# imall

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Network cable, Ethernet CAT6<sub>A</sub> (1 Gbps), 8-position, PUR, water blue RAL 5021, shielded, Plug Straight M12 SPEEDCON / IP67, Coding: X, on Plug Straight RJ45 Push Pull / IP67, Cable length: 2 m





## Key commercial data

Packing unit	1 pc
Custom tariff number	85444210
Country of origin	Poland

# Technical data

## Dimensions

Length of cable	2 m

## Ambient conditions

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

#### General data

Rated current at 40°C	0.5 A
Rated voltage	48 V
Number of positions	8
Signal type/category	Ethernet CAT6 <sub>A</sub> , 1 Gbps
Standards/regulations	M12 connector IEC 61076-2-109
Characteristics head 1	
Head type	Plug Straight M12 SPEEDCON / IP67

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# Technical data

#### Characteristics head 1

No. of positions (pin connector pattern)	8
Coding	X (Data)
Color	black
Material (component)	CuZn (Contact)
	Ni/Au (Contact surface)
	PP (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
	Zinc die-cast, nickel-plated (Screw connection)
Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq$ 100 M $\Omega$
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm
Ambient temperature (operation)	-25 °C 90 °C

## Characteristics head 2

Head type	Plug Straight RJ45 Push Pull / IP67
No. of positions (pin connector pattern)	8 (8)
Color	silver
Material (component)	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carriers)
	Zinc die-cast, nickel-plated (Housing)
Insertion/withdrawal cycles	≥ 750
Ambient temperature (operation)	-40 °C 70 °C

Cable

Cable type	Ethernet 10 Gbit
Cable type (abbreviation)	94F
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT6 <sub>A</sub> , 1 Gbps
Cable structure	4x2xAWG26/7; S/FTP
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	1.04 mm
Thickness, insulation	0.28 mm (signal line)
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown- brown
Twisted pairs	2 cores to the pair



# Technical data

Cable

Aluminum-lined foil
4 pairs
Tinned copper braided shield
70 %
water blue RAL 5021
0.65 mm
6.4 mm ±0.2 mm
4 x D
8 x D
≤ 100 N
42 kg/km
PUR
PE
Bare Cu litz wires
$\geq$ 500 M $\Omega$ *km
$\leq$ 290 $\Omega$ (per kilometer)
100 Ω ±5 Ω (at 100 MHz)
5.13 ns/m
≥ 80 dB (at 30 100 MHz)
≤ 100 V (at 20 °C)
700 V (50 Hz, 1 min.)
700 V (50 Hz, 1 min.)
IEC 60332-1-2
According to IEC 60754-1
in accordance with DIN EN 60811-2-1
-40 °C 80 °C (cable, fixed installation)
-20 °C 80 °C (cable, flexible installation)
-20 °C 80 °C
-20 °C 80 °C

# Classifications

eCl@ss

eCl@ss 4.0	27060307
eCl@ss 4.1	27060307
eCl@ss 5.0	27060307
eCl@ss 5.1	27060307



# Classifications

#### eCl@ss

eCl@ss 6.0	27060390
eCl@ss 7.0	27060390
eCl@ss 8.0	27060390

#### ETIM

ETIM 3.0	EC000830
ETIM 4.0	EC001855
ETIM 5.0	EC001855

## UNSPSC

UNSPSC 6.01	26121616
UNSPSC 7.0901	26121616
UNSPSC 11	26121604
UNSPSC 12.01	31261501
UNSPSC 13.2	26121616

## Drawings

## Schematic diagram



Pin assignment of M12 plug, 8-pos., X-coded, pin side view

#### Cable cross section

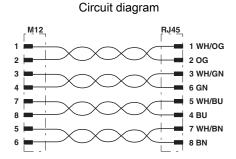


Ethernet 10 Gbit [94F]

#### Schematic diagram

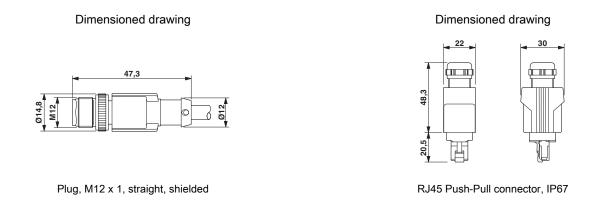


#### Connector pin assignment plug RJ45



Contact assignment of the M12 and RJ45 plug





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