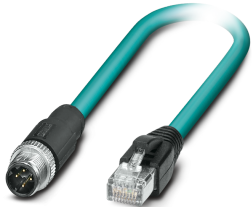


Network cable - NBC-M12MSD/30,0-93F/R4AC - 1192134

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Network cable, Ethernet CAT5e (100 Mbps), 4-position, TPE, Teal, shielded, Plug straight M12 / IP65, coding: D, on Plug straight RJ45 / IP20, cable length: 30 m



Key Commercial Data

Packing unit	1 pc
GTIN	 4 063151 325046
GTIN	4063151325046
Country of origin	United States

Technical data

Dimensions

Length of cable	30 m
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Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-25 °C ... 85 °C (M12 connector)

General data

Rated current at 40°C	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
	1.5 A (RJ45)
Rated voltage	48 V AC
	60 V DC
Number of positions	4
Signal type/category	Ethernet CAT5e, 100 Mbps

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Technical data

General data

Standards/regulations	M12 connector IEC 61076-2-101
Contact material	CuSn
Contact carrier material	TPU GF
Contact surface material	Ni/Au
Transmission characteristics (category)	CAT5e
Transmission speed	100 Mbps

Characteristics head 1

Head type	Plug straight M12 / IP65
Coding	D (Data)

Characteristics head 2

Head type	Plug straight RJ45 / IP20
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Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
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Cable

Cable type (abbreviation)	93F
UL AWM style	2463 (80 °C / 600 V)
Signal type/category	Ethernet CAT5e (TIA 568B)
Cable structure	2x2xAWG24/7; SF/UTP
Conductor cross section	2x 2x 0.2 mm ²
AWG signal line	24
Conductor structure signal line	7x 0.20 mm (7x32)
Core diameter including insulation	1.2 mm
Wire colors	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	2 pairs to the core
Shielding	Aluminum-lined polyester foil, tinned copper braided shield
Optical shield covering	75 %
External sheath, color	Teal
External cable diameter D	6.7 mm ±0.25 mm
Number of bending cycles	1000000
Minimum bending radius, drag chain applications	10 x D
Number of bending cycles	20000000
Minimum bending radius, drag chain applications	20 X D
Torsion force	1 lb. load
Torsion cycles	3000000

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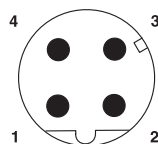
Technical data

Cable

Torsional frequency	71 (cycles/min)
Ambient temperature (operation)	20 °C
Outer sheath, material	TPE
Material conductor insulation	PE
Conductor material	Tin-plated Cu litz wires
Wave impedance	100 Ω $\pm$ 15 Ω (at 100 MHz)
Near end crosstalk attenuation (NEXT)	50 dB (with 100 MHz (IEC 62153-4-9))
Return loss (RL)	20 dB (at 10 MHz (+6LOG))
	26 dB (at 20 MHz)
	26 dB (at 100 MHz (-5LOG))
Cable impedance	100 Ω $\pm$ 15 Ω (at 1 ... 100 MHz)
Nominal voltage, cable	600 V
Test voltage, cable	2000 V
Flame resistance	VW-1
Other resistance	Resistant to welding splashes Abrasion and oil resistance
	UV resistant CMX outdoor
Ambient temperature (operation)	-40 °C ... 80 °C (Cable, flexible installation)
Shielded	yes

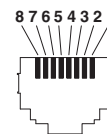
Drawings

Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side

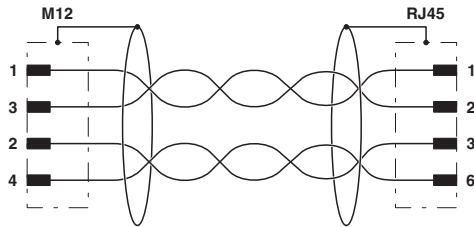
Schematic diagram



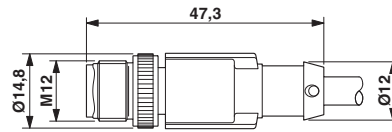
Connector pin assignment plug RJ45

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Circuit diagram



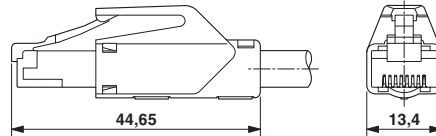
Dimensional drawing



Contact assignment of the M12 and RJ45 plug

Plug, M12 x 1, straight, shielded

Dimensional drawing



RJ45 connector, IP20

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Cable cross section



Classifications

eCl@ss

eCl@ss 9.0	27060308
eCl@ss 11.0	27060307

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

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Approvals

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	File E335024
Nominal voltage UN		60 V	
Nominal current IN		0.5 A	

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	File E335024
Nominal voltage UN		60 V	
Nominal current IN		0.5 A	

cULus Listed			
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