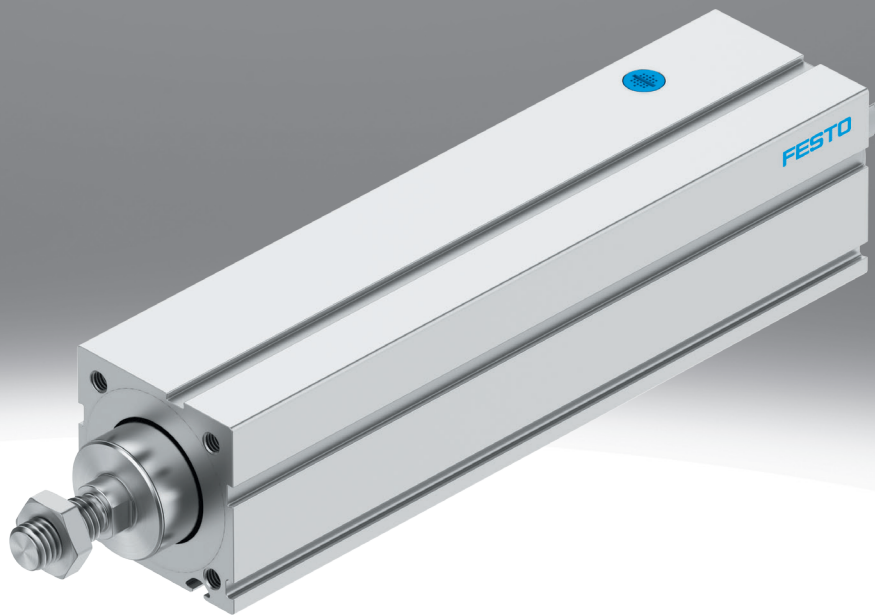# Electric cylinder EPCC

FESTO

Characteristics

At a glance

The electric cylinder EPCC is a mechanical linear drive with piston rods. The drive element consists of an electrically driven spindle that converts the rotary motion of the motor into a linear motion of the piston rods. Suitable for simple applications in factory automation, which were previously solved mainly pneumatically.

Sealing air connection
- Air is exchanged between the interior of the cylinder and the environment via a sealing air connection. This prevents negative pressure or excess pressure from developing in the cylinder interior.
- Application of slight negative pressure prevents the emission of particles
- Application of slight overpressure prevents the immission of particles

Product segmentation

Festo Core Range
Solves the majority of your automation tasks
With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.
the Core Range offers you the best value with the expected high Festo quality.
- Quickest delivery, worldwide – wherever, whenever
- Expected high Festo quality
- Easy and fast to select

Engineering tools

Save time with engineering tools:Smart engineering 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 that 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 all the relevant data including the bill of materials and documentation for your 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.

Diagrams

The diagrams shown in this document are also available online. These can be used to display precise values.

Drive system

[BS]	Ball screw drive

- For applications that require precision
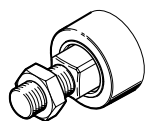- High reliability and long service life
- For large loads

Spindle pitch

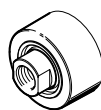The spindle pitch describes the distance travelled by the spindle nut per revolution of the spindle in millimetres.

Characteristics

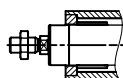## Piston rod thread type

[_]	Male thread

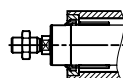

[F]	Female thread

Scraper variant

[_]	None

[A7]	Wiper

The piston rod has a simple standard wiper that easily removes lightly adhering particles.

Piston rod extension

[...E]	1 ... 100 mm
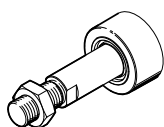
Position sensing

By using proximity switches, any position can be detected.

Guide unit

[KF]	Recirculating ball bearing with two guide rods

For higher requirements
- with regard toprotection against rotation for the piston rod
- with regard to precise piston rod movement
- with regard to lateral forces on the piston rod

Type code

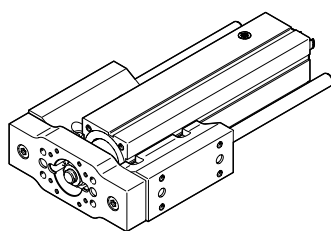| 001	Series	
EPCC	Electric cylinder	

002	Drive system	
BS	Ball screw drive	

003	Size	
25	25	
32	32	
45	45	
60	60	

004	Stroke [mm]	
25	25	
50	50	
75	75	
100	100	
125	125	
150	150	
175	175	
200	200	
250	250	
300	300	
350	350	
400	400	
500	500	

005	Spindle pitch	
2P	2 mm	
3P	3 mm	
5P	5 mm	
6P	6 mm	
8P	8 mm	
10P	10 mm	
12P	12 mm	

006	Piston rod thread type	
	Male thread	
F	Female thread	

007	Scraper variant	
	None	
A7	Wiper	

008	Piston rod extension	
	None	
...E	1 ... 100 mm	

009	Position sensing	
A	For proximity sensor	

010	Guide unit	
	None	
KF	Recirculating ball bearing with two guide rods	

Datasheet

General technical data

Size	25	32	45	60
Design	Electric cylinder, With ball screw drive			
Piston rod thread	M6	M8	M10x1.25	M12x1.25
Piston-rod end	Male thread			
Stroke	25 … 200 mm		25 … 300 mm	25 … 500 mm
Stroke reserve	0 mm			
Protection against torque/ guide	With plain-bearing guide			
Torsional backlash at piston rod +/-	1 deg			
Position detection	Via proximity switch			
Type of mounting	With accessories	Via female thread, With accessories		
Mounting position	optional			

Mechanical data

Size	25		32		45		60	
Spindle pitch	2 mm/U	6 mm/U	3 mm/U	8 mm/U	3 mm/U	10 mm/U	5 mm/U	12 mm/U
Spindle diameter	6 mm		8 mm		10 mm		12 mm	
Reference value effective load, horizontal	12 kg		24 kg		60 kg		120 kg	
Reference value effective load, vertical	6 kg		12 kg		30 kg		60 kg	
Max. feed force Fx	75 N		150 N		450 N		1,000 N	
Max. radial force at drive shaft	30		75		180		230	
Max. drive torque	0.05 Nm	0.1 Nm	0.15 Nm	0.3 Nm	0.4 Nm	0.9 Nm	1.2 Nm	2.4 Nm
Frictional torque independent of load [1]	0.02 Nm	0.055 Nm	0.065 Nm	0.095 Nm	0.08 Nm	0.16 Nm	0.235 Nm	0.325 Nm
Max. speed [2]	0.067 … 0.133 m/s	0.2 … 0.4 m/s	0.188 m/s	0.5 m/s	0.18 m/s	0.6 m/s	0.25 m/s	0.6 m/s
Max. acceleration	5 m/s²	15 m/s²	5 m/s²	15 m/s²	5 m/s²	15 m/s²	5 m/s²	15 m/s²
Max. rotational speed	4,000 rpm		3,750 rpm		3,600 rpm		3,000 rpm	
Reversing backlash theoretical [3]	100 µm							
Repetition accuracy	±0.02 mm							

1) Corresponds to the required drive torque without load at spindle speed of 200 rpm.
2) The speed depends on the stroke.
3) In new condition

Operating and environmental conditions

Ambient temperature [1]	0 … 60°C
Storage temperature	-20 … 60°C
Relative air humidity	0 - 95%, Non-condensing
Degree of protection	IP40
Duty cycle	100%
Cleanroom class	Class 9 according to ISO 14644-1
Maintenance interval	Life-time lubrication

1) Note the operating range of the proximity switches

Weight

Size	25	32	45	60
Basic weight for 0 mm stroke	132 g	225 g	555 g	1,114 g
Additional weight per 10 mm stroke	13 g	24 g	41 g	69 g
Moving mass for 0 mm stroke	53 g	98 g	179 g	305 g
Additional moving mass per 10 mm stroke	2.6 g	3.3 g	4.9 g	6.5 g

Datasheet

Mass moments of inertia

$$J_A = J_O + J_H \cdot l + J_L \cdot m$$

The mass moment of inertia J of the electric cylinder is calculated as follows.
l = working stroke
m = moving payload

Size	25		32		45		60	
Spindle pitch	2 mm/U	6 mm/U	3 mm/U	8 mm/U	3 mm/U	10 mm/U	5 mm/U	12 mm/U
Mass moment of inertia JO	0.0009 kgcm²	0.0014 kgcm²	0.0042 kgcm²	0.0055 kgcm²	0.0109 kgcm²	0.0153 kgcm²	0.0682 kgcm²	0.0779 kgcm²
Mass moment of inertia JH per metre of stroke	0.0056 kgcm²	0.0095 kgcm²	0.0256 kgcm²	0.0311 kgcm²	0.0503 kgcm²	0.0711 kgcm²	0.1195 kgcm²	0.1519 kgcm²
Mass moment of inertia JL per kg of working load	0.001 kgcm²	0.0091 kgcm²	0.0023 kgcm²	0.0162 kgcm²	0.0023 kgcm²	0.0253 kgcm²	0.0063 kgcm²	0.0365 kgcm²

Homing

Homing can be carried out in two ways:
- Against the fixed stop
- Using a reference switch

The following values must be observed:

Size	25	32	45	60
Impact energy in end positions	0.0012 J	0.0036 J	0.012 J	0.024 J
Max. homing speed	0.01 m/s			

Materials

Material housing	Wrought aluminium alloy, Smooth anodised
Material piston rod	High-alloy stainless steel
Material spindle nut	Steel
Material spindle	Rolled steel
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils

Max. permissible loads on the piston rod
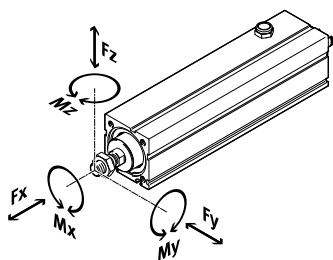
Size	25	32	45	60
Max. feed force Fx	75 N	150 N	450 N	1,000 N
Max. moment Mx	0 Nm			
Max. moment My	0.6 Nm	1.5 Nm	2.9 Nm	6.4 Nm
Max. moment Mz	0.6 Nm	1.5 Nm	2.9 Nm	6.4 Nm

