

Electric cylinders DNCE, with spindle drive



Electric cylinders DNCE, with spindle drive

Key features

FESTO

At a glance

General information

The electric cylinder DNCE is a mechanical linear axis with piston rod. The drive component consists of an electrically driven spindle, which converts the rotary motion of the motor into the linear motion of the piston rod.

The mechanical interfaces are largely compatible with the standard cylinder DNC.

Properties

- Choice of spindle type:
 - With lead screw (LS)
 - With ball screw (BS)
- Electric cylinder with lead screw is self-retarding
- Compact dimensions
- On request:
 - Higher IP protection class
 - Versions for clean room classes

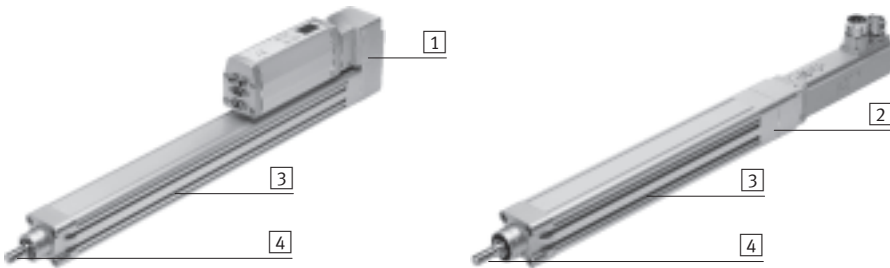
Range of applications

- Lead screw spindle
 - For applications with slow feed speeds
- Ball screw spindle
 - For applications with high feed speeds and high running performance

Entire system consists of electric cylinder, motor and motor mounting kit

Electric cylinder

→ 6



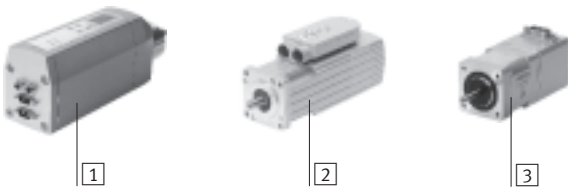
- 1** Parallel kit
- 2** Axial kit
- 3** Slot for proximity sensor
- 4** Alternatively:
 - With lead screw (LS)
 - With ball screw (BS)

Note

The lead screw spindle is self-retarding, which means that slow movements cannot be ruled out in the event of vibration. The entire system with motor unit MTR-DCI is self-locking.

Motor/motor unit

→ 17



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

Note

A range of specially adapted complete solutions is available for the electric cylinder DNCE and the motors/motor units.

Motor mounting kit

Axial kit

Parallel kit

→ 17



A range of complete kits is available for both parallel and axial motor mounting.

Longer service life thanks to bellows kit EADB

→ 23



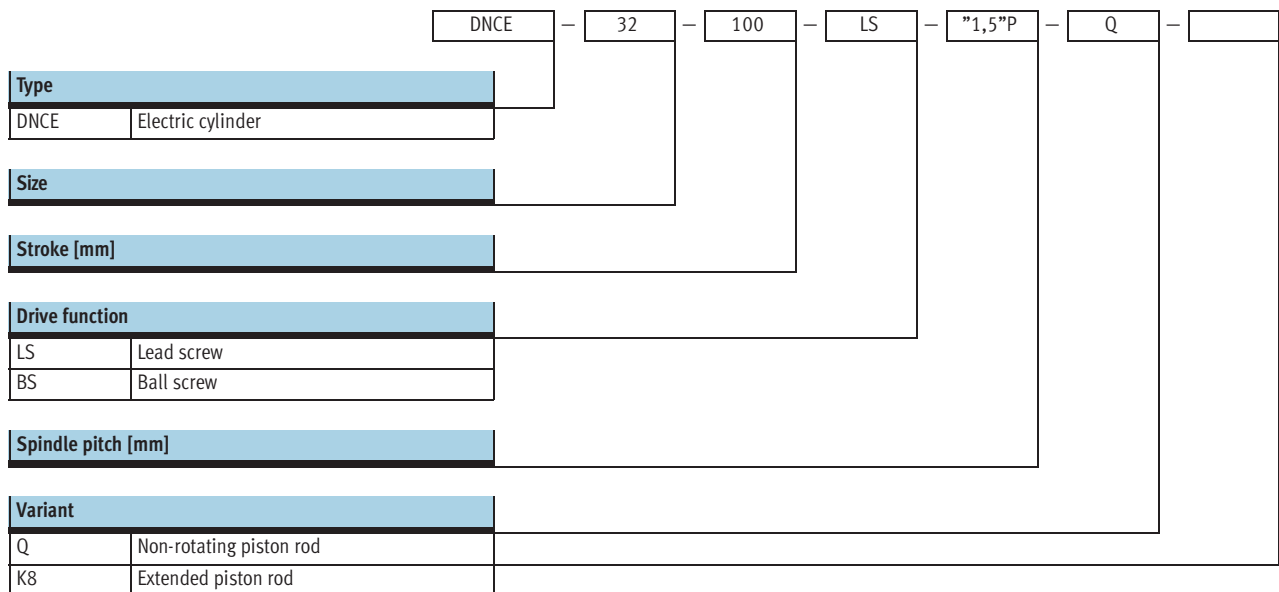
The bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air is ducted via a venting hole in the connection part **1**.

The kit protects the piston rod, seal and bearings against a wide variety of media, for example:

- dust
- chippings
- oil
- grease
- fuel

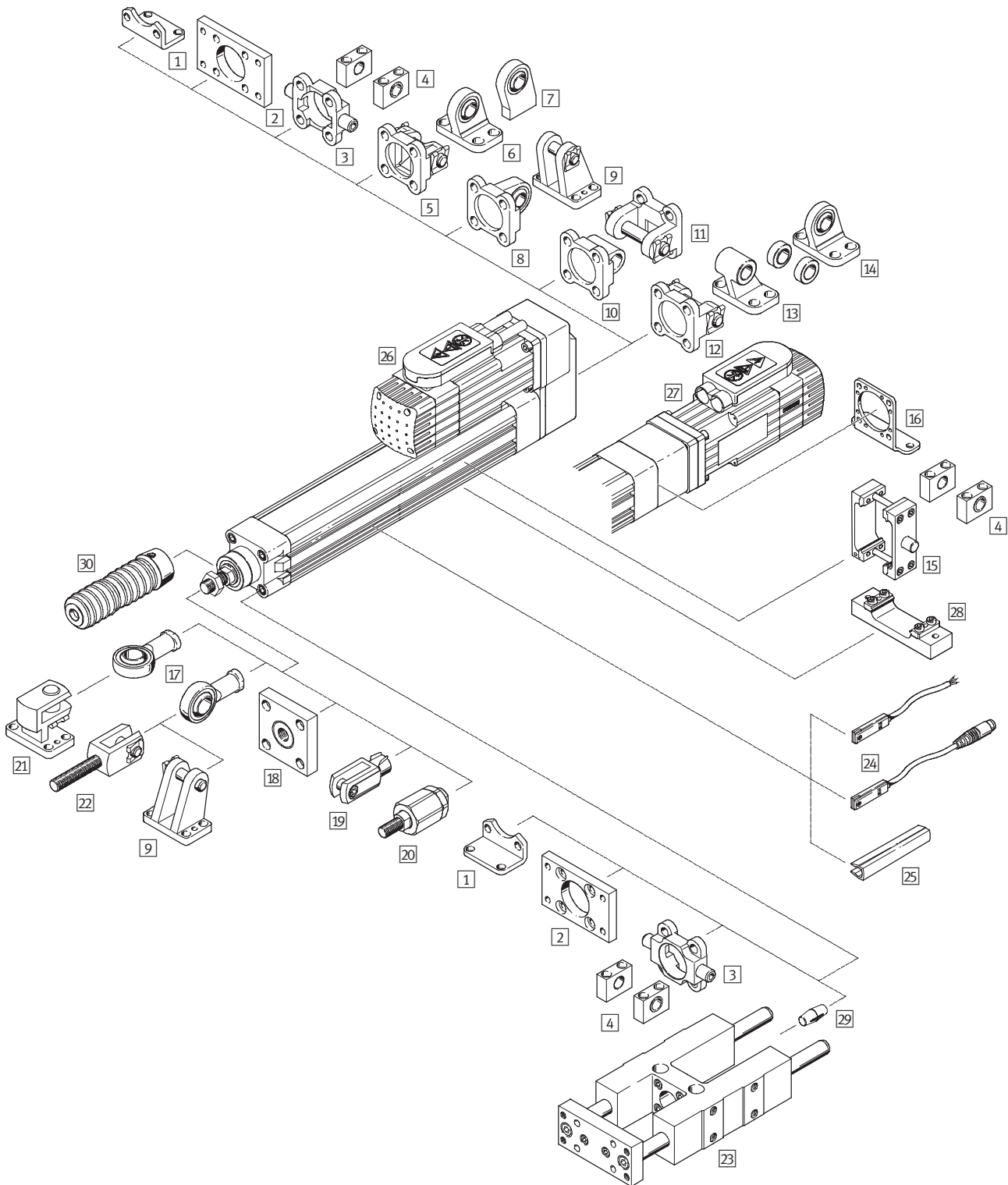
Electric cylinders DNCE, with spindle drive

Type codes



Electric cylinders DNCE, with spindle drive

Peripherals overview



Mounting attachments and accessories		
	Brief description	→ Page/Internet
1	Foot mounting HNC/CRHNC	For mounting the cylinder 28
2	Flange mounting FNC/CRFNG	- Cannot be used on the bearing cap in combination with bellows kit EADB 29
3	Trunnion flange ZNCF/CRZNG	- Cannot be used on the bearing cap in combination with bellows kit EADB 30

Electric cylinders DNCE, with spindle drive

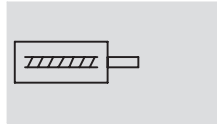
Peripherals overview



Mounting attachments and accessories		
	Brief description	→ Page/Internet
4	Trunnion support LNZG/CRLNZG	For cylinders with trunnion mounting 31
5	Swivel flange SNC	With parallel motor mounting 32
6	Clevis foot LSNG	With parallel motor mounting, with spherical bearing 35
7	Clevis foot LSNSG	With parallel motor mounting, weld-on, with spherical bearing 35
8	Swivel flange SNCS	With parallel motor mounting, for spherical bearing 32
9	Clevis foot LBG	With parallel motor mounting, for spherical bearing 35
10	Swivel flange SNCL	With parallel motor mounting 33
11	Swivel flange SNCB/SNCB-...-R3	With parallel motor mounting, for spherical bearing 34
12	Swivel flange SNCB/SNCB-...-R3	With parallel motor mounting 34
13	Clevis foot LNG/CRLNG	With parallel motor mounting 35
14	Clevis foot LSN	With parallel motor mounting, with spherical bearing 35
15	Trunnion mounting kit ZNCM	For mounting anywhere along the cylinder profile barrel. Cannot be mounted in the vicinity of the motor with parallel motor mounting 35
16	Foot mounting HNCE	With axial motor mounting 26
17	Rod eye SGS/CRSGS	With spherical bearing 36
18	Coupling piece KSZ	For compensating radial misalignments 36
19	Rod clevis SG/CRSG	Permits a swivelling movement of the cylinder in one plane 36
20	Self-aligning rod coupler FK	For compensating radial and angular misalignments 36
21	Right-angle clevis foot LQG	For rod eye SGS 36
22	Rod clevis SGA	For swivel mounting of cylinders 36
23	Guide unit FENG	– For protecting electric cylinders against rotation at high torque loads – Cannot be used in combination with bellows kit EADB 36
24	Proximity sensor SME/SMT-8	For position sensing. Can be integrated in sensor slot, thus no projecting parts 37
25	Slot cover ABP-5-S	For protecting against ingress of dirt 37
26	Parallel kit EAMM-U	For parallel motor mounting 17
27	Axial kit EAMM-A	For axial motor mounting 17
28	Profile mounting EAHF	– For mounting the electric cylinder via the profile – Cannot be mounted in the vicinity of the motor in combination with the parallel kit EAMM-U 27
29	Compensating component EADC	Compensates the play between the piston rod of the electric cylinder DNCE and the yoke plate of the guide unit FENG 37
30	Bellows kit EADB	– Protects the cylinder (piston rod, seal and bearings) against a wide range of media and thus prevents premature wear – The kit can only be used in combination with an extended piston rod (K8) 23

