

Rotary modules ERMB, electric



Rotary modules ERMB, electric

Key features

At a glance

The rotary module ERMB facilitates unlimited and flexible rotation angles. The output interface is the same as on the semi-rotary drive DRQD.

The motor's power is transmitted to the output pinion by means of a circulating toothed belt with a specific transmission ratio. The drive and

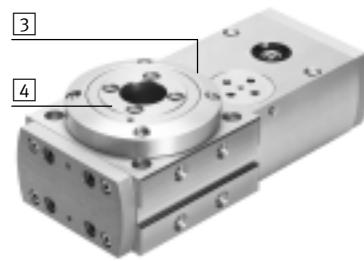
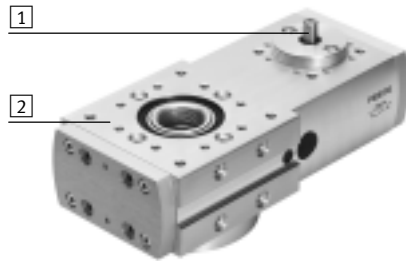
output pinions run on separate bearings. The toothed belt is pretensioned at the factory by means of an eccentric tensioning roller.

Advantages:

- Stable arrangement of the output shaft bearings
- Pretensioned toothed belt means zero backlash
- Compact design

The technology in detail

- 1 Interface with the motor, via axial kit
- 2 Mounting interface
- 3 Mounting for proximity sensor SIEN in the retaining ring
- 4 Output interface: Same as on the semi-rotary drive DRQD (with larger through-hole)



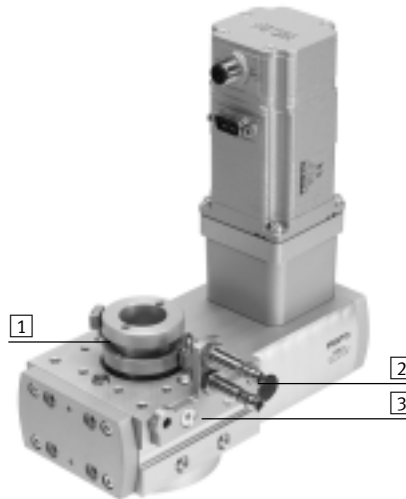
Sensing kit EAPS as an accessory

→ 14

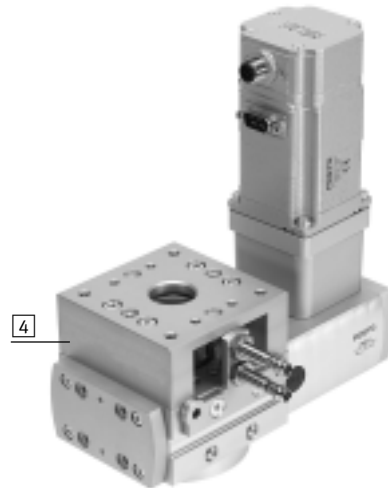
The sensing kit facilitates monitoring of the angle of rotation using adjustable cams. It can also be used for reference checking.

- 1 Trip cam support
- 2 Proximity sensor SIEN
- 3 Sensor bracket
- 4 Housing

Without housing



With housing



Mounting and installation options

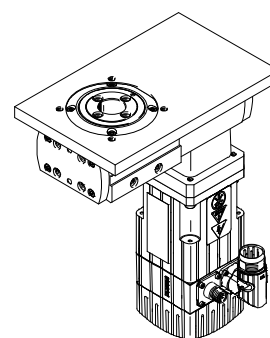
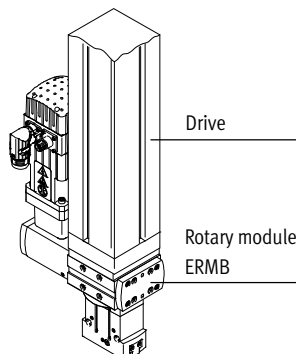
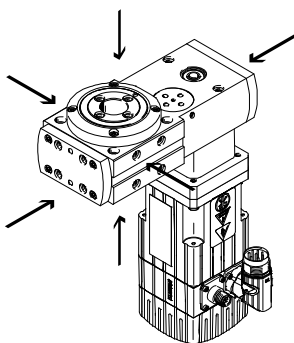
Mounting option

Installation option

The rotary module can be attached on six sides.

As a front end

As a rotary table in a plate



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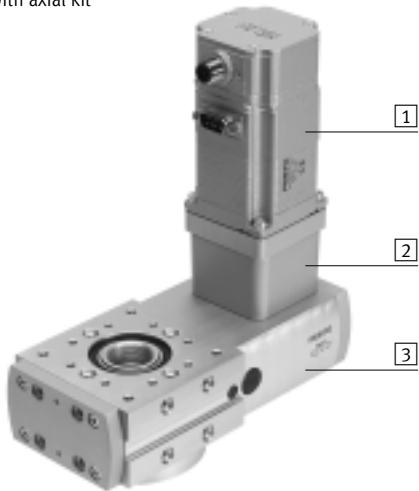
Key features

Total system comprising rotary module, motor and axial kit

Rotary module

→ 6

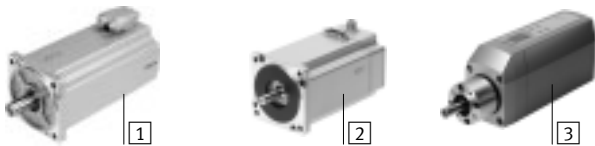
With axial kit




- 1 Motor
- 2 Axial kit
- 3 Rotary module

Motors

→ 16

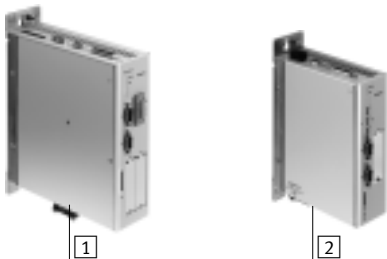


- 1 Servo motor EMME-AS, EMMS-AS
- 2 Stepper motor EMMS-ST
- 3 Motor unit MTR-DCI

-  - Note
A range of specially adapted complete solutions is available for the rotary module ERMB.