Calculation of the load comparison factor

$$f_v = \frac{|F_{y1}|}{F_{y2}} + \frac{|F_{z1}|}{F_{z2}} + \frac{|M_{x1}|}{M_{x2}} + \frac{|M_{y1}|}{M_{y2}} + \frac{|M_{z1}|}{M_{z2}} \leq 1$$
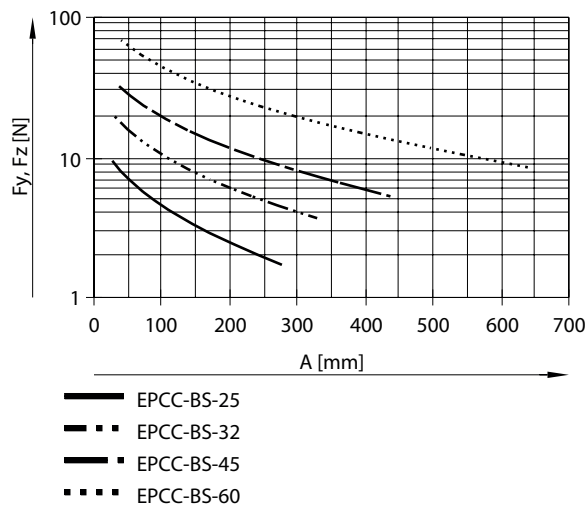
If the piston rod is subjected to two or more of the indicated forces and torques simultaneously, the following equation must be satisfied in addition to the indicated maximum loads.
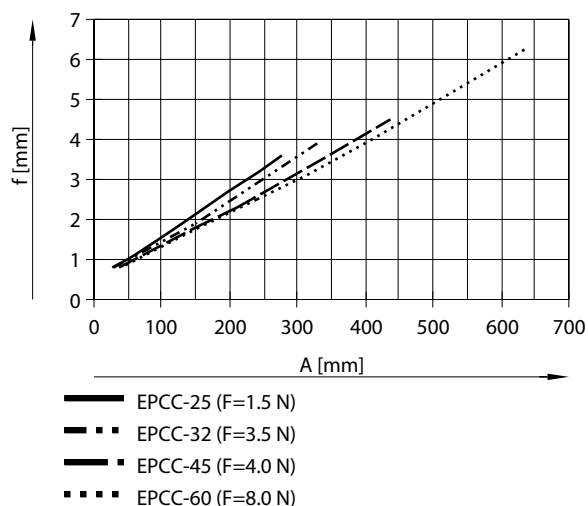
F1 / M1 = dynamic value
F2 / M2 = maximum value

Datasheet

Max. permissible transverse forces on the piston rod as a function of cantilever load A

EPCC-BS-25
EPCC-BS-32
EPCC-BS-45
EPCC-BS-60

Piston rod deflection f as a function of cantilever load A and transverse force F

EPCC-25 (F=1.5 N)
EPCC-32 (F=3.5 N)
EPCC-45 (F=4.0 N)
EPCC-60 (F=8.0 N)

Piston rod deflection f as a function of cantilever load A and lateral force F

$$f_1 = \frac{F_1}{F_2} \cdot f_2$$
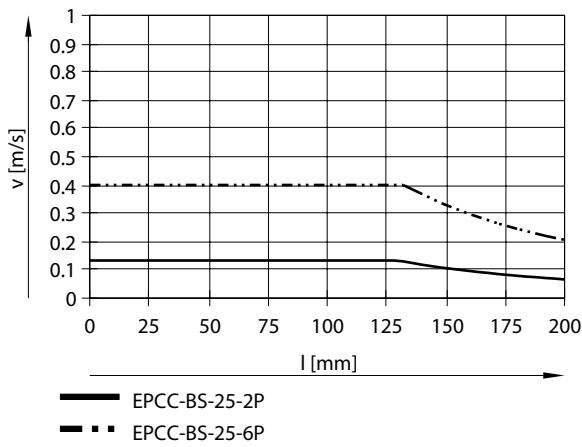
f1 = Piston rod deflection caused by lateral force [mm]
F1 = lateral force [N]
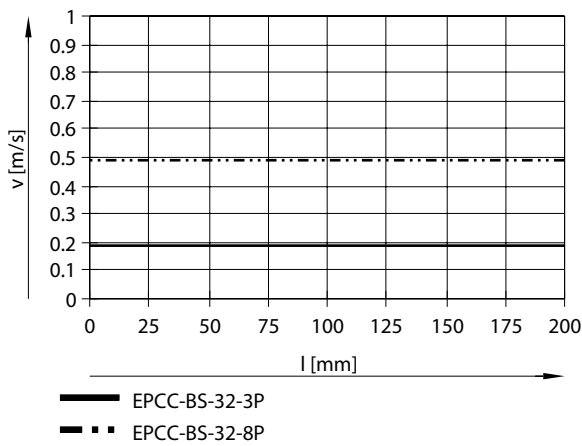F2 = Standardised lateral force [N] (constant force from graph)
f2 = Piston rod deflection caused by lateral force [N] (reading from graph)
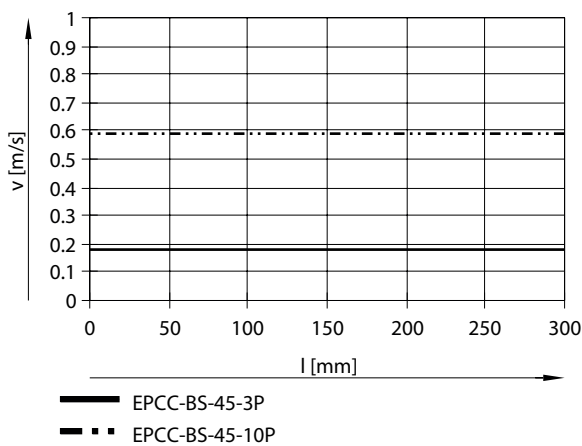
Datasheet

Feed speed v as a function of stroke length l for size 25

EPCC-BS-25-2P
EPCC-BS-25-6P

Feed speed v as a function of stroke length l for size 32

EPCC-BS-32-3P
EPCC-BS-32-8P

Feed speed v as a function of stroke length l for size 45

EPCC-BS-45-3P
EPCC-BS-45-10P

Datasheet

Feed speed v as a function of stroke length l for size 60

EPCC-BS-60-5P
EPCC-BS-60-12P
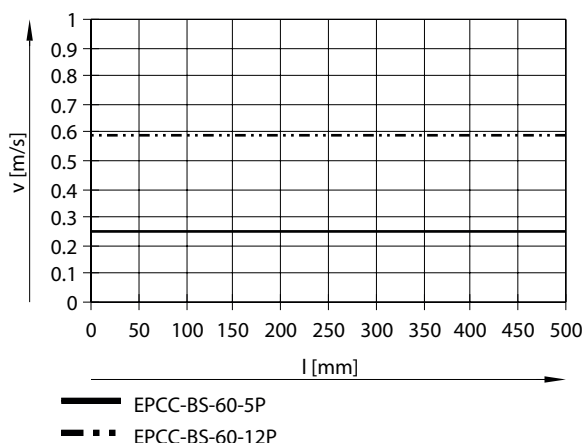
Calculating the mean feed force F (to DIN 69051-4)

$$F_{xm} = \sqrt[3]{\sum F_x^3 \cdot \frac{v_x}{v_{xm}} \cdot \frac{q}{100}} =$$

$$F_{xm} = \sqrt[3]{F_{x1}^3 \cdot \frac{v_{x1}}{v_{xm}} \cdot \frac{q_1}{100} + F_{x2}^3 \cdot \frac{v_{x2}}{v_{xm}} \cdot \frac{q_2}{100} + F_{x3}^3 \cdot \frac{v_{x3}}{v_{xm}} \cdot \frac{q_3}{100} + \cdots}$$

The peak feed force value must not exceed the maximum feed force within a movement cycle. The peak value is generally achieved in vertical operation during the acceleration phase of the upward stroke. If the maximum feed force is exceeded, this can increase wear and thus shorten the service life of the ball screw. The maximum speed must likewise not be exceeded.
During operation, the continuous feed force may be briefly exceeded up to the maximum feed force. The continuous feed force must, however, be adhered to when averaged over a movement cycle.

Mean feed speed v (according to DIN 69051-4)

$$v_{xm} = \boxtimes \quad v_x \cdot \frac{q}{100} = v_{x1} \cdot \frac{q_1}{100} + v_{x2} \cdot \frac{q_2}{100} + v_{x3} \cdot \frac{q_3}{100} + \cdots$$
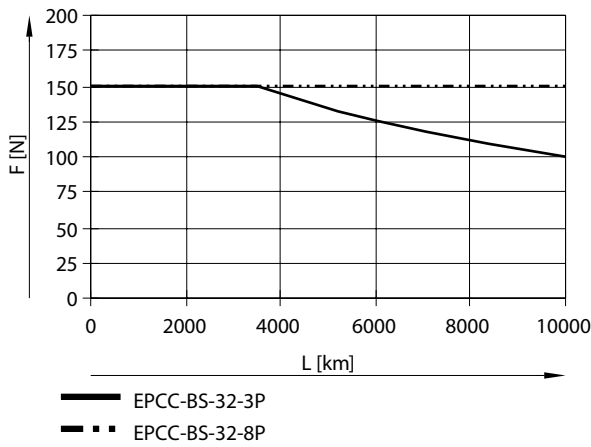
Fx = feed force
Fxm = mean feed force
q = time
vx = feed speed
vxm = mean feed speed

Mean feed force F as a function of running performance L, at an operating coefficient of 1.0 and room temperature for size 25
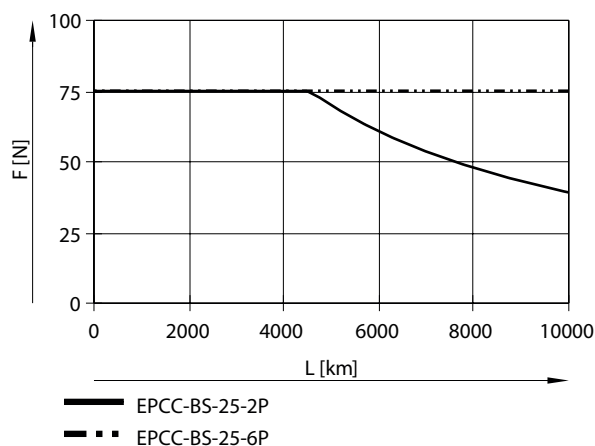
EPCC-BS-25-2P
EPCC-BS-25-6P

The specifications for running performance are based on experimentally determined and theoretically calculated data (at room temperature). The running performance that can be achieved in practice can deviate considerably from the specified curves under different characteristic curves.

