

Network cable - NBC-FSD/ 5,0-93E/R4AC SCO - 1407386

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Network cable, Ethernet CAT5 (100 Mbps), 4-position, PUR, water blue RAL 5021, shielded, Plug straight RJ45 / IP20, on Socket straight M12 SPEEDCON / IP67, Coding: D, Cable length: 5 m



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 775144

Technical data

Dimensions

Length of cable	5 m
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Ambient conditions

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

General data

Rated current at 40°C	1 A
Rated voltage	50 V
Number of positions	4
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Standards/regulations	M12 connector IEC 61076-2-101

Characteristics head 1

Head type	Plug straight RJ45 / IP20
No. of positions (pin connector pattern)	4 (8)
Color	gray
Material (component)	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carriers)

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Technical data

Characteristics head 1

	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Ambient temperature (operation)	-25 °C ... 60 °C

Characteristics head 2

Head type	Socket straight M12 SPEEDCON / IP67
No. of positions (pin connector pattern)	4
Coding	D (Data)
Color	black
Material (component)	CuZn (Contact)
	Ni/Au (Contact surface)
	TPU GF (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
	Zinc die-cast, nickel-plated (Screw connection)
Insulation resistance	≥ 100 MΩ
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm
Ambient temperature (operation)	-25 °C ... 90 °C

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101

Cable

Cable type	PUR ETHERNET 2x2 FLEX
Cable type (abbreviation)	93E
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Cable structure	2x2xAWG26/7; SF/UTP
Conductor cross section	2x 2x 0.14 mm ²
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	0.98 mm
Wire colors	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
Outer sheath thickness	1.2 mm
External cable diameter D	6.4 mm ±0.2 mm
Minimum bending radius, fixed installation	4 x D

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Technical data

Cable

Minimum bending radius, flexible installation	8 x D
Tensile strength short-term/long-term	≤ 80N
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
Cable capacity	approx. 45 nF/km (at 1 kHz)
Wave impedance	100 Ω ±5 Ω (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	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	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27060308

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC002599

UNSPSC

UNSPSC 6.01	31251501
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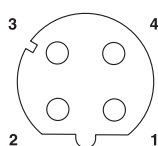
Classifications

UNSPSC

UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

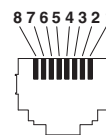
Drawings

Schematic diagram



Pin assignment M12 socket, 4-pos., D-coded, female side

Schematic diagram



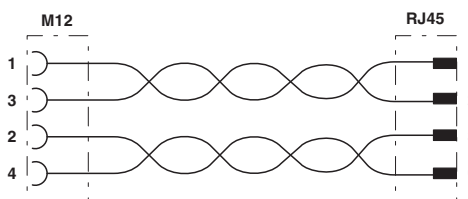
Connector pin assignment plug RJ45

Cable cross section



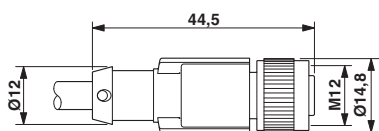
PUR ETHERNET 2x2 FLEX [93E]

Circuit diagram



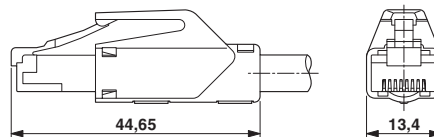
Contact assignment of the M12 socket and the RJ45 plug

Dimensional drawing



M12 x 1 socket, straight, shielded

Dimensional drawing



RJ45 connector, IP20

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