

NBC-M8MSD/ 5,0-93C/M12MSD - Network cable



1439808

<https://www.phoenixcontact.com/us/products/1439808>

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, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PUR halogen-free, green RAL 6018, shielded (Advanced Shielding Technology), Plug straight M8, coding: D / IP67, on Plug straight M12, coding: D / IP67, cable length: 5 m

Commercial data

Item number	1439808
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	AF1CJN
GTIN	4063151821074
Weight per piece (including packing)	337.57 g
Weight per piece (excluding packing)	621 g
Country of origin	PL

Technical data

Notes

General	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling)
---------	--

Product properties

Product type	Data cable preassembled
Application	Standard
Number of positions	4
No. of cable outlets	1
Coding	D

Interfaces

Bus system	PROFINET
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
	EtherCAT® CAT5 (IEC 11801), 100 Mbps

Signaling

Status display	no
Status display present	no

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Transmission medium	Copper
Transmission speed	100 Mbps

Connector

Connection 1

Type	Plug straight M8 / IP67
Number of positions	4
Coding type	D (Data)
Shielded	yes
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA 6.6 (Contact carrier)
	TPU, hardly inflammable, self-extinguishing (Grip body)
	Brass, nickel-plated (Screw connection)
Insertion/withdrawal cycles	≥ 100

NBC-M8MSD/ 5,0-93C/M12MSD - Network cable



1439808

<https://www.phoenixcontact.com/us/products/1439808>

Insulation resistance	≥ 100 MΩ
Tightening torque	0.2 Nm
Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 90 °C

Connection 2

Type	Plug straight M12 / IP67
Number of positions	4
Coding type	D (Data)
Handle color	black
Material	CuSn (Contact) Ni/Au (Contact surface) PA (Contact carrier) TPU, hardly inflammable, self-extinguishing (Grip body) Brass, nickel-plated (Screw connection)
Insertion/withdrawal cycles	≥ 100
Insulation resistance	≥ 100 MΩ
Tightening torque	0.4 Nm
Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 90 °C

Cable/line

Cable length	5 m
--------------	-----

PROFINET drag chain CAT5 [93C]

Dimensional drawing	
UL AWM Style	20233 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	PROFINET drag chain CAT5 [93C]
Conductor structure	1x4xAWG22/7, SF/TQ
AWG signal line	22
Conductor cross-section	4x 0.34 mm²
Wire diameter incl. insulation	1.5 mm ±0.05 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	green RAL 6018
Conductor material	Tin-plated Cu litz wires

NBC-M8MSD/ 5,0-93C/M12MSD - Network cable



1439808

<https://www.phoenixcontact.com/us/products/1439808>

Material wire insulation	PE
Single wire, color	white, yellow, blue, orange
Overall twist	Star quad
Optical shield covering	85 %
Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Loop resistance	$\leq 120.00 \text{ }\Omega/\text{km}$
Wave impedance	$100 \text{ }\Omega \pm 15 \text{ }\Omega$ (at 1 ... 100 MHz)
Nominal voltage, cable	$\leq 300 \text{ V}$
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	5 x D
Minimum bending radius, flexible installation	7.5 x D
Dynamic load capacity (bending)	Max. bending cycles: 3000000, Bending radius: 200 mm, Traversing path: 10 m, Traversing rate: 4 m/s, Acceleration: 4 m/s ²
Dynamic load capacity (torsion)	Torsion: $\pm 30 \text{ }^\circ/\text{m}$
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2 in accordance with UN ECE-R 118.03 according to CSA C 22.2 No. 210-FT1
Resistance to oil	in accordance with DIN EN 60811-404
Other resistance	UV resistant
Special properties	Flexible cable conduit capable
Ambient temperature (operation)	-40 °C ... 70 °C (cable, fixed installation) -40 °C ... 70 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

M12

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

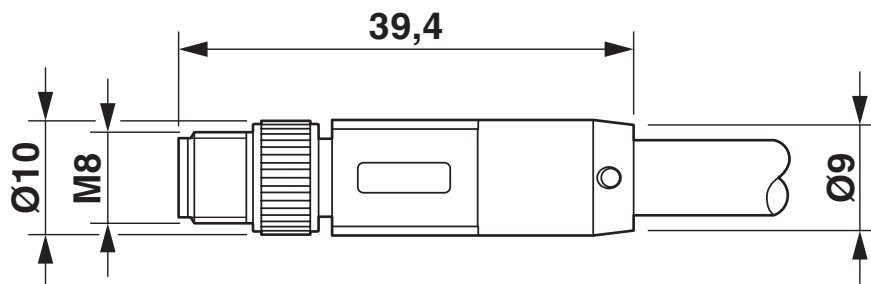
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



