

Stepper motors EMMB-ST

FESTO



Key features

At a glance

- Two-phase hybrid technology
- 3 flange sizes available: M = 0.25 ... 6.6 Nm
- Degree of protection IP20 for motor housing with connection technology
- Degree of protection IP40 for motor shaft

Connection technology:

- Simple connection technology (OCP: one cable plug) – hybrid cable: motor cable and connecting cable for supply and encoder in one
- Forward or backward orientation possible

Digital absolute encoder system:

- Single-turn
- Multi-turn, battery-free

Engineering tools

More information → [electric motion sizing](#)



Save time with smart engineering tools for the optimal solution. Our goal is to increase your productivity. Our engineering tools play an integral part in achieving this goal. They help you size your system correctly, tap into unimagined productivity reserves and generate additional productivity along the entire value chain. In every phase of your project, from the initial contact to the modernisation of your machine, you will come across a number of different tools which will be of use to you.

Electric Motion Sizing

- Create the optimum drive package quickly and reliably. Electric Motion Sizing calculates suitable combinations of electric axis, electric motor and servo drive using just a few application details. It provides you with all the relevant data including the bill of materials and documentation for the selected combination. This avoids design errors and results in significantly improved energy efficiency for the system. A smooth connection to the Festo Automation Suite also makes commissioning easier for you.

Graphs

More information → [emmb-st](#)



The graphs shown in this document are also available online. There, precise values can be displayed.

Measuring unit

[S] Absolute encoder, single-turn

- The angular position is assigned to a unique value in coded form.
- The position is only sensed within one turn. All subsequent turns need to be counted by the higher-level device.
- When switched off, the position is only sensed within one turn.
- A homing run is required after switch-on.

[M] Absolute encoder, multi-turn

- A unique value in coded form is assigned to the angular position and each full turn.
- This type counts the full turns until the specified maximum is reached (including when switched off).
- Homing is only required once it has been installed in the application.

Brake

[B] With brake

The holding brake should not be used as a safety brake.

Type codes

001	Series		005	Electrical connection	
EMMB	Motor		S	Straight plug	
002	Motor type		006	Measuring unit	
ST	Stepper motor ST			None	
003	Flange size, motors [mm]		M	Absolute encoder, multi-turn	
42	42		S	Absolute encoder, single turn	
57	57				
87	87		007	Brake	
004	Length			None	
L	Long		B	With brake	
M	Medium				
S	Short				

Datasheet

General technical data - EMMB-ST-42					
Flange size, motors [mm]	42 mm				
Length	[S]		[L]		
Measuring unit	[]	[M]	[S]	[]	[M]
Nominal operating voltage DC	48 V				
Nominal motor current	1.8 A		2.9 A		
Continuous stall current	2 A		3.7 A		
Peak current	2 A		4 A		
Rated motor output ¹⁾	–	17 W	–	49 W	
Step angle with full step	1.8 deg				
Stepping angle tolerance	±5%				
Motor holding torque	0.25 Nm		0.63 Nm		
Nominal torque ¹⁾	–	0.24 Nm	–	0.47 Nm	
Peak torque	0.25 Nm		0.63 Nm		
Nominal rotational speed ¹⁾	–	600 rpm	–	1,000 rpm	
Maximum speed	2,700 rpm		3,200 rpm		
Max. mechanical rotational speed	9,000 rpm				
Motor constant	0.159 Nm/A		0.162 Nm/A		
Voltage constant phase	12.1 mV/min		10.6 mV/min		
Electric time constant	1.4 ms		1.3 ms		
Thermal time constant	22 mins		16 mins		
Thermal resistance	3.5 K/W		2.4 K/W		
I ² T time motor	2 s				
Number of phases	2				
Number of pole pairs	50				
Winding resistance phase	2.1 Ohm		0.6 Ohm		
Winding inductance phase per individual phase (un-linked)	3 mH		0.8 mH		
Winding series inductance Ld (phase)	1.6 mH		1.45 mH		
Winding shunt inductance Lq (phase)	3 mH		0.8 mH		
Permissible axial shaft load	10 N				
Permissible radial shaft load	28 N				
Measuring flange	200 x 200 x 15 mm, steel				

1) For motors without encoders, no nominal operating point is defined.

