

NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

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 (100 Mbps), PROFINET (100 Mbps), EtherCAT® (100 Mbps), 4-position, shielded, Plug straight M8, coding: A / IP67, on Plug straight RJ45 / IP20, cable length: 10 m

Commercial data

Item number	1407355
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF02
Product key	BF1BJI
Catalog page	Page 394 (C-2-2019)
GTIN	4046356774833
Weight per piece (including packing)	666 g
Weight per piece (excluding packing)	650 g
Customs tariff number	85444290
Country of origin	PL

1407355

<https://www.phoenixcontact.com/us/products/1407355>

Technical data

Notes

General	Further products with variable cable type and variable cable length can be found in the accessories section
---------	---

Product properties

Product type	Data cable preassembled
Sensor type	Ethernet
Number of positions	4
Application	Standard
Shielded	yes
Coding	A

Interfaces

Bus system	Ethernet
Signal type/category	Ethernet, 100 Mbps
	PROFINET, 100 Mbps
	EtherCAT [®] , 100 Mbps

Signaling

Status display	No
Status display present	No

Electrical properties

Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	1 A
Transmission medium	Copper

Connector

Connection 1

Type	Plug straight M8 / IP67
Number of positions	4
Coding type	A (Standard)
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	TPU GF (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
	Zinc die-cast, nickel-plated (Screw connection)
Insertion/withdrawal cycles	≥ 100
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ

NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

Tightening torque	0.2 Nm
Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 90 °C

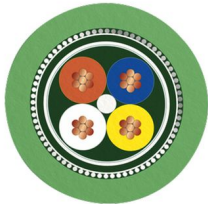
Connection 2

Type	Plug straight RJ45 / IP20
Number of positions	4 (8)
Handle color	black
Material	CuSn (Contact) Ni/Au (Contact surface) PA (Contact carriers) PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 80 °C

Cable/line

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

PROFINET PVC stranded CAT5 [93B]

Dimensional drawing	
Cable weight	67 kg/km
UL AWM Style	21694
Number of positions	4
Shielded	yes
Cable type	PROFINET PVC stranded CAT5 [93B]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Signal speed	0.66 c
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ²
Wire diameter incl. insulation	1.55 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	green RAL 6018
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE

NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

Single wire, color	white, yellow, blue, orange
Thickness, outer sheath	approx. 0.90 mm
Overall twist	Star quad
Optical shield covering	85 %
Insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 20.00 mΩ/m (at 10 MHz)
Loop resistance	≤ 120.00 Ω/km
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	46 mm
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
	76 dB (at 4 MHz)
	70 dB (at 10 MHz)
	65 dB (at 16 MHz)
	63 dB (at 20 MHz)
	60 dB (at 31.25 MHz)
	55 dB (at 62.5 MHz)
	50 dB (at 100 MHz)
Shield attenuation	2.1 dB (with 1 MHz)
	4 dB (at 4 MHz)
	6.3 dB (at 10 MHz)
	8 dB (at 16 MHz)
	9 dB (at 20 MHz)
	11.4 dB (at 31.25 MHz)
	16.5 dB (at 62.5 MHz)
	21.3 dB (at 100 MHz)
Flame resistance	according to UL 1685 (CSA FT 4)
Resistance to oil	Resistant to oil to a limited extent
Other resistance	UV resistant (According to UL 1581, Section 1200)
Ambient temperature (operation)	-40 °C ... 70 °C (cable, fixed installation)
	-40 °C ... 70 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 60 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 (M8 connectors)
	IP67 (M8 connectors)
	IP20 (RJ45 connector)

NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

Ambient temperature (operation)	-25 °C ... 90 °C (M8 connectors)
	-25 °C ... 60 °C (RJ45 connector)