Motor controllers

Technical data → Internet: motor controller



- 1 Servo motor controller CMMP-AS
- 2 Stepper motor controller CMMS-ST

Axial kit

→ 16

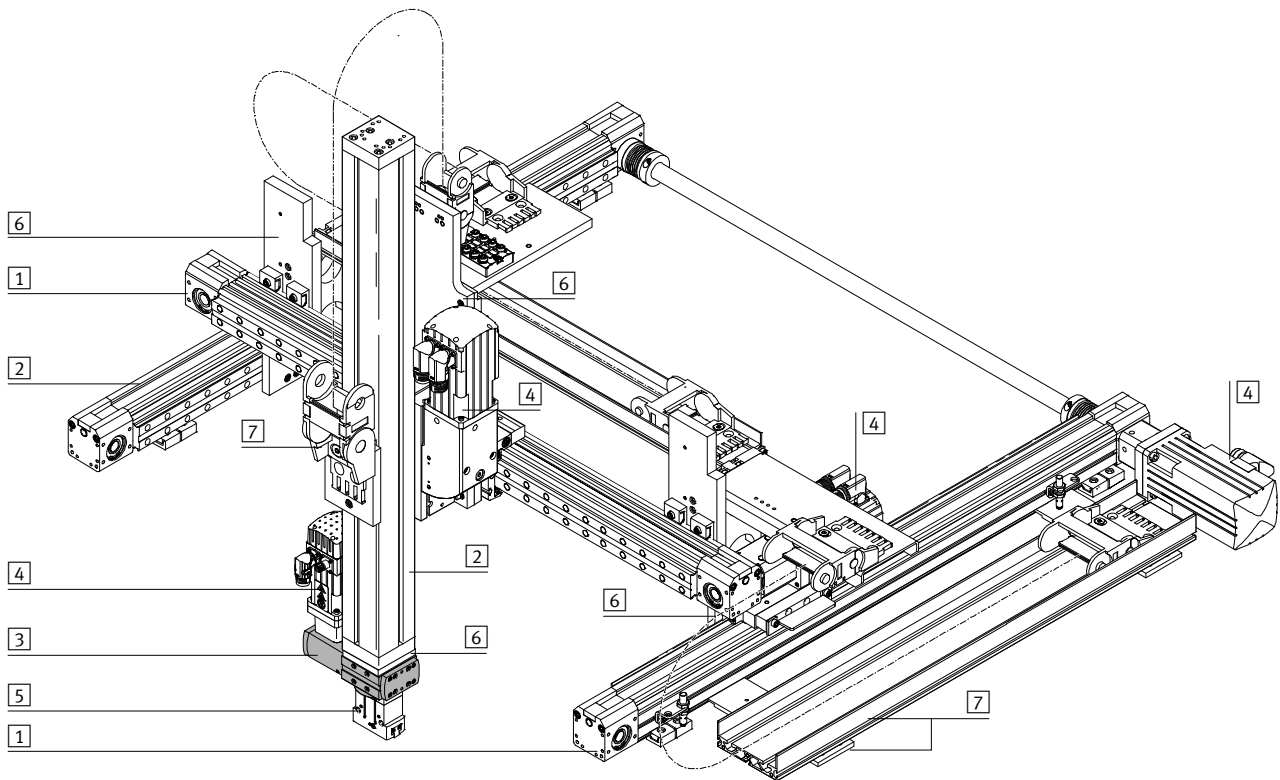


- Kit comprising:
- Motor flange
 - Coupling housing
 - Coupling
 - Screws

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Key features

System product for handling and assembly technology



System components and accessories		
	Description	→ Page/Internet
1	Axes	Wide range of combinations possible within handling and assembly technology axes
2	Guide axes	For extending force and torque capacity in multi-axis applications guide axes
3	Rotary module	Wide range of combinations possible within handling and assembly technology rotary module
4	Motors	Servo or stepper motors, with or without gear unit motor
5	Gripper	Wide range of variations possible within handling and assembly technology gripper
6	Adapters	For drive/drive and drive/gripper connections adapter kit
7	Installation components	For a clean, safe layout of electrical cables and tubing installation component

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Type code and peripherals overview

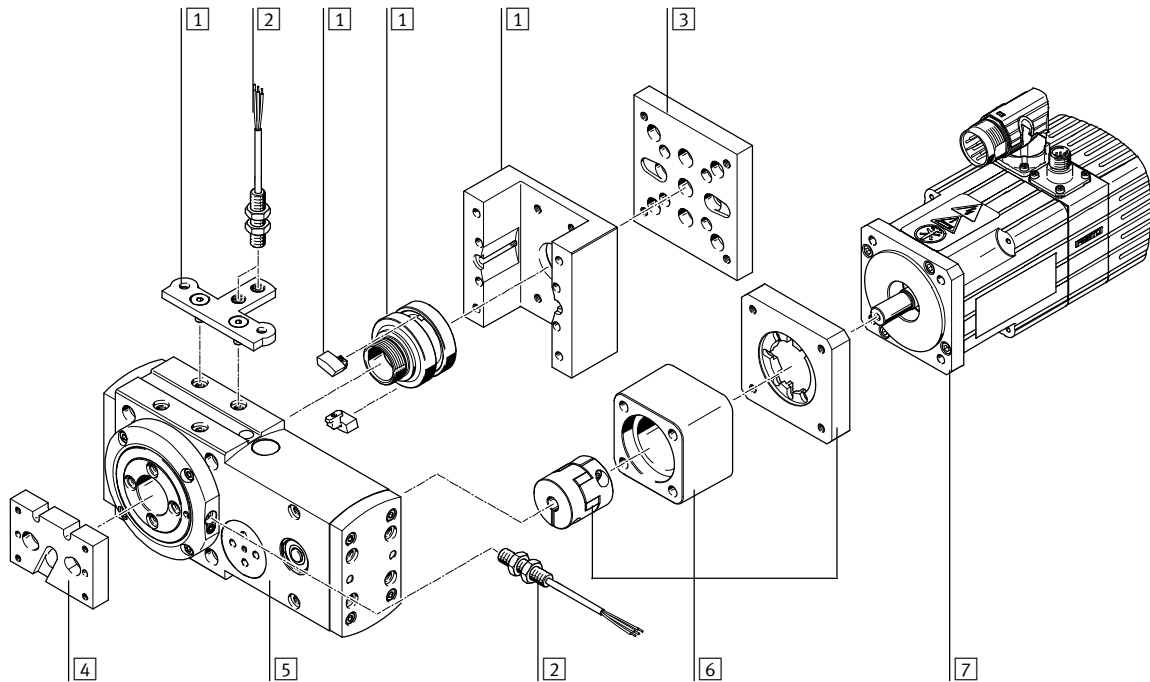
Type code

ERMB	-	25
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Type	
ERMB	Rotary module

Size	
20	Size 20
25	Size 25
32	Size 32

Peripherals overview



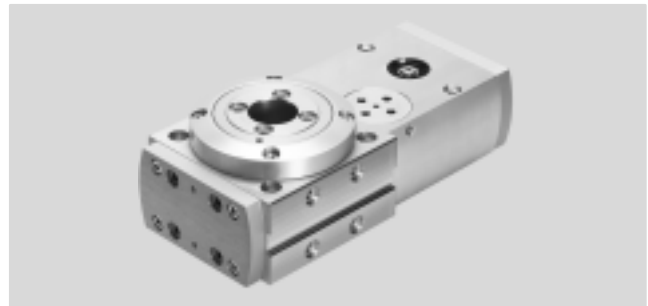
Accessories			
Type	Description	→ Page/Internet	
1 Sensing kit EAPS	For indicating impermissible swivel angles, i.e. obstacles or areas that cannot be approached can be sensed using proximity sensors (comprising: housing, trip cam support, 2 cams and sensor bracket)	19	
2 Proximity sensor SIEN	For use as a signal or safety check	19	
3 Adapter kit	Interface between the rotary module and drive (the rotary module can be attached to a drive with or without a sensing kit)	adapter kit	
4 Adapter kit	Interface between the rotary module and gripper	adapter kit	
5 Rotary module ERMB	Facilitates unlimited and flexible rotation angles	6	
6 Axial kit EAMM-A	For axial motor mounting (comprising: coupling, coupling housing and motor flange)	16	
7 Motor EMMS, MTR-DCI	<ul style="list-style-type: none"> • Motors specially matched to the axis, with or without brake • The motor can be turned by 90° for mounting, depending on requirements. This means the connection side can be freely selected 	16	

Rotary modules ERMB, electric

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Technical data

Size
20, 25, 32



General technical data			
Size	20	25	32
Constructional design	Electromechanical rotary module with toothed belt		
Drive shaft \varnothing [mm]	6	8	12
Rotation angle	Infinite		
Repetition accuracy ¹⁾			
with servo motor EMMS-AS [°]	±0.03		
with stepper motor EMMS-ST ²⁾ [°]	±0.08		
with motor unit MTR-DCI [°]	±0.05		
Positioning times	→ 8		
Transmission ratio	4.5:1	4:1	3:1
Position sensing	Via proximity sensor		
Mounting position	Any		
Product weight [g]	850	1460	3250

- 1) As per FN 942 027. The specifications apply only when the motor is directly mounted. If a gear unit is also installed, the repetition accuracy will be different
2) Depends on the encoder resolution

