

## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

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>)



Flush-type connector M12, socket, 8-pos., A-coded, for rear mounting, with Ethernet cable AWG 26 stranded (7-wire) and RJ45 connector, length: 0.5 m

RoHS

**Ethernet**

### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	67.000 g
Custom tariff number	85444210
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	0.5 m
-----------------	-------

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C (cable, fixed installation)
	-10 °C ... 50 °C (cable, flexible installation)
	Plug / socket

#### General data

Number of positions	8
Overvoltage category	I
Degree of pollution	1
Alternative short product description	Flush-type connector
Rated voltage (III/3)	30 V
Housing material	CuZn/PA
Degree of protection	IP67/IP20

# Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

## Technical data

### Characteristics head 1

Shielded	yes
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021

### Cable

Cable type	Ethernet flexible CAT5, 4-pair
Cable type (abbreviation)	94B
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT5 (IEC 11801), 1 Gbps
Cable structure	4x2xAWG26/7; SF/UTP
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	0.96 mm
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
Outer sheath thickness	1.05 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 GRP	≤ 100 N
Cable weight	47 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Loop resistance	≤ 290.00 Ω/km
Cable capacity	48 nF/km (at 1 kHz)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Near end crosstalk attenuation (NEXT)	71.3 dB (with 1 MHz)
	62.3 dB (at 4 MHz)
	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)

# Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

## Technical data

### Cable

	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)
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)
Return loss (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)
Signal runtime	5.3 ns/m
Coupling resistance	≤ 100.00 mΩ/m (at 10 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	according to EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)

## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

### Technical data

#### Cable

	-20 °C ... 80 °C (cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 80 °C
Ambient temperature (storage/transport)	-20 °C ... 80 °C

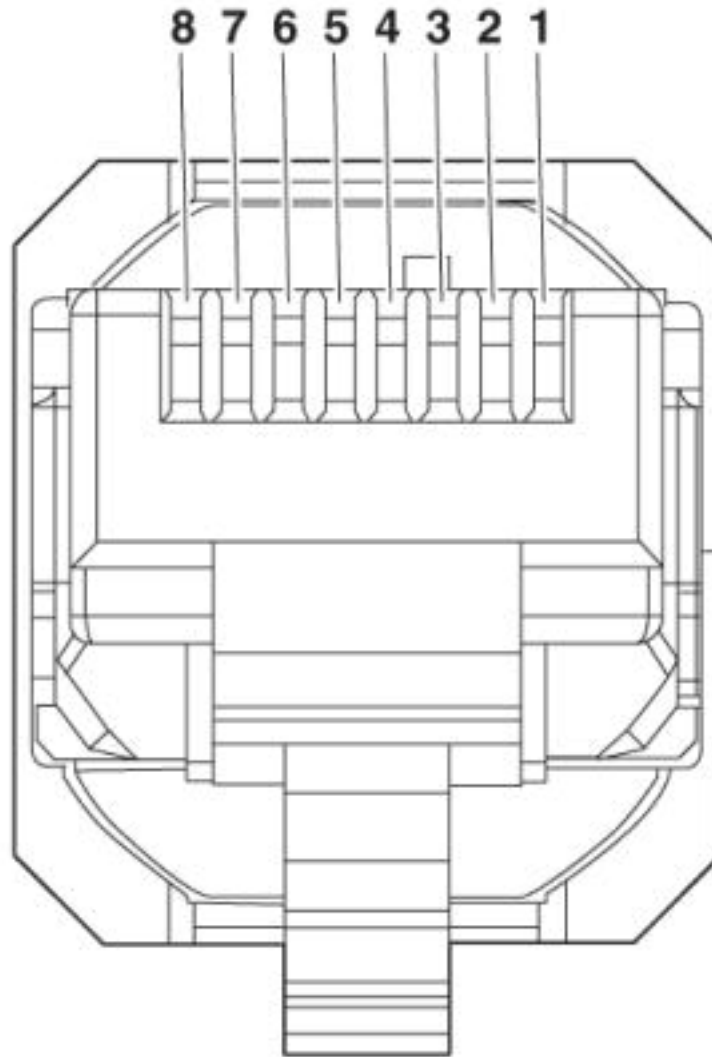
#### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