Datasheet

Mean feed force F as a function of running performance L, at an operating coefficient of 1.0 and room temperature for size 32

EPCC-BS-32-3P

EPCC-BS-32-8P

The specifications for running performance are based on experimentally determined and theoretically calculated data (at room temperature). The running performance that can be achieved in practice can deviate considerably from the specified curves under different characteristic curves.
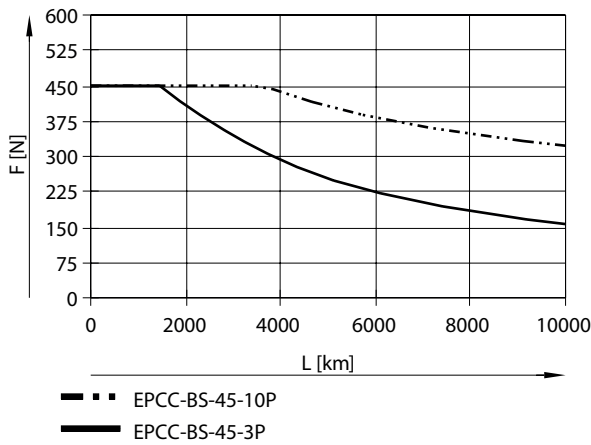
Mean feed force F as a function of running performance L, at an operating coefficient of 1.0 and room temperature for size 45
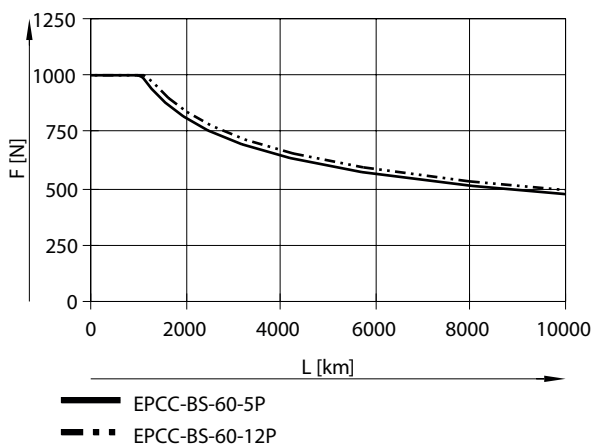

EPCC-BS-45-10P

EPCC-BS-45-3P

The specifications for running performance are based on experimentally determined and theoretically calculated data (at room temperature). The running performance that can be achieved in practice can deviate considerably from the specified curves under different characteristic curves.

Mean feed force F as a function of running performance L, at an operating coefficient of 1.0 and room temperature for size 60

EPCC-BS-60-5P

EPCC-BS-60-12P

The specifications for running performance are based on experimentally determined and theoretically calculated data (at room temperature). The running performance that can be achieved in practice can deviate considerably from the specified curves under different characteristic curves.

Datasheet

Service life taking into account the operating coefficient

$$L_1 = \frac{L}{f_B^3}$$

Operating coefficient fb
1.0 … 1.2 (for measuring machine)
1.2 … 1.4 (for handling technology, robotics)
1.4 … 1.6 (for press-fitting operations)
1.6 … 2.0 (for construction, agriculture)

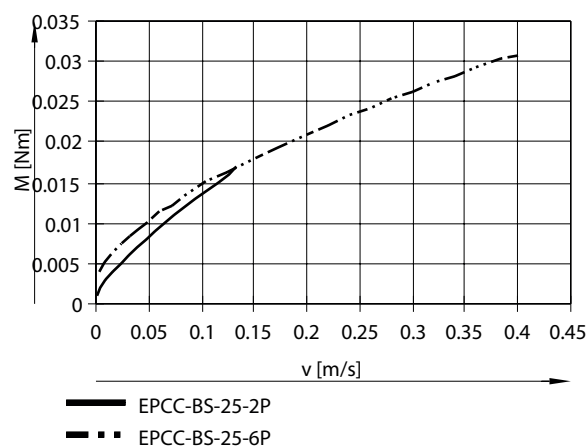L1 = actual service life
L = target service life
fb = operating coefficient

This refers to stress caused by impact, temperature, contamination, shock and vibrations that affect the cylinder or piston rod.

Frictional torque M as a function of feed speed v for size 25

EPCC-BS-25-2P
EPCC-BS-25-6P

Frictional torque M as a function of feed speed v for size 32

EPCC-BS-32-3P
EPCC-BS-32-8P
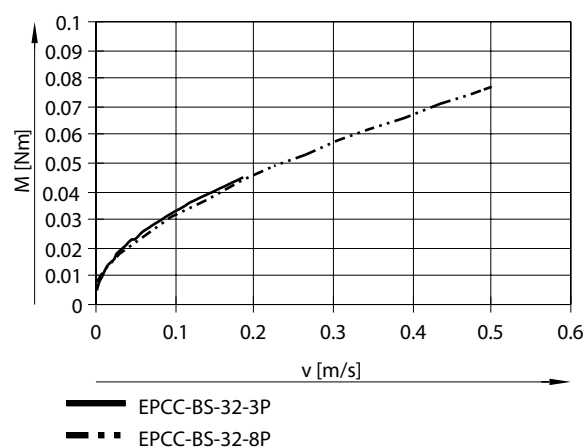
Datasheet

Frictional torque M as a function of feed speed v for size 45
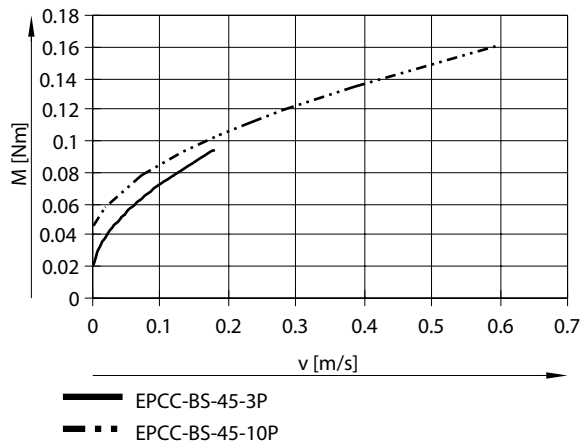
EPCC-BS-45-3P
EPCC-BS-45-10P

Frictional torque M as a function of feed speed v for size 60

EPCC-BS-60-5P
EPCC-BS-60-12P
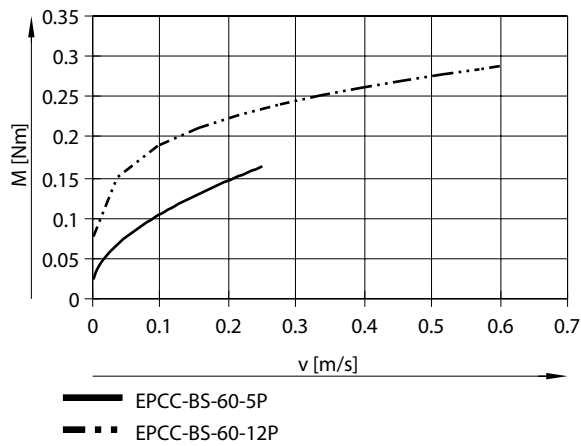
Effective torque M as a function of feed force F for size 25

EPCC-BS-25-2P
EPCC-BS-25-6P
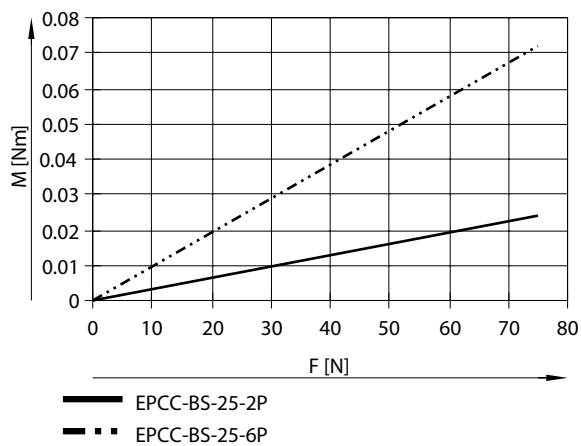
Datasheet

Effective torque M as a function of feed force F for size 32
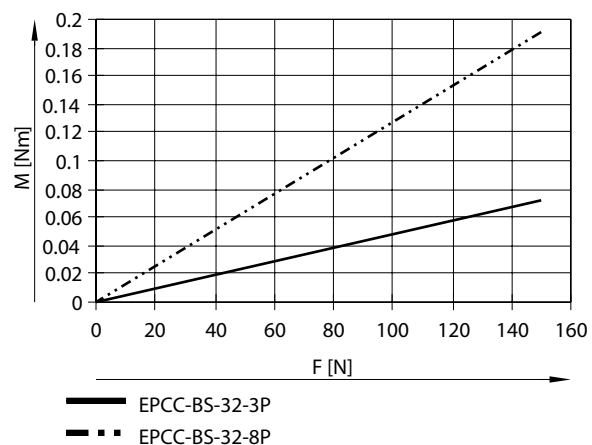
EPCC-BS-32-3P
EPCC-BS-32-8P

Effective torque M as a function of feed force F for size 45

EPCC-BS-45-3P
EPCC-BS-45-10P

Effective torque M as a function of feed force F for size 60

EPCC-BS-60-5P
EPCC-BS-60-12P
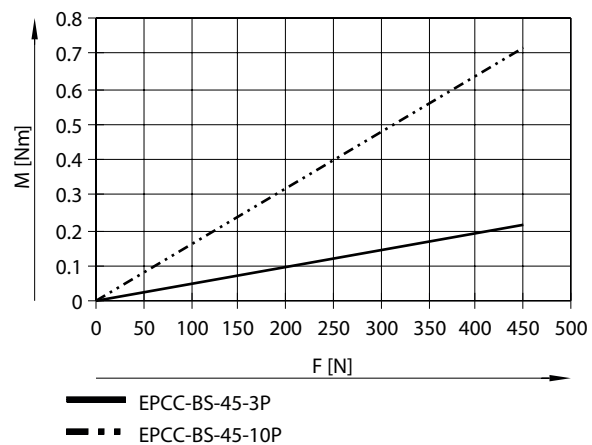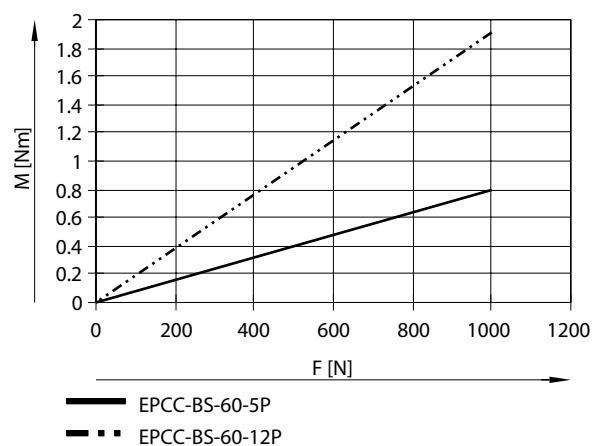
Dimensions

Dimensions – EPCC with spindle drive   Download CAD data $\mathscr{S}$ www.festo.com