Standards and regulations

M8

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

NBC-M 8MS/10,0-93B/R4AC - Network cable

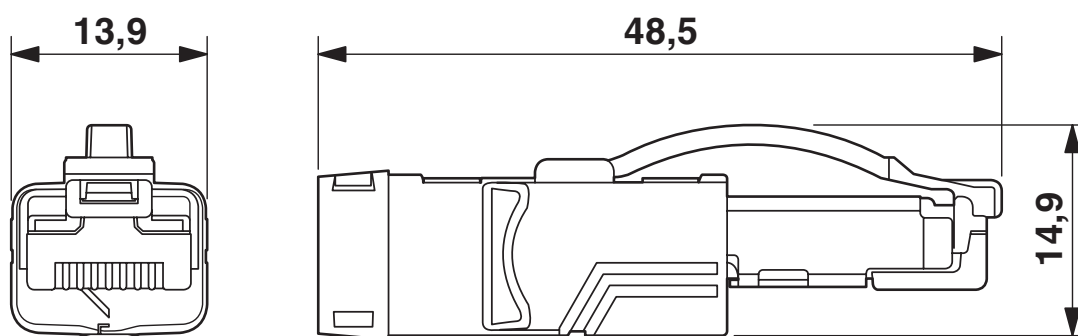


1407355

<https://www.phoenixcontact.com/us/products/1407355>

Drawings

Dimensional drawing



RJ45 connector, IP20

NBC-M 8MS/10,0-93B/R4AC - Network cable

1407355

<https://www.phoenixcontact.com/us/products/1407355>



Schematic diagram



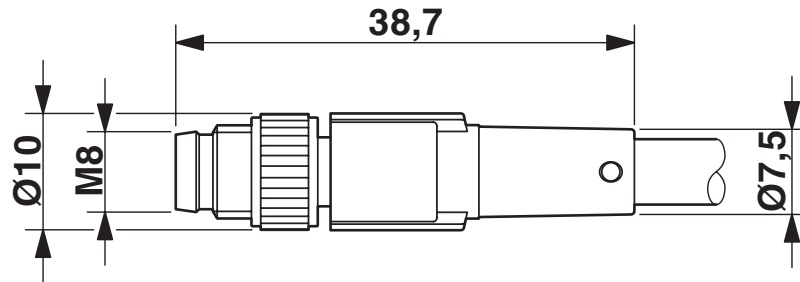
Connector pin assignment plug RJ45

NBC-M 8MS/10,0-93B/R4AC - Network cable

1407355

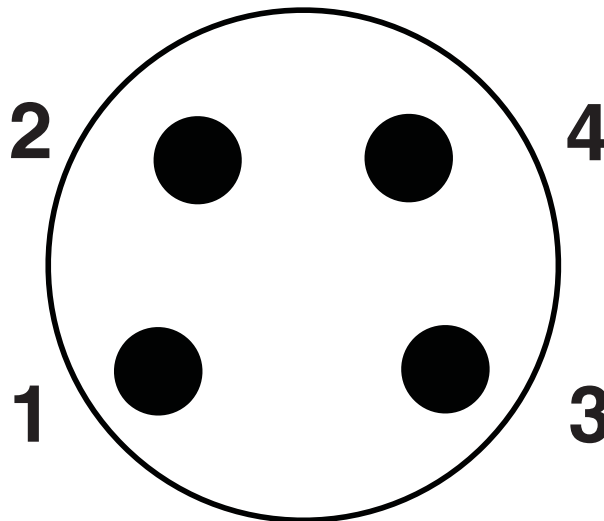
<https://www.phoenixcontact.com/us/products/1407355>