Datasheet

General technical data - EMMB-ST-57							
Flange size, motors [mm]	57 mm						
Length	[M]	[L]					
Measuring unit	[]	[M]	[S]	[]	[M]		
Nominal operating voltage DC	48 V						
Nominal motor current	5.1 A			5 A			
Continuous stall current	6.1 A			5.8 A			
Peak current	8 A						
Rated motor output ¹⁾	-	81 W		-	83 W		
Step angle with full step	1.8 deg						
Stepping angle tolerance	±5%						
Motor holding torque	1.05 Nm			1.8 Nm			
Nominal torque ¹⁾	-	0.77 Nm		-	1.58 Nm		
Peak torque	1.1 Nm			2.1 Nm			
Nominal rotational speed ¹⁾	-	1,000 rpm		-	500 rpm		
Maximum speed	2,600 rpm			1,500 rpm			
Max. mechanical rotational speed	8,000 rpm						
Motor constant	0.152 Nm/A			0.32 Nm/A			
Voltage constant phase	13.1 mV/min			22.6 mV/min			
Electric time constant	2.9 ms			3.7 ms			
Thermal time constant	28 mins			32 mins			
Thermal resistance	1.6 K/W			1.5 K/W			
I ² T time motor	2 s						
Number of phases	2						
Number of pole pairs	50						
Winding resistance phase	0.17 Ohm			0.26 Ohm			
Winding inductance phase per individual phase (un-linked)	0.5 mH			0.95 mH			
Winding series inductance Ld (phase)	0.7 mH			1.75 mH			
Winding shunt inductance Lq (phase)	0.5 mH			0.95 mH			
Permissible axial shaft load	15 N						
Permissible radial shaft load	75 N						
Measuring flange	200 x 200 x 15 mm, steel						

1) For motors without encoders, no nominal operating point is defined.

Datasheet

General technical data - EMMB-ST-87					
Flange size, motors [mm]	87 mm				
Length	[S]		[M]		[S]
Measuring unit	[]	[M]	[S]	[]	[M]
Nominal operating voltage DC	48 V				
Nominal motor current	6.9 A		7.5 A		
Continuous stall current	9.5 A		8.2 A		
Peak current	12 A				
Rated motor output ¹⁾	–	142 W	–	87 W	
Step angle with full step	1.8 deg				
Stepping angle tolerance	±5%				
Motor holding torque	2.4 Nm		6.6 Nm		
Nominal torque ¹⁾	–	1.7 Nm	–	5.9 Nm	
Peak torque	2.7 Nm		6.8 Nm		
Nominal rotational speed ¹⁾	–	800 rpm	–	140 rpm	
Maximum speed	2,200 rpm		600 rpm		
Max. mechanical rotational speed	8,000 rpm				
Motor constant	0.24 Nm/A		0.79 Nm/A		
Voltage constant phase	15.4 mV/min		56.6 mV/min		
Electric time constant	1.75 ms		8.5 ms		
Thermal time constant	37 mins		33 mins		
Thermal resistance	0.91 K/W		0.88 K/W		
I ² T time motor	2 s				
Number of phases	2				
Number of pole pairs	50				
Winding resistance phase	0.13 Ohm		0.27 Ohm		
Winding inductance phase per individual phase (un-linked)	0.35 mH		2.3 mH		
Winding series inductance Ld (phase)	0.56 mH		3.6 mH		
Winding shunt inductance Lq (phase)	0.35 mH		2.3 mH		
Permissible axial shaft load	60 N				
Permissible radial shaft load	220 N				
Measuring flange	250 x 250 x 15 mm, steel				

1) For motors without encoders, no nominal operating point is defined.

Datasheet

Technical data - Brakes			
Flange size, motors [mm]	42	57	87
Brake holding torque	0.63 Nm	1.74 Nm	4.26 Nm
Brake DC operating voltage	24 V		
Brake current consumption	0.34 A	0.38 A	0.49 A
Brake power consumption	8.2 W	9 W	12 W
Brake coil resistance	70.9 Ohm	63.8 Ohm	49.2 Ohm
Brake coil inductivity	146 mH	107 mH	110 mH
Brake separation time	28 ms	32 ms	44 ms
Brake closing time	41 ms	97 ms	110 ms
DC brake response delay	8 ms	11 ms	30 ms
Max. brake no-load speed	9,000 rpm	8,000 rpm	7,000 rpm
Brake max. friction	1,500 J	6,000 J	14,000 J
Mass moment of inertia, brake	0.006 kgcm ²	0.024 kgcm ²	0.11 kgcm ²
Switching cycles, holding brake	10 million idle actuations (without friction!)		

