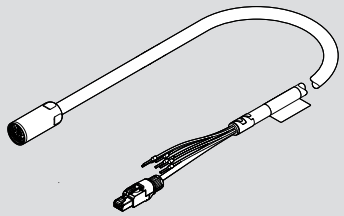
NEBM-H17G12-...-R3LEG14

Motor cable



FESTO

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Assembly instructions

8218270
2025-11
[8218272]

8218270

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

- Before starting work on the product: set connected devices to a safe condition.
- Before working on the product: Switch off the power supply, ensure that it is off and secure it against being switched on again.
- Do not disconnect the push-in connectors when the system is running, the motors are rotating and the axes are moving.

2.2 Intended use

The motor cable connects the motor EMMH-AS to a servo drive.

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.
The qualified personnel have knowledge and experience in handling electric drives and axes.

3 Additional information

- Contact the regional Festo contact if you have technical problems ➔ www.festo.com.
- Accessories ➔ www.festo.com/catalogue.

4 Product overview

4.1 Product design

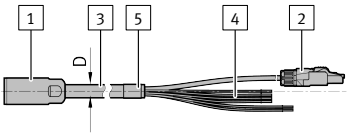
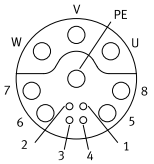


Fig. 1: Product design

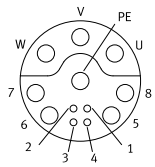
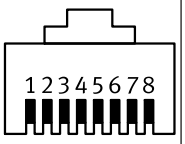
1 Socket
2 Plug
3 Cables
4 Core (6x)
5 Shielded connection

4.2 Contact assignment

Electrical connection 1 Field device side		Signal	Electrical connection 2 Controller side
1 Socket			4 Wire ends[1]
	U	U	BU
	V	V	BN
	W	W	BK
	PE	PE	GNYE
	7	BR-	BUWH
	8	BR+	GNWH

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

Tab. 1: Contact assignment for motor and brake

Electrical connection 1 Field device side		Signal	Electrical connection 2 Controller side
1 Socket			2 Plug connector
	1	DATA+	4
	2	CLK+	1
	3	CLK-	2
	4	DATA-	5
	5	Up	7
	6	0 V	8
			

Tab. 2: Encoder contact assignment

5 Mounting

5.1 Mounting electrical connection 1

1. Align the socket 1 to fit the plug.
2. Connect the socket 1 to the plug.
3. Tighten the socket 1 with a tool ⊂ 21. Hold the plug in position with a tool ⊂ 21. Tightening torque: 10 Nm
4. Attach the cable sheath to the area of the socket 1.
   - Force is not transferred to the socket.

5.2 Mounting electrical connection 2

1. Mount the shield connection 5 on the controller.
2. Connect the wire ends 4 in accordance with the contact assignment.
3. If necessary, install the line end with plug 2 in a loop and secure with cable binders to maintain the required distance from other components.
4. Align the plug 2 to fit the socket.
5. Insert the plug 2 into the socket and click into place.
6. Fix the cable in the area of the shield connection 5.
   - Force is not transferred to the cores.

5.3 Wiring

Characteristics	Cable characteristics	Wiring
-F	Suitable for the food industry	Fixed cable installation

Tab. 3: Wiring

6 Technical data

NEBM-H17G12-...-R3LEG14			
Certificates, declaration of conformity			➔ www.festo.com/sp
Cable characteristic			Suitable for the food industry, fixed cable installation
Cable function			3x motor cable
Cable composition		[mm²]	4x1.5 + 1x (2x07.5) + 1x (2x0.24 + 2x2x0.15)
Shielding			Shielded
Cable diameter	D	[mm]	11.5
Surge resistance		[kV]	6
Current rating at 40 °C		[A]	17.8
Overvoltage category			III
Operating voltage range			
AC	U_B	[V]	0 ... 480
DC	U_B	[V]	0 ... 680
Bending radius			
Fixed cable installation	R	[mm]	≥ 57.5
Ambient temperature			
Fixed cable installation		[°C]	–40 ... +90
Material			
Cable sheath			TPE-E
Insulating sheath			PP
Electrical connection 1			
Function			Field device side
Connection type			Hybrid socket
Connection technology			M21x1
Type of mounting			Screw-type lock with hexagon ⊂ 21
Number of pins/cores			12
Assigned pins/cores			12
Degree of protection In assembled state			IP69K
Pollution degree			3
Electrical connection 2			
Function			Controller side
Connection type			Plug connector and Cable
Connection technology			RJ45 and open end
Wire ends			Wire ferrule
Type of mounting			Inserted

NEBM-H17G12-...-R3LEG14	
Number of pins/cores	14
Assigned pins/cores	12
Degree of protection In assembled state	IP20
Pollution degree	3

Tab. 4: Technical data