EPCC-BS-25/32/45-...
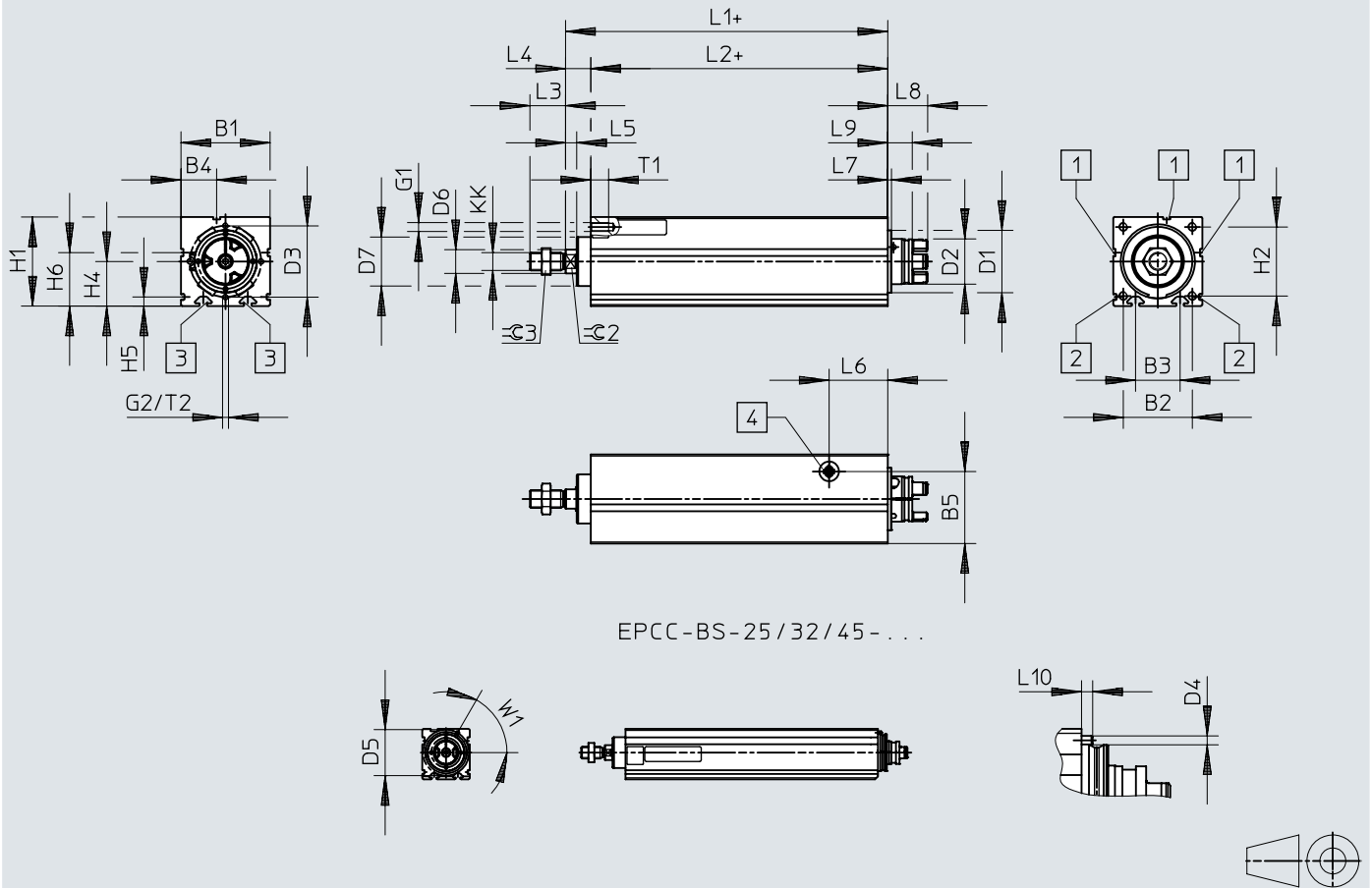
[1]   For sensor bracket
[2]   For profile mounting
[3]   For slot nut mounting
[4]   Sealing air connection
[5]   Orientation of the spanner flat 2 is not clear

Dimensions

	B1 ±0,15	B2	B3	B4	B5	D1 ∅	D2[1] ∅	D3 ∅	D4 ∅
EPCC-BS-25	25	–	14	5,8	20	20,5	10,8	–	2
EPCC-BS-32	32	24	16	8,1	25,5	25	15,5	–	2
EPCC-BS-45	45	32,5	24	16,5	35	32	16,3	–	3
EPCC-BS-60	60	46,5	30	24	48,5	42	31,4	48	–

	D5 ∅	D6 ∅	D7 ∅	G1	G2	H1 ±0,15	H2	H3	H4
EPCC-BS-25	25	8	17,3	–	–	27	–	4,7	–
EPCC-BS-32	31	10	21,3	M4	–	34	24	4,7	–
EPCC-BS-45	41	12	26,5	M5	–	45	32,5	6,3	–
EPCC-BS-60	–	16	33,6	M6	M4	60	46,5	7,3	30

	H5	H6 +0,15	KK	L1	L2	L3	L4	L5	L6
EPCC-BS-25	4,9	22,5	M6	74,5	60	12	14,5	4,7	19,2
EPCC-BS-32	4,9	26	M8	82,9	70	16	12,9	5,2	24,2
EPCC-BS-45	6,1	28,5	M10x1,25	99,9	83	20	16,9	5,7	30,5
EPCC-BS-60	6,1	36	M12x1,25	116	100	24	16	7,5	39,5

	L7	L8	L9	L10	T1	T2	W1	⊏1	⊏2	⊏3
EPCC-BS-25	5	15	10,5	2,5	–	–	60°	6	7	10
EPCC-BS-32	6	19,9	14,5	2,5	8	–	60°	6	9	13
EPCC-BS-45	6	19,9	14,5	3	10	–	60°	12	10	16
EPCC-BS-60	2,5	26,9	16,5	–	12	10	–	15	13	18

1) Coupling diameter or interference circuit diameter clamping screw

Dimensions

Dimensions – EPCC-...-...E (piston rod extension) Download CAD data ⸖ www.festo.com
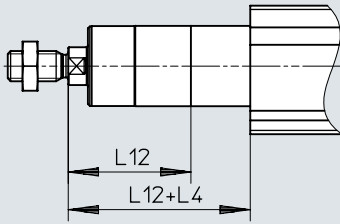
	L4	L12
		max.
EPCC-BS-25-...-...E	14,5	50
EPCC-BS-32-...-...E	12,9	100
EPCC-BS-45-...-...E	16,9	100
EPCC-BS-60-...-...E	16	100

Dimensions

Dimensions – EPCC-...-F (female thread)
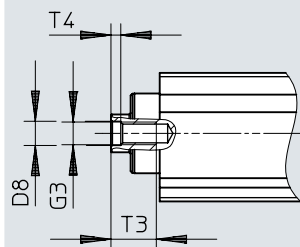
	D8 Ø	G3	T3	T4
EPCC-BS-25-...-F	4,3	M4	10	1,4
EPCC-BS-32-...-F	6,4	M6	12	2,6
EPCC-BS-45-...-F	8,4	M8	14	3,3
EPCC-BS-60-...-F	10,5	M10	16	4,7

Dimensions

Download CAD data ⸗ www.festo.com
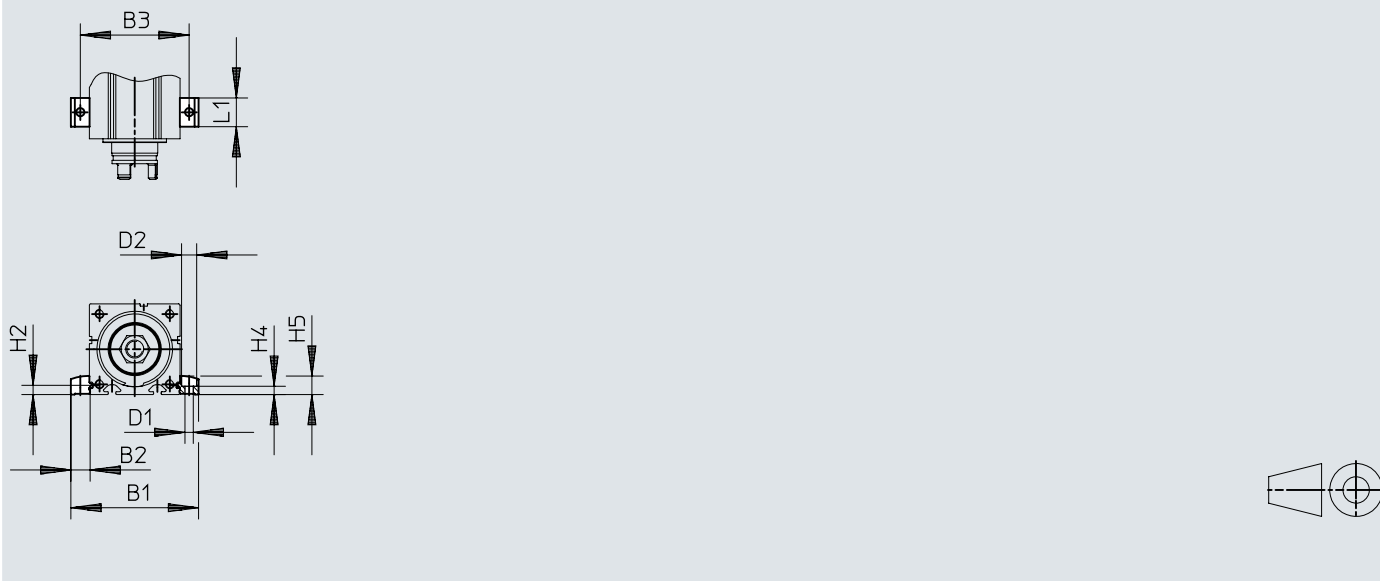
		B1	B2	B3	D1 ⌀ H13	D2 ⌀ H13	H2	H4 ±0,1	H5	L1
EAHF-L2-25-P-S	EPCC-BS-25	44,4	9,7	35	4,5	8	4,9	4,2	9	19
EAHF-L2-25-P-S	EPCC-BS-32	51,4	9,7	42	4,5	8	4,9	4,2	9	19
EAHF-L2-45-P-S	EPCC-BS-45	70,6	12,8	58	5,5	10	6,1	5,5	12,2	19
EAHF-L2-45-P-S	EPCC-BS-60	85,6	12,8	73	5,5	10	6,1	5,5	12,2	19