Technical data – Encoder						
Flange size, motors [mm]	42	57			87	
Measuring unit	[S]	[M]	[S]	[M]	[S]	[M]
Rotor position sensor measuring principle	Magnetic					
Rotary position encoder interface	BiSS-C					
Rotor position encoder for absolute detectable revolutions	–	65,536	–	65,536	–	65,536
Rotor position encoder, DC operating voltage	5 V			14 V	5 V	14 V
Rotor position encoder, DC operating voltage range	4.75 ... 5.25 V	4.5 ... 5.5 V	4.75 ... 5.25 V	4.75 ... 15 V	4.75 ... 5.25 V	4.75 ... 15 V
Rotor position encoder, sinusoidal/cosinusoidal periods per revolution	2					
Rotor position encoder, position values per revolution	65,536	131,072	65,536	131,072	65,536	131,072
Rotor position encoder resolution	16 bit	17 bit	16 bit	17 bit	16 bit	17 bit
Rotor position encoder, system accuracy of angle measurement	-540 ... 540 arcsec	-310 ... 310 arcsec	-540 ... 540 arcsec	-310 ... 310 arcsec	-540 ... 540 arcsec	-310 ... 310 arcsec
Rotor position encoder, max. operating speed	5,500 rpm	12,000 rpm	5,500 rpm	12,000 rpm	5,500 rpm	12,000 rpm
Rotor position encoder, temperature range	-40 ... 105 °C					
MTTF, subcomponent ¹⁾	687 years, rotor position encoder	20 years, rotor position encoder	687 years, rotor position encoder	20 years, rotor position encoder	687 years, rotor position encoder	20 years, rotor position encoder

1) The data given applies to an encoder temperature/operating temperature of 40 °C.

Stepper motors EMMB-ST

Datasheet

Total output moment of inertia - EMMB-ST-42

Flange size, motors [mm]	42									
Length	[S]									
Measuring unit	[]		[M]		[S]		[]		[M]	
Brake	[]	[B]								
Total output moment of inertia	0.035 kgcm ²	0.041 kgcm ²	0.037 kgcm ²	0.043 kgcm ²	0.035 kgcm ²	0.041 kgcm ²	0.082 kgcm ²	0.088 kgcm ²	0.084 kgcm ²	0.09 kgcm ²
									0.082 kgcm ²	0.088 kgcm ²

Total output moment of inertia - EMMB-ST-57

Flange size, motors [mm]	57									
Length	[M]									
Measuring unit	[]		[M]		[S]		[]		[M]	
Brake	[]	[B]	[]	[B]	[]	[B]	[]	[B]	[]	[B]
Total output moment of inertia	0.3 kgcm ²	0.324 kgcm ²	0.306 kgcm ²	0.33 kgcm ²	0.3 kgcm ²	0.324 kgcm ²	0.48 kgcm ²	0.504 kgcm ²	0.486 kgcm ²	0.51 kgcm ²
									0.48 kgcm ²	0.504 kgcm ²

Total output moment of inertia - EMMB-ST-87

Flange size, motors [mm]	87									
Length	[S]									
Measuring unit	[]		[M]		[S]		[]		[M]	
Brake	[]	[B]	[]	[B]	[]	[B]	[]	[B]	[]	[B]
Total output moment of inertia	1 kgcm ²	1.11 kgcm ²	1.006 kgcm ²	1.116 kgcm ²	1 kgcm ²	1.11 kgcm ²	1.9 kgcm ²	2.01 kgcm ²	1.906 kgcm ²	2.016 kgcm ²
									1.9 kgcm ²	2.01 kgcm ²

Weight

Flange size, motors [mm]	42				57				87			
Length	[S]				[L]				[M]			
Brake	[]	[B]	[]	[B]	[]	[B]	[]	[B]	[]	[B]	[]	[B]
Product weight	300 g	520 g	490 g	700 g	810 g	1,220 g	1,170 g	1,580 g	1,890 g	2,720 g	3,320 g	4,150 g

Datasheet

Operating and environmental conditions						
Flange size, motors [mm]	42		57		87	
Length	[S]	[L]	[M]	[L]	[S]	[M]
Conforms to standard	IEC 60034					
Motor type to EN 60034-7	IM B5, IM V1, IM V3					
Degree of protection	IP20					
Note on degree of protection	IP40 for motor shaft without radial shaft seal					
Ambient temperature	0 ... 40 °C	-15 ... 40 °C				
Note on ambient temperature	Up to 80 °C with derating -2%/°C					
Storage temperature	-20 ... 70 °C					
Max. winding temperature	130 °C					
Temperature monitoring ¹⁾	Digital Motor temp. via BiSS-C					
Rating class according to EN 60034-1	S1					
Thermal class according to EN 60034-1	B					
Relative humidity	0 - 90%					
CE marking (see declaration of conformity) ²⁾	To EU EMC Directive To EU RoHS Directive					
UKCA marking (see declaration of conformity) ³⁾	To UK EMC regulations To UK RoHS regulations					
Certification	RCM					
Vibration resistant	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6					
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27					
Isolation resistance AC	0.6					
Electrical connection 1, connection type	Hybrid plug					
LABS (PWIS) conformity	VDMA24364 zone III					
Note on materials	RoHS-compliant					

1) Only possible with EMMB-ST-...-M (multiturn).

