

VS-M12MR-IP20-93E-X/ 3,0 - Network cable



1403676

<https://www.phoenixcontact.com/us/products/1403676>

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 documentation. Our general terms of use for downloads are valid.



Network cable, Ethernet CAT5, 4-position, PUR halogen-free, water blue RAL 5021, Plug angled M12, coding: D, on Plug straight RJ45, cable length: 3 m, Crossover

Commercial data

Item number	1403676
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CJI
GTIN	4046356663472
Weight per piece (including packing)	160.3 g
Weight per piece (excluding packing)	160.3 g
Country of origin	PL

VS-M12MR-IP20-93E-X/ 3,0 - Network cable



1403676

<https://www.phoenixcontact.com/us/products/1403676>

Technical data

Product properties

Product type	Data cable preassembled
Sensor type	Ethernet
Number of positions	4
Number of slots	1
Shielded	yes
Coding	D

Insulation characteristics

Degree of pollution	3
---------------------	---

Interfaces

Bus system	Ethernet
Signal type/category	Ethernet CAT5 (IEC 11801:2002)

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

Material specifications

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

Connector

Connection 1

Type	Plug angled M12
Coding type	D (Data)

Connection 2

Type	Plug straight RJ45
------	--------------------

Cable/line

Cable length	3 m
--------------	-----

Ethernet flexible CAT5, 2-pair [93E]

Dimensional drawing



VS-M12MR-IP20-93E-X/ 3,0 - Network cable



1403676

<https://www.phoenixcontact.com/us/products/1403676>

Cable weight	42 kg/km
UL AWM Style	20963 (80°C/30 V)
Wiring standards/regulations	Electrical requirements EN 50288-2-2
Number of positions	4
Shielded	yes
Cable type	Ethernet flexible CAT5, 2-pair [93E]
Conductor structure	2x2xAWG26/7, SF/UTP
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	2x 2x 0.14 mm ²
Wire diameter incl. insulation	0.98 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white/orange-orange, white/green-green
Thickness, outer sheath	1.20 mm
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Optical shield covering	70 %
Insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Loop resistance	≤ 290.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Cable capacity	approx. 45 nF/km (at 1 kHz)
Nominal voltage, cable	≤ 100 V (Peak value, not for high-power applications)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700.00 V (50 Hz, 1 min.)
Current carrying capacity of cable	2.00 A (according to DIN VDE 0891-1)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Tensile strength	≤ 80 N
Near end crosstalk attenuation (NEXT)	65.3 dB (with 1 MHz)
	56.3 dB (at 4 MHz)
	50.3 dB (at 10 MHz)
	47.2 dB (at 16 MHz)
	45.8 dB (at 20 MHz)
	42.9 dB (at 31.25 MHz)
	38.4 dB (at 62.5 MHz)
	35.3 dB (at 100 MHz)

VS-M12MR-IP20-93E-X/ 3,0 - Network cable



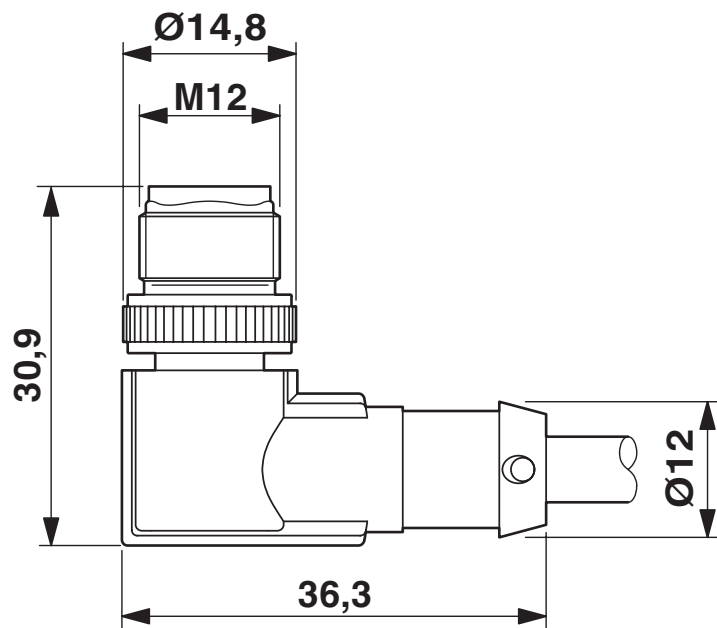
1403676

<https://www.phoenixcontact.com/us/products/1403676>

Power-summated near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
Return attenuation (RL)	23 dB (at 4 MHz)
	24.1 dB (at 8 MHz)
	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (at 100 MHz)
Shield attenuation	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
	in acc. to UL VW1
	in accordance with UN ECE-R 118.03
Resistance to oil	in accordance with 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

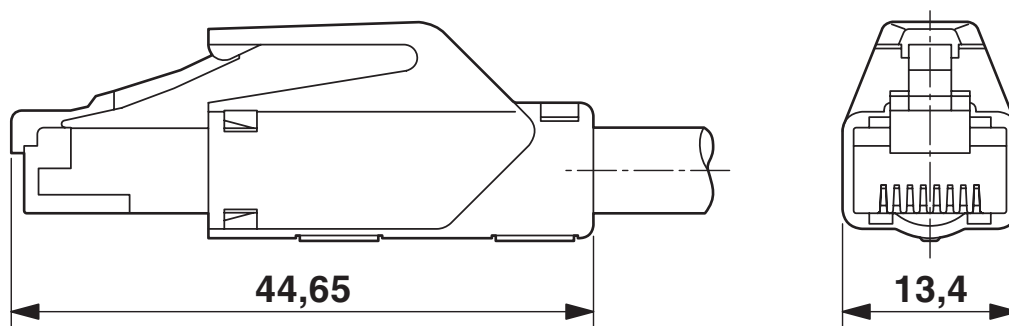
Drawings

Dimensional drawing



M12 x 1 male plug, angled, shielded

Dimensional drawing



RJ45 connector, IP20

VS-M12MR-IP20-93E-X/ 3,0 - Network cable



1403676

<https://www.phoenixcontact.com/us/products/1403676>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com