45 / IP20
No. of positions (pin connector pattern)	8 (8)
Color	Gray
Shielded	Yes

#### Cable

Cable type	Ethernet 10 Gbit
Cable type (abbreviation)	94F
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT6 <sub>A</sub> , 10 Gbps
Cable structure	4x2xAWG26/7; S/FTP
Conductor cross section	4x 2x 0.14 mm <sup>2</sup>
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	1.04 mm
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined foil
Overall twist	4 pairs for core
Shielding	Tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
Outer sheath thickness	0.65 mm
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
Tensile strength short-term/long-term	≤ 100 N
Cable weight	42 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires

## Network cable - VS-M12MSS-IP20-94F/10,0/10G - 1440630

### Technical data

#### Cable

Insulation resistance	≥ 500 MΩ*km
Conductor resistance	≤ 290 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Signal runtime	5.13 ns/m
Shield attenuation	≥ 80 dB (at 30 ... 100 MHz)
Nominal voltage, cable	≤ 100 V
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
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	27060307
eCl@ss 6.0	27060390
eCl@ss 7.0	27060390
eCl@ss 8.0	27060390

#### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC000830
ETIM 4.0	EC002599
ETIM 5.0	EC001855

#### UNSPSC

UNSPSC 6.01	26121609
UNSPSC 7.0901	26121609
UNSPSC 11	26121609
UNSPSC 12.01	26121609

# Network cable - VS-M12MSS-IP20-94F/10,0/10G - 1440630

## Classifications

### UNSPSC

UNSPSC 13.2	26121609
-------------	----------

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

#### Approvals submitted

## Approval details

UL Listed	
Nominal current IN	0.5 A
Nominal voltage UN	30 V

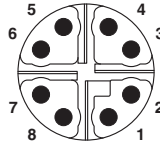
cUL Listed	
Nominal current IN	0.5 A
Nominal voltage UN	30 V

cULus Listed	
--------------	--

## Drawings

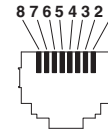
# Network cable - VS-M12MSS-IP20-94F/10,0/10G - 1440630

Schematic diagram



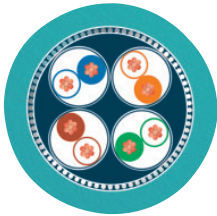
M12 Cat6<sub>A</sub>, 8-pos. plug pin assignment, pin side view

Schematic diagram



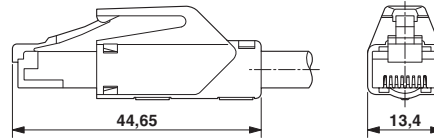
Connector pin assignment plug RJ45

Cable cross section



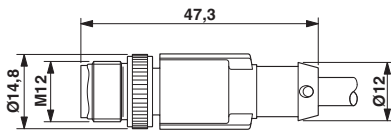
Ethernet 10 Gbit [94F]

Dimensioned drawing



RJ45 connector dimensional drawing

Dimensioned drawing



M12 connector dimensional drawing

Circuit diagram