Mechanical data			
Size	20	25	32
Max. driving torque [Nm]	0.7	2.2	8.5
Max. output torque ¹⁾ [Nm]	3.15	8.8	25.5
Average driving torque ²⁾ [Nm]	< 0.07	< 0.18	≤ 0.5
Max. input speed [rpm]	1350	1200	900
Max. output speed [rpm]	300	300	300
Max. mass moment of inertia ³⁾			
with servo motor EMMS-AS [kgcm ²]	50	200	1000
with stepper motor EMMS-ST [kgcm ²]	30	100	500
with motor unit MTR-DCI-...-G7 [kgcm ²]	50	300	1000
with motor unit MTR-DCI-...-G14 [kgcm ²]	200	1200	3700
Toothed belt pitch	2	3	5
Hollow shaft \varnothing [mm]	20	24	28

- 1) Output torque less friction depends on speed
2) At maximum speed
3) Depends on the size of the motor. Suitable motors → 16

Operating and environmental conditions			
Size	20	25	32
Ambient temperature [°C]	-10 ... +60		
Protection class	IP20		
Corrosion resistance class CRC ¹⁾	2		
Noise level L_{pEq} ²⁾ [dB (A)]	32	49	53

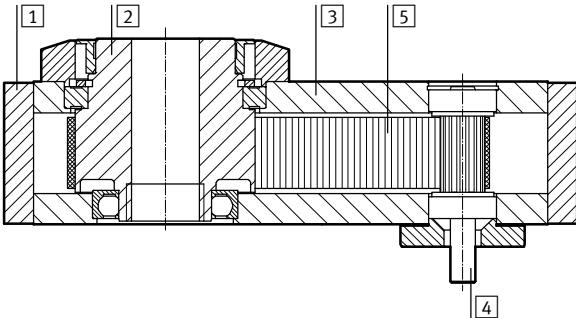
- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
2) In combination with servo motor EMMS-AS

Rotary modules ERMB, electric

Technical data

Materials

Sectional view

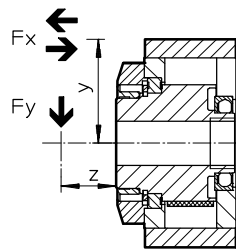


Rotary module

1	End cap	Anodised aluminium
2	Output shaft	Wrought aluminium alloy, anodised
3	Housing	Wrought aluminium alloy, anodised
4	Drive shaft	High-alloy stainless steel
5	Toothed belt	Polychloroprene with glass fibres
-	Note on materials	Contains paint wetting impairment substances

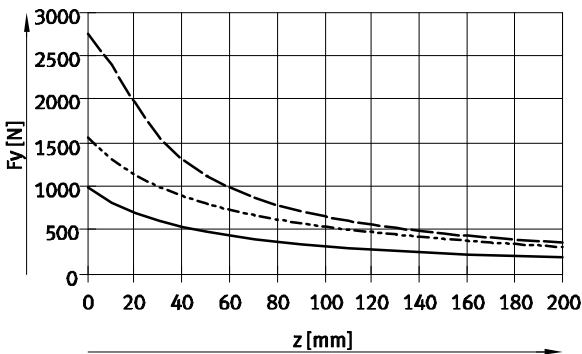
Maximum radial and axial force Fx/Fy on the output shaft as a function of the distance y/z

If the rotary module is subjected to several forces at once, the following equation must be satisfied in addition to the maximum loads indicated below.

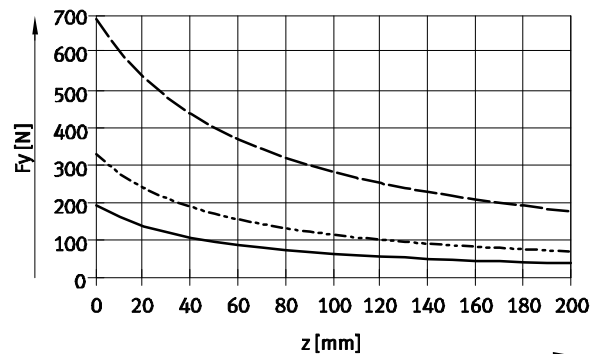


$$\frac{F_{y(z)}}{F_{y, \max.(z)}} + \frac{F_{x, \text{pushing}(v)}}{F_{x, \text{pushing}, \max.(v)}} + \frac{F_{x, \text{pulling}(v)}}{F_{x, \text{pulling}, \max.(v)}} \leq 1$$

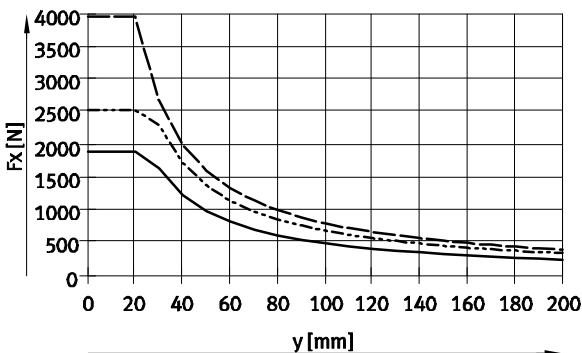
Max. radial force Fy, static



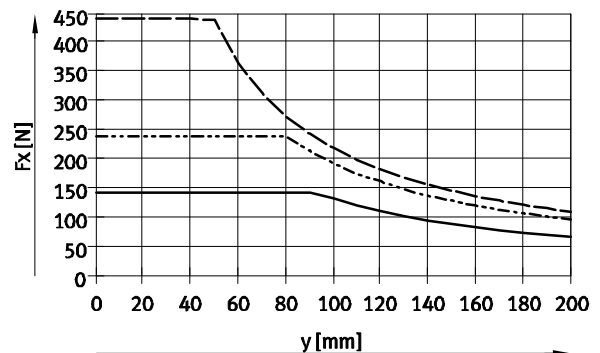
Max. radial force Fy, dynamic



Max. axial force Fx, static, pushing and pulling



Max. axial force Fx, dynamic, pushing and pulling



- ERMB-20
- - - ERMB-25
- · - ERMB-32

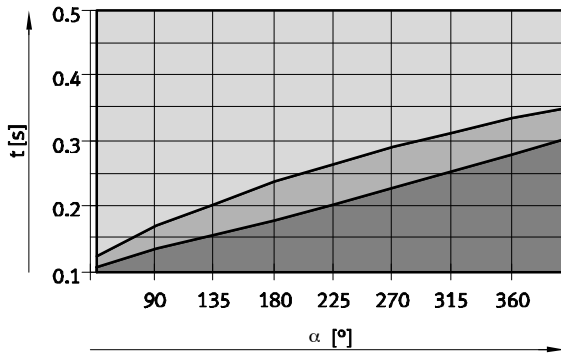
Rotary modules ERMB, electric

Technical data

Positioning time t as a function of the rotation angle α in combination with motor EMMS-.../motor unit MTR-DCI-...

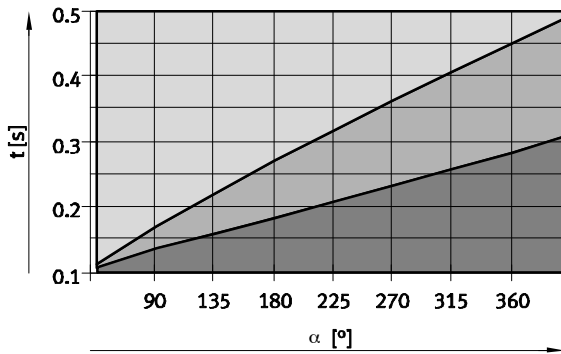
Size 20

with servo motor EMMS-AS



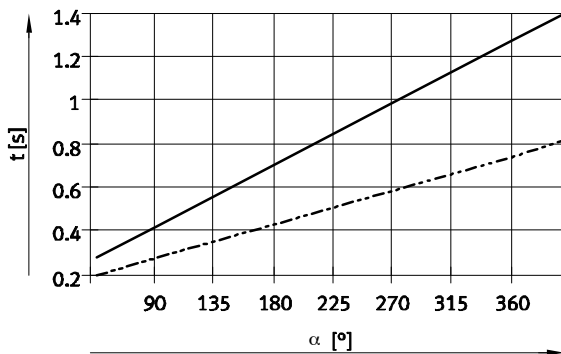
- Extended operating range
- Typical operating range, depending on motor size and load inertia
- Unrealisable range

with stepper motor EMMS-ST



- Extended operating range
- Typical operating range, depending on motor size and load inertia
- Unrealisable range

with motor unit MTR-DCI



- Limit line for MTR-DCI-32-G14 at 0 ... 200 kgcm²
- - - - Limit line for MTR-DCI-32-G7 at 0 ... 50 kgcm²

Note

The positioning time t ends with the controller signal MC (motion complete), i.e. on the drive side. Increased positioning times are to be expected at the output shaft depending on the motor type and eccentricity of the moving load.