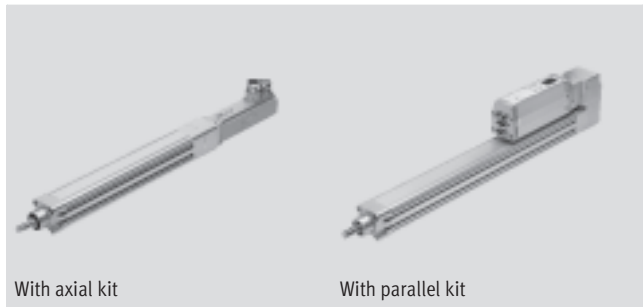
Electric cylinders DNCE, with spindle drive

Technical data

Function



-  Size
32 ... 63
 -  Stroke length
1 ... 800 mm
- www.festo.com/en/Spare_parts_service



General technical data		32	40	63
Size		32	40	63
Design	LS	With lead screw		
	BS	With ball screw		
Piston rod thread		M10x1.25	M12x1.25	M16x1.5
Working stroke	[mm]	1 ... 400	1 ... 600	1 ... 800
Variant		Non-rotating piston rod		
Protection against torsion/guide		Plain-bearing guide		
Stroke reserve	[mm]	0		
Max. torsion angle at the piston rod	[°]	±0.30	±0.25	±0.20
Impact energy (E) in the end positions	[J]	0.0001 $E = 0.5 \times m \times v^2$	0.0002 $E = 0.5 \times m \times v^2$	0.0004 $E = 0.5 \times m \times v^2$
Duty cycle ¹⁾	[%]	100		
Position sensing		Via proximity sensor		
Type of mounting		Via female thread		
		Via accessories		
Mounting position		Any		

1) In the case of the variant with lead screw (LS), the duty cycle depends on the speed

Mechanical data		32			40			63		
Size		LS-"1,5"P	BS-"3"P	BS-"10"P	LS-"2,5"P	BS-"5"P	BS-"12,7"P	LS-"4"P	BS-"10"P	BS-"20"P
Spindle pitch	[mm/rev.]	1.5	3	10	2.5	5	12.7	4	10	20
Spindle diameter	[mm]	9	10	10	12.5	12	12.7	20	20	20
Max. stat. axial force	[N]	600	600	600	1,400	1,400	1,400	3,700	3,700	3,700
Max. feed force $F_x^{1)}$	[N]	300	300	350	600	525	800	1,000	2,500	1,625
Continuous feed force ⁴⁾	[N]	300	240	280	600	420	640	1,000	2,000	1,300
Max. driving torque ²⁾	[Nm]	0.4	0.4	0.8	1.15	0.9	1.9	3	4.9	5.9
No-load driving torque with axial kit ³⁾	[Nm]	0.08	0.08	0.08	0.12	0.12	0.12	0.3	0.2	0.2
No-load driving torque with parallel kit ³⁾	[Nm]	0.13	0.13	0.13	0.22	0.22	0.22	0.6	0.5	0.5
Continuous driving torque	[Nm]	0.4	0.3	0.6	1.15	0.8	1.6	3	4.1	4.8
Max. radial force ⁴⁾	[N]	120	120	120	260	260	260	300	300	300
Max. speed	[m/s]	0.06	0.15	0.5	0.07	0.25	0.64	0.07	0.5	1.0
Max. rotational speed	[rpm]	2,400	3,000	3,000	1,650	3,000	3,000	1,050	3,000	3,000
Max. acceleration	[m/s ²]	1	6	6	1	6	6	1	6	6
Reversing backlash ⁵⁾	[mm]	0.2	0.05	0.05	0.2	0.05	0.05	0.2	0.05	0.05
Repetition accuracy	[mm]	±0.07	±0.02	±0.02	±0.07	±0.02	±0.02	±0.07	±0.02	±0.02

- 1) In the case of the variant with lead screw (LS), the feed force depends on the speed → 9
The feed force in the case of the variant with ball screw (BS) → 7
- 2) In the case of the variant with lead screw (LS), the driving torque depends on the rotational speed → 10
- 3) Measured at a speed of 200 rpm
- 4) At the drive shaft
- 5) In new condition

Electric cylinders DNCE, with spindle drive

Technical data

Operating and environmental conditions		
Ambient temperature ¹⁾²⁾	[°C]	0 ... 50
Storage temperature	[°C]	-25 ... +60
Protection class ²⁾		IP40
Relative air humidity	[%]	0 ... 95

- 1) Note operating range of proximity sensors and motors
- 2) Higher protection class and other environmental conditions on request

Weight [g]									
Size	32			40			63		
Spindle design	LS-™1,5™P	BS-™3™P	BS-™10™P	LS-™2,5™P	BS-™5™P	BS-™12,7™P	LS-™4™P	BS-™10™P	BS-™20™P
Basic weight with 0 mm stroke	720	750	770	1,210	1,270	1,350	2,790	3,010	3,010
Additional weight per 10 mm stroke	32.4	33	33.6	46.1	45.5	46.7	79.8	81.2	81.2
Moving load with 0 mm stroke	150	170	200	250	310	380	600	810	810
Moving load per 10 mm stroke	6.9	6.9	6.9	8.9	8.9	8.9	12.8	12.8	12.8

Mass moment of inertia										
Size	32			40			63			
Spindle design	LS-™1,5™P	BS-™3™P	BS-™10™P	LS-™2,5™P	BS-™5™P	BS-™12,7™P	LS-™4™P	BS-™10™P	BS-™20™P	
J ₀ at 0 mm stroke	[kg cm ²]	0.0433	0.0439	0.0446	0.1316	0.1304	0.1337	0.7565	0.7626	0.7624
j _s per metre stroke	[kg cm ² /m]	0.0361	0.0476	0.0595	0.1341	0.1163	0.1572	0.8176	0.9090	0.9103
j _L per kg working load	[kg cm ² /kg]	0.0006	0.0023	0.0253	0.0016	0.0063	0.0409	0.0041	0.0253	0.1013

The mass moment of inertia J_A of the electric cylinder is calculated as follows:

$$J_A = J_0 + j_s \times \text{working stroke [m]} + j_L \times m_{\text{moving effective load [kg]}}$$

Calculation of the mean feed force F_{xm} for the electric cylinder DNCE with ball screw (BS)

The peak feed force value must not exceed the maximum feed force within a movement cycle. In the case of vertical operation, the peak value is generally achieved during the acceleration phase of the upwards 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.

$$F_x \leq F_{x\text{max}}$$

and

$$v_x \leq v_{x\text{max}}$$

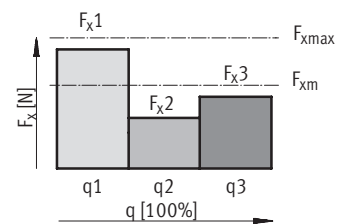
Mean feed force (to DIN 69 051-4)

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.

$$F_{xm} \leq F_{x\text{cont}}$$

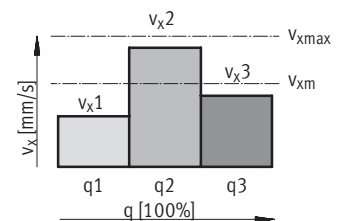
$$F_{xm} = \sqrt[3]{\sum F_x^3 \times \frac{v_x}{v_{xm}} \times \frac{q}{100}} =$$

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



Mean feed speed (to DIN 69 051-4)

$$v_{xm} = \sum v_x \times \frac{q}{100} = v_{x1} \times \frac{q_1}{100} + v_{x2} \times \frac{q_2}{100} + v_{x3} \times \frac{q_3}{100} + \dots$$



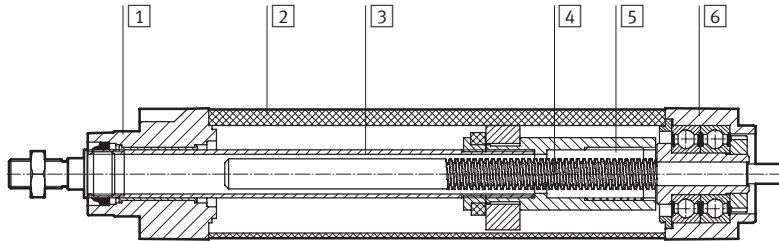
- F_x Feed force
- F_{xm} Mean feed force
- F_{xmax} Max. feed force
- F_{xcont} Continuous feed force
- q Time
- v_x Feed speed
- v_{xm} Mean feed speed
- v_{xmax} Max. feed speed

Electric cylinders DNCE, with spindle drive

Technical data

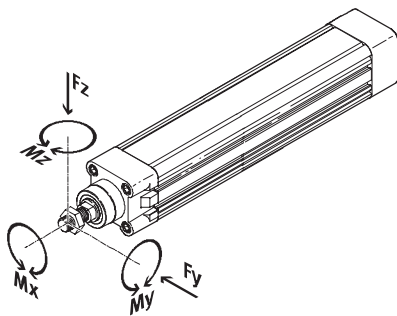
Materials

Sectional view



Electric cylinder	
1	Bearing cap Painted die-cast aluminium
2	Cylinder barrel Smooth anodised wrought aluminium alloy
3	Piston rod High-alloy stainless steel
4	Spindle Steel
5	Spindle nut for LS Polyacetal Spindle nut for BS Steel
6	Drive cover Painted die-cast aluminium

Maximum permissible loads on the piston rod



If there are two or more forces and torques simultaneously acting on the piston rod, the following equations must be satisfied:

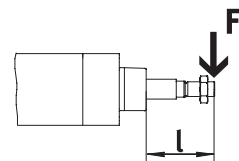
$$\frac{|F_y|}{F_{y_{max}}} + \frac{|F_z|}{F_{z_{max}}} + \frac{|M_y|}{M_{y_{max}}} + \frac{|M_z|}{M_{z_{max}}} \leq 1$$

$$|F_x| \leq F_{x_{max}}$$

$$|M_x| \leq M_{x_{max}}$$

Definition of stroke length l:

