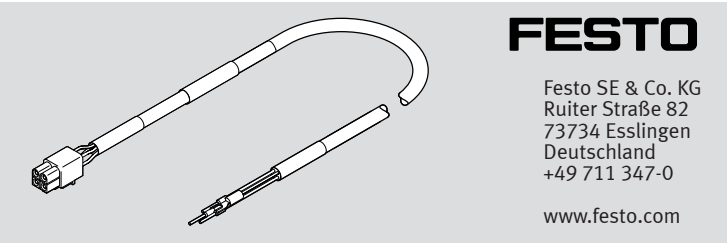


NEBM-H6G4-...-Q13...-LE4
Motor cable



Assembly instructions

8174235
2022-04b
[8174237]



Translation of the original instructions

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1 Applicable documents

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

2 Safety

2.1 Safety instructions

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

2.2 Intended use

Connection of a motor EMMB-AS to a servo drive CMMB-AS or CMMT-AS.

3 Additional information

- Accessories -> www.festo.com/catalogue.

4 Structure

4.1 Product design

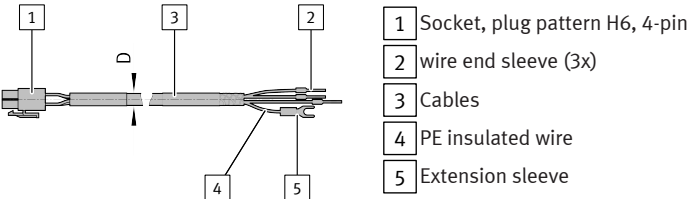


Fig.1

4.2 Contact assignment

Electrical connection 1 Field device side		Assignment/signal	Electrical connection 2 Controller side
1 Socket	Pin		2 Wire ends ¹⁾
	1	U	WH or YE
	2	V	RD
	3	W	BK
	4	PE, shielding	GNYE

1) Colour code in accordance with IEC 60757:2021-06

Tab. 1: Contact assignment

5 Assembly

5.1 Mounting electrical connection 1

1. Align the socket 1 to fit the plug.
2. Connect the socket 1 to the plug and click into place.

5.2 Mounting electrical connection 2

For servo drive CMMB-AS

- Connect the wires in accordance with the contact assignment.

For servo drive CMMT-AS

1. Detach the clevis shoe 5.

2. Strip the insulated wire 4 and attach a wire end sleeve (1x 0.75 mm² x 10).
3. Connect the wires in accordance with the contact assignment.

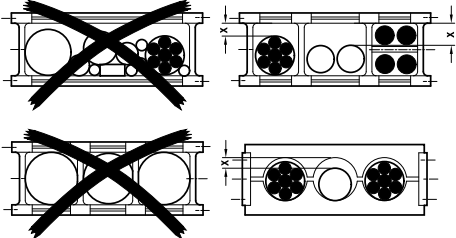
5.3 Wiring

Feature	Cable characteristic	Wiring
-K	Standard	Flexible (freely movable, unguided wiring) The line can be dynamically bent, but not for robots or energy chains.
-E	Suitable for energy chains	In energy chain or flexible

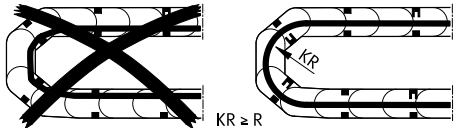
Tab. 2: Wiring

5.4 Mounting in energy chain

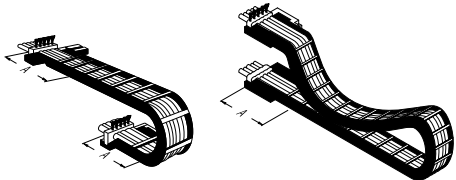
1. Lay out the energy chain lengthways.
2. Place the cables in the energy chain without twisting them.
3. Separate cables from each other using separators/drilled holes.
4. Do not bind cables in bundles.
5. Maintain space X. X > 10% of the cable diameter D.
With the energy chain hanging vertically: increase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

6 Technical data

NEBM-H6G4...-Q13...-LE4			-E	-K
Certificates, declaration of conformity			➔ www.festo.com/sp	
Cable characteristic			Suitable for energy chains	Standard
Cable function			Power line	
Cable composition [mm²]			4x0.79 (AWG 18)	
Shielding			Shielded	
Cable diameter	D	[mm]	7.3	7.4
Mounting space	A	[mm]	146	–
Current rating at 40 °C [A]			9.5	
Surge resistance [kV]			2	
Operating voltage range				
AC	U _B	[V]	0 ... 300	
DC	U _B	[V]	0 ... 300	
Bending radius				
Fixed cable installation	R	[mm]	≥ 55	≥ 74
Flexible cable installation	R	[mm]	≥ 55	≥ 111
Ambient temperature				
Fixed cable installation		[°C]	–25 ... +90	
Flexible cable installation		[°C]	–25 ... +90	
Material				
Cable sheath			PVC	TPE-E
Insulating sheath			PVC [SR-PVC]	TPE-E
Note on materials			Contains paint-wetting impairment substances ¹⁾	
Electrical connection 1				
Function			Field device side	
Connection type			Socket	
Connection technology			Plug pattern H6, coded for motor	
Degree of protection			IP20 In assembled state	
Electrical connection 2				
Function			Controller side	
Connection type			Cable	
Connection technology			Open end	

1) PWIS = paint-wetting impairment substances

Tab. 3: Technical data