For servo motor: 50 ... 100 ms
For stepper motor: 100 ... 200 ms

Note

The "PositioningDrives" design tool compiles the optimum combination of rotary module and motor for the respective application with respect to mass moment of inertia, positioning time and positioning accuracy.
→ www.festo.com

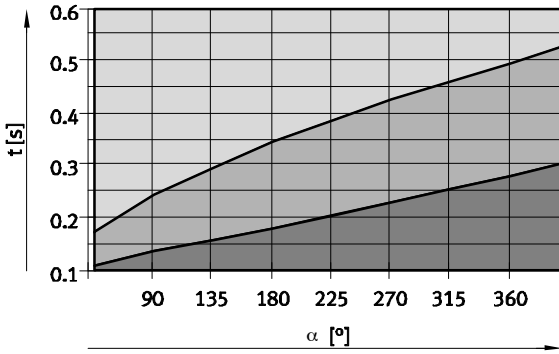
Rotary modules ERMB, electric

Technical data

Positioning time t as a function of the rotation angle α in combination with motor EMMS-.../motor unit MTR-DCI-...

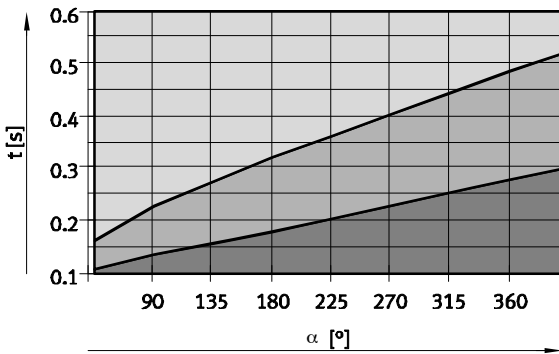
Size 25

with servo motor EMMS-AS



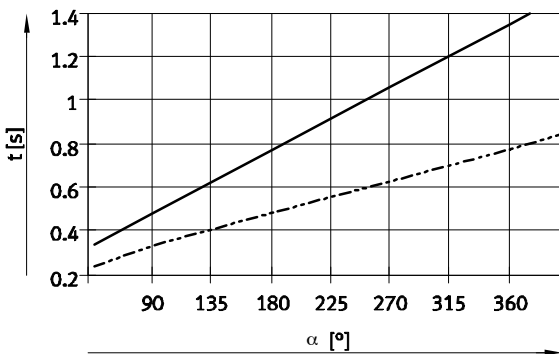
- Extended operating range
- Typical operating range, depending on motor size and load inertia
- Unrealisable range

with stepper motor EMMS-ST



- Extended operating range
- Typical operating range, depending on motor size and load inertia
- Unrealisable range

with motor unit MTR-DCI



- Limit line for MTR-DCI-42-G14 at 0 ... 1200 kgcm²
- Limit line for MTR-DCI-42-G7 at 0 ... 300 kgcm²

Note

The positioning time t ends with the controller signal MC (motion complete), i.e. on the drive side. Increased positioning times are to be expected at the output shaft depending on the motor type and eccentricity of the moving load.

For servo motor: 50 ... 100 ms
For stepper motor: 100 ... 200 ms

Note

The "PositioningDrives" design tool compiles the optimum combination of rotary module and motor for the respective application with respect to mass moment of inertia and positioning time, positioning accuracy.

➔ www.festo.com

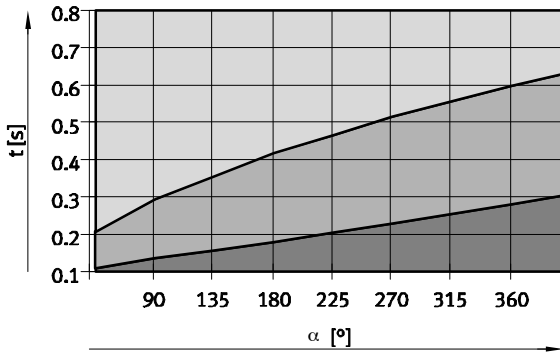
Rotary modules ERMB, electric

Technical data

Positioning time t as a function of the rotation angle α in combination with motor EMMS-.../motor unit MTR-DCI-...

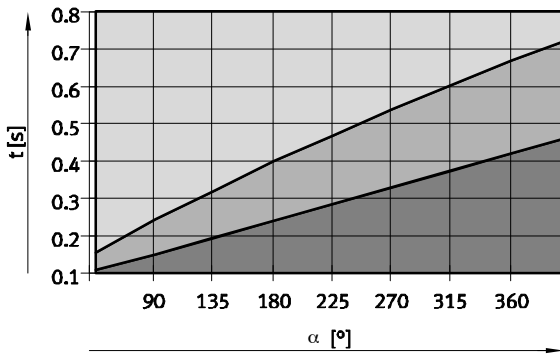
Size 32

with servo motor EMMS-AS



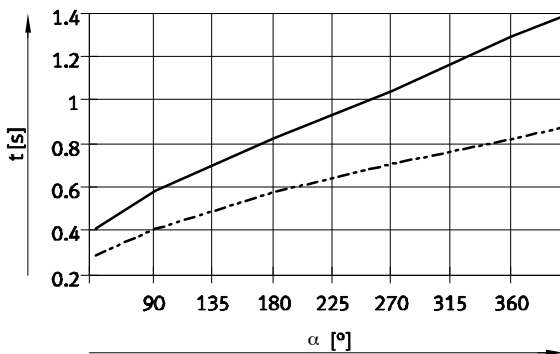
- Extended operating range
- Typical operating range, depending on motor size and load inertia
- Unrealisable range

with stepper motor EMMS-ST



- Extended operating range
- Typical operating range, depending on motor size and load inertia
- Unrealisable range

with motor unit MTR-DCI



- Limit line for MTR-DCI-52-G14 at 0 ... 3700 kgcm²
- - - - - Limit line for MTR-DCI-52-G7 at 0 ... 1000 kgcm²

Note

The positioning time t ends with the controller signal MC (motion complete), i.e. on the drive side. Increased positioning times are to be expected at the output shaft depending on the motor type and eccentricity of the moving load.

For servo motor: 50 ... 100 ms
For stepper motor: 100 ... 200 ms

Note

The "PositioningDrives" design tool compiles the optimum combination of rotary module and motor for the respective application with respect to mass moment of inertia and positioning time, positioning accuracy.
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Rotary modules ERMB, electric

Technical data



Information on service life characteristic values

Within the framework of product qualification, the specified statistic load changes/switching cycles were achieved with 3 samples.

Definition of load change/switching cycle:

A switching cycle corresponds to two load changes: position A to position B and back.

Size		20	25	32
Guide value load changes	[Mio.]	30	40	40
Guide value switching cycles	[Mio.]	15	20	20
Mass moment of inertia at output	[kgcm ²]	24	80	400
Medium angle acceleration at output	[°/sec ²]	28000	20000	12000
Maximum angle speed at output	[°/sec]	1800	1800	1800

The above specified statistic load change/switching cycles were achieved under the following defined operating conditions: horizontally hanging fitting, 180° swivel angle,

frequency 2 Hz, mass moment of inertia, acceleration (jerk-free) and max. angle speed as specified in the table, room temperature (23 ± 5) °C.