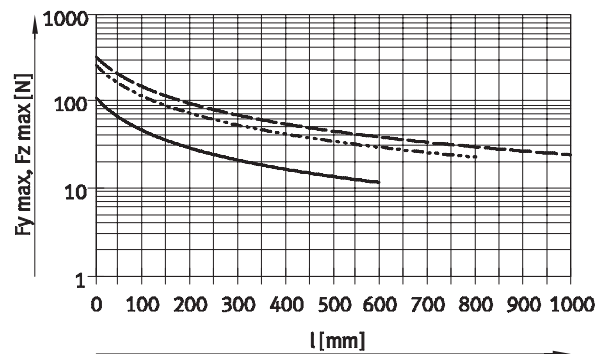
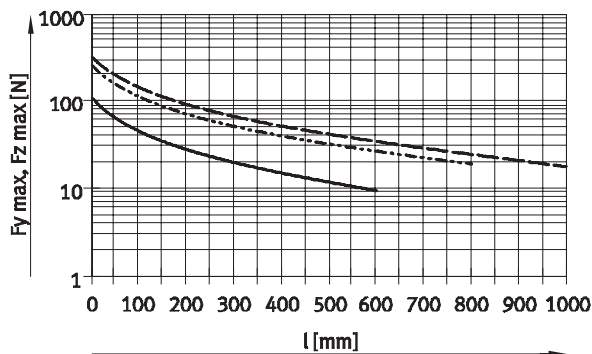
l = Stroke + value of the piston rod extension K8



Maximum permissible lateral forces $F_{y_{max}}$ and $F_{z_{max}}$ on the piston rod as a function of stroke length l

Mounting position, horizontal

Mounting position, vertical



- DNCE-32-LS/BS
- - - DNCE-40-LS/BS
- · - DNCE-63-LS/BS

Note

PositioningDrives
sizing software
→ www.festo.com

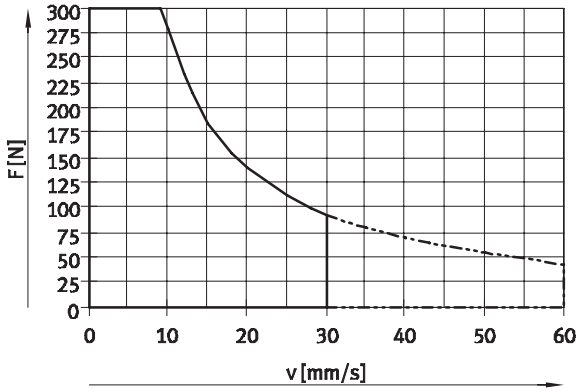
Size	32	40	63
Maximum permissible forces and torques			
$F_{x_{max}}$ (static) [N]	600	1,400	3,700
$M_{x_{max}}$ [Nm]	1	1	1.5
$M_{y_{max}}, M_{z_{max}}$ [Nm]	8	20	27

Electric cylinders DNCE, with spindle drive

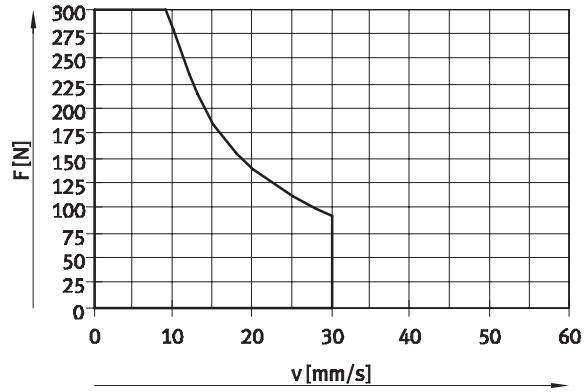
Technical data

Feed force F as a function of speed v

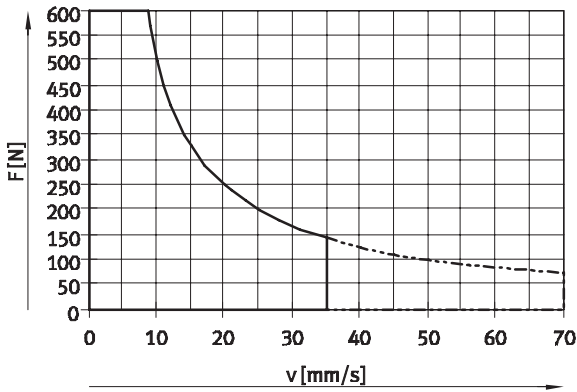
DNCE-32-1...299-LS-...



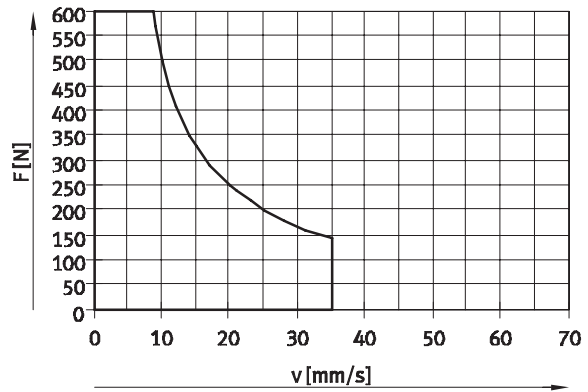
DNCE-32-300...400-LS-...



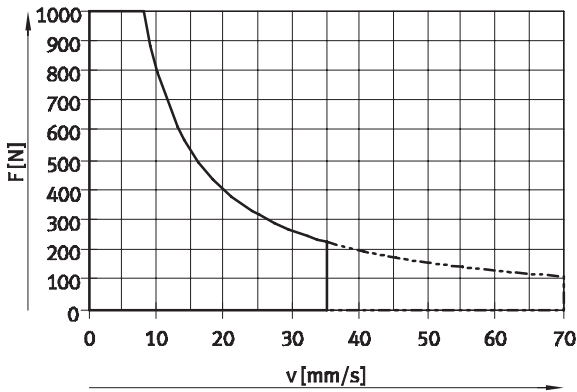
DNCE-40-1...299-LS-...



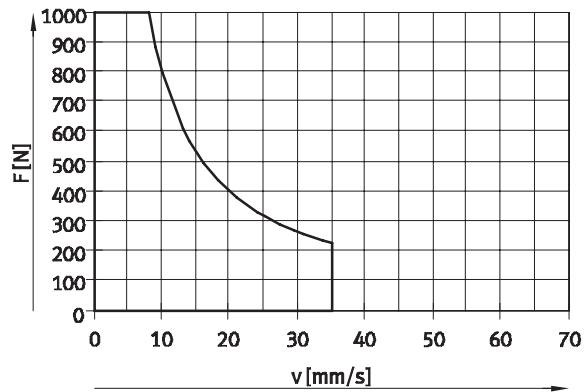
DNCE-40-300...600-LS-...



DNCE-63-1...419-LS-...



DNCE-63-420...800-LS-...



- Recommended operating range
- - - Permissible operating range
(duty cycle < 50% recommended)

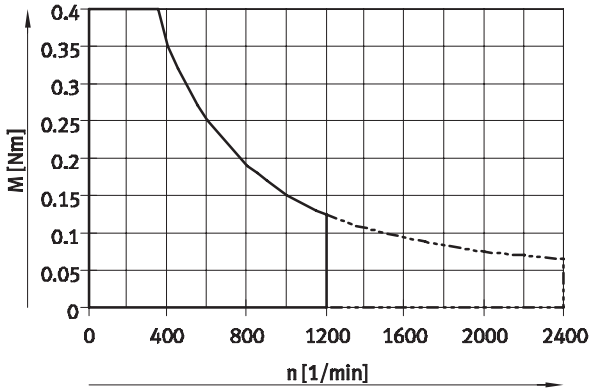
Electric cylinders DNCE, with spindle drive

Technical data

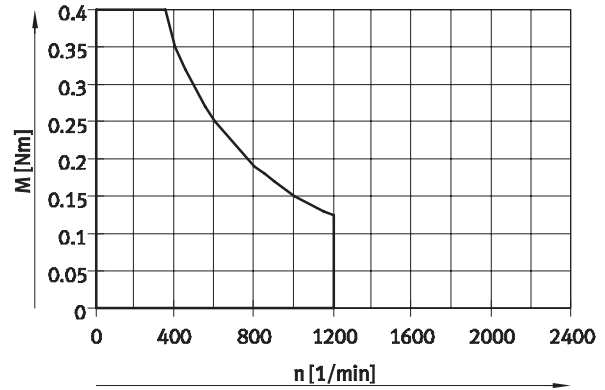
FESTO

Driving torque M as a function of rotational speed n

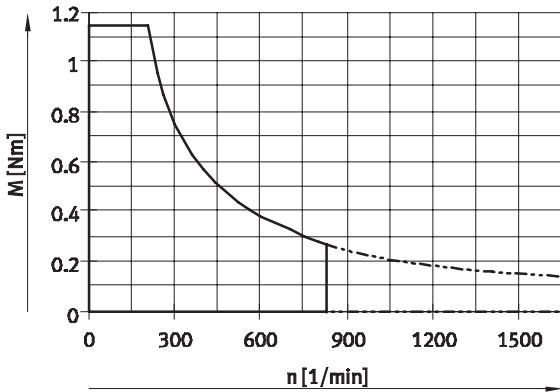
DNCE-32-1...299-LS-...



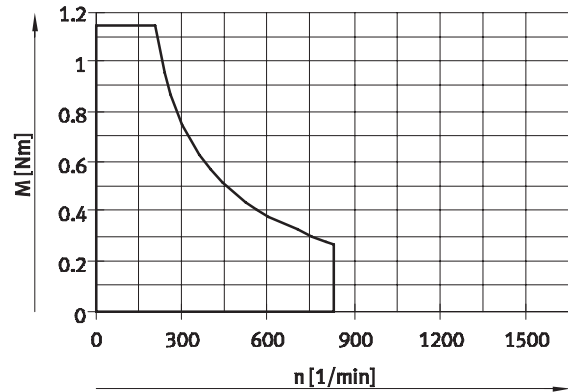
DNCE-32-300...400-LS-...



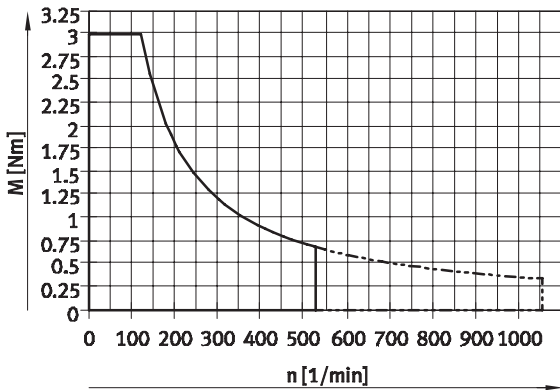
DNCE-40-1...299-LS-...



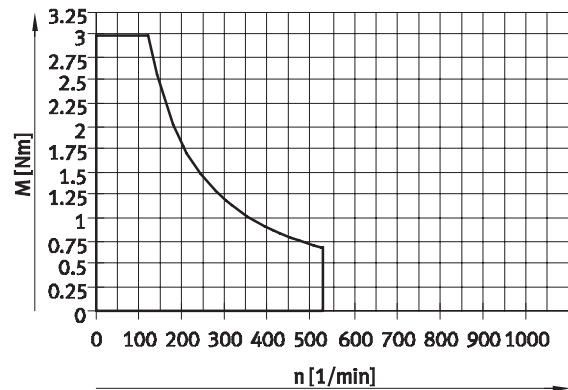
DNCE-40-300...600-LS-...



DNCE-63-1...419-LS-...



DNCE-63-420...800-LS-...