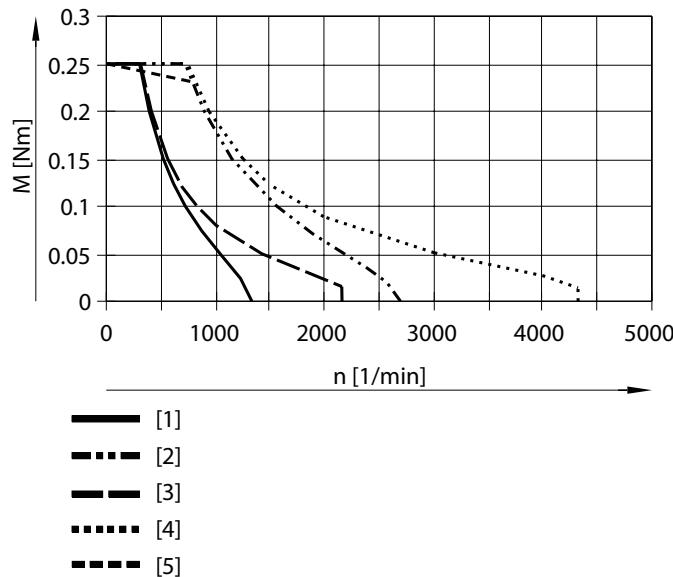
2) More information www.festo.com/catalogue/emmb-st → Support/Downloads.

3) More information www.festo.com/catalogue/emmb-st → Support/Downloads.

Datasheet

Torque M as a function of rotational speed n

EMMB-ST-42-S

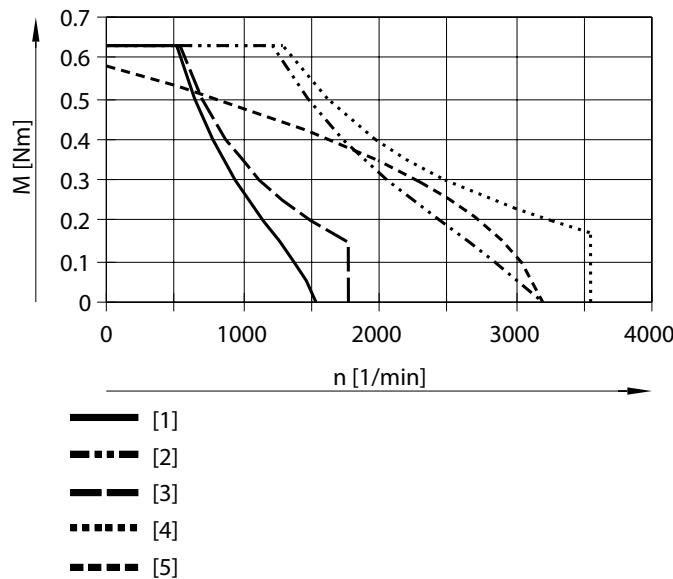


- [1] Peak torque at 24V DC
- [2] Peak torque at 48V DC
- [3] Field weakened peak torque at 24V DC
- [4] Field weakened peak torque at 48V DC
- [5] Nominal torque

Typical motor characteristic curve with nominal voltage and optimal motor controller.

Observe the maximum permissible rotational speed of add-on and installation components (such as encoder, brake etc.)!

EMMB-ST-42-L



- [1] Peak torque at 24V DC
- [2] Peak torque at 48V DC
- [3] Field weakened peak torque at 24V DC
- [4] Field weakened peak torque at 48V DC
- [5] Nominal torque