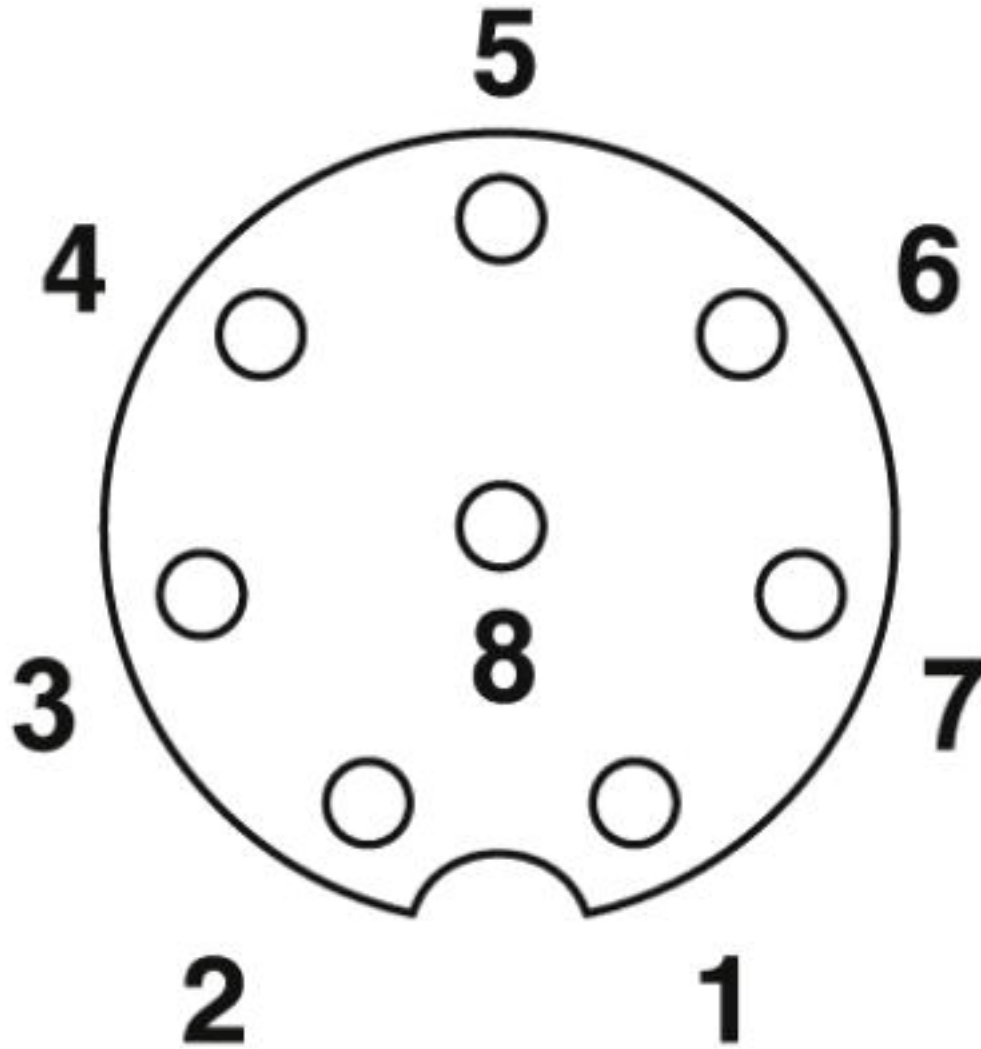
Schematic diagram



Connector pin assignment plug RJ45

## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

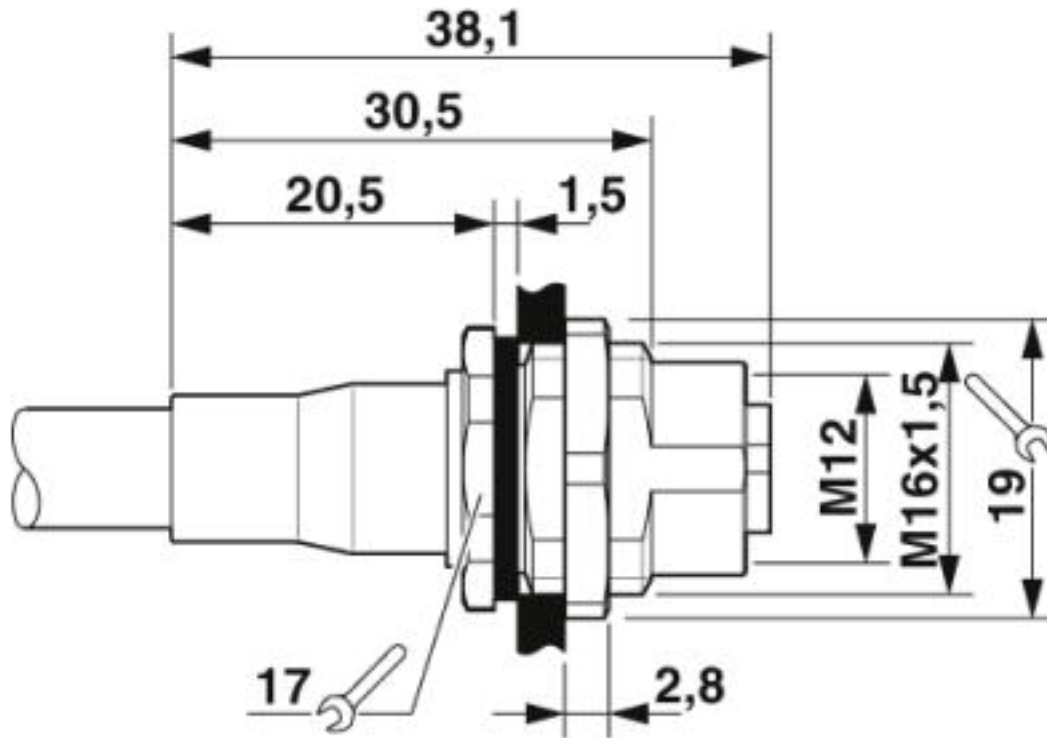
Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