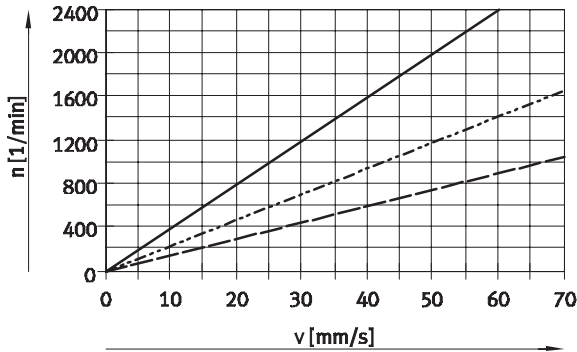
- Recommended operating range
- - - Permissible operating range
(duty cycle < 50% recommended)

Electric cylinders DNCE, with spindle drive

Technical data

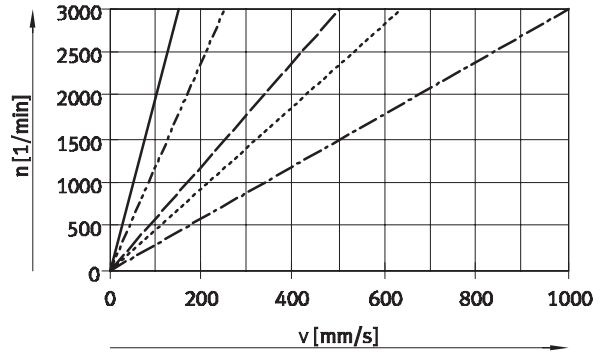
Rotational speed n as a function of speed v

DNCE-...-LS-...



- DNCE-32-LS-1,5°P
- - - DNCE-40-LS-2,5°P
- · - DNCE-63-LS-4°P

DNCE-...-BS-...



- DNCE-32-BS-3°P
- - - DNCE-40-BS-5°P
- · - DNCE-63-BS-10°P
- - - DNCE-32-BS-10°P
- · - DNCE-40-BS-12,7°P
- · - DNCE-63-BS-20°P

Driving torque M as a function of feed force F

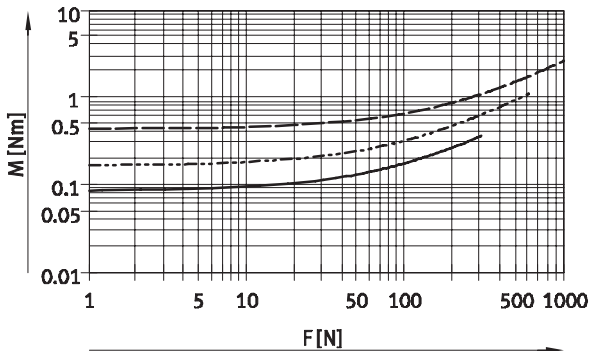
Note

The graphs take into consideration the frictional torques at room temperature.

At lower temperatures, the frictional torques increase with the temperature. DNCE-...-LS (lead screw).

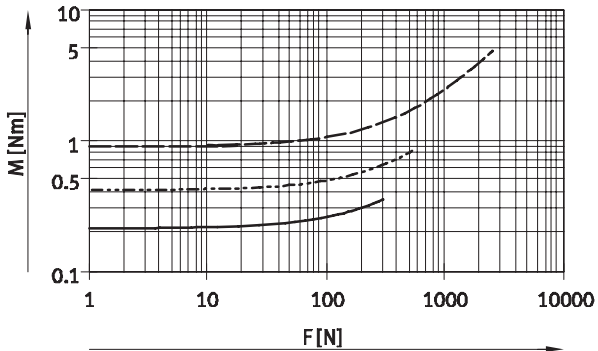
PositioningDrives sizing software
→ www.festo.com

DNCE-...-LS-...

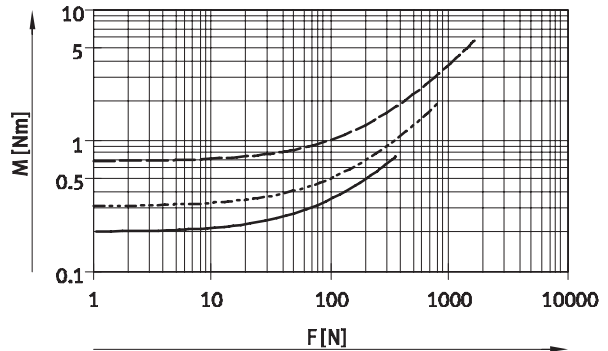


- DNCE-32-LS-1,5°P
- - - DNCE-40-LS-2,5°P
- · - DNCE-63-LS-4°P

DNCE-...-BS-...



- DNCE-32-BS-3°P
- - - DNCE-40-BS-5°P
- · - DNCE-63-BS-10°P

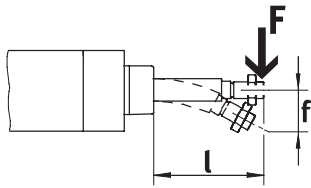


- DNCE-32-BS-10°P
- - - DNCE-40-BS-12,7°P
- · - DNCE-63-BS-20°P

Electric cylinders DNCE, with spindle drive

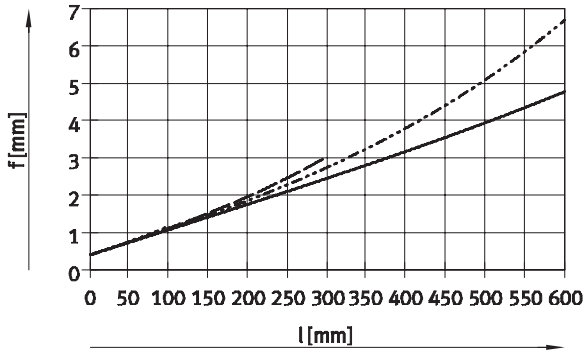
Technical data

Piston rod displacement f as a function of stroke length l



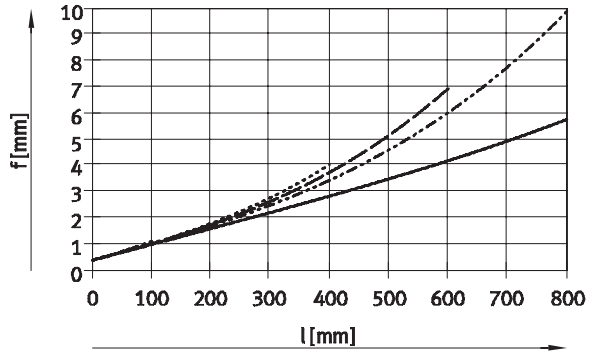
Definition of stroke length l :
 $l = \text{Stroke} + \text{value of the piston rod extension } K8$

DNCE-32-...



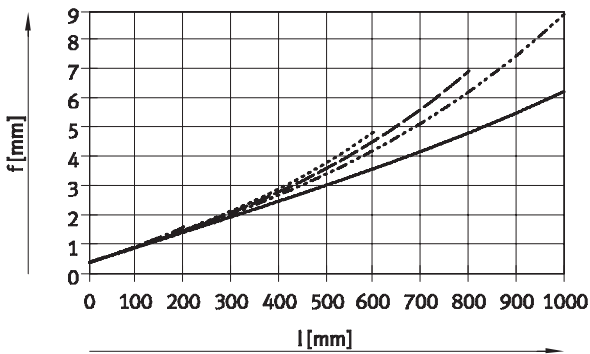
- Lateral force $F = 0 \text{ N}$
- - - - - Lateral force $F = 10 \text{ N}$
- · — · — Lateral force $F = 20 \text{ N}$
- · - · - Lateral force $F = 45 \text{ N}$

DNCE-40-...



- Lateral force $F = 0 \text{ N}$
- - - - - Lateral force $F = 20 \text{ N}$
- · — · — Lateral force $F = 30 \text{ N}$
- · - · - Lateral force $F = 40 \text{ N}$
- · - · - Lateral force $F = 115 \text{ N}$

DNCE-63-...



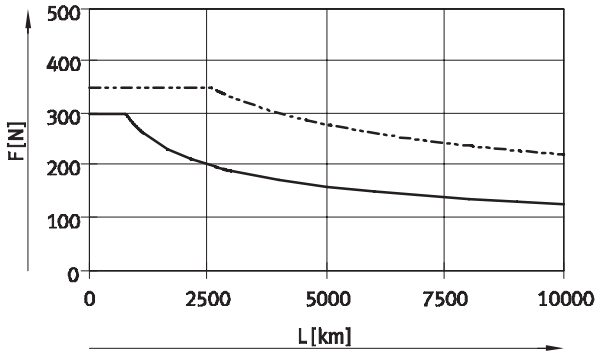
- Lateral force = 0 N
- - - - - Lateral force = 20 N
- · — · — Lateral force = 30 N
- · - · - Lateral force = 40 N
- · - · - Lateral force = 95 N

Electric cylinders DNCE, with spindle drive

Technical data

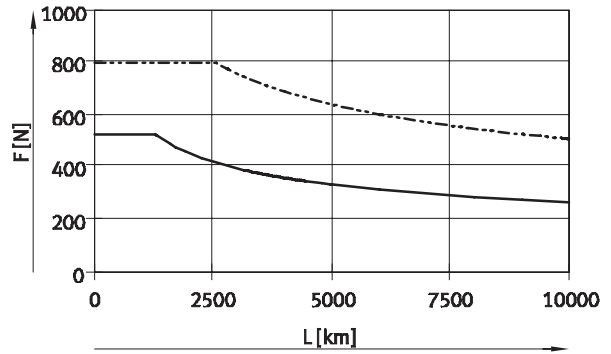
Running performance L as a function of mean feed force F (to DIN 69 051-4)

DNCE-32-...-BS-...



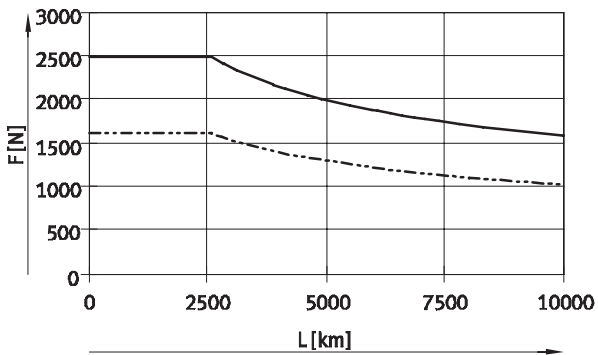
— DNCE-32-BS-3''P
 - - - DNCE-32-BS-10''P

DNCE-40-...-BS-...



— DNCE-40-BS-5''P
 - - - DNCE-40-BS-12,7''P

DNCE-63-...-BS-...



— DNCE-63-BS-10''P
 - - - DNCE-63-BS-20''P

Note

- The specifications for running performance are based on experimentally determined and theoretically calculated data. The running performance that can be achieved in practice can deviate considerably from the specified curves under different parameters.

