

NBC-M12MRD/20,0-93P/R4AQ - Network cable



1417987

<https://www.phoenixcontact.com/us/products/1417987>

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.



Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26, stranded (7-wire), RAL 5021 (aqua blue), M12 plug to RJ45 plug/IP20, line, length 20 m

As shown in the illustration but with an angled plug

Commercial data

Item number	1417987
Packing unit	1 pc
Minimum order quantity	15 pc
Product key	AF1CJI
GTIN	4055626200620
Weight per piece (including packing)	776.45 g
Weight per piece (excluding packing)	776.45 g
Country of origin	PL

1417987

<https://www.phoenixcontact.com/us/products/1417987>

Technical data

Product properties

Product type	Data cable preassembled
Sensor type	Ethernet
Number of positions	4
Number of slots	1
Shielded	yes
Coding	D

Insulation characteristics

Degree of pollution	3
---------------------	---

Interfaces

Bus system	Ethernet
Signal type/category	Ethernet CAT5 (IEC 11801:2002)

Signaling

Status display	no
Status display present	no

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

Material specifications

Flammability rating according to UL 94	V2
--	----

Connector

Connection 1

Type	Plug angled M12 / IP67
Number of positions	4
Coding type	D (Data)
Handle color	black
Material	CuZn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carrier)
	TPU, hardly inflammable, self-extinguishing (Grip body)
Zinc die-cast, nickel-plated (Screw connection)	
Insertion/withdrawal cycles	≥ 100
Insulation resistance	≥ 100 MΩ
Tightening torque	0.4 Nm
Degree of protection	IP67

NBC-M12MRD/20,0-93P/R4AQ - Network cable



1417987

<https://www.phoenixcontact.com/us/products/1417987>

Connection 2

Type	Plug straight RJ45 Push Pull / IP67
Number of positions	4 (8)
Locking type	Push Pull
Handle color	black
Material	CuSn (Contact) Ni/Au (Contact surface) PC (Contact carrier) PA GF (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP67

Cable/line

Cable length	20 m
--------------	------

Ethernet [93P]

UL AWM Style	2654 (90 °C / 300 V)
Number of positions	4
Shielded	yes
Cable type	Ethernet [93P]
Conductor structure	2x2xAWG26/7, SF/UTP
Signal runtime	0.4 ns/m
Signal speed	0.6 c
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross-section	2x 2x 0.14 mm ²
Wire diameter incl. insulation	0.98 mm ±0.05 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	white/orange-orange, white/green-green
Thickness, outer sheath	≥ 1.00 mm
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	Two pairs with two fillers to the core
Optical shield covering	85 %
Max. conductor resistance	≤ 140 Ω/km
Insulation resistance	> 5 GΩ*km
Wave impedance	100 Ω ±5 % (at 100 MHz)
Working capacitance	< 56 nF
Nominal voltage, cable	≤ 300 V AC ≤ 450 V DC

NBC-M12MRD/20,0-93P/R4AQ - Network cable



1417987

<https://www.phoenixcontact.com/us/products/1417987>

Test voltage Core/Core	2500 V DC
Smallest bending radius, movable installation	25 mm
Tensile strength	≤ 40 N
Shield attenuation	32.00 dB (up to 100 MHz)
Flame resistance	According to VW-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Resistant to cleaning agents/disinfectants (According to ECOLAB F&E/P3-E No. 40-1)
Ambient temperature (operation)	-40 °C ... 90 °C
Ambient temperature (installation)	0 °C ... 50 °C