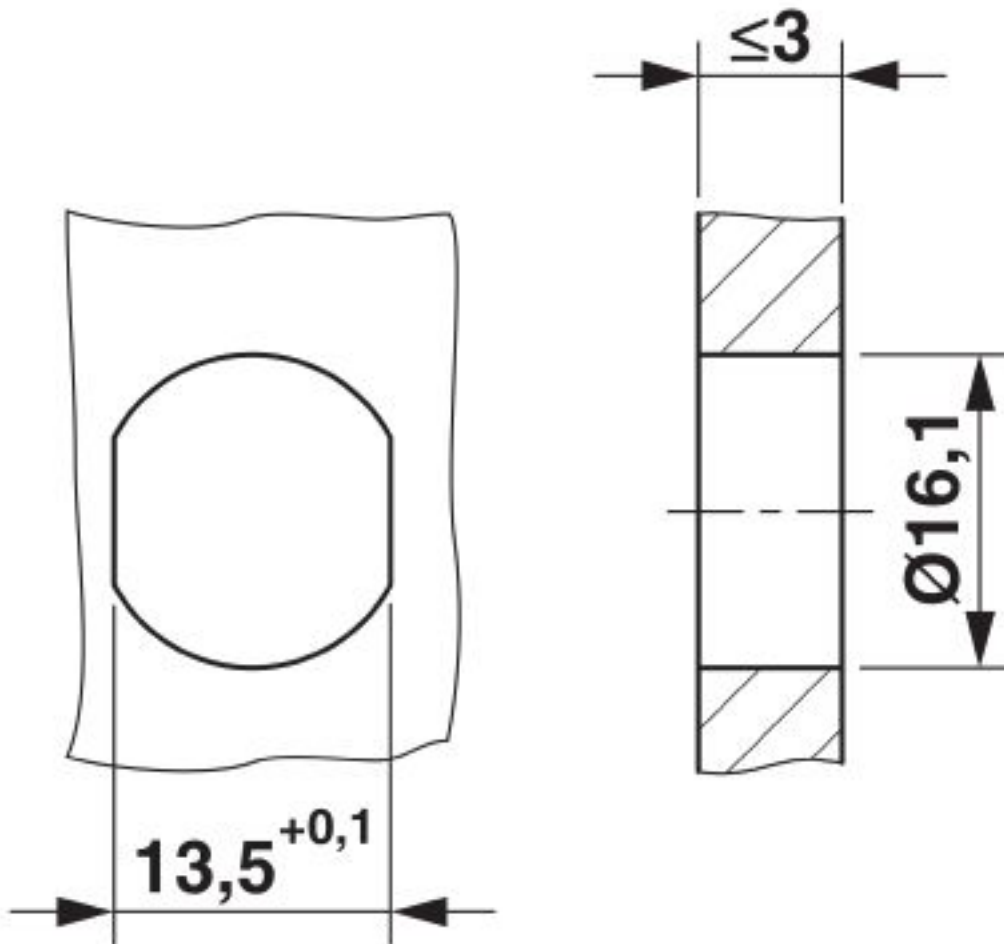
Dimensional drawing



M12 flush-type connector

## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

Dimensional drawing

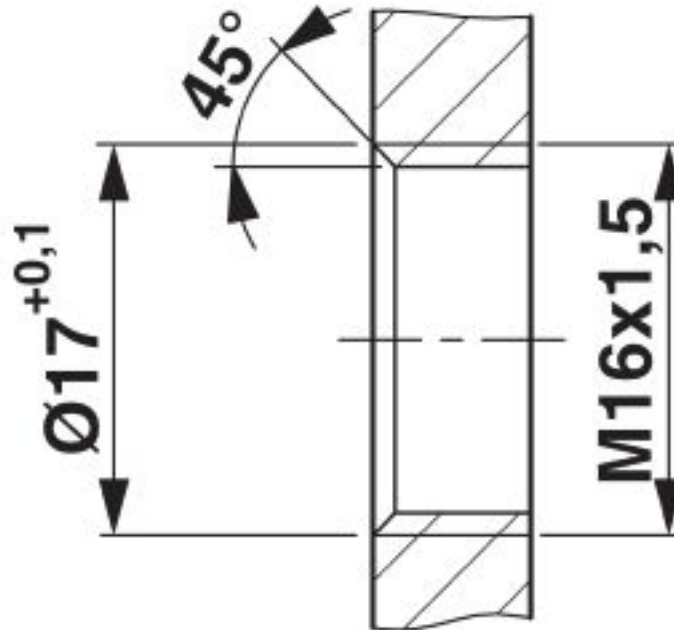


Mounting panel with feed-through hole



## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

Dimensional drawing



Mounting panel with thread

Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

Cable cross section



Ethernet flexible CAT5, 4-pair [94B]

Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27260701
eCl@ss 6.0	27279220
eCl@ss 8.0	27440103
eCl@ss 9.0	27440103

## Network cable - VS-DSIV-M12FS-8C-RJ45-940/0,5 - 1658710

### Classifications

#### ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC002061
ETIM 5.0	EC002061

#### UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31261501