Electric cylinders DNCE, with spindle drive

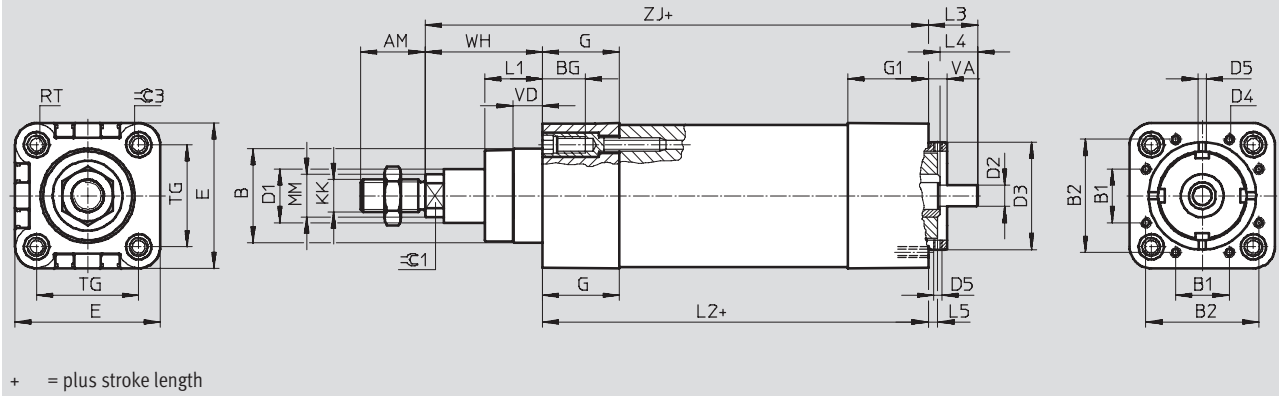
Technical data

FESTO

Dimensions

Download CAD Data → www.festo.com/us/cad

Electric cylinder DNCE



Size	AM	B	B1	B2	BG	D1	D2	D3	D4	D5	E	G	G1	KK
[mm]		\varnothing d11				\varnothing h9	\varnothing h6	\varnothing f7						
32	22	30	19	32	16	16	6	32	M3	M3	45.5	24	26	M10x1.25
40	24	35	20	42	16	20	8	40	M4	M3	54	28.5	30	M12x1.25
63	32	45	31	62	17	28	12	60	M5	M4	75.5	34	36	M16x1.5

Size	L1	L2	L3	L4	L5	MM	RT	TG	VA	VD	WH	ZJ	$\varnothing 1$	$\varnothing 3$
[mm]												± 1		
32	18	122	15.9	8	3.5	12	M6	32.5	7	10	26	148	10	6
40	21.5	146.5	18.4	14	3.5	16	M6	38	7	10.5	30	176.5	13	6
63	28.5	177	23.5	17	4.5	20	M8	56.5	9	15	37	214	17	8

Electric cylinders DNCE, with spindle drive

Technical data

FESTO

Ordering data – DNCE-32				
Stroke [mm]	Part No.	Type	Stroke [mm]	Part No. Type
Ball screw drive with spindle pitch 3 mm			Linear drive with lead screw with spindle pitch 1.5 mm	
100	543 115	DNCE-32-100-BS-”3”P-Q	100	543 111 DNCE-32-100-LS-”1,5”P-Q
200	543 116	DNCE-32-200-BS-”3”P-Q	200	543 112 DNCE-32-200-LS-”1,5”P-Q
300	543 117	DNCE-32-300-BS-”3”P-Q	300	543 113 DNCE-32-300-LS-”1,5”P-Q
400	543 118	DNCE-32-400-BS-”3”P-Q	400	543 114 DNCE-32-400-LS-”1,5”P-Q
Linear drive with ball screw with spindle pitch 10 mm				
100	543 119	DNCE-32-100-BS-”10”P-Q		
200	543 120	DNCE-32-200-BS-”10”P-Q		
300	543 121	DNCE-32-300-BS-”10”P-Q		
400	543 122	DNCE-32-400-BS-”10”P-Q		

Ordering data – DNCE-40				
Stroke [mm]	Part No.	Type	Stroke [mm]	Part No. Type
Linear drive with ball screw with spindle pitch 5 mm			Linear drive with lead screw with spindle pitch 2.5 mm	
100	543 127	DNCE-40-100-BS-”5”P-Q	100	543 123 DNCE-40-100-LS-”2,5”P-Q
200	543 128	DNCE-40-200-BS-”5”P-Q	200	543 124 DNCE-40-200-LS-”2,5”P-Q
300	555 466	DNCE-40-300-BS-”5”P-Q	300	555 465 DNCE-40-300-LS-”2,5”P-Q
400	543 129	DNCE-40-400-BS-”5”P-Q	400	543 125 DNCE-40-400-LS-”2,5”P-Q
600	543 130	DNCE-40-600-BS-”5”P-Q	600	543 126 DNCE-40-600-LS-”2,5”P-Q
Linear drive with ball screw with spindle pitch 12.7 mm				
100	543 131	DNCE-40-100-BS-”12,7”P-Q		
200	543 132	DNCE-40-200-BS-”12,7”P-Q		
300	555 467	DNCE-40-300-BS-”12,7”P-Q		
400	543 133	DNCE-40-400-BS-”12,7”P-Q		
600	543 134	DNCE-40-600-BS-”12,7”P-Q		

Ordering data – DNCE-63				
Stroke [mm]	Part No.	Type	Stroke [mm]	Part No. Type
Linear drive with ball screw with spindle pitch 10 mm			Linear drive with lead screw with spindle pitch 4 mm	
100	555 470	DNCE-63-100-BS-”10”P-Q	100	555 468 DNCE-63-100-LS-”4”P-Q
200	543 139	DNCE-63-200-BS-”10”P-Q	200	543 135 DNCE-63-200-LS-”4”P-Q
300	555 471	DNCE-63-300-BS-”10”P-Q	300	555 469 DNCE-63-300-LS-”4”P-Q
400	543 140	DNCE-63-400-BS-”10”P-Q	400	543 136 DNCE-63-400-LS-”4”P-Q
600	543 141	DNCE-63-600-BS-”10”P-Q	600	543 137 DNCE-63-600-LS-”4”P-Q
800	543 142	DNCE-63-800-BS-”10”P-Q	800	543 138 DNCE-63-800-LS-”4”P-Q
Linear drive with ball screw with spindle pitch 20 mm				
100	555 472	DNCE-63-100-BS-”20”P-Q		
200	543 143	DNCE-63-200-BS-”20”P-Q		
300	555 473	DNCE-63-300-BS-”20”P-Q		
400	543 144	DNCE-63-400-BS-”20”P-Q		
600	543 145	DNCE-63-600-BS-”20”P-Q		
800	543 146	DNCE-63-800-BS-”20”P-Q		

Note

Variable strokes can be ordered via the modular product system → 16

Electric cylinders DNCE, with spindle drive

Ordering data – Modular products

Ordering table						
Size	32	40	63	Conditions	Code	Enter code
M Module No.	555488	555489	555490			
Function	Electric cylinder				DNCE	DNCE
Size	32	40	63		-...	
Stroke [mm]	100				-...	
	200					
	300					
	400					
	-	600				
	-	-	800			
	1 ... 400	1 ... 600	1 ... 800	[1]		
Drive type	Lead screw spindle				-LS	
	Ball screw spindle				-BS	
Spindle pitch [mm]	1.5	-	-	[2]	-... "P"	
	-	2.5	-	[2]		
	3	-	-	[3]		
	-	-	4	[2]		
	-	5	-	[3]		
	10	-	10	[3]		
	-	12.7	-	[3]		
	-	-	20	[3]		
	-	-	-	[3]		
Protection against rotation	Non-rotating piston rod				-Q	-Q
O Extended piston rod	1 ... 200			[3]	-...K8	

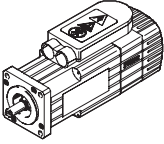
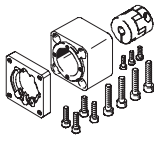


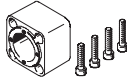
- [1] ... Additional stroke lengths on request
- [2] "1,5"P, "2,5"P, "4"P
Only with drive type LS
- [3] "3"P, "5"P, "10"P, "12,7"P, "20"P, ...K8
Only with drive type BS

Transfer order code

Electric cylinders DNCE, with spindle drive

Accessories

FESTO

Permissible axis/motor combinations with axial kit				
Motor/motor unit	Axial kit	Axial kit consisting of:		
		Motor flange	Coupling	Coupling housing
				
Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
DNCE-32				
With servo motor				
EMMS-AS-40-...	543147 EAMM-A-D32-40A	552163 EAMF-A-28B-40A	543420 EAMC-16-20-6-6	552155 EAMK-A-D32-28B
EMMS-AS-55-...	550979 EAMM-A-D32-55A	529942 EAMF-A-44A/B-55A	551003 EAMC-30-32-6-9	551006 EAMK-A-D32-44A
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
With motor unit				
MTR-DCI-32S-... ¹⁾	543149 EAMM-A-D32-32B	–	543420 EAMC-16-20-6-6	552156 EAMK-A-D32-32B
DNCE-40				
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
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
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
EMMS-ST-87-...	550982 EAMM-A-D40-87A	530082 EAMF-A-44A/B-87A	551004 EAMC-30-32-8-11	552157 EAMK-A-D40-44A
With motor unit				
MTR-DCI-42S-...-G7 ¹⁾	543155 EAMM-A-D40-42B	–	543422 EAMC-30-32-8-8	522158 EAMK-A-D40-42B
MTR-DCI-42S-...-G14 ¹⁾	543156 EAMM-A-D40-42C	–	543422 EAMC-30-32-8-8	522159 EAMK-A-D40-42C

Note

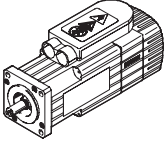
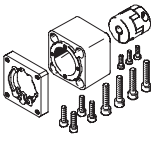


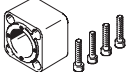
1) The motor unit MTR-DCI must only be used in combination with the electric cylinder DNCE-...-LS (lead screw).
The maximum feed force of the cylinder may not be reached depending on the combination of motor/motor unit and electric cylinder.

The following tool is available for sizing:
PositioningDrives sizing software
→ www.festo.com

Electric cylinders DNCE, with spindle drive

Accessories

FESTO

Permissible axis/motor combinations with axial kit				
Motor/motor unit	Axial kit	Axial kit consisting of:		
		Motor flange	Coupling	Coupling housing
				
Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
DNCE-63				
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
EMMS-AS-100-...	550983 EAMM-A-D60-100A	529947 EAMF-A-64A/C-100A	551005 EAMC-42-50-12-19	551007 EAMK-A-D60-64C
With stepper motor				
EMMS-ST-87-...	543162 EAMM-A-D60-87A	530082 EAMF-A-44A/B-87A	543424 EAMC-42-50-11-12	552160 EAMK-A-D60-64B
With motor unit				
MTR-DCI-52S-...-G7 ¹⁾	543163 EAMM-A-D60-52B	–	533709 EAMC-42-50-12-12	552161 EAMK-A-D60-52B
MTR-DCI-52S-...-G14 ¹⁾	543164 EAMM-A-D60-52C	–	533709 EAMC-42-50-12-12	552162 EAMK-A-D60-52C

Note

1) The motor unit MTR-DCI must only be used in combination with the electric cylinder DNCE-...-LS (lead screw).

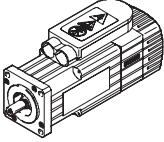
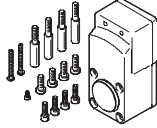
The maximum feed force of the cylinder may not be reached depending on the combination of motor/motor unit and electric cylinder.

The following tool is available for sizing:
PositioningDrives
sizing software
→ www.festo.com

Electric cylinders DNCE, with spindle drive

Accessories

FESTO

Permissible axis/motor combinations with parallel kit		
Motor/motor unit	Parallel kit	
		
Type	Part No.	Type
DNCE-32		
With servo motor		
EMMS-AS-40-...	543150	EAMM-U-D32-40A
With motor unit		
MTR-DCI-32S-...¹⁾	543152	EAMM-U-D32-32B
DNCE-40		
With servo motor		
EMMS-AS-55-...	543157	EAMM-U-D40-55A
With motor unit		
MTR-DCI-42S-...-G7¹⁾	543159	EAMM-U-D40-42B
MTR-DCI-42S-...-G14¹⁾	543160	EAMM-U-D40-42C
DNCE-63		
With servo motor		
EMMS-AS-70-...	543165	EAMM-U-D60-70A
With motor unit		
MTR-DCI-52S-...-G7¹⁾	543167	EAMM-U-D60-52B
MTR-DCI-52S-...-G14¹⁾	543168	EAMM-U-D60-52C

Note

1) The motor unit MTR-DCI must only be used in combination with the electric cylinder DNCE-...-LS (lead screw).

