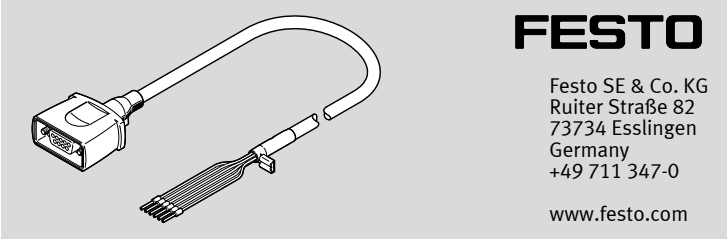


NEBM-S1G9/W9-E-...-Q5-LE6
Motor cable



Assembly instructions

8135054
2020-04b
[8135056]



Translation of the original instructions

© 2020 all rights reserved to Festo SE & Co. KG

1 Applicable documents

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

2 Safety

2.1 Safety Instructions

- Do not connect or disconnect plug connector when powered.
- Only mount the product on components that are in a condition to be safely operated.
- Assembly and installation should only be carried out by qualified personnel. These personnel have electrical training or a relevant qualification.

2.2 Intended use

Connection of a stepper motor EMMS-ST-42/57 to a motor controller CMMT-ST/CMMS-ST/CMMO-ST.

3 Configuration

3.1 Product design

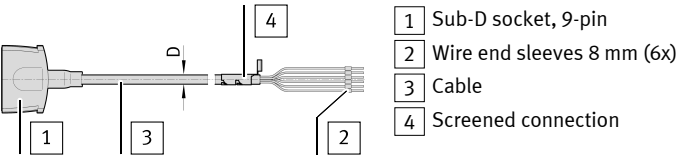


Fig. 1 NEBM-S1G9-E-...-Q5-LE6

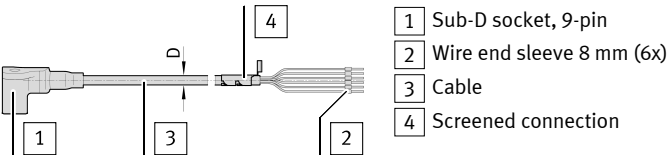


Fig. 2 NEBM-S1W9-E-...-Q5-LE6

3.2 Contact assignment

Electrical connection 1 Field device side		Assignment/signal	Electrical connection 2 Controller side
1 Socket	Pin		2 Wire ends ¹⁾
	1	String A	WH
	2	String A/	BN
	3	String B	GN
	4	String B/	YE
	5	-	-
	6	-	-
	7	Brake + 24 V	GY
	8	Brake GND	PK
	9	-	-

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

Tab. 1 Contact assignment

4 Assembly

4.1 Mounting of electrical connection 1

1. Align socket 1 to fit the plug.
2. Connect socket 1 to the plug.

4.2 Wiring

Character-istic	Cable characteristic	Wiring
-E-	Suitable for energy chains	In energy chain or flexible

Tab. 2 Wiring

4.3 Mounting in energy chain

1. Lay the chain out lengthwise.
2. Place the cables on the chain, making sure they are not twisted.
3. Separate cables from each other using separators/drilled holes.
4. Do not connect cables together.

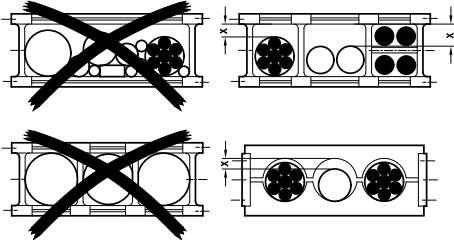


Fig. 3

5. Maintain space X. X > 10% of the cable diameter D. If the chain is suspended vertically: increase space X.

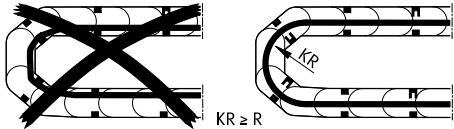


Fig. 4

6. 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.
7. Mount the energy chain -> corresponding instructions.
8. Fasten cables:
 - with short energy chains (length < 1 m) at both ends of the chain
 - with long sliding energy chains (length > 1 m) only at the driver end

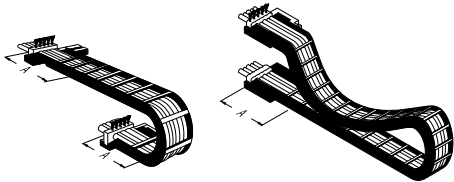


Fig. 5

9. Do not move cables all the way to the fastening point. 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.

NEBM-S1G9/W9-E-...-Q5-SE6		
Cable characteristic		Suitable for energy chains
Cable composition	[mm²]	6x0.34
Shielding		Shielded
Cable diameter	D [mm]	6.2 ± 0.2
Mounting space	A [mm]	124
Current rating at 25 °C	I _{eff} [A]	5
Note on current rating at >25 °C		Reduction of the current rating by 1%/K
Operating voltage range		
DC	U _B [V]	0 ... 72
Bending radius		
Fixed cable installation	R [mm]	≥ 31
Flexible cable installation	R [mm]	≥ 62
Ambient temperature		
Fixed cable installation	[°C]	−40 ... +80
Flexible cable installation	[°C]	−5 ... +80
Material		
Cable sheath		TPE-U(PUR)
Insulating sheath		PP
Electrical connection 1		
Function		Field device side
Connection type		Socket
Connection technology		Sub-D
Type of mounting		–
Degree of protection		IP65 In assembled state
Electrical connection 2		
Function		Controller side
Connection type		Cable
Connection technology		Open end
Wire ends		Wire end sleeve

Tab. 3 Technical data