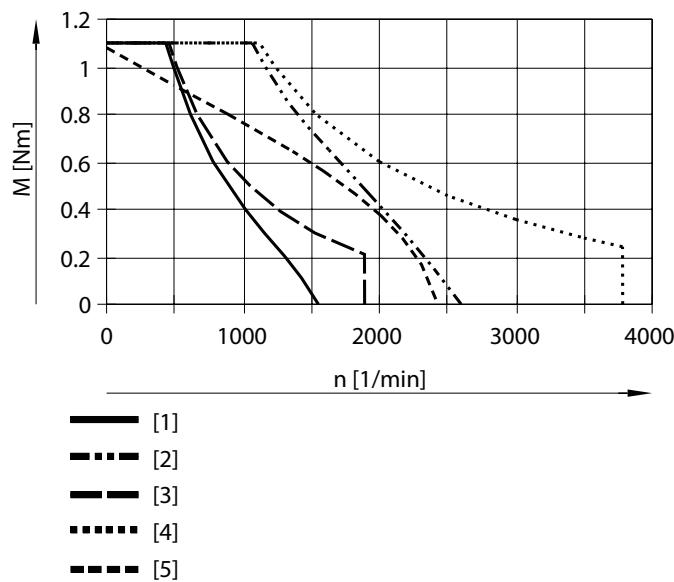
Typical motor characteristic curve with nominal voltage and optimal motor controller.

Observe the maximum permissible rotational speed of add-on and installation components (such as encoder, brake etc.)!

Datasheet

Torque M as a function of rotational speed n

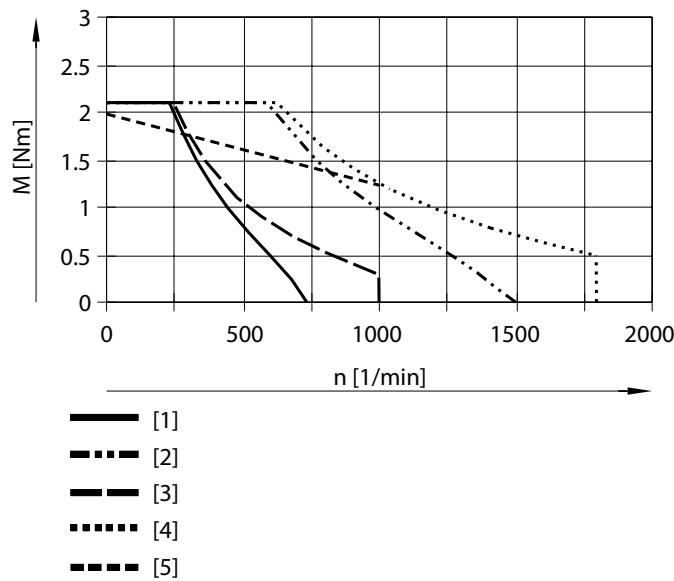
EMMB-ST-57-M



- [1] Peak torque at 24V DC
- [2] Peak torque at 48V DC
- [3] Field weakened peak torque at 24V DC
- [4] Field weakened peak torque at 48V DC
- [5] Nominal torque

Typical motor characteristic curve with nominal voltage and optimal motor controller.
Observe the maximum permissible rotational speed of add-on and installation components (such as encoder, brake etc.)!

EMMB-ST-57-L



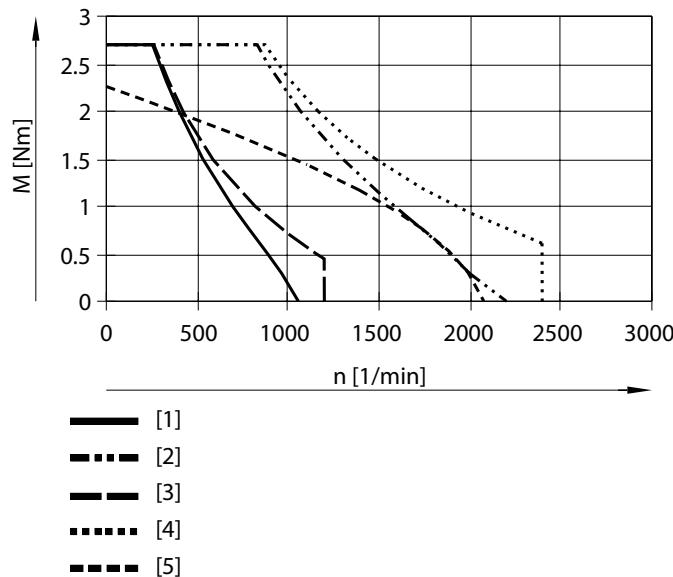
- [1] Peak torque at 24V DC
- [2] Peak torque at 48V DC
- [3] Field weakened peak torque at 24V DC
- [4] Field weakened peak torque at 48V DC
- [5] Nominal torque

Typical motor characteristic curve with nominal voltage and optimal motor controller.
Observe the maximum permissible rotational speed of add-on and installation components (such as encoder, brake etc.)!

