

NBC-M12MS/40,0-94B US - Network cable



1418075

<https://www.phoenixcontact.com/us/products/1418075>

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 CAT5 (1 Gbps), 8-position halogen-free, shielded, Plug straight M12, coding: A / IP67, on free cable end, cable length: 40 m

Commercial data

Item number	1418075
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF15
Product key	BF1IHB
GTIN	4055626211800
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	US

1418075

<https://www.phoenixcontact.com/us/products/1418075>

Technical data

Product properties

Product type	Data cable preassembled
Sensor type	Ethernet
Number of positions	8
Application	Standard, U.S. cables
Shielded	yes
Coding	A

Interfaces

Bus system	Ethernet
Signal type/category	Ethernet CAT5 (based on IEC 11801), 1 Gbps

Signaling

Status display	No
Status display present	No

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	2 A
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

Connector

Connection 1

Type	Plug straight M12 / IP67
Coding type	A (Standard)
Material	CuZn (Contact)
	Ni/Au (Contact surface)
	TPU GF (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
	Zinc die-cast, nickel-plated (Screw connection)
Degree of protection	IP67

Connection 2

Type	free cable end
------	----------------

Cable/line

Cable length	40 m
--------------	------


Ethernet flexible CAT5, 4-pair [94B]

NBC-M12MS/40,0-94B US - Network cable



1418075

<https://www.phoenixcontact.com/us/products/1418075>

Dimensional drawing	
Cable weight	47 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet flexible CAT5, 4-pair [94B]
Conductor structure	4x2xAWG26/7, SF/UTP
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	4x 2x 0.14 mm ²
Wire diameter incl. insulation	0.96 mm
External cable diameter	6.4 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Thickness, outer sheath	1.05 mm
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Optical shield covering	70 %
Insulation resistance	≥ 5 GΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Loop resistance	≤ 290.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Cable capacity	48 nF/km (at 1 kHz)
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.)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Tensile strength	≤ 100 N
	71.3 dB (with 1 MHz)

NBC-M12MS/40,0-94B US - Network cable



1418075

<https://www.phoenixcontact.com/us/products/1418075>

Near end crosstalk attenuation (NEXT)	62.3 dB (at 4 MHz)
	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)
	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)
Return attenuation (RL)	32.3 dB (at 100 MHz)
	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)
Shield attenuation	20.1 dB (at 100 MHz)
	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)
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
Resistance to oil	in accordance with 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

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
	IP65/IP67
Ambient temperature (operation)	-25 °C ... 85 °C (M12 connector)

NBC-M12MS/40,0-94B US - Network cable



1418075

<https://www.phoenixcontact.com/us/products/1418075>

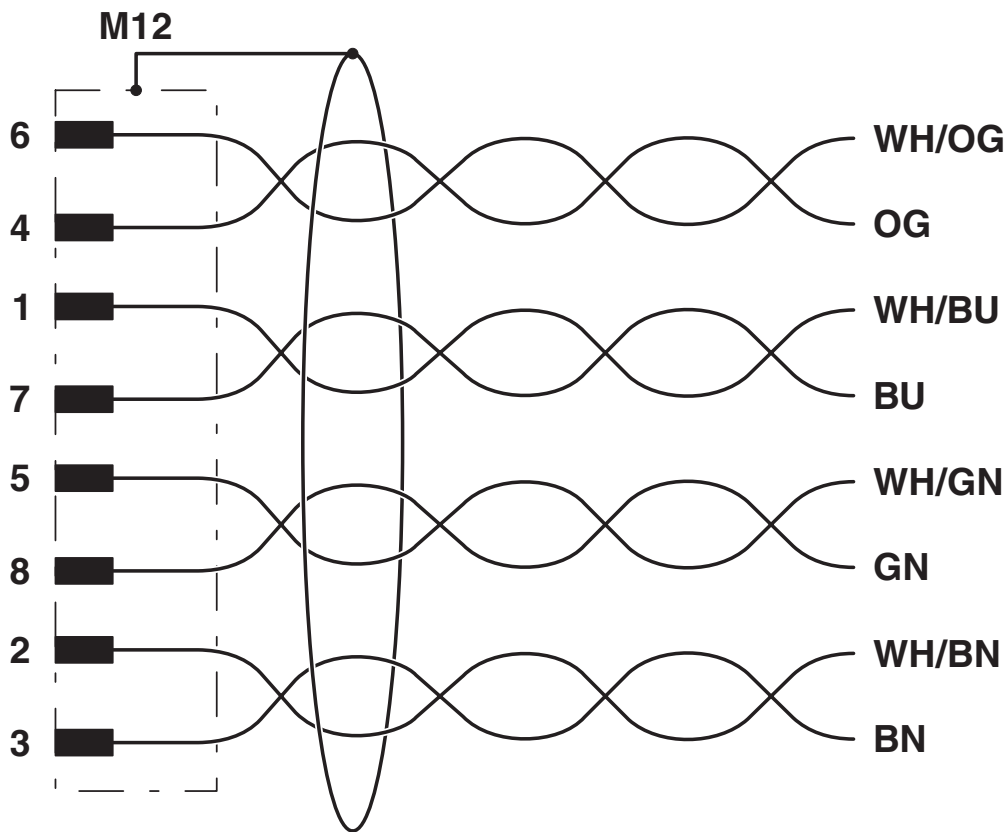
Standards and regulations

M12

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

Drawings

Circuit diagram



1418075

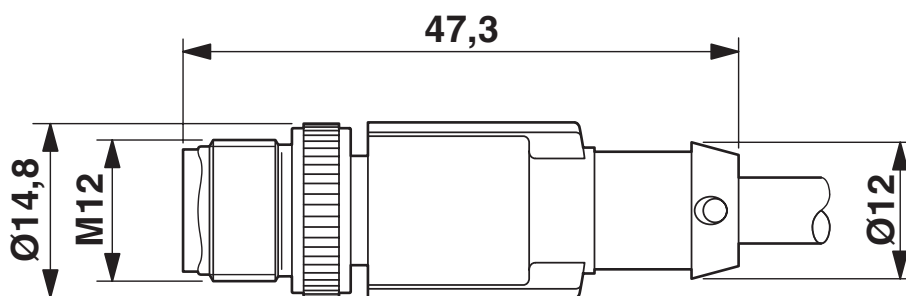
<https://www.phoenixcontact.com/us/products/1418075>

Schematic diagram



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

Dimensional drawing



Plug, M12 x 1, straight, shielded

NBC-M12MS/40,0-94B US - Network cable




1418075

<https://www.phoenixcontact.com/us/products/1418075>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1418075>

 UL Recognized Approval ID: FILE E 335024	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	1.5 A	-	-

NBC-M12MS/40,0-94B US - Network cable



1418075

<https://www.phoenixcontact.com/us/products/1418075>

Classifications

ECLASS

ECLASS-11.0	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307

UNSPSC

UNSPSC 21.0	26121604
-------------	----------

NBC-M12MS/40,0-94B US - Network cable



1418075

<https://www.phoenixcontact.com/us/products/1418075>

Environmental product compliance

China RoHS	Environmentally Friendly Use Period = 50 years For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------

Phoenix Contact 2024 © - 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