The maximum feed force of the cylinder may not be reached depending on the combination of motor/motor unit and electric cylinder.

When using parallel kits, the respective no-load driving torque of the kit must be taken into consideration.

The following tool is available for sizing:
PositioningDrives
sizing software
→ www.festo.com

Electric cylinders DNCE, with spindle drive

Accessories

FESTO

Axial kit EAMM-A-...

Materials:

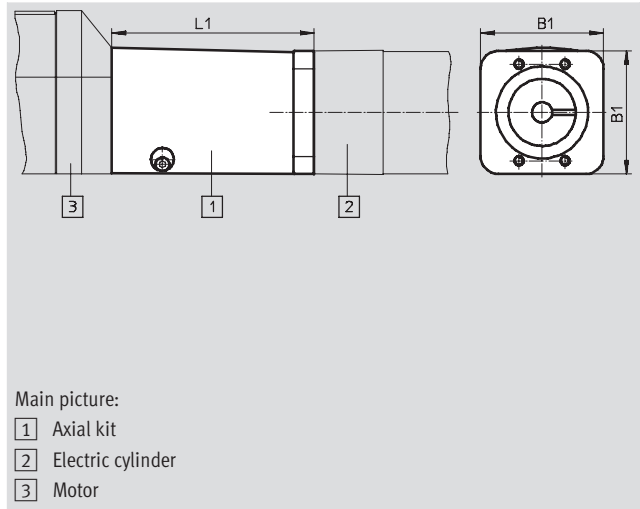
Coupling housing, coupling hubs,

motor flange: Aluminium

Screws: Galvanised steel

Clamping component:

Corrosion-resistant steel



Main picture:

- 1 Axial kit
- 2 Electric cylinder
- 3 Motor

General technical data												
EAMM-A-...		D32-					D40-					
		32B	40A	42A	55A	57A	42B	42C	55A	57A	70A	87A
Transferable torque	[Nm]	1.1	1.1	0.8	4	4	8	8	8	6	8	8
Mass moment of inertia	[kg mm ²]	0.3	0.3	0.3	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87
Max. rotational speed	[rpm]	10,000			8,000		8,000					
Mounting position		Any										

EAMM-A-...		D60-						
		52B		52C		70A	87A	100A
Transferable torque	[Nm]	14		14		12	12	14
Mass moment of inertia	[kg mm ²]	35.5		35.5		35.5	35.5	35.5
Max. rotational speed	[rpm]	6,000						
Mounting position		Any						

Operating and environmental conditions		
Ambient temperature	[°C]	0 ... 50
Storage temperature	[°C]	-25 ... +60
Protection class ¹⁾		IP40
Relative air humidity	[%]	0 ... 95

1) Only in combination with attached motor and axis

Electric cylinders DNCE, with spindle drive

Accessories

Dimensions and ordering data					
Type	B1	L1	Weight [g]	Part No.	Type
EAMM-A-D32-32B	45	43	150	543149	EAMM-A-D32-32B
EAMM-A-D32-40A		39.8	130	543147	EAMM-A-D32-40A
EAMM-A-D32-42A		48	140	543148	EAMM-A-D32-42A
EAMM-A-D32-55A	55	49.2	260	550979	EAMM-A-D32-55A
EAMM-A-D32-57A	56.4	50.5	270	550980	EAMM-A-D32-57A
EAMM-A-D40-42B	53.5	88	340	543155	EAMM-A-D40-42B
EAMM-A-D40-42C		101	370	543156	EAMM-A-D40-42C
EAMM-A-D40-55A		49.2	350	543153	EAMM-A-D40-55A
EAMM-A-D40-57A		50.5	350	543154	EAMM-A-D40-57A
EAMM-A-D40-70A	70	52	410	550981	EAMM-A-D40-70A
EAMM-A-D40-87A	85.8	54	530	550982	EAMM-A-D40-87A
EAMM-A-D60-52B	74	112	930	543163	EAMM-A-D60-52B
EAMM-A-D60-52C		126	1,020	543164	EAMM-A-D60-52C
EAMM-A-D60-70A		63.2	750	543161	EAMM-A-D60-70A
EAMM-A-D60-87A		64.7	890	543162	EAMM-A-D60-87A
EAMM-A-D60-100A	100	78.2	1,170	550983	EAMM-A-D60-100A

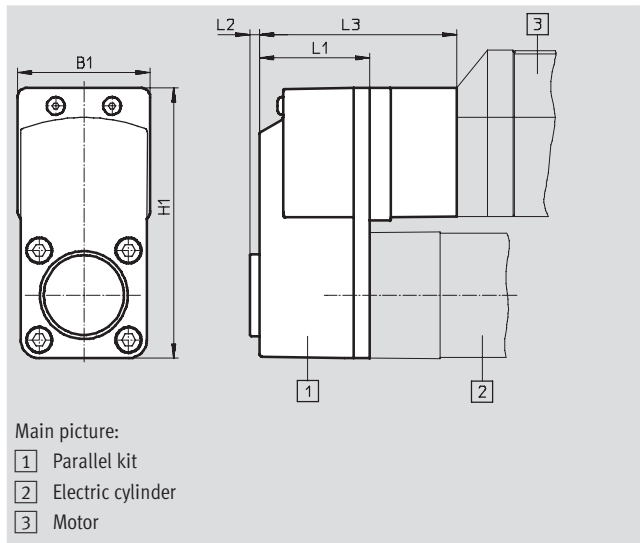
Electric cylinders DNCE, with spindle drive

Accessories

Parallel kit EAMM-U-...

Materials:

- Housing: Die-cast aluminium
- Clamping component, clamping sleeve, toothed belt pulley:
- Corrosion-resistant steel
- Toothed belt: Polychloroprene
- Screws: Galvanised steel



General technical data									
EAMM-U-...		D32-		D40-			D60-		
		32B	40A	42B	42C	55A	52B	52C	70A
Transferable torque	[Nm]	1	1	3	3	3	5.5	5.5	5.5
No-load driving torque	[Nm]	0.05	0.05	0.1	0.1	0.1	0.3	0.3	0.3
Mass moment of inertia	[kgmm ²]	2.931	2.931	10.016	10.016	10.016	70.5	70.5	70.5
Max. rotational speed	[rpm]	3,000							
Mounting position		Any							

Operating and environmental conditions		
Ambient temperature	[°C]	0 ... 50
Storage temperature	[°C]	-25 ... +60
Protection class ¹⁾		IP40
Relative air humidity	[%]	0 ... 95

1) Only in combination with attached motor and axis

Dimensions and ordering data								
Type	B1	H1	L1	L2	L3	Weight [g]	Part No.	Type
EAMM-U-D32-32B	45.1	93.1	40	4	-	300	543152	EAMM-U-D32-32B
EAMM-U-D32-40A						300	543150	EAMM-U-D32-40A
EAMM-U-D40-42B	56.5	115	47	4	84	660	543159	EAMM-U-D40-42B
EAMM-U-D40-42C						690	543160	EAMM-U-D40-42C
EAMM-U-D40-55A						530	543157	EAMM-U-D40-55A
EAMM-U-D60-52B	86	162.6	58	4	106	1,530	543167	EAMM-U-D60-52B
EAMM-U-D60-52C						1,630	543168	EAMM-U-D60-52C
EAMM-U-D60-70A						1,170	543165	EAMM-U-D60-70A

Electric cylinders DNCE, with spindle drive

Accessories

FESTO

Bellows kit EADB



General technical data				
Type EADB-V1-		32	40	63
Max. stroke range of cylinder ¹⁾	[mm]	10 ... 400	10 ... 500	10 ... 500
Type of mounting		Via threaded pin		
Mounting position		Any		
Resistance to media		Dust, chippings, oil, grease, fuel (→ Internet: Resistance to media)		
Ambient temperature ²⁾	[°C]	-10 ... +80		
Protection class to IEC 60529		IP65		
Corrosion resistance class CRC ³⁾		3		

1) In combination with the bellows kit EADB

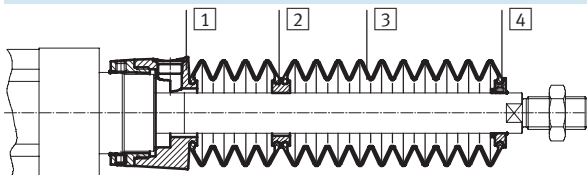
2) Note operating range of proximity sensors and cylinder

3) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

Materials

Sectional view



Bellows		
1	Connection	Anodised wrought aluminium alloy
2	Adapter	Polyamide
3	Bellows	Nitrile rubber
4	End piece	Anodised wrought aluminium alloy
-	O-ring	Nitrile rubber
Note on materials		Free of copper and PTFE RoHS-compliant

Weight [g]				
Type EADB-V1-		32	40	63
Stroke [mm]				
Product weight				
10 ... 100		77	116	196
101 ... 200		108	153	263
201 ... 300		122	172	309
301 ... 400		153	209	376
401 ... 500		-	227	397
Moving load				
10 ... 100		35	43	86
101 ... 200		66	80	153
201 ... 300		80	99	199
301 ... 400		111	136	266
401 ... 500		-	154	287

Electric cylinders DNCE, with spindle drive

Accessories

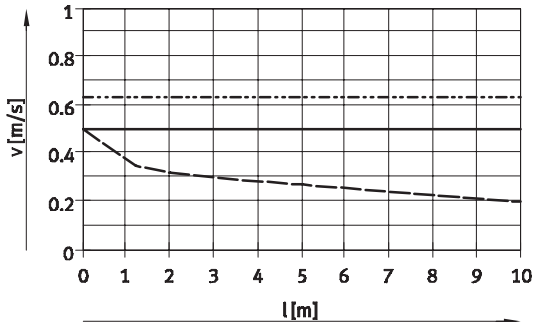
Speed of travel v as a function of tubing length l



The bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air is ducted via a venting

hole in the connection part **1**. The pressure generated in the bellows kit by the travel motion is primarily defined by the speed of travel and

tubing length. The recommended tubing length based on the travel speed of the drive can be read from the graph.