Datasheet

Torque M as a function of rotational speed n

EMMB-ST-87-S



[1] Peak torque at 24V DC

[2] Peak torque at 48V DC

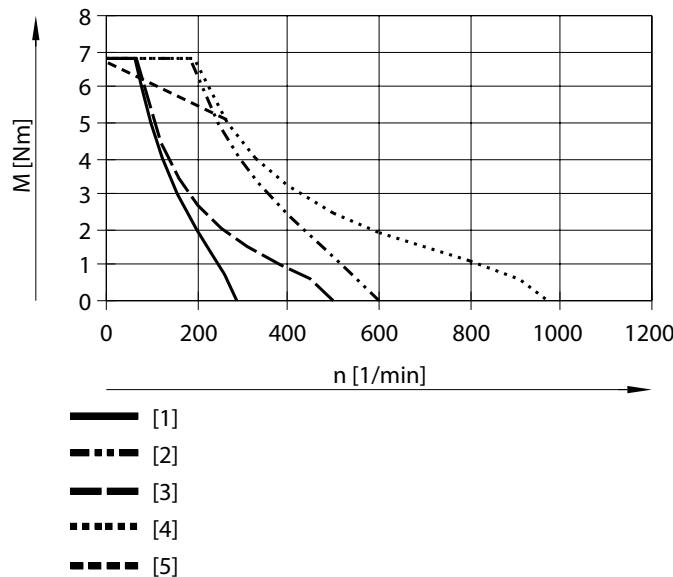
[3] Field weakened peak torque at 24V DC

[4] Field weakened peak torque at 48V DC

[5] Nominal torque

Typical motor characteristic curve with nominal voltage and optimal motor controller.
Observe the maximum permissible rotational speed of add-on and installation components (such as encoder, brake etc.)!

EMMB-ST-87-M



[1] Peak torque at 24V DC

[2] Peak torque at 48V DC

[3] Field weakened peak torque at 24V DC

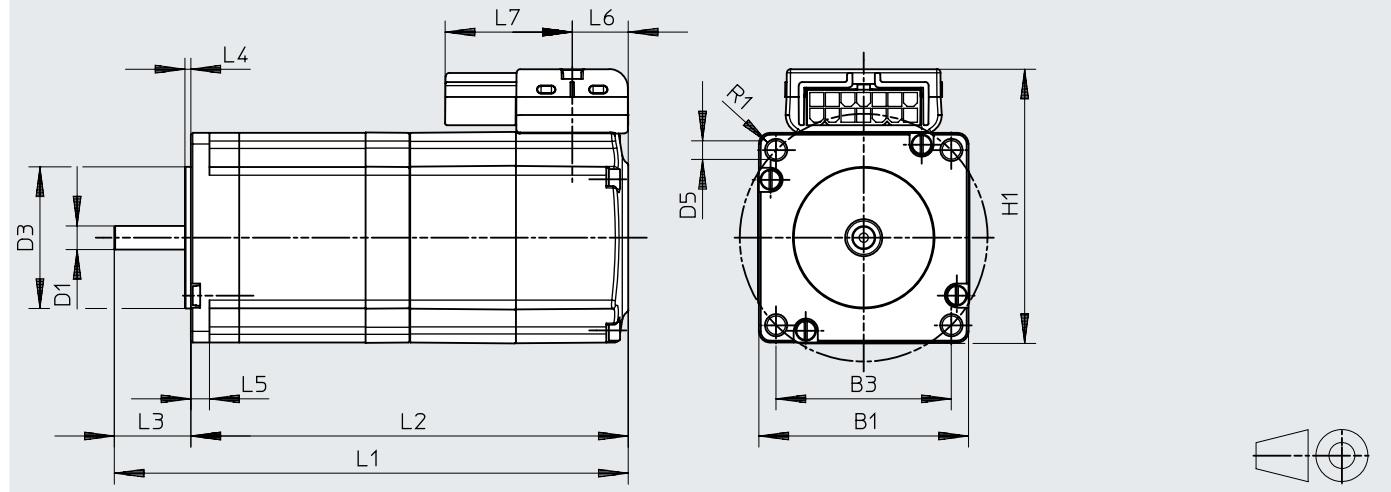
[4] Field weakened peak torque at 48V DC

[5] Nominal torque

Typical motor characteristic curve with nominal voltage and optimal motor controller.
Observe the maximum permissible rotational speed of add-on and installation components (such as encoder, brake etc.)!