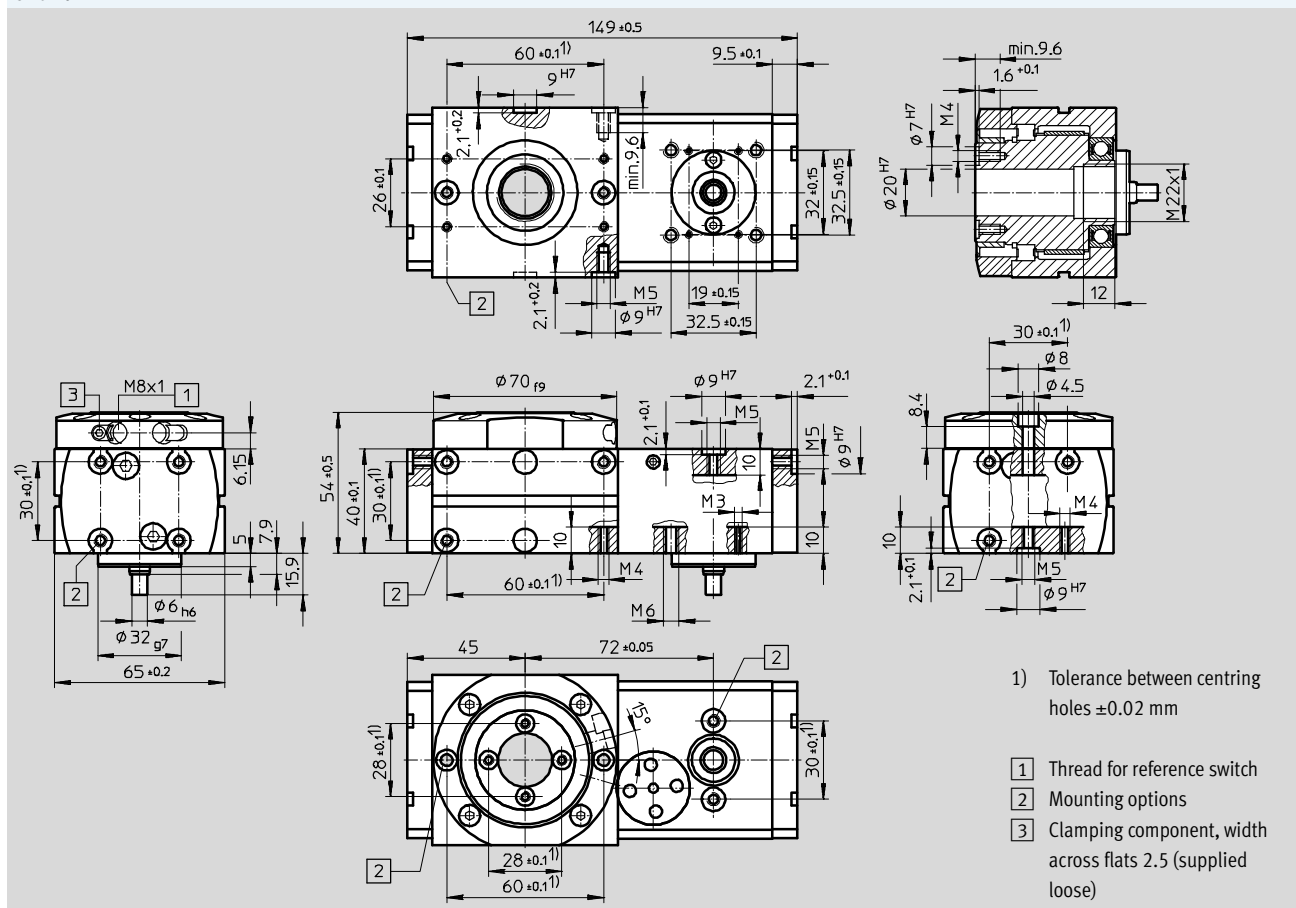
Under different operating conditions, a shorter or longer service life is possible.

The conditions of use and safety regulations specified in the product documentation must also be taken into account.

Dimensions

Download CAD data → www.festo.com

Size 20



Rotary modules ERMB, electric

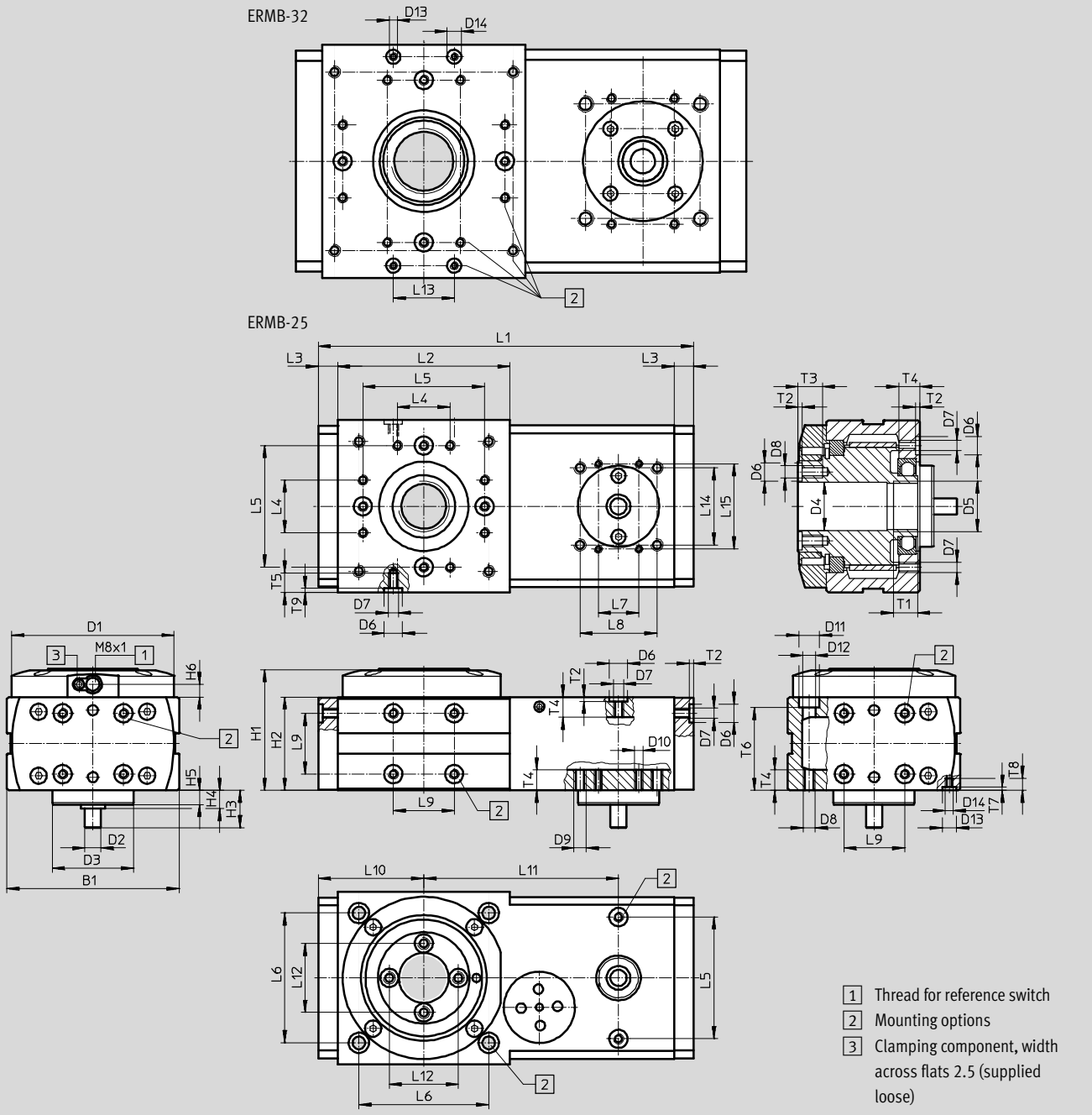
Technical data

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Dimensions

Size 25/32

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Rotary modules ERMB, electric