Dimensions
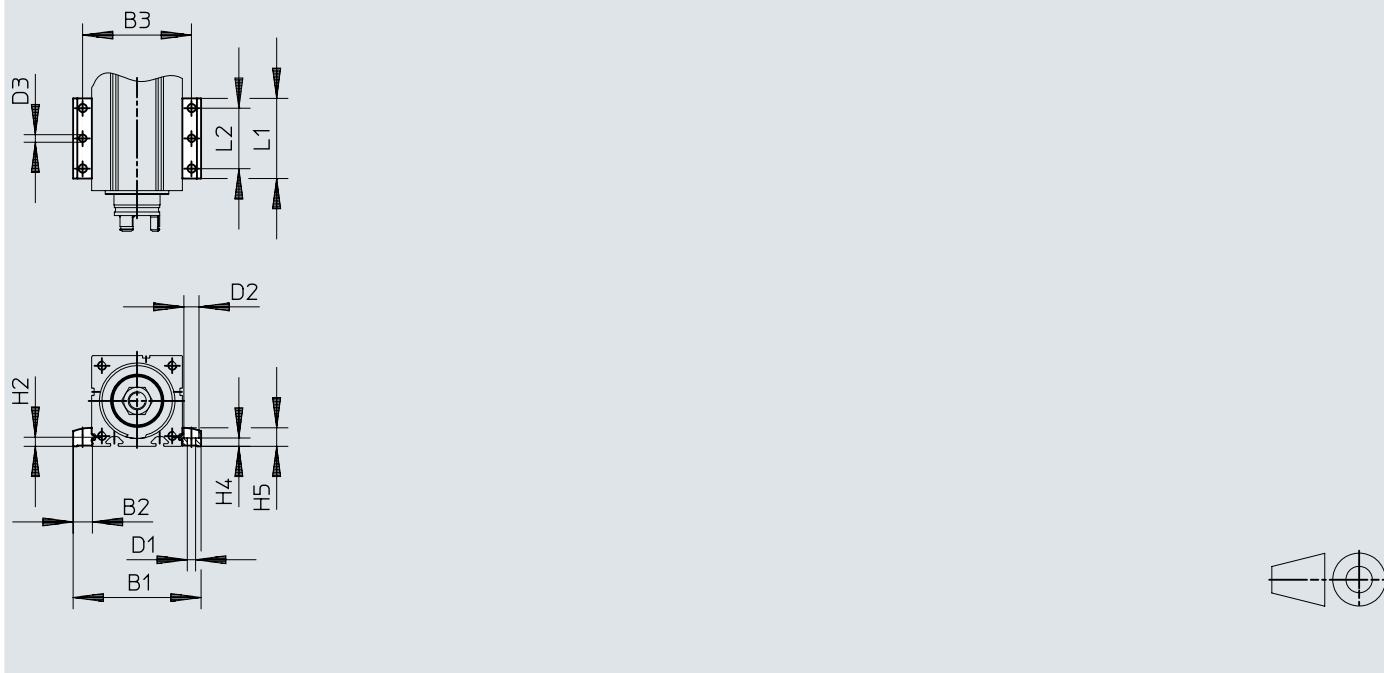
		B1	B2	B3	D1 Ø H13	D2 Ø H13	D3 Ø	H2	H4 ±0,1	H5	L1	L2
EAHF-L2-25-P	EPCC-BS-25	44,4	9,7	35	4,5	8	4	4,9	4,2	9	53	40
EAHF-L2-25-P	EPCC-BS-32	51,4	9,7	42	4,5	8	4	4,9	4,2	9	53	40
EAHF-L2-45-P	EPCC-BS-45	70,6	12,8	58	5,5	10	5	6,1	5,5	12,2	53	40
EAHF-L2-45-P	EPCC-BS-60	85,6	12,8	73	5,5	10	5	6,1	5,5	12,2	53	40

Dimensions
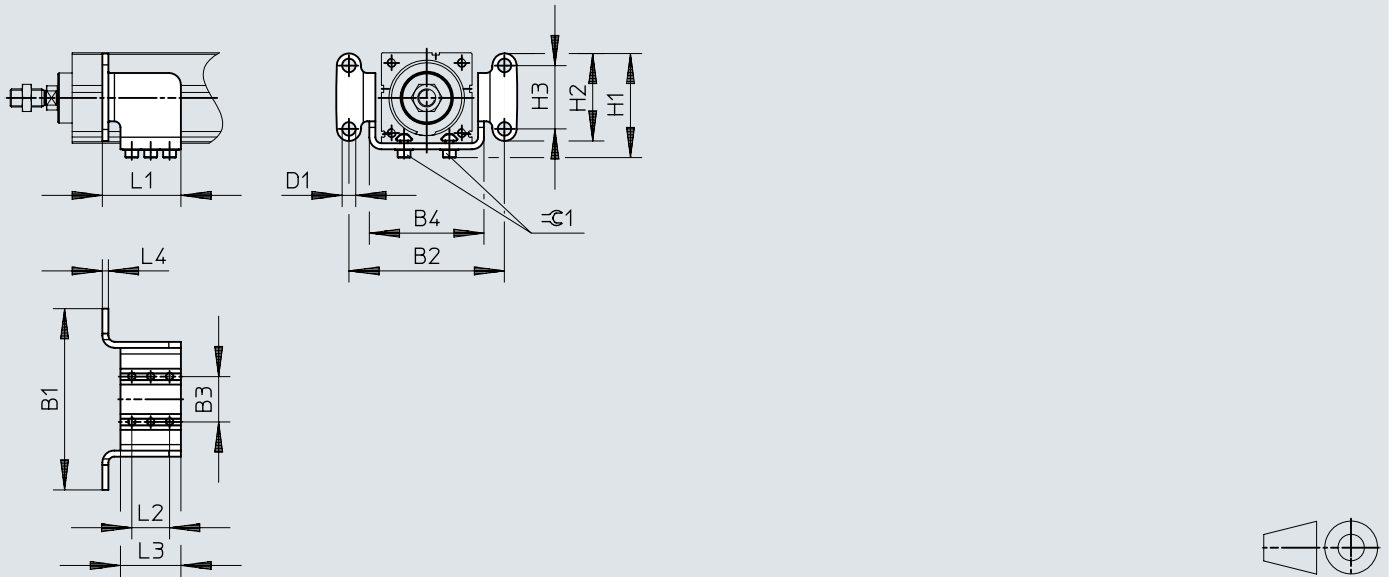
[1]   The position is freely selectable along the entire cylinder length.

	B1	B2	B3 ±0,1	B4	D1 ∅	H1	H2	H3	L1	L2	L3	L4	⊏C1
EAHH-P2-25	61	50	14	35	4,5	32,5	25	15	38	20	30	2,5	2,5
EAHH-P2-32	70	58	16	42	5,5	39	31	20	38	20	30	2,5	2,5
EAHH-P2-45	100	85	24	61	6,6	54,5	48	35	42	20	30	4	2,5
EAHH-P2-60	120	103	30	76	9	69	58	42	52	25	40	4	4

Dimensions

Dimensions – Adapter kit EAHA   Download CAD data www.festo.com
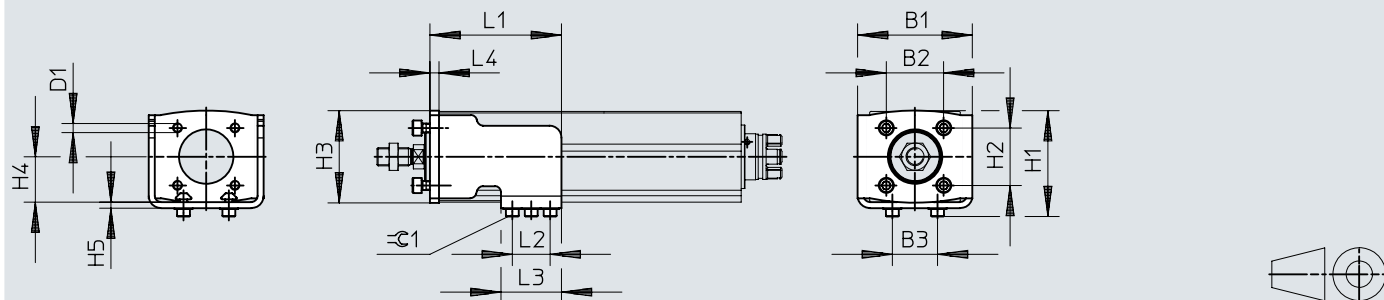
	B1	B2 ±0,2	B3 ±0,1	D1 Ø	H1	H2 ±0,2	H3	H4	H5	L1	L2	L3	L4	⊏C1
EAHA-P2-25	37	18	14	M4	35	18	30	14,5	2,5	58	20	30	4	2,5
EAHA-P2-32	53	22	16	M5	42	22	37	18	2,5	64	20	30	4	2,5
EAHA-P2-45	61	32,5	24	M6	54	32,5	49	22,5	4	68	20	30	6	2,5
EAHA-P2-60	76	38	30	M6	69,5	38	61	30	4	87	25	40	6	4

Dimensions

Dimensions – Swivel mounting EAHS   Download CAD data ⸚ www.festo.com
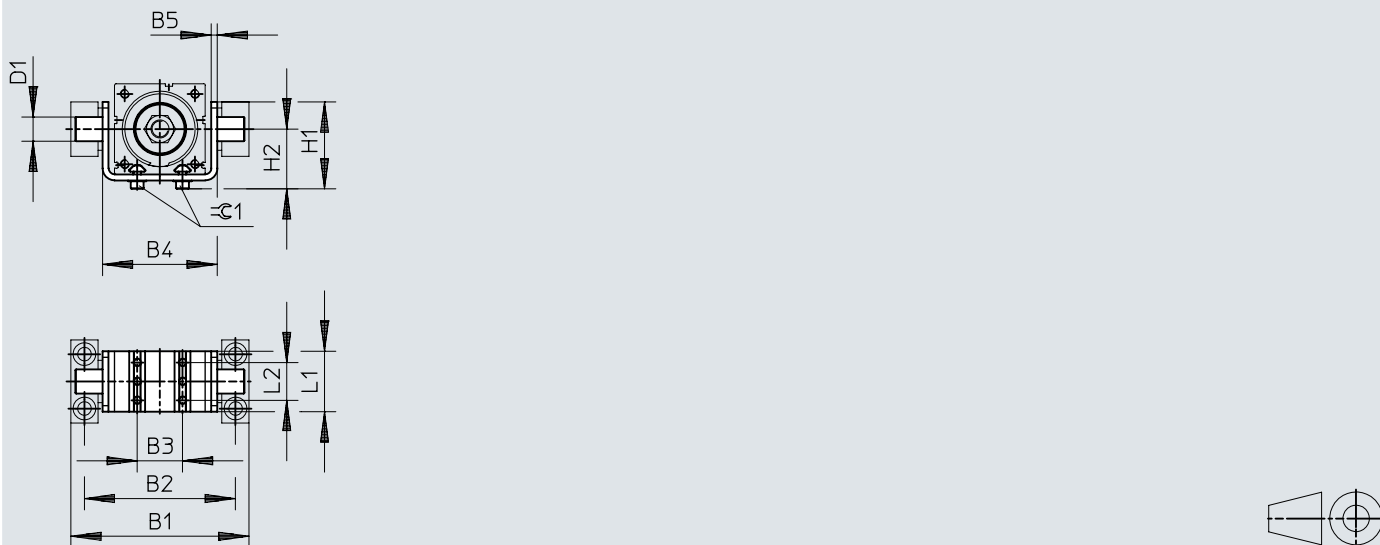
[1]   The position is freely selectable along the entire cylinder length.

