

NBC-P12MSD/ 3,0-93E/P12MSD - Network cable



1554011

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Network cable, Ethernet CAT5 (100 Mbps), 4-position, PUR halogen-free, water blue RAL 5021, Plug straight M12 Push Pull, coding: D / IP67, on Plug straight M12 Push Pull, coding: D / IP67, cable length: 3 m

Commercial data

Item number	1554011
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	AF1CJJ
GTIN	4067923035409
Weight per piece (including packing)	161.5 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

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

Interfaces

Bus system	Ethernet
Signal type/category	Ethernet 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	1.5 A
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

Connector

Connection 1

Type	Plug straight M12 Push Pull / IP67
Number of positions	4
Locking type	Push Pull
Coding type	D (Data)
Handle color	black
Flammability rating according to UL 94	V0
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carrier)
	TPU, hardly inflammable, self-extinguishing (Grip body)
	Zinc die-cast, nickel-plated (Screw connection)
	FKM (Seal)
Insertion/withdrawal cycles	≥ 100
Insulation resistance	≥ 100 MΩ
Overvoltage category	II
Degree of pollution	3

NBC-P12MSD/ 3,0-93E/P12MSD - Network cable



1554011

<https://www.phoenixcontact.com/us/products/1554011>

Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 85 °C

Connection 2

Type	Plug straight M12 Push Pull / IP67
Number of positions	4
Locking type	Push Pull
Coding type	D (Data)
Handle color	black
Flammability rating according to UL 94	V0
Material	CuSn (Contact) Ni/Au (Contact surface) PA (Contact carrier) TPU, hardly inflammable, self-extinguishing (Grip body) Zinc die-cast, nickel-plated (Screw connection) FKM (Seal)
Insertion/withdrawal cycles	≥ 100
Insulation resistance	≥ 100 MΩ
Degree of pollution	3
Overvoltage category	II
Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 85 °C

Cable/line

Cable length	3 m
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Ethernet flexible CAT5, 2-pair [93E]

Dimensional drawing	
UL AWM Style	21238 (80 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	Ethernet flexible CAT5, 2-pair [93E]
Conductor structure	2x2xAWG26/7, SF/UTP
AWG signal line	26
Conductor cross section	2x 2x 0.14 mm²
Wire diameter incl. insulation	0.95 mm ±0.05 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR

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1554011

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External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Optical shield covering	70 %
Insulation resistance	$\geq 5 \text{ G}\Omega \cdot \text{km}$
Loop resistance	$\leq 280.00 \text{ }\Omega/\text{km}$
Wave impedance	$100 \text{ }\Omega \pm 5 \text{ }\Omega$ (at 100 MHz)
Nominal voltage, cable	$\leq 100 \text{ V}$
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	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
	in accordance with UN ECE-R 118.03
	UL 1581, Section 1060 and UL 2556, Section 9.3 (FT1)
	UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2)
Resistance to oil	in accordance with IEC 60811-404
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (Cable, flexible installation)

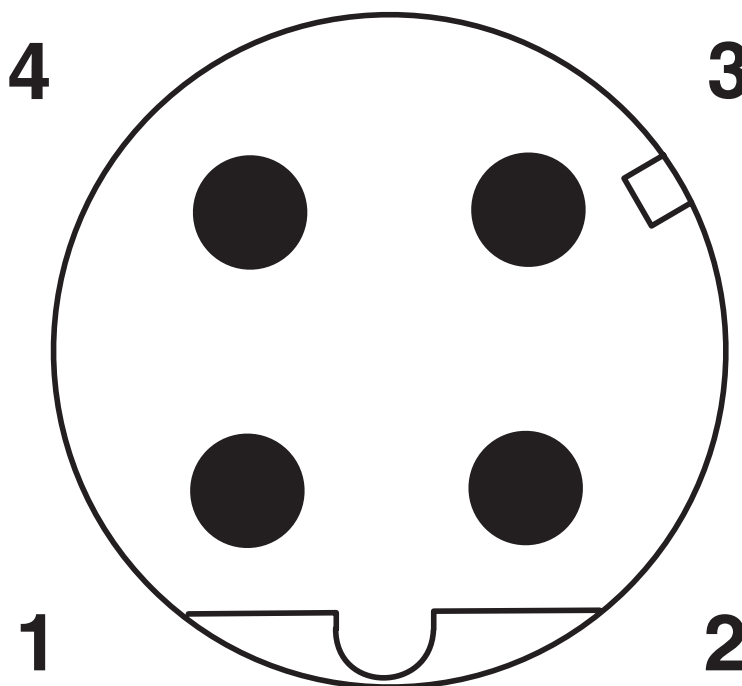
Drawings

Dimensional drawing



M12 push-pull male connector, straight

Schematic diagram

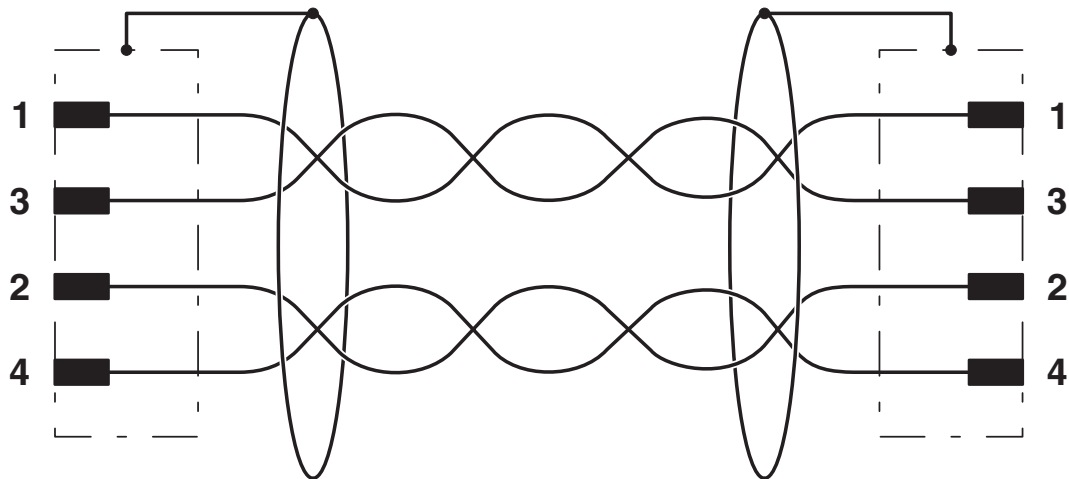


Pin assignment M12 male connector, 4-pos., D-coded, male side

1554011

<https://www.phoenixcontact.com/us/products/1554011>

Circuit diagram



Contact assignment of the M12 plugs

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1554011

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Approvals

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 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	4 A	-	-

 cUL Listed Approval ID: FILE E 335024				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	60 V	0.5 A	-	-

 EAC-RoHS Approval ID: RU D-DE.HB35.B.00387				
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 cULus Listed Approval ID: E335024				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	30 V	4 A	-	-

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Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 9.0	EC001855
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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%
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