Technical data

Size	B1 ±0.2	D1 ∅ f9	D2 ∅ h6	D3 ∅ g7	D4 ∅ H7	D5	D6 ∅ H7	D7	D8	D9	D10
25	85	80	8	40	24	M25x1	9	M5	M6	M6	M4
32	115	112	12	60	28	M32x1.5	9	M5	M6	M8	M5

Size	D11 ∅	D12 ∅	D13 ∅ H7	D14	H1 ±0.5	H2 ±0.1	H3	H4	H5	H6	L1 ±0.5
25	10	6.2	–	–	60	46	18.45	–	7	6.3	185
32	10	6.2	7	M4	76.05	60	23.5	6.5	6	9.4	222

Size	L2 ±0.2	L3 ±0.1	L4 ±0.1	L5 ¹⁾ ±0.1	L6	L7 ±0.15	L8 ±0.15	L9 ¹⁾ ±0.1	L10	L11 ±0.05	L12 ¹⁾ ±0.1	L13 ¹⁾ ±0.1
25	85	9.5	26	60	64±0.15	20	38	30	52	96	34	–
32	100	13	36	80	88±0.1	31	56.5	40	63	108	45	30

Size	L14 ±0.15	L15 ±0.15	L16 +0.2	T1	T2 +0.1	T3 min.	T4	T5 min.	T6	T7 +0.1	T8 min.	T9 +0.2
25	38	42	–	12	2.1	12	10	9.6	40.8±0.2	–	–	2.1
32	56.5	62	103	12	2.1	12	10	10	54.3	1.6	7.6	2.1

1) Tolerance between centring holes ±0.02 mm

Rotary modules ERMB, electric

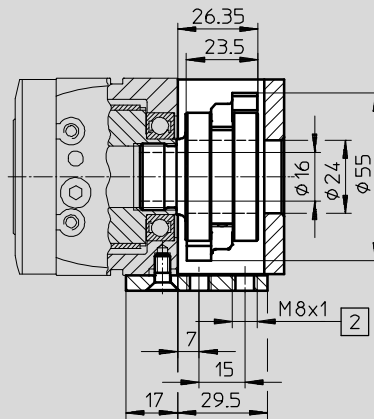
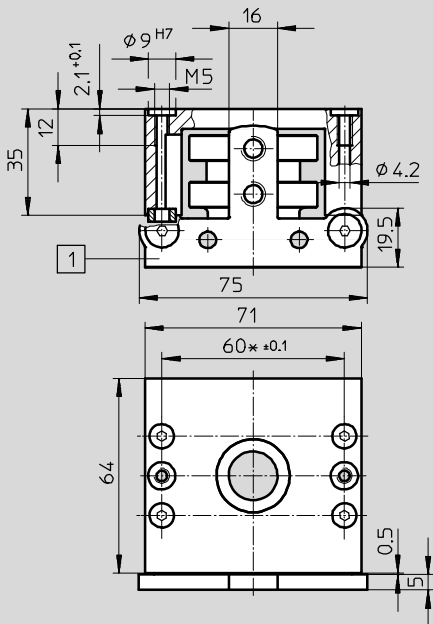
Technical data

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Dimensions

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Sensing kit EAPS-R1-20-S for size 20



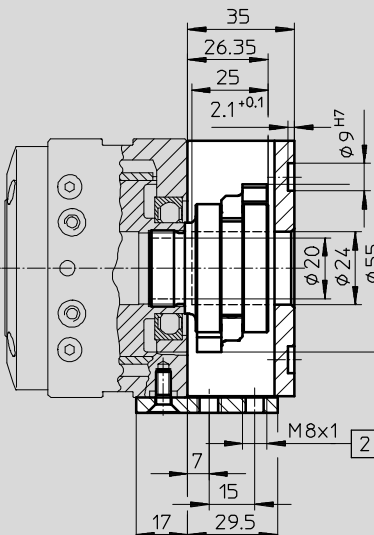
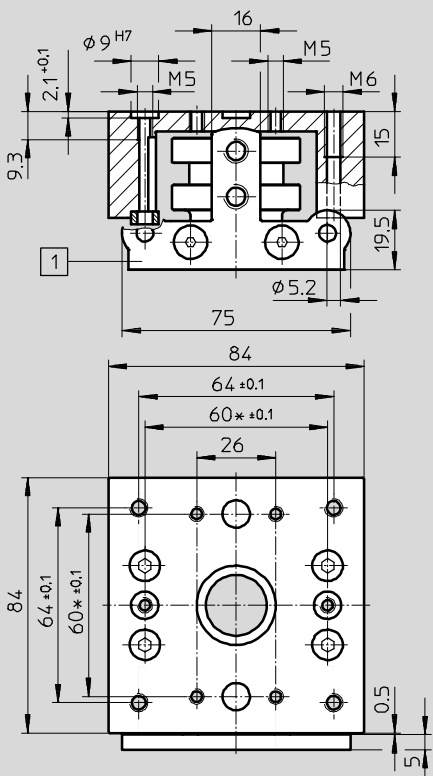
Note
Ordering data → 19