Plug M8 x 1, straight, shielded

1439808

<https://www.phoenixcontact.com/us/products/1439808>

Schematic diagram

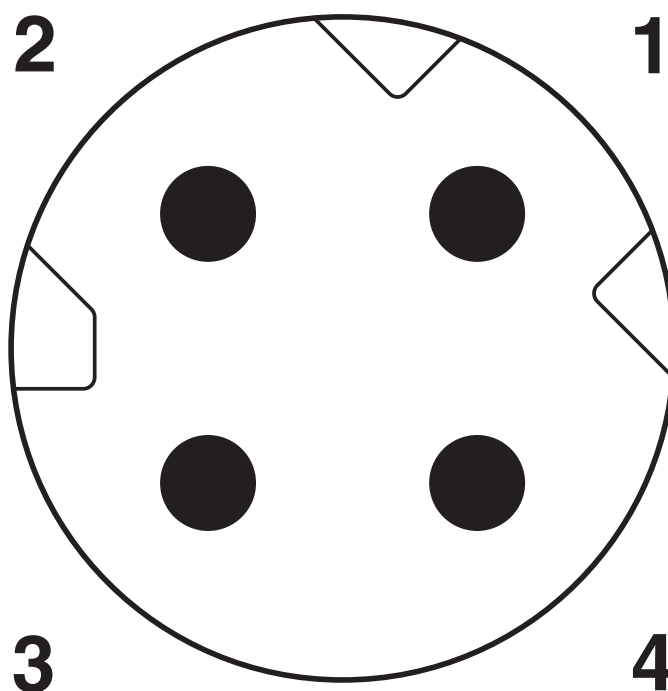


Pin assignment M12 male connector, 4-pos., D-coded, male side

1439808

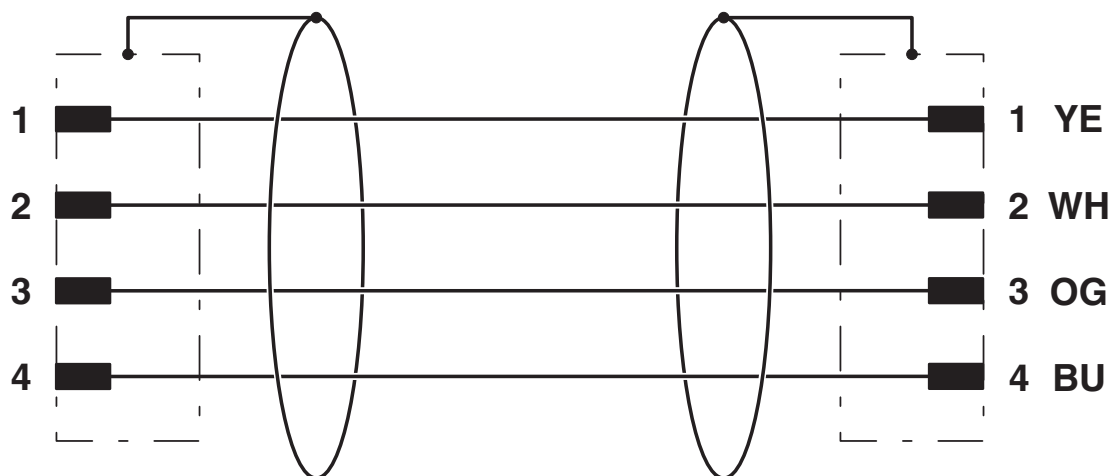
<https://www.phoenixcontact.com/us/products/1439808>

Schematic diagram



Pin assignment M8 male connector, 4-pos., D-coded, view of pin side

Circuit diagram



Contact assignment of M8 plugs

NBC-M8MSD/ 5,0-93C/M12MSD - Network cable



1439808

<https://www.phoenixcontact.com/us/products/1439808>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 10.0	EC002599
-----------	----------

UNSPSC

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

NBC-M8MSD/ 5,0-93C/M12MSD - Network cable



1439808

<https://www.phoenixcontact.com/us/products/1439808>

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%
-------------------------------------	----------------------------

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