



Automatización Eléctrica
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

Network cable - VS-M12MSS-M12MSS-94F/20,0/10G - 1440520

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_A, shielded, 4-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 plug on M12 plug, length 20 m



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 504447

Technical data

Dimensions

Length of cable	20 m
-----------------	------

Ambient conditions

Degree of protection	IP65
	IP67

General data

Rated current at 40°C	0.5 A
Rated voltage	48 V
Number of positions	8
Signal type/category	Ethernet CAT6 _A , 10 Gbps
Overvoltage category	II
Degree of pollution	3

Characteristics head 1

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

Network cable - VS-M12MSS-M12MSS-94F/20,0/10G - 1440520

Technical data

Characteristics head 1

Shielded	yes
----------	-----

Characteristics head 2

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

Standards and Regulations

Flammability rating according to UL 94	HB
--	----

Cable

Cable type	Ethernet 10 Gbit
Cable type (abbreviation)	94F
UL AWM style	20963 (80°C/30 V)
Cable structure	4x2xAWG26/7; S/FTP
Conductor cross section	4x 2x 0.14 mm ²
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
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)

Network cable - VS-M12MSS-M12MSS-94F/20,0/10G - 1440520

Technical data

Cable

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	27060308

ETIM

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

UNSPSC

UNSPSC 6.01	26121609
UNSPSC 7.0901	26121609
UNSPSC 11	26121609
UNSPSC 12.01	26121609
UNSPSC 13.2	26121609

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Network cable - VS-M12MSS-M12MSS-94F/20,0/10G - 1440520

Approvals

Ex Approvals

Approvals submitted

Approval details

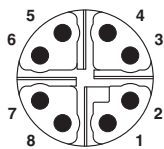
UL Listed	
Nominal current IN	0.5 A
Nominal voltage UN	30 V

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

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

Drawings

Schematic diagram



M12 Cat6_A, 8-pos. plug pin assignment, pin side view

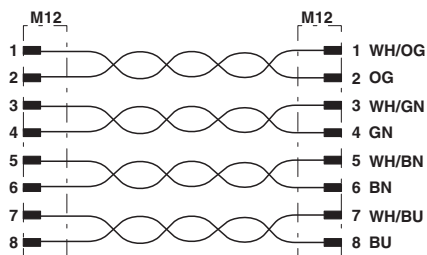
Cable cross section



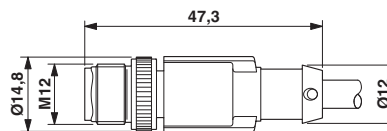
Ethernet 10 Gbit [94F]

Network cable - VS-M12MSS-M12MSS-94F/20,0/10G - 1440520

Circuit diagram



Dimensional drawing



Contact assignment of the M12 plugs

Dimens. drawing: M12 connectors

Phoenix Contact 2016 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>



Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

Product	Code	Reference	Product link
Assembled Ethernet cable, CAT6A, shielded, 4-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 plug on M12 plug, length 20 m	1440520	VS-M12MSS-M12MSS-94F/20,0/10G	Buy on EAN