Dimensional drawing



M8 x 1 male plug, straight version

Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

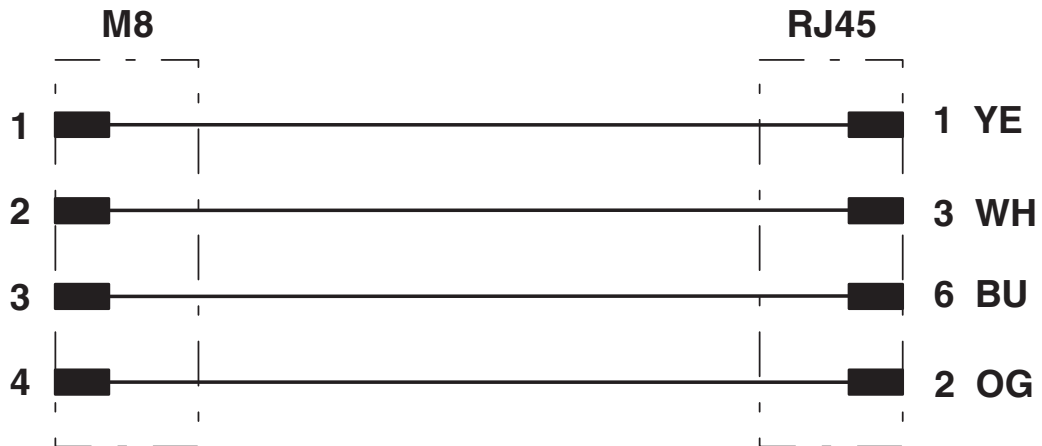
NBC-M 8MS/10,0-93B/R4AC - Network cable

1407355

<https://www.phoenixcontact.com/us/products/1407355>



Circuit diagram



NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1407355>



EAC-RoHS

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

NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

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

NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

Accessories

NBC-M 8MS-R4AC/.../... - Network cable

1408717

<https://www.phoenixcontact.com/us/products/1408717>



Network cable, Ethernet (100 Mbps), PROFINET (100 Mbps), EtherCAT® (100 Mbps), 4-position, Variable cable type, shielded, Plug straight M8, coding: A / IP67, on Plug straight RJ45 / IP20, cable length: Free input (0.2 ... 40.0 m)

NBC-M 8MS-M 8MS/.../... - Network cable

1408718

<https://www.phoenixcontact.com/us/products/1408718>



Network cable, Ethernet (100 Mbps), PROFINET (100 Mbps), EtherCAT® (100 Mbps), 4-position, Variable cable type, shielded, Plug straight M8, coding: A / IP67, on Plug straight M8, coding: A / IP67, cable length: Free input (0.2 ... 40.0 m)

NBC-M 8MS/10,0-93B/R4AC - Network cable

1407355

<https://www.phoenixcontact.com/us/products/1407355>



NBC-M 8FS-R4AC/.../... - Network cable

1408714

<https://www.phoenixcontact.com/us/products/1408714>



Network cable, Ethernet (100 Mbps), PROFINET (100 Mbps), EtherCAT® (100 Mbps), 4-position, Variable cable type, shielded, Plug straight RJ45 / IP20, on Socket straight M8, coding: A / IP67, cable length: Free input (0.2 ... 40.0 m)

NBC-M 8MS-M 8FS/.../... - Network cable

1408715

<https://www.phoenixcontact.com/us/products/1408715>



Network cable, Ethernet (100 Mbps), PROFINET (100 Mbps), EtherCAT® (100 Mbps), 4-position, Variable cable type, shielded, Plug straight M8, coding: A / IP67, on Socket straight M8, coding: A / IP67, cable length: Free input (0.2 ... 40.0 m)

NBC-M 8MS/10,0-93B/R4AC - Network cable

1407355

<https://www.phoenixcontact.com/us/products/1407355>



PROT-M 8 FS-PA-CHAIN - Sealing cap

1430857

<https://www.phoenixcontact.com/us/products/1430857>

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs



TSD 02 SAC - Torque screwdriver

1208487

<https://www.phoenixcontact.com/us/products/1208487>

Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors



NBC-M 8MS/10,0-93B/R4AC - Network cable



1407355

<https://www.phoenixcontact.com/us/products/1407355>

SAC BIT M8-D10 - Tool

1208461

<https://www.phoenixcontact.com/us/products/1208461>



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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