

NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

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, PUR halogen-free, water blue RAL 5021, shielded (Advanced Shielding Technology), Plug straight RJ45 / IP20, on Socket straight M12, coding: A / IP67, cable length: 10 m

Commercial data

Item number	1407446
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	AF1CMI
GTIN	4046356775670
Weight per piece (including packing)	483.2 g
Weight per piece (excluding packing)	472.9 g
Customs tariff number	85444210
Country of origin	PL

1407446

<https://www.phoenixcontact.com/us/products/1407446>

Technical data

Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	Ethernet
Number of positions	8
Shielded	yes

Interfaces

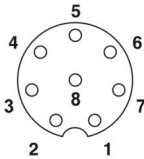
Signal type/category	Ethernet CAT5 (IEC 11801), 1 Gbps
----------------------	-----------------------------------

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	1 A
Transmission medium	Copper
Transmission speed	1 Gbps

Connector

Connection 1

Dimensional drawing	 <p>Pin assignment M12 socket, 8-pos., A-coded, view female side</p>
Type	M12 Socket, angled, 8-position, shielded (Advanced Shielding Technology), Keying: A
Number of positions	8
Shielded	yes
Shielding	Advanced Shielding Technology
Signal type/category	Ethernet CAT5, 1 bps
Insertion/withdrawal cycles	≥ 100
Insulation resistance	$\geq 100 \Omega$
Overvoltage category	II
Degree of pollution	3
Tightening torque	0.4 Nm (M12 connector)
Material Contact	CuZn
Material Contact surface	Ni/Au
Material Contact carrier	PA 6.6
Material Screw connection	Die-cast zinc, nickel-plated

NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

Material Grip body	TPU, hardly inflammable, self-extinguishing
Material Seal	FKM
Flammability rating according to UL 94	V0
Ambient temperature (operation)	-25 °C ... 85 °C
Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101


Connection 2

Type	RJ45
------	------

Cable/line

Cable length	10 m
--------------	------

Ethernet flexible CAT5, 4-pair [94B]

Dimensional drawing	
UL AWM Style	21238 (80 °C / 600 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet flexible CAT5, 4-pair [94B]
Conductor structure	4x2xAWG26/7, SF/UTP
AWG signal line	26
Conductor cross-section	4x 2x 0.14 mm ²
Wire diameter incl. insulation	0.96 mm ±0.05 mm
External cable diameter	6.40 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
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Optical shield covering	70 %
Insulation resistance	≥ 500 MΩ*km
Loop resistance	≤ 290.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)

NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

Test voltage Core/Shield	2000.00 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	51 mm
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
	according to CSA C 22.2 No. 210-FT1
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)

NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

Drawings

Dimensional drawing



M12 x 1 socket, straight, shielded

Dimensional drawing



RJ45 connector, IP20

1407446

<https://www.phoenixcontact.com/us/products/1407446>

Schematic diagram



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

NBC-M12FS/10,0-94B/R4AC - Network cable

1407446

<https://www.phoenixcontact.com/us/products/1407446>

Schematic diagram



Connector pin assignment plug RJ45

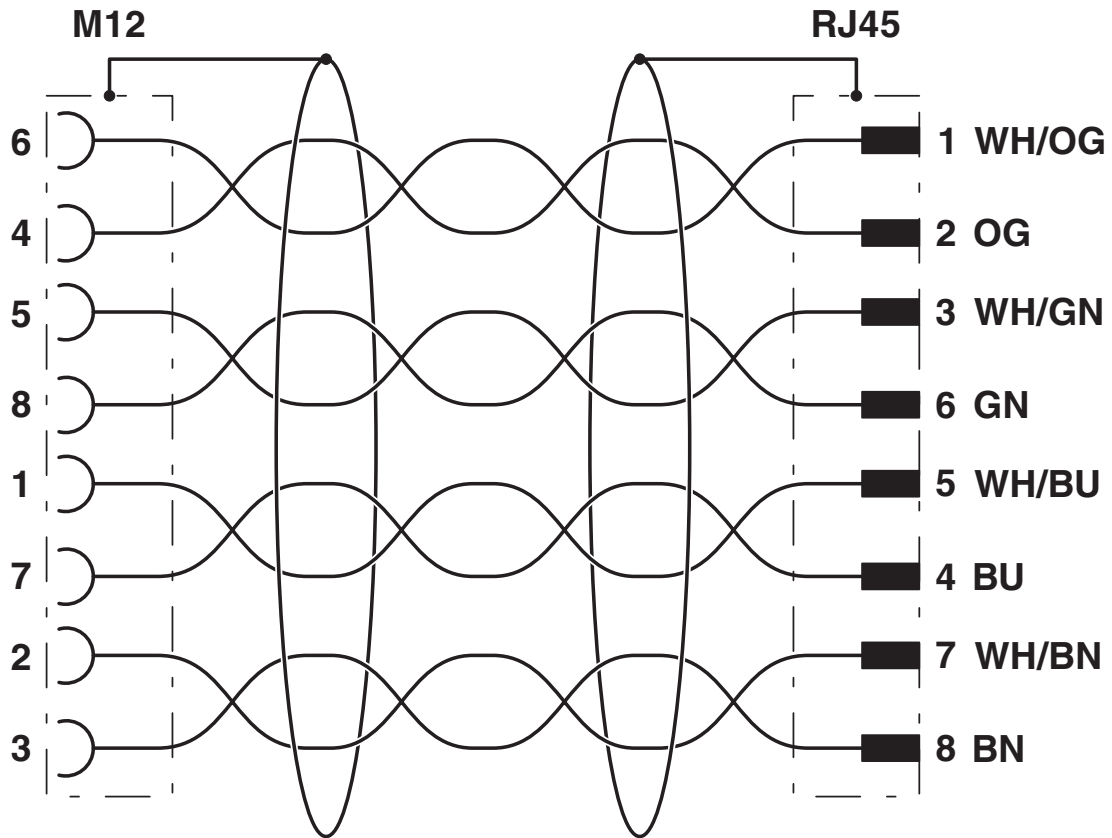
NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

Circuit diagram



Contact assignment of the M12 and RJ45 plug

NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1407446>

 UL Listed Approval ID: FILE E 335024				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 V	0.5 A	-	-

 cUL Listed Approval ID: FILE E 335024				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 V	0.5 A	-	-

 EAC-RoHS Approval ID: RU D-DE.HB35.B.00387	
--	--

NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 10.0	EC001855
-----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

NBC-M12FS/10,0-94B/R4AC - Network cable



1407446

<https://www.phoenixcontact.com/us/products/1407446>

Environmental product compliance

EU RoHS

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

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

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

EF3.1 Climate Change

CO2e kg	8.277 kg CO2e
---------	---------------

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