Datasheet

Dimensions – EMMB-ST-42/-57/-87

Download CAD data → www.festo.com

		B1	B3 ±0.2	D1 Ø h6	D3 Ø h8	D5	H1
EMMB-ST-42	S	42	31	5	22	M3	55
	S-B						
	L						
	L-B						
EMMB-ST-57	M	56.4	47.1	6.35	38.1	5	75
	M-B						
	L						
	L-B						
EMMB-ST-87	S	85.9	69.5	11	73	6.6	75
	S-B						
	M						
	M-B						

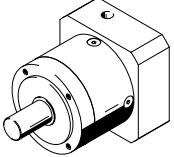
		L1	L2	L3	L4	L5	L6	L7	R1
EMMB-ST-42	S	94	70	24	2	-	15	25.6	2.3
	S-B	124	100						
	L	112	88						
	L-B	142	118						
EMMB-ST-57	M	108.3	88	20.6	1.6	5	15.1	34.2	3
	M-B	138.3	118						
	L	129.3	109						
	L-B	159.3	139						
EMMB-ST-87	S	120.7	93.7	27	2	8	15.1	34.2	5.5
	S-B	149.2	122.2						
	M	154.2	127.2						
	M-B	182.7	155.7						

Ordering data

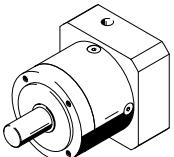
Ordering data Length	Measuring unit	Brake	Part no.	Type
EMMB-ST-42				
Short [S]	None	None	8156125	EMMB-ST-42-S-S
	Absolute encoder, single-turn [S]		8156126	EMMB-ST-42-S-SS
	Absolute encoder, multi-turn [M]		8156127	EMMB-ST-42-S-SM
	None	With brake [B]	8156128	EMMB-ST-42-S-SB
	Absolute encoder, single-turn [S]		8156129	EMMB-ST-42-S-SSB
	Absolute encoder, multi-turn [M]		8156130	EMMB-ST-42-S-SMB
Long [L]	None	None	8156131	EMMB-ST-42-L-S
	Absolute encoder, single-turn [S]		8156132	EMMB-ST-42-L-SS
	Absolute encoder, multi-turn [M]		8156133	EMMB-ST-42-L-SM
	None	With brake [B]	8156134	EMMB-ST-42-L-SB
	Absolute encoder, single-turn [S]		8156135	EMMB-ST-42-L-SSB
	Absolute encoder, multi-turn [M]		8156136	EMMB-ST-42-L-SMB
EMMB-ST-57				
Medium [M]	None	None	8156137	EMMB-ST-57-M-S
	Absolute encoder, single-turn [S]		8156138	EMMB-ST-57-M-SS
	Absolute encoder, multi-turn [M]		8156139	EMMB-ST-57-M-SM
	None	With brake [B]	8156140	EMMB-ST-57-M-SB
	Absolute encoder, single-turn [S]		8156141	EMMB-ST-57-M-SSB
	Absolute encoder, multi-turn [M]		8156142	EMMB-ST-57-M-SMB
Long [L]	None	None	8156143	EMMB-ST-57-L-S
	Absolute encoder, single-turn [S]		8156144	EMMB-ST-57-L-SS
	Absolute encoder, multi-turn [M]		8156145	EMMB-ST-57-L-SM
	None	With brake [B]	8156146	EMMB-ST-57-L-SB
	Absolute encoder, single-turn [S]		8156147	EMMB-ST-57-L-SSB
	Absolute encoder, multi-turn [M]		8156148	EMMB-ST-57-L-SMB
EMMB-ST-87				
Short [S]	None	None	8156149	EMMB-ST-87-S-S
	Absolute encoder, single-turn [S]		8156150	EMMB-ST-87-S-SS
	Absolute encoder, multi-turn [M]		8156151	EMMB-ST-87-S-SM
	None	With brake [B]	8156152	EMMB-ST-87-S-SB
	Absolute encoder, single-turn [S]		8156153	EMMB-ST-87-S-SSB
	Absolute encoder, multi-turn [M]		8156154	EMMB-ST-87-S-SMB
Medium [M]	None	None	8156155	EMMB-ST-87-M-S
	Absolute encoder, single-turn [S]		8156156	EMMB-ST-87-M-SS
	Absolute encoder, multi-turn [M]		8156157	EMMB-ST-87-M-SM
	None	With brake [B]	8156158	EMMB-ST-87-M-SB
	Absolute encoder, single-turn [S]		8156159	EMMB-ST-87-M-SSB
	Absolute encoder, multi-turn [M]		8156160	EMMB-ST-87-M-SMB