* Tolerance between centring holes ± 0.02 mm

1 Bracket for proximity sensor SIEN-M8B

2 Thread for proximity sensor SIEN-M8B

Sensing kit EAPS-R1-25-S for size 25



Note
Ordering data → 19

* Tolerance between centring holes ± 0.02 mm

1 Bracket for proximity sensor SIEN-M8B

2 Thread for proximity sensor SIEN-M8B

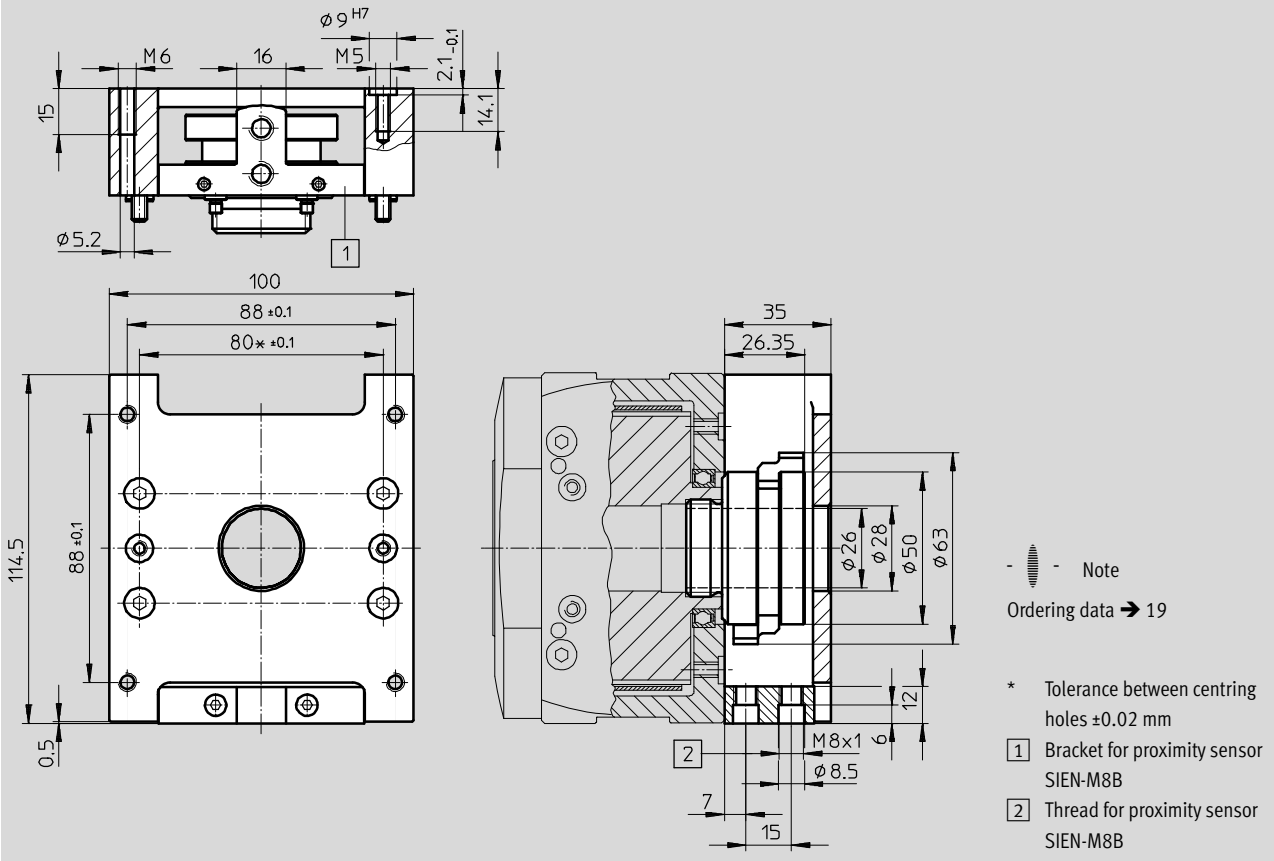
Rotary modules ERMB, electric

Technical data

Dimensions

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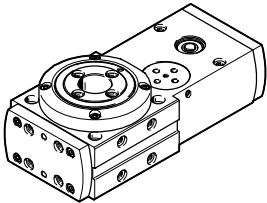
Sensing kit EAPS-R1-32-S for size 32



Rotary modules ERMB, electric

Technical data and accessories

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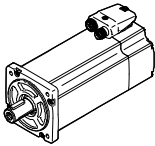
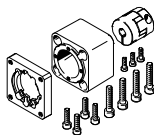


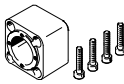
Ordering data			
	Size	Part No.	Type
	20	552706	ERMB-20
	25	552707	ERMB-25
	32	552708	ERMB-32

Accessories

-  - Note

Depending on the combination of motor and drive, it may not be possible to reach the maximum feed force of the drive.

Permissible axis/motor combinations with axial kit – Without gear unit

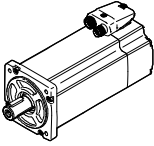
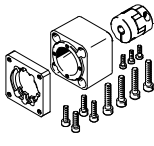


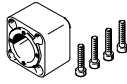
Motor/motor unit ¹⁾	Axial kit	Axial kit comprising:		
		Motor flange	Coupling	Coupling housing
				
Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
ERMB-20				
with servo motor				
EMME-AS-40-...	2207441 EAMM-A-D32-35A-40P	–	533708 EAMC-30-32-6-8	2207509 EAMK-A-D32-35-40P
EMMS-AS-40-...	560281 EAMM-A-D32-35A-40A	–	558312 EAMC-30-32-6-6	560280 EAMK-A-D32-35-40A
with stepper motor				
EMMS-ST-42-...	543148 EAMM-A-D32-42A	552164 EAMF-A-28B-42A	543419 EAMC-16-20-5-6	552155 EAMK-A-D32-28B
EMMS-ST-57-...	550980 EAMM-A-D32-57A	530081 EAMF-A-44A/B-57A	551002 EAMC-30-32-6-6.35	551006 EAMK-A-D32-44A/C
with integrated drive				
EMCA-EC-67-...	1454239 EAMM-A-D32-67A	1476305 EAMF-A-44A/B/C-67A-S1	551003 EAMC-30-32-6-9	551006 EAMK-A-D32-44A/C
With motor unit				
MTR-DCI-32S-...	543149 EAMM-A-D32-32B	–	543420 EAMC-16-20-6-6	552156 EAMK-A-D32-32B

1) The input torque must not exceed the maximum permissible transferable torque of the axial kit.

Rotary modules ERMB, electric

Accessories

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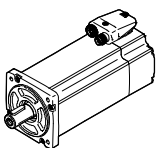
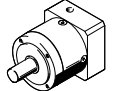
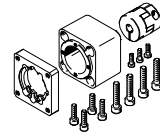


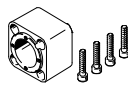
Permissible axis/motor combinations with axial kit – Without gear unit					Technical data → Internet: eamm-a
Motor ¹⁾	Axial kit	Axial kit consisting of:			
		Motor flange	Coupling	Coupling housing	
					
Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
ERMB-25					
With servo motor					
EMMS-AS-55-...	543153 EAMM-A-D40-55A	529942 EAMF-A-44A/B-55A	543423 EAMC-30-32-8-9	552157 EAMK-A-D40-44A/C	
EMME-AS-60-...	1977000 EAMM-A-D40-60P	1956846 EAMF-A-44C-60P	562682 EAMC-30-32-8-14	552157 EAMK-A-D40-44A/C	
EMMS-AS-70-...	550981 EAMM-A-D40-70A	529943 EAMF-A-44A/B-70A	551004 EAMC-30-32-8-11	552157 EAMK-A-D40-44A/C	
With stepper motor					
EMMS-ST-57-...	543154 EAMM-A-D40-57A	530081 EAMF-A-44A/B-57A	543421 EAMC-30-32-6.35-8	552157 EAMK-A-D40-44A/C	
With integrated drive					
EMCA-EC-67-...	1454243 EAMM-A-D40-67A	1476305 EAMF-A-44A/B/C-67A-S1	543423 EAMC-30-32-8-9	552157 EAMK-A-D40-44A/C	
With motor unit					
MTR-DCI-42S-...-G7	543155 EAMM-A-D40-42B	–	543422 EAMC-30-32-8-8	552158 EAMK-A-D40-42B	
MTR-DCI-42S-...-G14	543156 EAMM-A-D40-42C	–	543422 EAMC-30-32-8-8	552159 EAMK-A-D40-42C	
ERMB-32					
With servo motor					
EMMS-AS-70-...	543161 EAMM-A-D60-70A	529945 EAMF-A-64A/B-70A	543424 EAMC-42-50-11-12	552160 EAMK-A-D60-64B	
EMME-AS-80-...	1977073 EAMM-A-D60-80P	1977113 EAMF-A-64A/C-80P	551005 EAMC-42-50-12-19	551007 EAMK-A-D60-64C	
EMME-AS-100-...	550983 EAMM-A-D60-100A	529947 EAMF-A-64A/C/D-100A	551005 EAMC-42-50-12-19	551007 EAMK-A-D60-64C	
EMMS-AS-100-...	550983 EAMM-A-D60-100A	529947 EAMF-A-64A/C/D-100A	551005 EAMC-42-50-12-19	551007 EAMK-A-D60-64C	
With stepper motor					
EMMS-ST-87-...	543162 EAMM-A-D60-87A	533140 EAMF-A-64A/B-87A	543424 EAMC-42-50-11-12	552160 EAMK-A-D60-64B	
With motor unit					
MTR-DCI-52S-...-G7	543163 EAMM-A-D60-52B	–	533709 EAMC-42-50-12-12	552161 EAMK-A-D60-52B	
MTR-DCI-52S-...-G14	543164 EAMM-A-D60-52C	–	533709 EAMC-42-50-12-12	552162 EAMK-A-D60-52C	

1) The input torque must not exceed the maximum permissible transferable torque of the axial kit.