	B1	B2	B3 ±0,1	B4	B5	D1 ∅ e9	H1	H2	L1	L2	⊏C1
EAHS-P2-25	61	50	14	35	2,5	8	30	20	30	20	2,5
EAHS-P2-32	68	57	16	42	2,5	8	32	23,5	30	20	2,5
EAHS-P2-45	98	83	24	62	4	12	44,5	29,5	30	20	2,5
EAHS-P2-60	118	100	30	76	4	16	57	39	40	25	4

Dimensions

Dimensions – Trunnion support LNZG   Download CAD data 🔗 www.festo.com
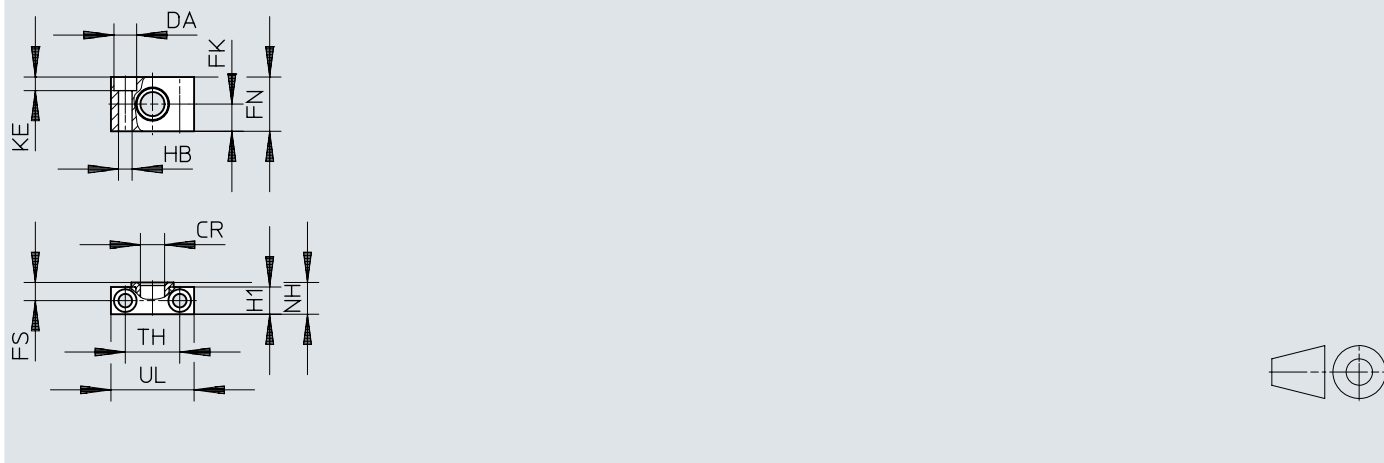
	CR Ø D11	DA Ø H13	FK ±0,1	FN	FS	H1	HB Ø H13	KE	NH	TH ±0,2	UL
LNZG-32	12	11	15	30	10,5	15	6,6	6,8	18	32	46
LNZG-40/50	16	15	18	36	12	18	9	9	21	36	55
LNZG-63/80	20	18	20	40	13	20	11	11	23	42	65
LNZG-100/125	25	20	25	50	16	24,5	14	13	28,5	50	75

Dimensions

Dimensions – Swivel flange SNCS
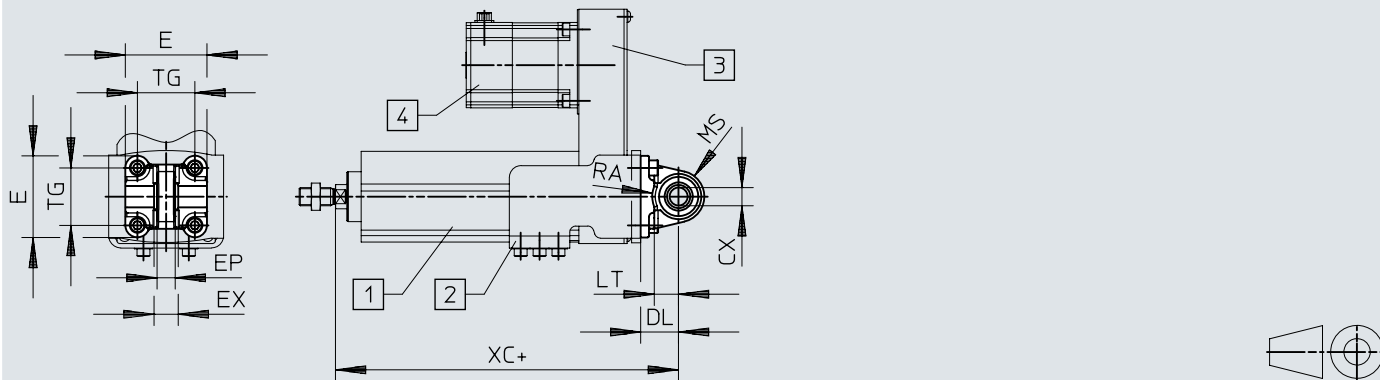
[1] Electric cylinder EPCC
[2] Adapter kit EAHA
[3] Parallel kit EAMM-U
[4] Motor EMME, EMMT
[5] + = plus stroke length

		CX	DL	E	L	EP	EX	LT	MS	RA	TG	XC
		±0,2				±0,2						
SNCS-32	EPCC-BS-45	10$^{+0,13}$	22	45+0,2/–0,5	3	10,5	14	13	15	14,5	32,5	154,9
SNCS-40	EPCC-BS-60	12$^{+0,15}$	25	54$_{-0,5}$	3	12	16	16	17	17,5	38	182

Dimensions

Dimensions – Swivel flange SNCL   Download CAD data 🔗 www.festo.com
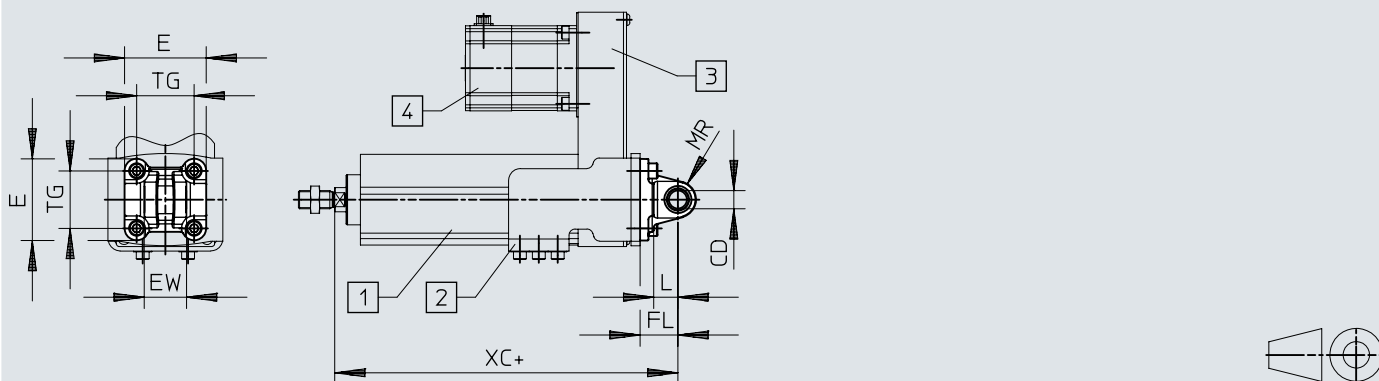
[1]   Electric cylinder EPCC
[2]   Adapter kit EAHA
[3]   Parallel kit EAMM-U
[4]   Motor EMME, EMMT
[5]   + = plus stroke length

		CD $\varnothing$ H10	E	EW h12	FL ±0,2	L	LT	MR	TG	XC
SNCL-16	EPCC-BS-25	6	$27,5_{-0,6}$	12_{h12}	16	3	10	6	18	115,7
SNCL-20	EPCC-BS-32	8	$34,5_{-0,6}$	16_{h12}	20	3	14	8	22	133,9
SNCL-32	EPCC-BS-45	10	$45_{+0,2/-0,5}$	$26_{-0,2/-0,6}$	22	3	13	10	32,5	154,9
SNCL-40	EPCC-BS-60	12	$54_{-0,5}$	$28_{-0,2/-0,6}$	25	3	16	12	38	182

Dimensions

Dimensions – Swivel flange SNCB

Download CAD data ⌀ www.festo.com

[1] Electric cylinder EPCC
[2] Adapter kit EAHA
[3] Parallel kit EAMM-U
[4] Motor EMME, EMMT
[5] + = plus stroke length

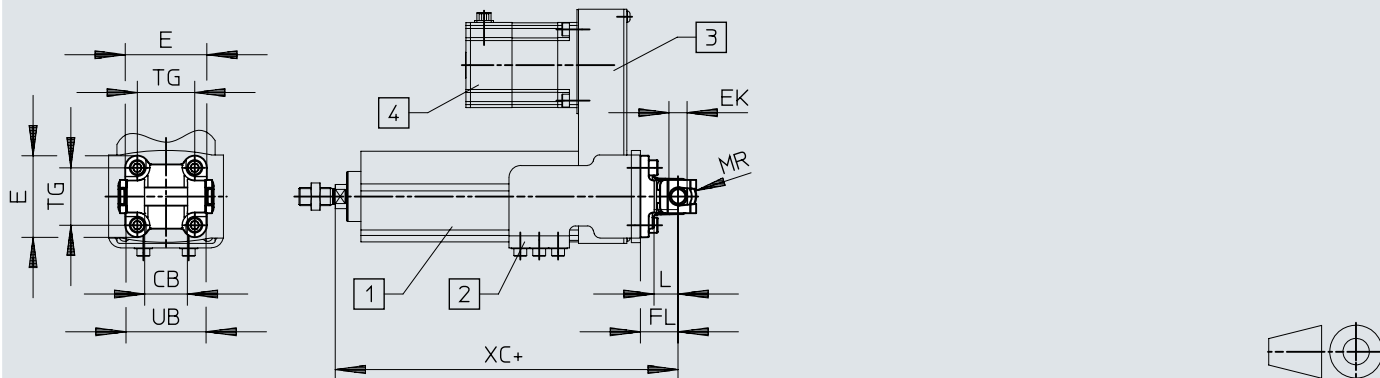|		CB	E	EK	FL	L	LT	MR	TG	UB	XC
		H14		∅ H10/e8	±0,2			−0,5		h14	
SNCB-32	EPCC-BS-45	26	45+0,2/−0,5	10	22	3	13	8,5	32,5	45	154,9
SNCB-40	EPCC-BS-60	28	54−0,5	12	25	3	16	12	38	52	182

Dimensions

Dimensions – Sensor bracket EAPM-L2
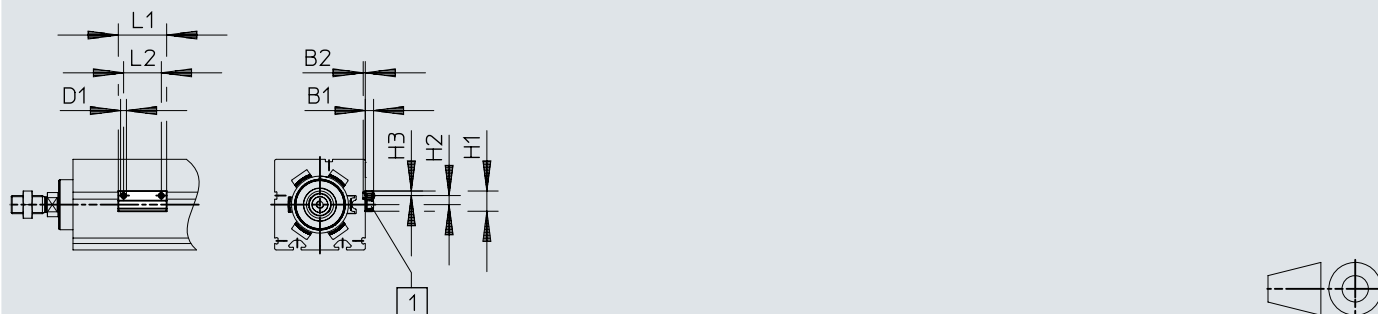
[1]   Proximity switches SME-8- …, SMT-8- …

