

NBC-M12MSD-R4AC/93F/... - Network cable



1201762

<https://www.phoenixcontact.com/us/products/1201762>

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 documentation. Our general terms of use for downloads are valid.



Network cable, Ethernet CAT5e (100 Mbps), 4-position, TPE, highly flexible, turquoise, shielded, Plug straight M12, coding: D / IP65, on Plug straight RJ45 / IP20

Commercial data

Item number	1201762
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF17
Product key	AF1IHC
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	US

1201762

<https://www.phoenixcontact.com/us/products/1201762>

Technical data

Product properties

Product type	Data cable preassembled
Application	Standard, U.S. cables
Sensor type	Ethernet
Number of positions	4
Shielded	yes
Coding	D

Interfaces

Bus system	Ethernet
Signal type/category	Ethernet CAT5e, 100 Mbps

Signaling

Status display	no
Status display present	no

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC (RJ45 30 V AC/57 V DC)
	RJ45 30 V AC/57 V DC
Nominal current I_N	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
	1.5 A (RJ45)
Transmission medium	Copper
Transmission speed	100 Mbps

Connector

Connection 1

Type	Plug straight M12 / IP65
Coding type	D (Data)
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carrier)
	TPU, hardly inflammable, self-extinguishing (Grip body)
	Zinc die-cast, nickel-plated (Screw connection)
	FKM (Seal)
Degree of protection	IP65

Connection 2

Type	Plug straight RJ45 / IP20
Number of positions	4 (8)
	CuSn (Contact)

NBC-M12MSD-R4AC/93F/... - Network cable




1201762

<https://www.phoenixcontact.com/us/products/1201762>

Material	Ni/Au (Contact surface)
	PA (Contact carrier)
	PA (Housing)
Degree of protection	IP20

Cable/line

Highly flexible Ethernet CAT5e [93F]

Dimensional drawing	
UL AWM Style	2463 (80 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	Highly flexible Ethernet CAT5e [93F]
Conductor structure	2x2xAWG24/7, SF/UTP
Conductor structure signal line	7x 0.20 mm (7x32)
AWG signal line	24
Conductor cross-section	2x 2x 0.2 mm ²
Wire diameter incl. insulation	1.2 mm
External cable diameter	6.70 mm ±0.25 mm
Outer sheath, material	TPE
External sheath, color	turquoise
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE
Single wire, color	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	2 pairs to the core
Optical shield covering	75 %
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Cable impedance	100 Ω ±15 Ω (at 1 ... 100 MHz)
Nominal voltage, cable	600 V
Test voltage	2000 V
Dynamic load capacity (bending)	Max. bending cycles: 1000000, Bending radius: 10 x D, Traversing path: 0.23 m, Traversing rate: 1.5 m/s, Acceleration: 20.5 m/s ²
	Max. bending cycles: 20000000, Bending radius: 20 X D (126 cycles/min. at 20 °C)
Dynamic load capacity (torsion)	Torsion: 360 °/m (1 lb. load), Torsion cycles: 3000000, Torsional frequency: 71 cycles/min, Ambient temperature (operation): 20 °C

NBC-M12MSD-R4AC/93F/... - Network cable



1201762

<https://www.phoenixcontact.com/us/products/1201762>

Near end crosstalk attenuation (NEXT)	50 dB (with 100 MHz (IEC 62153-4-9))
Return attenuation (RL)	20 dB (at 10 MHz (+6LOG))
	26 dB (at 20 MHz)
	26 dB (at 100 MHz (-5LOG))
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)

Standards and regulations

M12

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

NBC-M12MSD-R4AC/93F/... - Network cable

1201762

<https://www.phoenixcontact.com/us/products/1201762>

Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



RJ45 connector, IP20

1201762

<https://www.phoenixcontact.com/us/products/1201762>

Schematic diagram



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

Schematic diagram



Connector pin assignment plug RJ45

Circuit diagram



Contact assignment of the M12 and RJ45 plug

NBC-M12MSD-R4AC/93F/... - Network cable




1201762

<https://www.phoenixcontact.com/us/products/1201762>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1201762>

 UL Listed Approval ID: File E335024				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	60 V	0.5 A	-	-

 cUL Listed Approval ID: File E335024				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	60 V	0.5 A	-	-

NBC-M12MSD-R4AC/93F/... - Network cable



1201762

<https://www.phoenixcontact.com/us/products/1201762>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

1201762

<https://www.phoenixcontact.com/us/products/1201762>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

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

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com