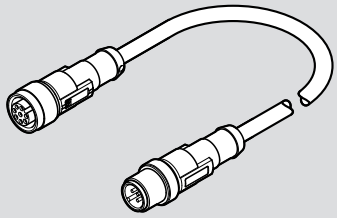
NEFC-M12G8-...-M12G5-LK

Adapter



FESTO

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Assembly instructions

8204647
2023-11b
[8204649]

8204647

Translation of the original instructions

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IO-Link is a registered trademark of its respective trademark holder in certain countries.

1 Applicable documents

All available documents for the product ➔ www.festo.com/sp.

2 Safety

2.1 Safety instructions

- Do not connect or disconnect the push-in connector while the voltage is live.
- Only mount the product on components that are in a condition to be safely operated.

2.2 Intended use

The adapter connects the IO-Link master to the logic connection of the integrated drive EMCS-ST.
The adapter is intended for use with IO-Link Master Port Class A and IO-Link Master Port Class B.

i

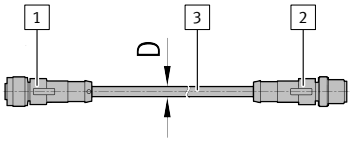
Older adapters, prior to product version 01/22, are only intended for use with sind nur für die Verwendung mit IO-Link Master Port Class A.
The product version can be identified on the cable of the adapter, e.g. "Festo NEFC-M12G8-0.3-M12G5-LK 8080777 01/22 CE...".
Explanation of identification 01/22:
01 = calendar week
22 = year.

2.3 Training of qualified personnel

Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers. The qualified personnel are trained in electrical engineering.

3 Structure

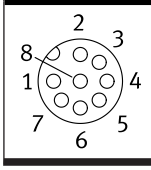
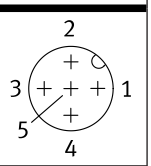
3.1 Product design



1 M12x1 socket, A-coded
2 M12x1 plug, A-coded
3 Cable

Fig.1

3.2 Contact assignment

Electrical connection 1 Field device side		Electrical connection 2 Controller side	
1 Socket	Pin	Pin	2 Plug connector
	1	1	
	2 not assigned	2 not assigned	
	3	4	
	4	3	
	5 ... 8 not assigned	5 not assigned	

Tab. 1: Contact assignment

4 Assembly

4.1 Mounting electrical connection 1

1. Align the socket 1 to fit the plug.
2. Connect the socket 1 to the plug.
3. Tighten the screw-type lock of the socket 1. Tightening torque: 0.4 Nm ± 55%

4.2 Mounting electrical connection 2

1. Align the plug 2 to fit the socket.
2. Insert the plug 2 into the socket.
3. Tighten the screw-type lock of the plug 2. Tightening torque: 0.4 Nm ± 55%

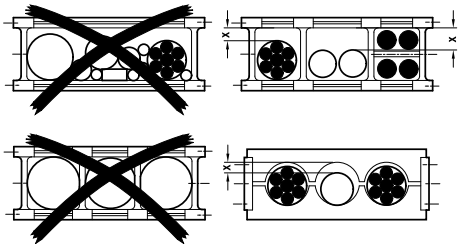
4.3 Wiring

Characteristics	Cable characteristics	Wiring
-E	Suitability for energy chains	In energy chain or flexible

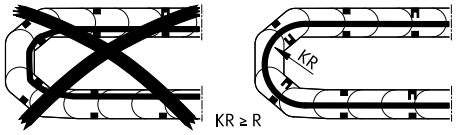
Tab. 2: Wiring

4.4 Mounting in energy chain

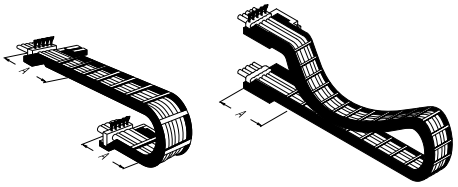
1. Lay out the energy chain lengthways.
2. Place the cables in the energy chain without twisting them.
3. Separate cables from each other using separators/drilled holes.
4. Do not bind cables in bundles.
5. Maintain space X. X > 10% of the cable diameter D.
   With the energy chain hanging vertically: increase the space X.



6. Align the energy chain in the working position:
   - Make sure that the radius is greater than the bending radius R of the cables.
   - The cables can move freely in the bending radius KR of the energy chain.



   ↳ The cable movement is not forced by the energy chain.
7. Mount the energy chain ➔ corresponding instruction manual.
8. Fasten the cables:
   - for short energy chains with a length < 1 m at both ends of the energy chain
   - for long sliding energy chains with a length > 1 m at the driver end only
9. Do not move cables all the way to the fastening point.



   ↳ The mounting space A between the fastening point and bending movement is maintained.

NOTICE

Damage to cables if the chain breaks.
- Replace cables after a chain break.

NOTICE

Malfunction and material damage due to vertically suspended cables.
The cables stretch.
- Regularly check the length of the cables.
- Readjust the cables if required.

5 Technical data

NEFC-M12G8-...-M12G5-LK			
Cable characteristic			Suitability for energy chains
Cable composition		[mm²]	5x0.34
Shielding			no
Cable diameter	D	[mm]	5.1
Mounting space	A	[mm]	≥ 102
Current rating at 40 °C		[A]	2
Surge resistance		[kV]	0.8

NEFC-M12G8-...-M12G5-LK			
Operating voltage range			
AC	U_B	[V]	0 ... 48
DC	U_B	[V]	0 ... 60
Bending radius			
Fixed cable installation	R	[mm]	≥ 26
Flexible cable installation	R	[mm]	≥ 26
Ambient temperature			
Fixed cable installation		[°C]	–25 ... +90
Flexible cable installation		[°C]	–25 ... +90
Material			
Cable sheath			TPE-U(PUR)
Insulating sheath			PP
Electrical connection 1			
Function			Field device side
Connection type			Socket
Connection technology			M12x1 A-coded to EN 61076-2-101
Number of pins/wires			8
Assigned pins/wires			3
Type of mounting			Screw-type lock
Degree of protection In assembled state			IP65, IP67
Electrical connection 2			
Function			Controller side
Connection type			Plug connector
Connection technology			M12x1 A-coded to EN 61076-2-101
Number of pins/wires			5
Assigned pins/wires			3
Type of mounting			Screw-type lock
Degree of protection In assembled state			IP65, IP67

Tab. 3: Technical data