VS-M12MS-IP20-94B-LI/3,0 - Network cable

1403492

https://www.phoenixcontact.com/au/products/1403492

Network cable, Ethernet CAT5 (1 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, Plug straight M12, coding: A / IP67, on Plug straight RJ45 / IP20, cable length: 3 m

Commercial data

Item number	1403492
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF1CMI
Product key	AF1CMI
GTIN	4046356656122
Weight per piece (including packing)	173.6 g
Weight per piece (excluding packing)	159.7 g
Customs tariff number	85444290
Country of origin	PL

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Technical data

Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	Ethernet
Number of positions	8
No. of cable outlets	1
Shielded	yes

Insulation characteristics

Degree of pollution	3

Interfaces

Signal type/category	Ethernet CAT5 (based on IEC 11801), 1 Gbps

Electrical properties

Nominal voltage U_N	30 V AC
	30 V DC
Transmission medium	Copper
Transmission characteristics (category)	CAT5

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Material specifications

Flammability rating according to UL 94	HB

Connector

Connection 1

Type	Plug straight M12 / IP67
Coding type	A (Standard)
Handle color	black
Degree of protection	IP67

Connection 2

Type	RJ45

Cable/line

Cable length	3 m

Ethernet flexible CAT5, 4-pair [94B]

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Dimensional drawing	
Cable weight	47 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet flexible CAT5, 4-pair [94B]
Conductor structure	4x2xAWG26/7, SF/UTP
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	4x 2x 0.14 mm²
Wire diameter incl. insulation	0.96 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/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Thickness, outer sheath	1.05 mm
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Optical shield covering	70 %
Insulation resistance	≥ 5 GΩ*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	48 nF/km (at 1 kHz)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700.00 V (50 Hz, 1 min.)
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	≤ 100 N
	71.3 dB (with 1 MHz)

Near end crosstalk attenuation (NEXT)	62.3 dB (at 4 MHz)
	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)
	51.8 dB (at 20 MHz)
	48.9 dB (at 31.25 MHz)
	44.4 dB (at 62.5 MHz)
	41.3 dB (at 100 MHz)
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
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

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 (M12 connector)
	IP20 (RJ45 connector)
Ambient temperature (operation)	-25 °C ... 60 °C (cable, fixed installation)

	-5 °C ... 60 °C (Cable, flexible installation)

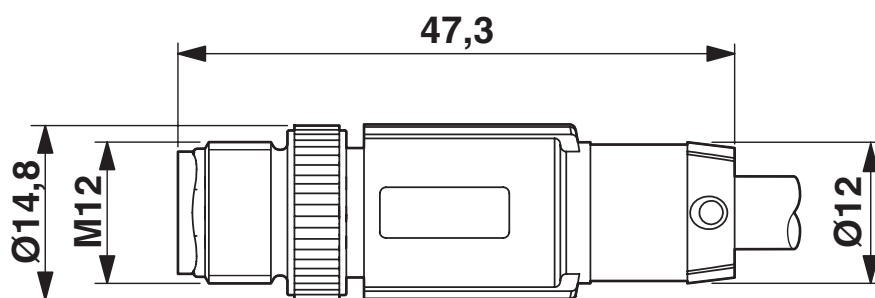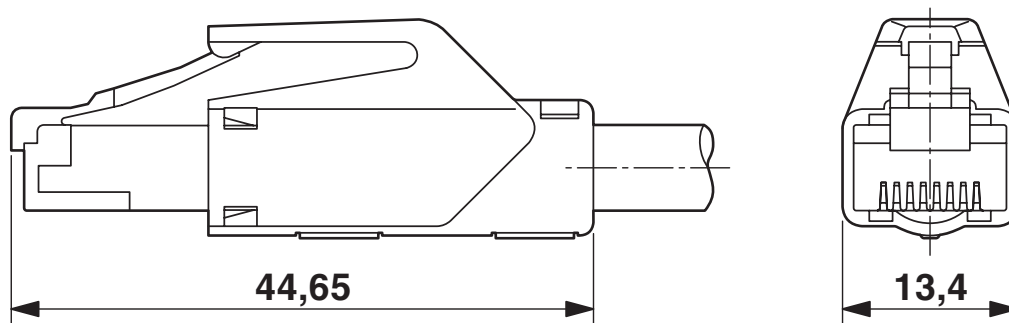## Drawings

Dimensional drawing

Plug, M12 x 1, straight, shielded

Dimensional drawing

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Circuit diagram

M12		RJ45	
6		1	WH-OG
4		2	OG
5		3	WH-GN
8		6	GN
1		5	WH-BU
7		4	BU
2		7	WH-BN
3		8	BN
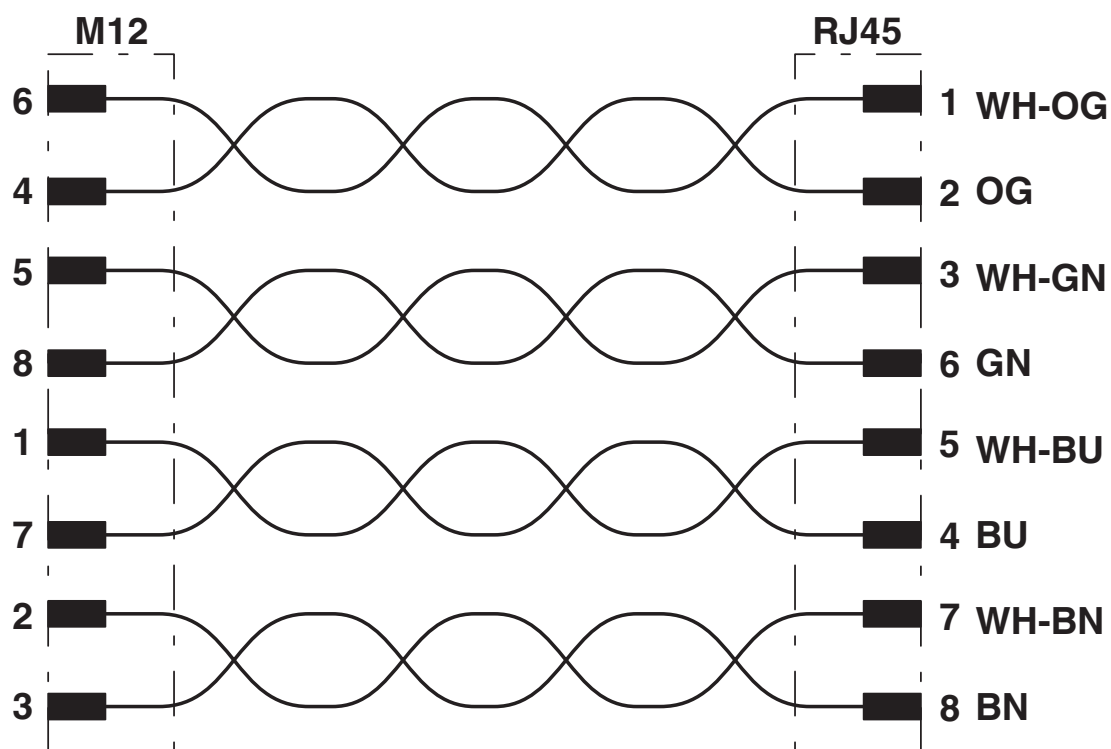
Classifications

ECLASS

ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

EF3.0 Climate Change

CO_2e kg	3.161 kg CO_2e

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