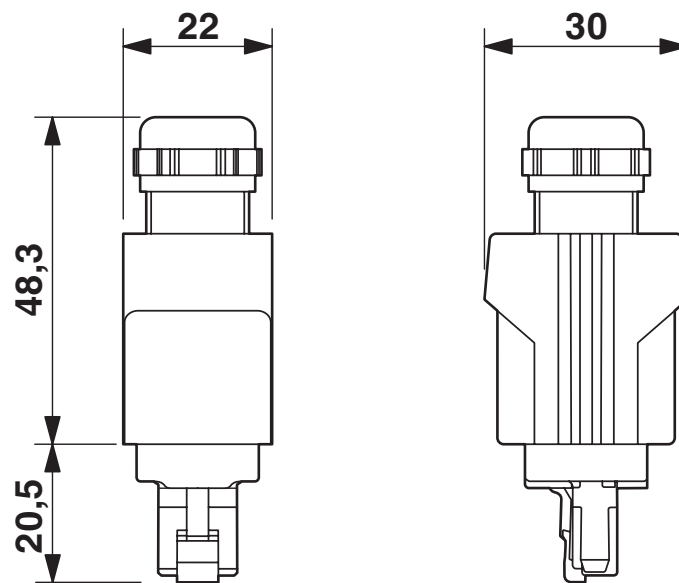
Standards and regulations

M12

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

Drawings

Dimensional drawing



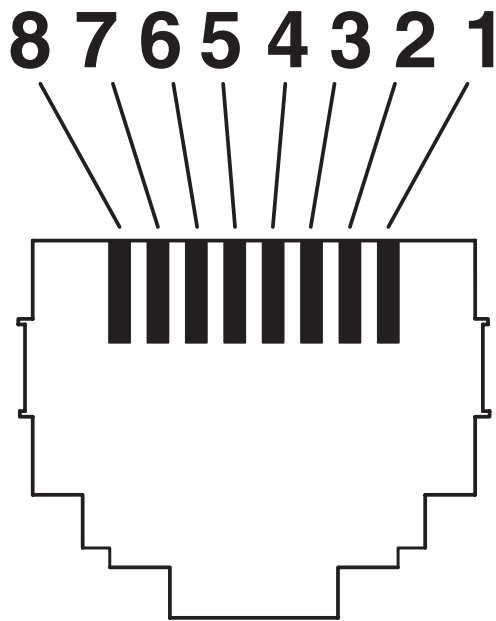
RJ45 Push-Pull connector, IP67

Schematic diagram



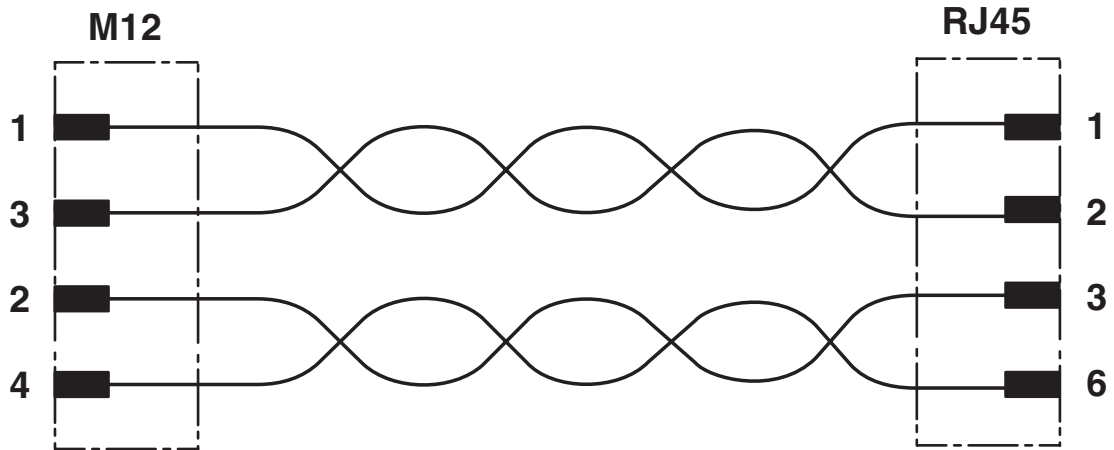
Pin assignment M12 male connector, 4-pos., D-coded, male side

Schematic diagram



Connector pin assignment plug RJ45

Circuit diagram



Contact assignment of the M12 and RJ45 plug

NBC-M12MRD/20,0-93P/R4AQ - Network cable



1417987

<https://www.phoenixcontact.com/us/products/1417987>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

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