— EADB-V1-32/tubing Ø 8 mm
 - - - EADB-V1-40/tubing Ø 16 mm
 - · - EADB-V1-63/tubing Ø 16 mm

Note

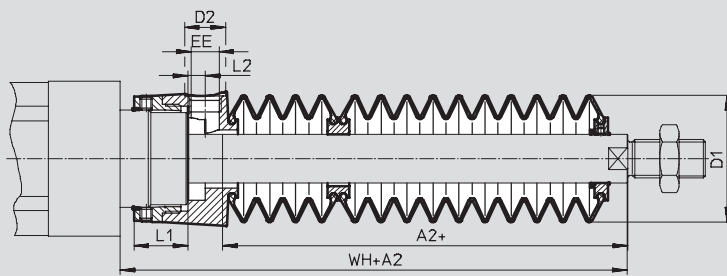
The push-in fittings opposite must be used for the venting hole. alternative. This reduces the travel speed slightly. Silencers can be used as an

Tubing length and push-in fitting for venting hole

Ø [mm]	Tubing O.D. [mm]	Push-in fitting	
		Part No.	Type
32	8	186109	QS-G $\frac{1}{8}$ -8-I
		533929	QS-F-G $\frac{1}{8}$ -8-I
40, 63	16	186350	QS-G $\frac{1}{4}$ -12
		533848	QS-F-G $\frac{1}{4}$ -12
		153261	QSH-12-16

Dimensions

Download CAD Data → www.festo.com/us/cad



+ = plus stroke length

Ø Stroke [mm]	32							40						
	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2
10 ... 100	44	46	14	G $\frac{1}{8}$	12.9	5.4	70	48	57	17	G $\frac{1}{4}$	16.3	7	78
101 ... 200	74						100	77						107
201 ... 300	88						114	88						118
301 ... 400	117						143	117						147
401 ... 500	-	-	-	-	-	-	-	135	-	-	-	-	-	165

Ø Stroke [mm]	63						
	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2
10 ... 100	43	93	17	G $\frac{1}{4}$	22.4	7	80
101 ... 200	68						105
201 ... 300	80						117
301 ... 400	104						141
401 ... 500	117						154

1) The dimension corresponds to the K8 value (extended piston rod) of the cylinder

Electric cylinders DNCE, with spindle drive

Accessories

FESTO

Ordering data – Bellows kit

An extended piston rod (order code K8) → 16 is absolutely necessary for using a bellows kit.

The necessary dimension for K8 as a function of cylinder size and stroke as well as the corresponding bellows kit is indicated in the table below:

Order example:

Selected electric cylinder:

DNCE-32-250-BS-”3”P-Q-...K8

The dimension for the corresponding K8 value (see table):
88 mm

Complete type designation for electric cylinder:

DNCE-32-250-BS-”3”P-Q-88K8

The corresponding bellows kit:

EADB-V1-32-S201-300

Cylinder data			Bellows kit		Cylinder data			Bellows kit	
∅	Stroke	Dimension for K8	Part No.	Type	∅	Stroke	Dimension for K8	Part No.	Type
[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
32	10 ... 100	44	570262	EADB-V1-32-S10-100	40	10 ... 100	48	570266	EADB-V1-40-S10-100
	101 ... 200	74	570263	EADB-V1-32-S101-200		101 ... 200	77	570267	EADB-V1-40-S101-200
	201 ... 300	88	570264	EADB-V1-32-S201-300		201 ... 300	88	570268	EADB-V1-40-S201-300
	301 ... 400	117	570265	EADB-V1-32-S301-400		301 ... 400	117	570269	EADB-V1-40-S301-400
	–					401 ... 500	135	570270	EADB-V1-40-S401-500
63	10 ... 100	43	570271	EADB-V1-63-S10-100					
	101 ... 200	68	570272	EADB-V1-63-S101-200					
	201 ... 300	80	570273	EADB-V1-63-S201-300					
	301 ... 400	104	570274	EADB-V1-63-S301-400					
	401 ... 500	117	570275	EADB-V1-63-S401-500					

Electric cylinders DNCE, with spindle drive

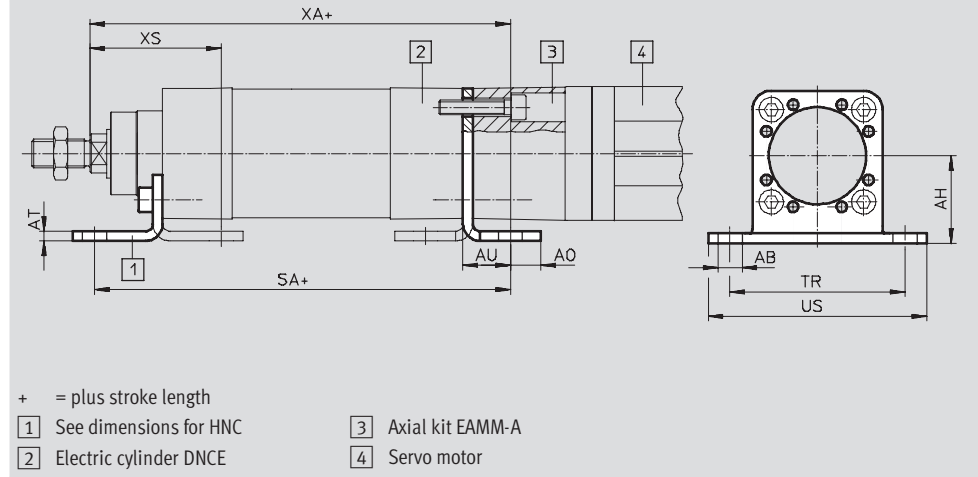
Accessories



Foot mounting HNCE, for axial motor mounting

Material:
Galvanised steel

Free of copper, PTFE and silicone



Dimensions and ordering data										
For size	AB	AH	AO	AT	AU	SA	TR	US	XA	XS
[mm]	∅									
32	7	32	10.5	4	17.5	163.5	58	71	165.5	46
40	10	36	12.5	4	19.5	194.5	72	90	196	54
63	10	50	15	5	23	232	92	110	237	64

For size	CRC ¹⁾	Weight	Part No.	Type
[mm]		[g]		
32	1	160	547949	HNCE-32-AX
40	1	220	547950	HNCE-40-AX
63	1	470	547951	HNCE-63-AX

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Electric cylinders DNCE, with spindle drive

Accessories

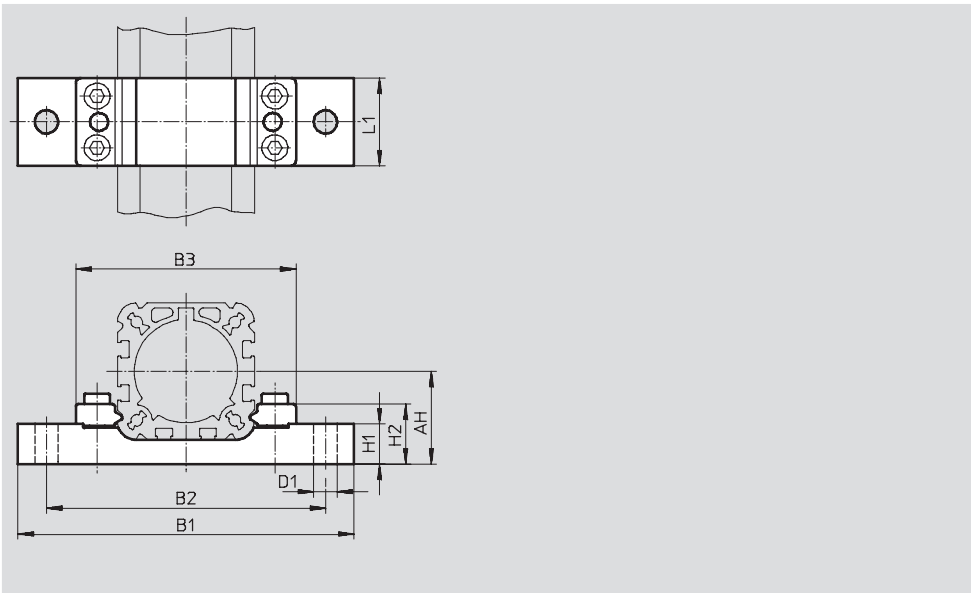
Profile mounting EAHF

Materials:

RoHS-compliant

Yoke plate: Anodised aluminium

Clamping pieces: Galvanised steel



Dimensions and ordering data								
For size	AH	B1	B2	B3	D1	H1	H2	L1
[mm]					Ø			
32	32	100	84	66.1	6.6	17.5	26.1	32
40	36	130	108	85.2	9	15.7	23.3	34
63	50	150	128	104.8	9	22.9	30.4	41

For size	CRC ¹⁾	Weight	Part No.	Type
[mm]		[g]		
32	1	175	1098473	EAHF-V1-32-P
40	1	230	1098478	EAHF-V1-40-P
63	1	400	1098481	EAHF-V1-63-P

1) Corrosion resistance class 1 according to Festo standard 940 070
 Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Electric cylinders DNCE, with spindle drive

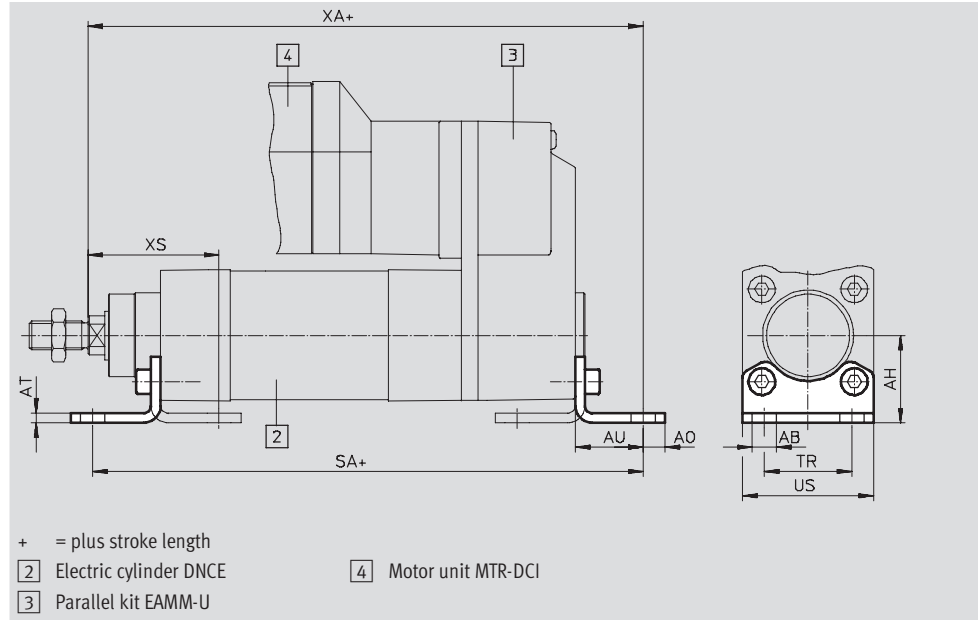
Accessories



Foot mounting HNC/CRHNC, for parallel motor mounting

Material:
HNC: Galvanised steel

CRHNC: High-alloy steel
Free of copper, PTFE and silicone



Dimensions and ordering data

For size	AB	AH	AO	AT	AU	SA	TR	US	XA	XS
[mm]	∅									
32	7	32	6.5	4	24	210	32	45	212	46
40	10	36	9	4	28	249.5	36	54	251.5	54
63	10	50	12.5	5	32	299	50	75	304	64

For size	Basic version				High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]								
32	2	135	174369	HNC-32	4	135	176937	CRHNC-32
40	2	180	174370	HNC-40	4	180	176938	CRHNC-40
63	2	405	174372	HNC-63	4	405	176940	CRHNC-63

1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Corrosion resistance class 4 according to Festo standard 940 070

Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Electric cylinders DNCE, with spindle drive