	B1	B2	D1	H1	H2	H3	L1	L2
EAPM-L2-SH	5,5	1,3	M4	13,4	6	3	32	25

Ordering data

EPCC-BS-25

	Stroke	Spindle pitch	Part no.	Type
	25 mm	2 mm/U	**5428805**	**EPCC-BS-25-25-2P-A**
		6 mm/U	**5428813**	**EPCC-BS-25-25-6P-A**
	50 mm	2 mm/U	**5428806**	**EPCC-BS-25-50-2P-A**
		6 mm/U	**5428814**	**EPCC-BS-25-50-6P-A**
	75 mm	2 mm/U	**5428807**	**EPCC-BS-25-75-2P-A**
		6 mm/U	**5428815**	**EPCC-BS-25-75-6P-A**
	100 mm	2 mm/U	**5428808**	**EPCC-BS-25-100-2P-A**
		6 mm/U	**5428816**	**EPCC-BS-25-100-6P-A**
	125 mm	2 mm/U	**5428809**	**EPCC-BS-25-125-2P-A**
		6 mm/U	**5428817**	**EPCC-BS-25-125-6P-A**
	150 mm	2 mm/U	**5428810**	**EPCC-BS-25-150-2P-A**
		6 mm/U	**5428818**	**EPCC-BS-25-150-6P-A**
	175 mm	2 mm/U	**5428811**	**EPCC-BS-25-175-2P-A**
		6 mm/U	**5428819**	**EPCC-BS-25-175-6P-A**
	200 mm	2 mm/U	**5428812**	**EPCC-BS-25-200-2P-A**
		6 mm/U	**5428820**	**EPCC-BS-25-200-6P-A**

EPCC-BS-32

	Stroke	Spindle pitch	Part no.	Type
	25 mm	3 mm/U	**5428833**	**EPCC-BS-32-25-3P-A**
		8 mm/U	**5428841**	**EPCC-BS-32-25-8P-A**
	50 mm	3 mm/U	★ **5428834**	**EPCC-BS-32-50-3P-A**
		8 mm/U	★ **5428842**	**EPCC-BS-32-50-8P-A**
	75 mm	3 mm/U	**5428835**	**EPCC-BS-32-75-3P-A**
		8 mm/U	**5428843**	**EPCC-BS-32-75-8P-A**
	100 mm	3 mm/U	★ **5428836**	**EPCC-BS-32-100-3P-A**
		8 mm/U	★ **5428844**	**EPCC-BS-32-100-8P-A**
	125 mm	3 mm/U	**5428837**	**EPCC-BS-32-125-3P-A**
		8 mm/U	**5428845**	**EPCC-BS-32-125-8P-A**
	150 mm	3 mm/U	★ **5428838**	**EPCC-BS-32-150-3P-A**
		8 mm/U	★ **5428846**	**EPCC-BS-32-150-8P-A**
	175 mm	3 mm/U	**5428839**	**EPCC-BS-32-175-3P-A**
		8 mm/U	**5428847**	**EPCC-BS-32-175-8P-A**
	200 mm	3 mm/U	★ **5428840**	**EPCC-BS-32-200-3P-A**
		8 mm/U	★ **5428848**	**EPCC-BS-32-200-8P-A**

EPCC-BS-45

	Stroke	Spindle pitch	Part no.	Type
	25 mm	3 mm/U	★ **5428858**	**EPCC-BS-45-25-3P-A**
		10 mm/U	★ **5428868**	**EPCC-BS-45-25-10P-A**
	50 mm	3 mm/U	★ **5428859**	**EPCC-BS-45-50-3P-A**
		10 mm/U	★ **5428869**	**EPCC-BS-45-50-10P-A**
	75 mm	3 mm/U	**5428860**	**EPCC-BS-45-75-3P-A**
		10 mm/U	**5428870**	**EPCC-BS-45-75-10P-A**
	100 mm	3 mm/U	★ **5428861**	**EPCC-BS-45-100-3P-A**
		10 mm/U	★ **5428871**	**EPCC-BS-45-100-10P-A**
	125 mm	3 mm/U	**5428862**	**EPCC-BS-45-125-3P-A**
		10 mm/U	**5428872**	**EPCC-BS-45-125-10P-A**
	150 mm	3 mm/U	★ **5428863**	**EPCC-BS-45-150-3P-A**
		10 mm/U	★ **5428873**	**EPCC-BS-45-150-10P-A**
	175 mm	3 mm/U	**5428864**	**EPCC-BS-45-175-3P-A**
		10 mm/U	**5428874**	**EPCC-BS-45-175-10P-A**
	200 mm	3 mm/U	★ **5428865**	**EPCC-BS-45-200-3P-A**
		10 mm/U	★ **5428875**	**EPCC-BS-45-200-10P-A**

Ordering data

EPCC-BS-45

	Stroke	Spindle pitch	Part no.	Type
	250 mm	3 mm/U	**5428866**	**EPCC-BS-45-250-3P-A**
		10 mm/U	**5428876**	**EPCC-BS-45-250-10P-A**
	300 mm	3 mm/U	**5428867**	**EPCC-BS-45-300-3P-A**
		10 mm/U	**5428877**	**EPCC-BS-45-300-10P-A**

EPCC-BS-60

	Stroke	Spindle pitch	Part no.	Type
	25 mm	5 mm/U	★ 5428888	**EPCC-BS-60-25-5P-A**
		12 mm/U	★ 5428901	**EPCC-BS-60-25-12P-A**
	50 mm	5 mm/U	★ 5428889	**EPCC-BS-60-50-5P-A**
		12 mm/U	★ 5428902	**EPCC-BS-60-50-12P-A**
	75 mm	5 mm/U	5428890	**EPCC-BS-60-75-5P-A**
		12 mm/U	5428903	**EPCC-BS-60-75-12P-A**
	100 mm	5 mm/U	★ 5428891	**EPCC-BS-60-100-5P-A**
		12 mm/U	★ 5428904	**EPCC-BS-60-100-12P-A**
	125 mm	5 mm/U	5428892	**EPCC-BS-60-125-5P-A**
		12 mm/U	5428905	**EPCC-BS-60-125-12P-A**
	150 mm	5 mm/U	★ 5428893	**EPCC-BS-60-150-5P-A**
		12 mm/U	★ 5428906	**EPCC-BS-60-150-12P-A**
	175 mm	5 mm/U	5428894	**EPCC-BS-60-175-5P-A**
		12 mm/U	5428907	**EPCC-BS-60-175-12P-A**
	200 mm	5 mm/U	★ 5428895	**EPCC-BS-60-200-5P-A**
		12 mm/U	★ 5428908	**EPCC-BS-60-200-12P-A**
	250 mm	5 mm/U	★ 5428896	**EPCC-BS-60-250-5P-A**
		12 mm/U	★ 5428909	**EPCC-BS-60-250-12P-A**
	300 mm	5 mm/U	★ 5428897	**EPCC-BS-60-300-5P-A**
		12 mm/U	★ 5428910	**EPCC-BS-60-300-12P-A**
	350 mm	5 mm/U	5428898	**EPCC-BS-60-350-5P-A**
		12 mm/U	5428911	**EPCC-BS-60-350-12P-A**
	400 mm	5 mm/U	5428899	**EPCC-BS-60-400-5P-A**
		12 mm/U	5428912	**EPCC-BS-60-400-12P-A**
	500 mm	5 mm/U	5428900	**EPCC-BS-60-500-5P-A**
		12 mm/U	5428913	**EPCC-BS-60-500-12P-A**

Ordering information – Modular product system **Link** 🔗 **epcc**

	Size	Stroke	Spindle pitch	Part no.	Type
	25	25 ... 200 mm	2 ... 6 mm/U	**5428821**	**EPCC-BS-25-**
	32		3 ... 8 mm/U	**5428849**	**EPCC-BS-32-**
	45	25 ... 300 mm	3 ... 10 mm/U	**5428878**	**EPCC-BS-45-**
	60	25 ... 500 mm	5 ... 12 mm/U	**5428914**	**EPCC-BS-60-**

Peripherals

Peripherals overview

Accessories			→ Link
	Type/order code	Description	
[1]	Electric cylinder EPCC	Electric drive	🔗 epcc
[2]	Axial kit EAMM-A	For axial motor mounting	🔗 eamm-a
[3]	Motor EMMT-AS	Motors and kits specially matched with the axis Detailed information: www.festo.com/catalogue/eamm Engineering tool: www.festo.com/x/electric-motion-sizing	🔗 emmt-as
[3]	Motor EMMT-ST	Motors and kits specially matched with the axis Detailed information: www.festo.com/catalogue/eamm Engineering tool: www.festo.com/x/electric-motion-sizing	🔗 emmt-st
[4]	Parallel kit EAMM-U	For parallel motor mounting	🔗 eamm-u
[5]	Sensor bracket EAPM-L2	For mounting the proximity switches on the axis. The proximity switches can only be mounted using the sensor bracket	36
[6]	Proximity switches SMT-8M	Magnetic proximity switches, for T-slot	35
[7]	Adapter kit EAHA-P2	- For mounting the swivel flange and trunnion flange on the front - Can only be mounted on the rear in conjunction with parallel kit EAMM-U	32
[8]	Swivel flange SNCL	With parallel motor mounting	33
[9]	Swivel flange SNCS	With parallel motor mounting	33
[10]	Swivel flange SNCB	For parallel motor mounting, for spherical bearing	33
[11]	Clevis foot LBN	For parallel motor mounting, for spherical bearing	
[12]	Clevis foot LBG/LBG-...-R3	For parallel motor mounting, for spherical bearing	34
[13]	Slot nut ABAN	For mounting the electric cylinder	35
[14]	Profile mounting EAHF-L2-P	- For mounting the axis on the side of the profile - The hole in the middle allows the profile mounting to be attached to the mounting surface	32
[15]	Profile mounting EAHF-L2-P-S	For mounting the axis on the side of the profile	32
[16]	Swivel mounting EAHS-P2	Position freely selectable along the cylinder length	32
[17]	Trunnion support LNZG	For cylinders with trunnion mounting	33
[18]	Flange mounting EAHH-P2	- For mounting the electric cylinder via the profile - Position within the cylinder length freely selectable	32
[19]	Self-aligning rod coupler FK/CRFK	To compensate for radial and angular deviations	34
[20]	Rod clevis SG/CRSG	Allows a swivelling movement of the cylinder in one plane	34
[21]	Coupling piece KSG	To compensate for radial deviations	34
[22]	Rod eye SGS/CRSGS	With spherical bearing	34
[23]	Rod clevis SGA	For swivelling cylinder mounting	34

