

Motor cable NEBM-T1G8-E-...-Q7N-LE8

FESTO

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1. Applicable documents

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

→ Assembly instructions of the encoder cable (G)

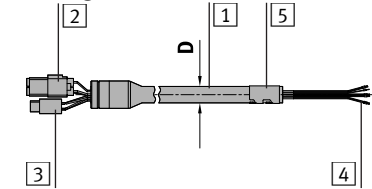
2. Safety

- Do not connect or disconnect plug connectors when powered.
- Switch off power supply before mounting work.
- Observe the tightening torque.

3. Intended use

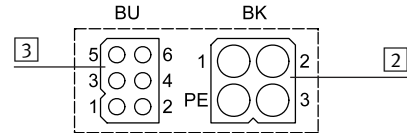
Connection of motor EMMS-AS to a suitable controller.

4. Design



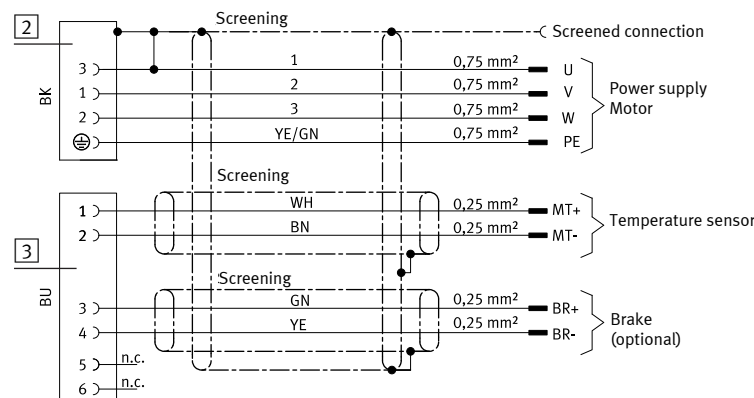
- | | | |
|--------------------|---------------------------------|------|
| 1 | Cable | (1x) |
| Field device side: | | |
| 2 | Socket BK ¹⁾ , 4-pin | (1x) |
| 3 | Socket BU, 6-pin | (1x) |
| Controller side: | | |
| 4 | Wire end sleeve 6 mm/5 mm | (8x) |
| 5 | Screened connection | (1x) |

5. Pin allocation



Field device side

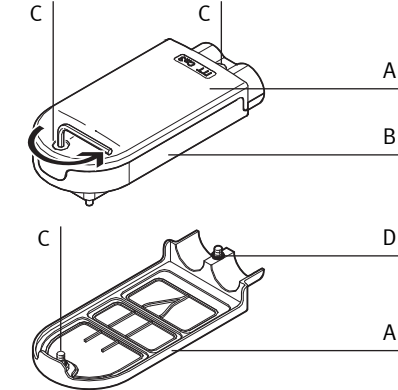
Controller side



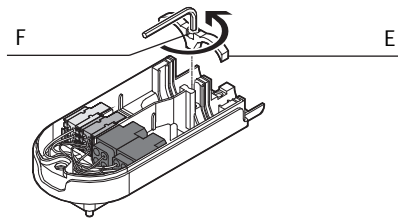
6. Mounting, controller side

- Connect the wires to the motor connection of the controller in accordance with the pin allocation.
- Clamp the screened connection [5] into the spring clip of the controller.

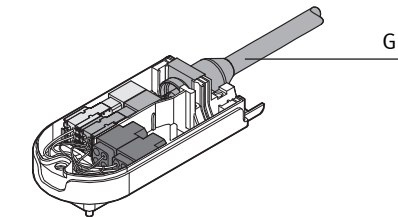
7. Mounting, field device side



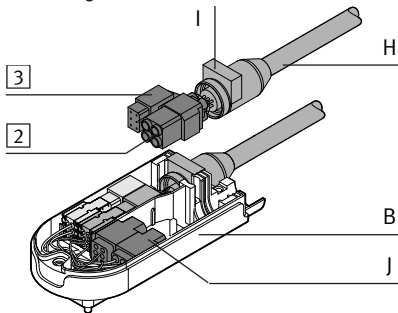
- Remove the cover (A) of the connection box (B).
 - Unscrew screws (C) (→ 2).
 - O-rings (D) are still seated on the screws (C).
- The O-rings (D) prevent loss of the screws (C) and damage to the main seal.



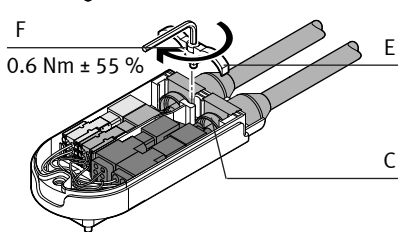
- Unscrew screw (F) (→ 2).
- Remove the strain relief (E).