Rotary modules ERMB, electric

Accessories

FESTO

Permissible axis/motor combinations with axial kit – With gear unit						Technical data → Internet: eamm-a
Motor ¹⁾	Gear unit	Axial kit	Axial kit consisting of:			
			Motor flange	Coupling	Coupling housing	
						
Type	Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type	
ERMB-20						
With integrated drive						
EMCA-EC-67-...	EMGC-40-...	1454238 EAMM-A-D32-40G	1460095 EAMF-A-44C-40G-S	562681 EAMC-30-32-6-10	551006 EAMK-A-D32-44A/C	
	EMGC-60-...	2946760 EAMM-A-D32-60H	1460105 EAMF-A-44C-60G/H-S1	1233256 EAMC-30-32-6-14	551006 EAMK-A-D32-44A/C	
ERMB-25						
With servo motor						
EMME-AS-40-...	EMGA-40-P-G...-EAS-40	560282 EAMM-A-D40-40G	550986 EAMF-A-44A/B-40G	558029 EAMC-30-32-8-10	552157 EAMK-A-D40-44A/C	
EMMS-AS-40-...	EMGA-40-P-G...-SAS-40	560282 EAMM-A-D40-40G	550986 EAMF-A-44A/B-40G	558029 EAMC-30-32-8-10	552157 EAMK-A-D40-44A/C	
With stepper motor						
EMME-ST-42-...	EMGA-40-P-G...-SST-42	560282 EAMM-A-D40-40G	550986 EAMF-A-44A/B-40G	558029 EAMC-30-32-8-10	552157 EAMK-A-D40-44A/C	
With integrated drive						
EMCA-EC-67-...	EMGC-40-...	560282 ²⁾ EAMM-A-D40-40G	550986 EAMF-A-44A/B-40G	558029 EAMC-30-32-8-10	552157 EAMK-A-D40-44A/C	
		2256398 EAMM-A-D40-40G-G2	1460095 EAMF-A-44C-40G-S	558029 EAMC-30-32-8-10	552157 EAMK-A-D40-44A/C	
	EMGC-60-...	1454242 EAMM-A-D40-60H	1460105 EAMF-A-44C-60G/H-S1	562682 EAMC-30-32-8-14	552157 EAMK-A-D40-44A/C	
ERMB-32						
With servo motor						
EMMS-AS-55-...	EMGA-60-P-G...-SAS-55	560283 EAMM-A-D60-60G	550987 EAMF-A-64A/B-60G	543424 EAMC-42-50-11-12	552160 EAMK-A-D60-64B	
EMMS-AS-70-...	EMGA-60-P-G...-SAS-70	560283 EAMM-A-D60-60G	550987 EAMF-A-64A/B-60G	543424 EAMC-42-50-11-12	552160 EAMK-A-D60-64B	
With stepper motor						
EMMS-ST-57-...	EMGA-60-P-G...-SST-57	560283 EAMM-A-D60-60G	550987 EAMF-A-64A/B-60G	543424 EAMC-42-50-11-12	552160 EAMK-A-D60-64B	
With integrated drive						
EMCA-EC-67-...	EMGC-60-...	1454245 EAMM-A-D60-60H	2256289 EAMF-A-64B-60G/H-S1	1455671 EAMC-42-50-12-14	552160 EAMK-A-D60-64B	

- 1) The input torque must not exceed the maximum permissible transferable torque of the axial kit.
 2) Type discontinued


 Note

Note the maximum permissible drive torque of the ERMB. The motor current may need to be limited.

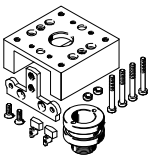



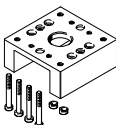
Rotary modules ERMB, electric


Accessories


FESTO

Ordering data – Centring sleeves						
	For size	Brief description	Number	Part No.	Type	PU ¹⁾
	20	For centring loads and attachments (centring sleeves are included in the scope of delivery of the rotary module)	2	186717	ZBH-7	10
	25, 32		2	150927	ZBH-9	
			4			

1) Packaging unit

Ordering data						
	For size	Brief description	Weight [g]	Part No.	Type	PU ¹⁾
Sensing kit EAPS-...-S						
	20	Kit with housing (trip cam support, 2 cams, sensor bracket)	258	558392	EAPS-R1-20-S	1
	25		406	558393	EAPS-R1-25-S	
	32		560	558394	EAPS-R1-32-S	
Sensing kit without housing EAPS-...-S-WH						
	20	Kit without housing (trip cam support, 2 cams, sensor bracket)	86	558395	EAPS-R1-20-S-WH	1
	25		90	558396	EAPS-R1-25-S-WH	
	32		136	558397	EAPS-R1-32-S-WH	
Cam EAPS-...-CK						
	20, 25, 32	For sensing positions (2 cams included in the scope of delivery)	5 each	558398	EAPS-R1-CK	2
Sensor bracket EAPS-...-SH						
	20, 25	For attaching proximity sensors to the rotary module	24	558399	EAPS-R1-20-SH	1
	32		30	558400	EAPS-R1-32-SH	
Housing EAPS-...-H						
	20	For protecting the sensing kit and as mounting interface for the drive	172	560673	EAPS-R1-20-H	1
	25		316	560674	EAPS-R1-25-H	
	32		424	560675	EAPS-R1-32-H	

Ordering data – Proximity sensors, inductive				Technical data → Internet: sien	
	Contact	Connection	Part No.	Type	
	N/O contact	Cable, 2.5 m	150386	SIEN-M8B-PS-K-L	
		Plug connector	150387	SIEN-M8B-PS-S-L	
	N/C contact	Cable, 2.5 m	150390	SIEN-M8B-PO-K-L	
		Plug connector	150391	SIEN-M8B-PO-S-L	

Ordering data – Connecting cables				Technical data → Internet: nebu	
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541333	NEBU-M8G3-K-2.5-LE3
			5	541334	NEBU-M8G3-K-5-LE3


Rotary modules ERMB, electric

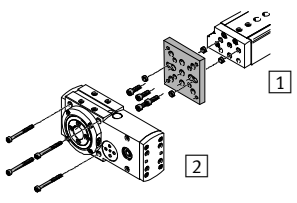
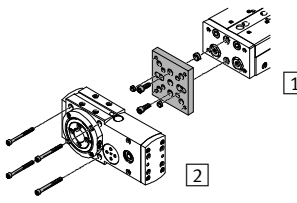
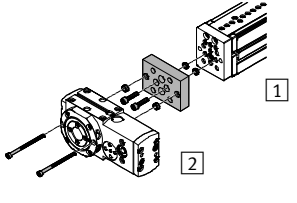
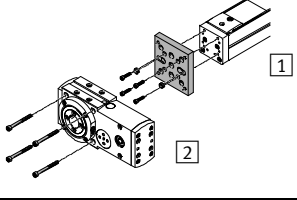
Accessories



**Adapter kit
HAPB, HMSV**

Material:
Wrought aluminium alloy
Free of copper and PTFE
RoHS-compliant

 Note
The kit includes the individual mounting interface as well as the necessary mounting material.

Permissible drive/drive combinations with adapter kit			Download CAD data → www.festo.com		
Combination	[1] Drive	[2] Drive	Adapter kit		
	Size	Size	CRC ¹⁾	Part No.	Type
	DGSL	ERMB	HAPB		
	16, 20, 25	20	2	558306	HAPB-38
	20, 25	25		558307	HAPB-39
	25	32		558308	HAPB-40
	SLT	ERMB	HAPB		
	20	20	2	558306	HAPB-38
	25	25		558307	HAPB-39
	EGSL	ERMB	HAPB		
	45, 55, 75	20	2	558306	HAPB-38
	75	25		558307	HAPB-39
	75	32		558308	HAPB-40
	DGEA	ERMB	HAPB		
	18, 25	20	2	558306	HAPB-38
	25, 40	25		558307	HAPB-39
	40	32		558308	HAPB-40

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.