Peripherals

Accessories			→ Link
	Type/order code	Description	
[24]	Right angle clevis foot LQG	For rod eye SGS	33
[25]	Guide unit EAGF	For protecting electric cylinders against rotation at high torque loads	35

Accessories

Permitted axis/motor combinations for axial and parallel kits
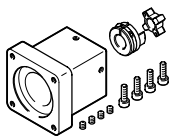
By following these links you will find all the information on:
- Axis/motor combinations
- Permitted third-party motors
- Technical data
- Dimensions

For axial kits → Internet: www.festo.com/catalogue/eamm-a

For parallel kits → Internet: www.festo.com/catalogue/eamm-u

Profile mounting EAHF-L2-...-P-S

	Description	Material plate	Note on materials	Product weight	Part no.	Type
	For sizes 25 and 32	Anodised wrought aluminium alloy	RoHS-compliant	4 g	**5183153**	**EAHF-L2-25-P-S**
	For size 45, 60			6 g	**5184133**	**EAHF-L2-45-P-S**

Profile mounting EAHF-L2-...-P

	Description	Material plate	Note on materials	Product weight	Part no.	Type
	For sizes 25 and 32	Anodised wrought aluminium alloy	RoHS-compliant	19 g	**4835684**	**EAHF-L2-25-P**
	For size 45, 60			35 g	**4835728**	**EAHF-L2-45-P**

Flange mounting EAHH

	Description	Note on materials	Product weight	Part no.	Type
	For size 25	RoHS-compliant	65 g	**5127286**	**EAHH-P2-25**
	For size 32		80 g	**5126157**	**EAHH-P2-32**
	For size 45		185 g	**5126669**	**EAHH-P2-45**
	For size 60		320 g	**5127005**	**EAHH-P2-60**

Adapter kit EAHA

	Description	Note on materials	Product weight	Part no.	Type
	For size 25	RoHS-compliant	110 g	**5172843**	**EAHA-P2-25**
	For size 32		165 g	**5173020**	**EAHA-P2-32**
	For size 45		340 g	**5172353**	**EAHA-P2-45**
	For size 60		560 g	**5173082**	**EAHA-P2-60**

Swivel mounting EAHS
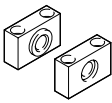
	Description	Note on materials	Product weight	Part no.	Type
	For size 25	RoHS-compliant	70 g	**5125383**	**EAHS-P2-25**
	For size 32		75 g	**5125041**	**EAHS-P2-32**
	For size 45		165 g	**5125167**	**EAHS-P2-45**
	For size 60		305 g	**5125281**	**EAHS-P2-60**
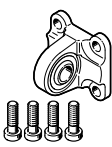
Trunnion support LNZG
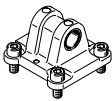
	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For sizes 25 and 32	Wrought aluminium alloy	RoHS-compliant	26 g	**1434912**	**LNZG-16**
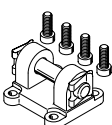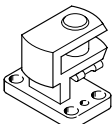
Accessories

Trunnion support LNZG

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 45	Wrought aluminium alloy	RoHS-compliant	83 g	**32959**	**LNZG-32**
	For size 60			129 g	**32960**	**LNZG-40/50**

Swivel flange SNCS

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 45	Die-cast aluminium	RoHS-compliant	86 g	★ **174397**	**SNCS-32**
	For size 60			122 g	★ **174398**	**SNCS-40**
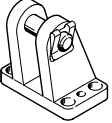
Swivel flange SNCL

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 25	Wrought aluminium alloy	RoHS-compliant	21 g	**537791**	**SNCL-16**
	For size 32			38 g	**537792**	**SNCL-20**
	For size 45	Die-cast aluminium		71 g	★ **174404**	**SNCL-32**
	For size 60			95 g	★ **174405**	**SNCL-40**

Swivel flange SNCB

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 45	Die-cast aluminium	RoHS-compliant	103 g	★ **174390**	**SNCB-32**
	For size 60			155 g	★ **174391**	**SNCB-40**
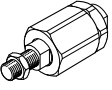
Clevis foot transverse LQG

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 45	Stainless steel casting	RoHS-compliant	301 g	**31768**	**LQG-32**
	For size 60			369 g	**31769**	**LQG-40**
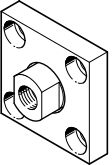
Clevis foot LBN

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 25	Steel, Galvanised	RoHS-compliant	40 g	★ **6058**	**LBN-12/16**
	For size 32			84 g	★ **6059**	**LBN-20/25**
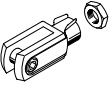
Accessories
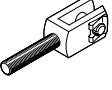
Clevis foot LBG

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 45	Stainless steel casting	RoHS-compliant	220 g	**31761**	**LBG-32**
	For size 60			300 g	**31762**	**LBG-40**

Rod eye SGS

	Description	Material housing	Note on materials	Product weight	Part no.	Type
	For size 25	Galvanised steel	RoHS-compliant	30 g	★ **9254**	**SGS-M6**
	For size 32			54 g	★ **9255**	**SGS-M8**
	For size 45			88 g	★ **9261**	**SGS-M10X1,25**
	For size 60			130 g	★ **9262**	**SGS-M12X1,25**

Self-aligning rod coupler FK

	Description	Material housing	Note on materials	Product weight	Part no.	Type
	For size 25	Steel, Galvanised	RoHS-compliant	23 g	★ **2061**	**FK-M6**
	For size 32			50 g	★ **2062**	**FK-M8**
	For size 45			210 g	★ **6140**	**FK-M10X1,25**
	For size 60			215 g	★ **6141**	**FK-M12X1,25**

Coupling piece KSG

	Description	Material mounting	Note on materials	Product weight	Part no.	Type
	For size 45	Steel, Galvanised	RoHS-compliant	229 g	**32963**	**KSG-M10X1,25**
	For size 60			447 g	**32964**	**KSG-M12X1,25**
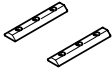
Rod clevis SG

	Description	Material housing	Note on materials	Product weight	Part no.	Type
	For size 25		RoHS-compliant	22 g	★ **3110**	**SG-M6**
	For size 32			53 g	★ **3111**	**SG-M8**
	For size 45			103 g	★ **6144**	**SG-M10X1,25**
	For size 60			166 g	★ **6145**	**SG-M12X1,25**
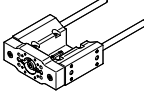
Rod clevis SGA

	Description	Material housing	Note on materials	Product weight	Part no.	Type
	For size 45		RoHS-compliant	129 g	**32954**	**SGA-M10X1,25**
	For size 60			222 g	**10767**	**SGA-M12X1,25**
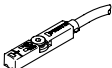
Push-in fitting for sealing air connection

	Description	Material housing	Size of pack	Product weight	Part no.	Type
	For size 25, 32	Brass, nickel-plated	10	3 g	**133004**	**QSM-M5-4-I-R**

Accessories

Push-in fitting for sealing air connection

	Description	Material housing	Size of pack	Product weight	Part no.	Type
	For size 25, 32	Brass, nickel-plated	10	3.2 g	**133003**	**QSM-M5-3-I-R**
	For size 45			8.9 g	★ **186266**	**QSM-G1/8-4-I**
				9.5 g	★ **186267**	**QSM-G1/8-6-I**
	For size 60			13 g	★ **186108**	**QS-G1/4-6-I**
				14 g	★ **186110**	**QS-G1/4-8-I**

Slot nut ABAN

	Material slot nut	Size of pack	Product weight	Part no.	Type
	Steel	2	5 g	**8169987**	**ABAN-3-3M3-30-M-P2**
			18 g	**8169988**	**ABAN-5-3M5-40-M-P2**
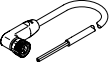
Guide unit EAGF

	Size	Stroke	Part no.	Type
	32	1 … 200 mm	**8158030**	**EAGF-P2-KF-32-**
		50 mm	**8158032**	**EAGF-P2-KF-32-50**
		100 mm	**8158029**	**EAGF-P2-KF-32-100**
		150 mm	**8158027**	**EAGF-P2-KF-32-150**
		200 mm	**8158028**	**EAGF-P2-KF-32-200**
	45	1 … 300 mm	**8158133**	**EAGF-P2-KF-45-**
		50 mm	**8158131**	**EAGF-P2-KF-45-50**
		100 mm	**8158123**	**EAGF-P2-KF-45-100**
		150 mm	**8158125**	**EAGF-P2-KF-45-150**
		200 mm	**8158127**	**EAGF-P2-KF-45-200**
		300 mm	**8158130**	**EAGF-P2-KF-45-300**
	60	1 … 500 mm	**8158150**	**EAGF-P2-KF-60-**
		100 mm	**8158138**	**EAGF-P2-KF-60-100**
		150 mm	**8158140**	**EAGF-P2-KF-60-150**
		200 mm	**8158142**	**EAGF-P2-KF-60-200**
		300 mm	**8158031**	**EAGF-P2-KF-60-300**

Proximity switch SMT for T-slot, magneto-resistive Link ⧉ **smt-8m**

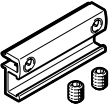|	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type
	Screw-clamped, Insertable in the slot from above	3-wire N/C contact NPN	Open end	2.5 m	**8138000**	**SMT-8M-A-NO-24V-E-2,5-OE**
				7.5 m	**8138001**	**SMT-8M-A-NO-24V-E-7,5-OE**
		3-wire NPN N/O contact		2.5 m	★ **574338**	**SMT-8M-A-NS-24V-E-2,5-OE**
			Plug M8, A-coded	0.3 m	★ **574339**	**SMT-8M-A-NS-24V-E-0,3-M8D**
		3-wire PNP N/C contact	Open end	7.5 m	★ **574340**	**SMT-8M-A-PO-24V-E-7,5-OE**
		3-wire PNP N/O contact		2.5 m	★ **574335**	**SMT-8M-A-PS-24V-E-2,5-OE**
			Plug M8, A-coded	0.3 m	★ **574334**	**SMT-8M-A-PS-24V-E-0,3-M8D**

Connecting cable NEBA, straight

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	★ **8078223**	**NEBA-M8G3-U-2.5-N-LE3**
				5 m	★ **8078224**	**NEBA-M8G3-U-5-N-LE3**

Accessories

Connecting cable NEBA, angled

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/ cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	★ 8078230	**NEBA-M8W3-U-2.5-N-LE3**
				5 m	★ 8078231	**NEBA-M8W3-U-5-N-LE3**

Sensor bracket EAPM-L2

	Material sensor bracket	Note on materials	Product weight	Part no.	Type
	Anodised wrought aluminium alloy	RoHS-compliant	4 g	★ 4759852	**EAPM-L2-SH**