- Wire the encoder cable (G) with the yellow and red signal sockets (→ applicable document).



- Wiring the motor cable (H):
- Align the motor cable (H) so that the flat side (I) faces upwards.
- Press the sockets [2] and [3] onto the appropriate plug connectors (J).
- Contact PE from socket [2] latches into the terminal of connecting box (B).

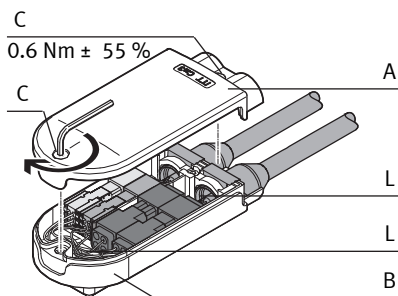


- Brass rings (K) of the cables (G)/(H) are located at the position of the strain relief (E).
- Fasten the strain relief (E) onto the brass rings (K) using the screw (F).

→ Note

Malfunction and material damage due to crushed wires.

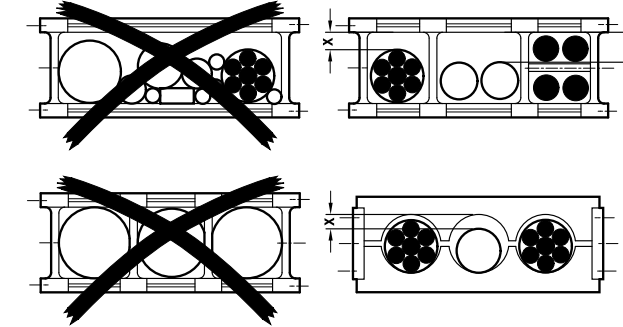
- Do not clamp any wires (L) between the cover (A) and connection box (B).



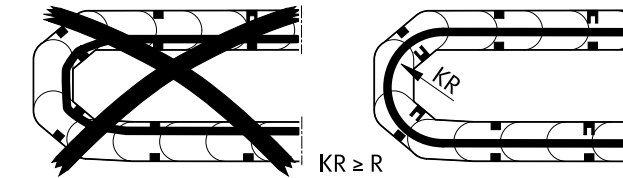
- Place the cover (A) carefully onto the connection box (B).
- Tighten screws (C).

8. Mounting cables in an energy chain

- Lay the chain out lengthwise.
 - Place the cables in the chain, making sure they are not twisted.
 - Separate cables from each other through separator/drift holes.
 - Do not connect cables together.
 - Comply with space X. X > 10 % of the cable diameter D.
- With vertically hanging chain, increase the space X.



- Align chain in the operating position.
- The bending radius of the cables is at least R
- Cables are freely movable in the bending radius KR of the energy chain
- Cables are not forced through the chain.



- Mount chain (→ corresponding assembly instructions).

8. Fasten cables:

- For short energy chains, fasten at both ends of the chain (→ Fig. 1)
- For long, sliding energy chains, fasten only at the moment compensator end (→ Fig. 2).

- Do not move cables up to the fastening point.

→ Mounting space A between the fastening point and the bending movement is maintained.

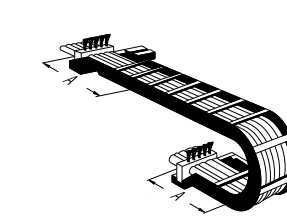


Fig. 1

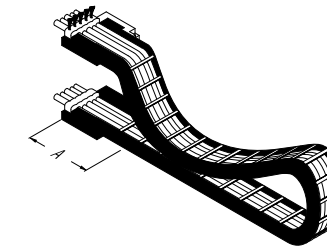


Fig. 2

→ Note

Chain break.
Damages to cables.

- Replace cables.

→ Note

Malfunction and material damage due to vertically hanging cables.
The cables stretch.

- Regularly check the length of the cables.
- Readjust the cables if required.

9. Technical data

NEBM-T1G8-E-...-Q7N-LE8			
Cable composition	[mm²]	4x0.75	2x(2x0.25)
		Screened	
Current rating	[A]	12	3
Operating voltage range AC/DC	U _B [V]	0 ... 630	0 ... 48
Surge resistance	[kV]	4.0	0.5
Cable diameter	D [mm]	11	
Cable bending radius			
Fixed cable installation	R [mm]	≥ 55	
Flexible cable installation	R [mm]	≥ 110	
Mounting space	A R	220	
Degree of protection in mounted status			
Field device side		IP65	
Ambient temperature			
Fixed cable installation	[°C]	-50 ... +90	
Flexible cable installation	[°C]	-40 ... +90	
Cable sheath material		TPE-U(PUR)	
CE marking (declaration of conformity)		In accordance with EU Low Voltage Directive	
→ www.festo.com/sp			

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