Accessories

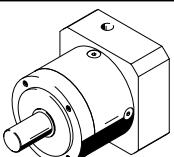
Planetary gear for EMMB-ST-42

	Gear ratio	Product weight	Part no.	Type	Datasheets → Internet: emga
	3:1	350 g	549428	EMGA-40-P-G3-SST-42	
	5:1	350 g	549429	EMGA-40-P-G5-SST-42	
	8:1	400 g	8141762	EMGA-40-P-G8-SST-42	
	12:1	450 g	8141763	EMGA-40-P-G12-SST-42	

Planetary gear for EMMB-ST-57

	Gear ratio	Product weight	Part no.	Type	Datasheets → Internet: emga
	3:1	900 g	549430	EMGA-60-P-G3-SST-57	
	5:1	900 g	549431	EMGA-60-P-G5-SST-57	
	8:1	900 g	8141764	EMGA-60-P-G8-SST-57	
	12:1	1100 g	8141765	EMGA-60-P-G12-SST-57	

Planetary gear for EMMB-ST-87

	Gear ratio	Product weight	Part no.	Type	Datasheets → Internet: emga
	3:1	2100 g	549432	EMGA-80-P-G3-SST-87	
	5:1	2100 g	549433	EMGA-80-P-G5-SST-87	
	8:1	2100 g	8141766	EMGA-80-P-G8-SST-87	
	12:1	2600 g	8141767	EMGA-80-P-G12-SST-87	

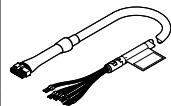
Accessories

Recommended cable cross section as a function of cable length and servo drive CMMT-ST

	Up to 5 m	Up to 10 m	Up to 20 m	Up to 25 m
EMMB-ST-42-S...	Q6	Q6	Q6	Q6
EMMB-ST-42-L...	Q6	Q6	Q6	Q6
EMMB-ST-57-M...	Q6	Q7	Q9	Q9
EMMB-ST-57-L...	Q6	Q7	Q9	Q9
EMMB-ST-87-S...	Q7	Q9	Q9	Q9
EMMB-ST-87-M...	Q7	Q9	Q9	Q9

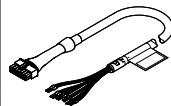
Q6 = 0.5 mm²Q7 = 0.75 mm²Q9 = 1.5 mm²

Ordering data – Motor cable for EMMB-ST-42

	Cable cross section ¹⁾	Bending radius, flexible cable installation	Cable characteristic	Cable length	Part no.	Type
	0.5 mm ²	78.75 mm	Suitable for energy chains	2.5 m	8181675	NEBM-L5G14-EH-2.5-Q6N-LE12
				5 m	8181664	NEBM-L5G14-EH-5-Q6N-LE12
				7.5 m	8181676	NEBM-L5G14-EH-7.5-Q6N-LE12
				10 m	8181672	NEBM-L5G14-EH-10-Q6N-LE12
	0.5 ... 1.5 mm ²	78.75 ... 81 mm	Suitable for energy chains	0.5 ... 25 m	8181663	NEBM-LX/M17-

1) For NEBM-LX/M17-...: selectable cable length: 0.5 ... 25 m, in 0.5 m grid and all cable cross-sections Q6, Q7, Q9

Ordering data – Motor cable for EMMB-ST-57/87

	Cable cross section ¹⁾	Bending radius, flexible cable installation	Cable characteristic	Cable length	Part no.	Type
	0.5 mm ²	78.75 mm	Suitable for energy chains	2.5 m	8181677	NEBM-L10G14-EH-2.5-Q6N-LE12
				5 m	8181667	NEBM-L10G14-EH-5-Q6N-LE12
				7.5 m	8181669	NEBM-L10G14-EH-7.5-Q6N-LE12
				10 m	8181665	NEBM-L10G14-EH-10-Q6N-LE12
	0.75 mm ²			2.5 m	8181666	NEBM-L10G14-EH-2.5-Q7N-LE12
				5 m	8181671	NEBM-L10G14-EH-5-Q7N-LE12
				7.5 m	8181674	NEBM-L10G14-EH-7.5-Q7N-LE12
				10 m	8181673	NEBM-L10G14-EH-10-Q7N-LE12
	0.5 ... 1.5 mm ²	78.75 ... 81 mm	Suitable for energy chains	0.5 ... 25 m	8181663	NEBM-LX/M17-

1) For NEBM-LX/M17-...: selectable cable length: 0.5 ... 25 m, in 0.5 m grid and all cable cross-sections Q6, Q7, Q9