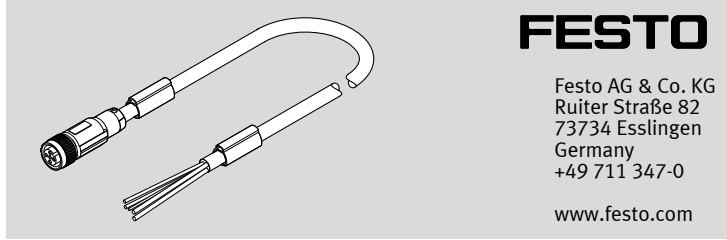


Connecting line NEBC-M12G5-ES-...-LE5-CO



FESTO

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Instructions | Assembly

8081599
2017-11
[8081601]



Translation of the original instructions

CANopen®, DeviceNet® are registered trademarks of the respective trademark owners in certain countries.

1 Further applicable documents

All available documents for the product → www.festo.com/pk.

2 Safety

2.1 Safety instructions

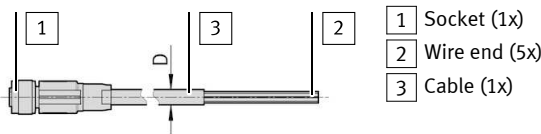
- Do not connect or disconnect plug connector when powered.
- Before starting mounting work: Switch off power supply.
- Observe tightening torques.

2.2 Intended use

Connecting cable with connection technology M12x1, A-coded to EN 61076-2-101 for CANopen and DeviceNet.

3 Configuration

3.1 Product design



- 1 Socket (1x)
- 2 Wire end (5x)
- 3 Cable (1x)

Fig. 1

3.2 Pin allocation

Port 1	Pin	Wire colour ¹⁾	Function
	1	–	Screening
	2	RD	V+
	3	BK	V–
	4	WH	CAN_H
	5	BU	CAN_L

1) Colour code in accordance with IEC 60757:1983-01

Tab. 1 Pin allocation

4 Mounting

4.1 Mounting, field device side

- Connect socket 1 to the matching plug connector.
- Tighten the screw-type lock of the socket 1.

4.2 Mounting, controller side

- Shorten and pre-assemble wire ends as needed.
- Connect the wires in accordance with the pin allocation.

4.3 Installation

Mounting in energy chain

- Lay the chain out lengthwise.
- Place the cables in the chain, making sure they are not twisted.
- Separate cables from each other using separators/drill holes.
- Do not connect cables together.

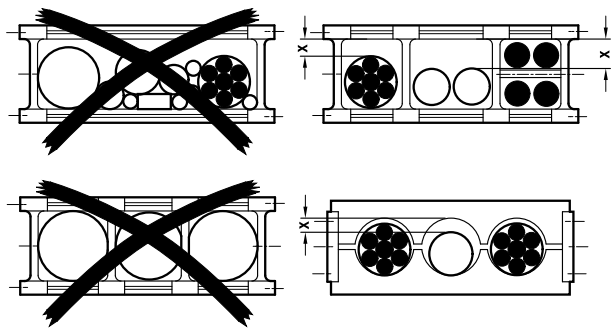


Fig. 2

- Maintain space X. $X > 10\%$ of the cable diameter D. If the chain is suspended vertically, increase the space X.

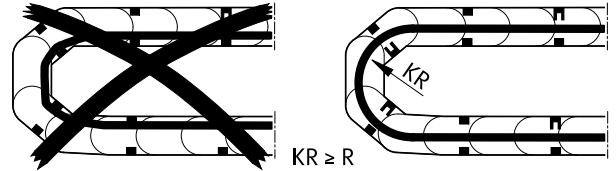


Fig. 3

- Align chain in the operating position:
 - Make sure that the radius is greater than the bending radius R of the cables.
 - Cables can move freely in the bending radius KR of the energy chain. Cables are not forced through the chain.
- Mount chain (→ corresponding assembly instructions).
- Fasten cables:
 - At both ends of the chain in case of short energy chains (→ Fig.4).
 - Only at the driver end in the case of long, sliding energy chains (→ Fig.5).

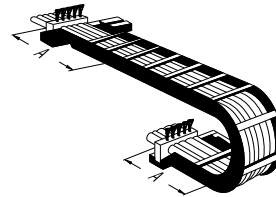


Fig. 4

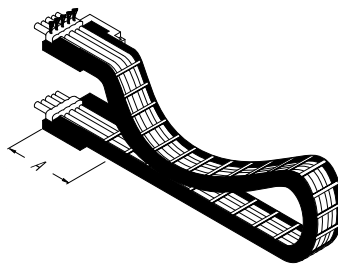


Fig. 5

- Do not bend cables all the way to the fastening point.
 - Mounting space A between the fastening point and bending movement is observed.

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

NEBC-M12G5-ES-...-LE5-CO

Cable characteristic		Suitable for energy chains
Cable composition	[mm ²]	(2x0.34) + (2x0.25) + 0.34
Shielding		Shielded
Cable diameter	D [mm]	6.7

NEBC-M12G5-ES-...-LE5-CO

Current rating at 40 °C	[A]	4
Surge resistance	[kV]	2
Degree of protection		IP65, IP67
Note on degree of protection		In assembled state
Operating voltage range		
DC	U_B [V]	0 ... 30
Bending radius		
Fixed cable installation	R [mm]	≥ 35
Flexible cable installation	R [mm]	≥ 70
Ambient temperature		
Fixed cable installation	[°C]	-25 ... +80
Flexible cable installation	[°C]	-20 ... +80
Material		
Cable sheath		TPE-U(PUR)
Insulating sheath		PE
Note on materials		Cable sheath contains phosphate esters. Must not be laid in direct contact with polyurethane-based pneumatic tubing.
Electrical connection 1		
Function		Field device side
Connection type		Socket
Connection technology		M12x1 A-coded in accordance with EN 61076-2-101
Type of mounting		Screw-type lock
Tightening torque	[Nm]	0.4 ± 10 %
Electrical connection 2		
Function		Controller side
Connection type		Cable
Connection technology		Open end
Wire ends		Cable unsheathed, wire ends cut off bluntly

Tab. 2 Technical data