Accessories

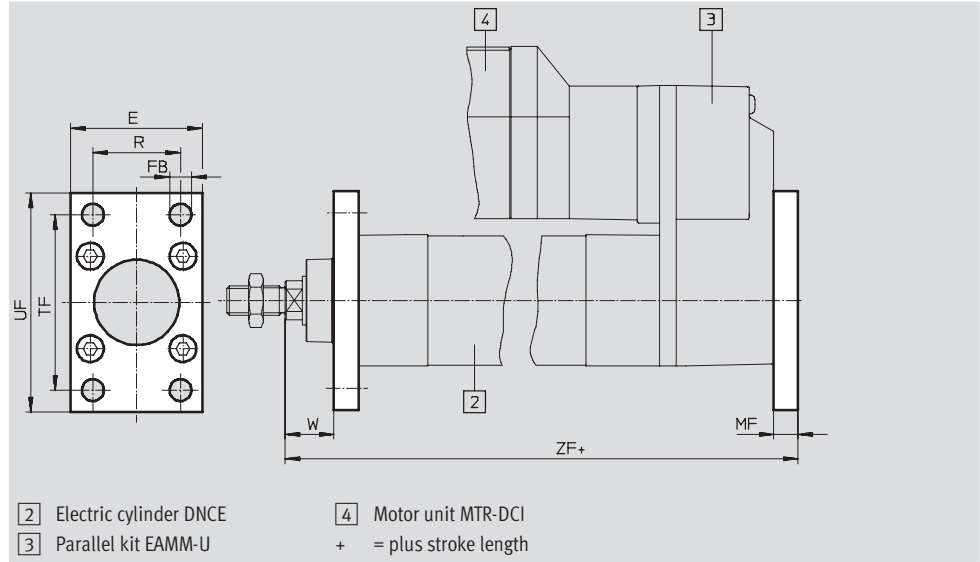
Flange mounting FNC/CRFNG

Material:

FNC: Galvanised steel

CRFNG: High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data								
For size	E	FB	MF	R	TF	UF	W	ZF
[mm]		∅ H13						
32	45	7	10	32	64	80	16	198
40	54	9	10	36	72	90	20	233.5
63	75	9	12	50	100	120	25	284

For size [mm]	Basic version				High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
32	2	240	174376	FNC-32	4	240	161846	CRFNG-32
40	2	280	174377	FNC-40	4	300	161847	CRFNG-40
63	2	690	174379	FNC-63	4	710	161849	CRFNG-63

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Electric cylinders DNCE, with spindle drive

Accessories



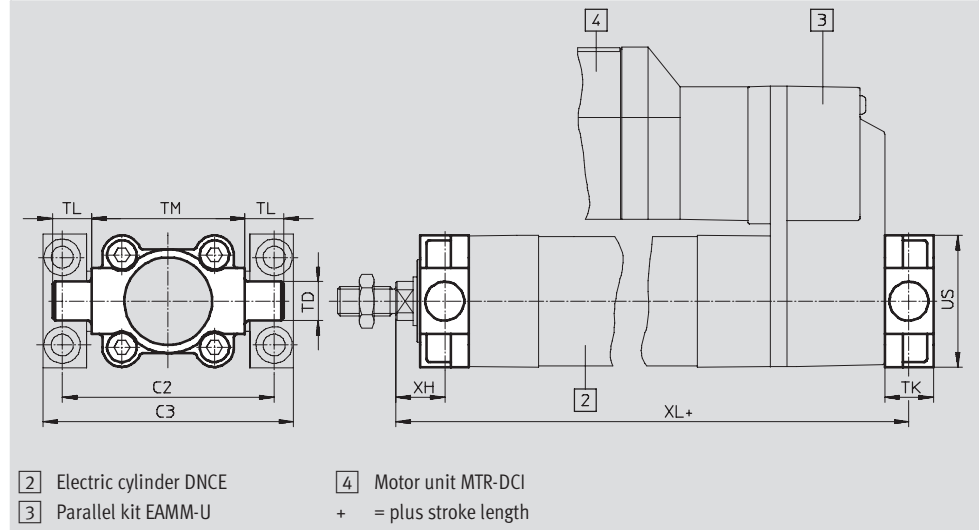
Trunnion flange ZNCF/CRZNG

Material:

ZNCF: Stainless steel casting

CRZNG: Electropolished stainless steel casting

Free of copper, PTFE and silicone



Dimensions and ordering data									
For size	C2	C3	TD	TK	TL	TM	US	XH	XL
[mm]			∅ e9						
32	71	86	12	16	12	50	45	18	196
40	87	105	16	20	16	63	54	20	233.5
63	116	136	20	24	20	90	75	25	284

For size [mm]	Basic version				High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
32	2	130	174411	ZNCF-32	4	150	161852	CRZNG-32
40	2	240	174412	ZNCF-40	4	260	161853	CRZNG-40
63	2	600	174414	ZNCF-63	4	640	161855	CRZNG-63

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Electric cylinders DNCE, with spindle drive

Accessories

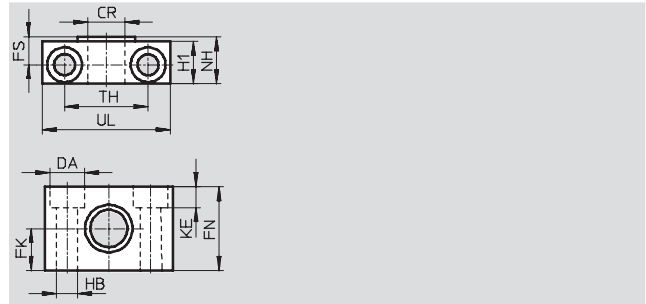
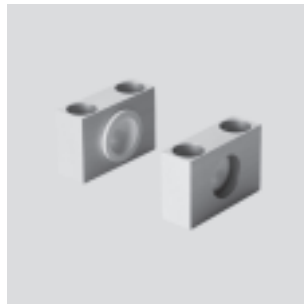
Trunnion support LNZG

Materials:

Trunnion support: Anodised aluminium

Plain bearing: Plastic

Free of copper, PTFE and silicone



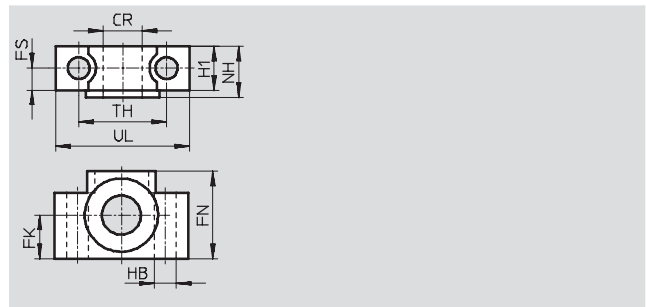
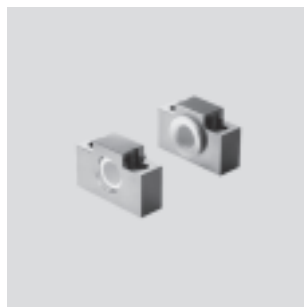
Dimensions and ordering data															
For size	CR	DA	FK	FN	FS	H1	HB	KE	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[mm]	∅ D11	∅ H13	∅ ±0.1				∅ H13			±0.2			[g]		
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2	125	32959	LNZG-32
40	16	15	18	36	12	18	9	9	21	36	55	2	400	32960	LNZG-40/50
63	20	18	20	40	13	20	11	11	23	42	65	2	480	32961	LNZG-63/80

Trunnion support CRLNZG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data													
For size	CR	FK	FN	FS	H1	HB	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[mm]	∅ D11	∅ ±0.1				∅ H13		±0.2			[g]		
32	12	15	30	10.5	15	6.6	18	32	46	4	200	161874	CRLNZG-32
40	16	18	36	12	18	9	21	36	55	4	330	161875	CRLNZG-40/50
63	20	20	40	13	20	11	23	42	65	4	440	161876	CRLNZG-63/80

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Electric cylinders DNCE, with spindle drive

Accessories

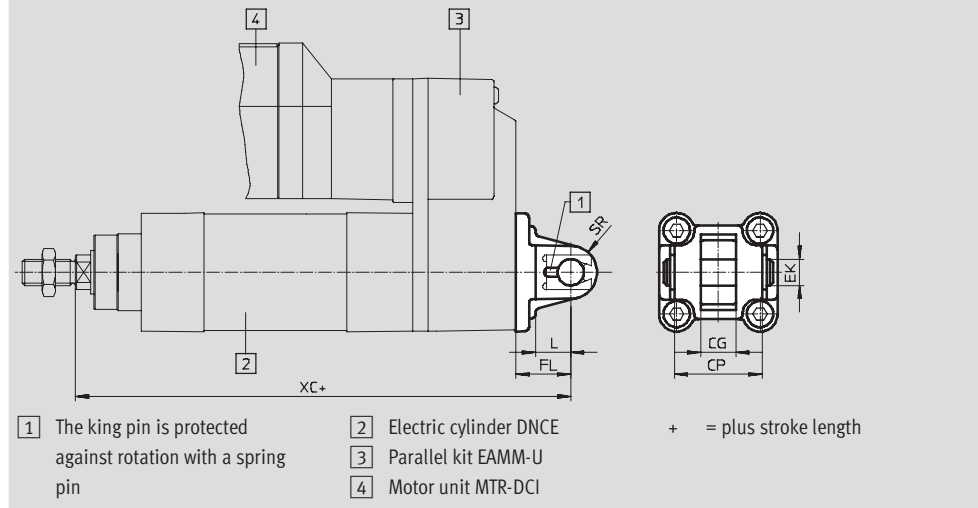


Swivel flange SNC

Material:

Die-cast aluminium

Free of copper, PTFE and silicone



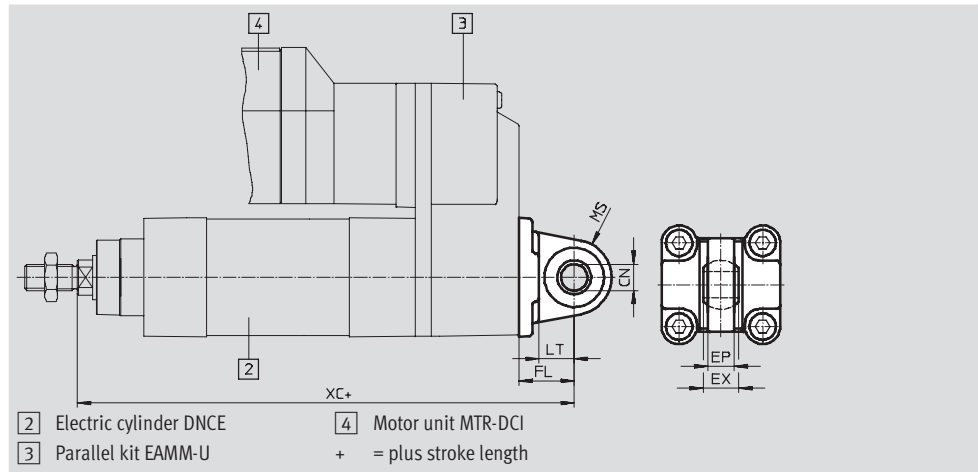
Dimensions and ordering data											
For size	CG	CP	EK ∅	FL	L	SR	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	H14	h14		±0.2					[g]		
32	14	34	10	22	13	10	210	2	90	174383	SNC-32
40	16	40	12	25	16	12	248.5	2	120	174384	SNC-40
63	21	51	16	32	21	16	304	2	320	174386	SNC-63

Swivel flange SNCS

Material:

Die-cast aluminium

Free of copper, PTFE and silicone



Dimensions and ordering data											
For size	CN ∅	EP	EX	FL	LT	MS	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	H7	+0.2		±0.2					[g]		
32	10	10.5	14	22	13	15	210	2	85	174397	SNCS-32
40	12	12	16	25	16	17	248.5	2	125	174398	SNCS-40
63	16	15	21	32	21	22	304	2	280	174400	SNCS-63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

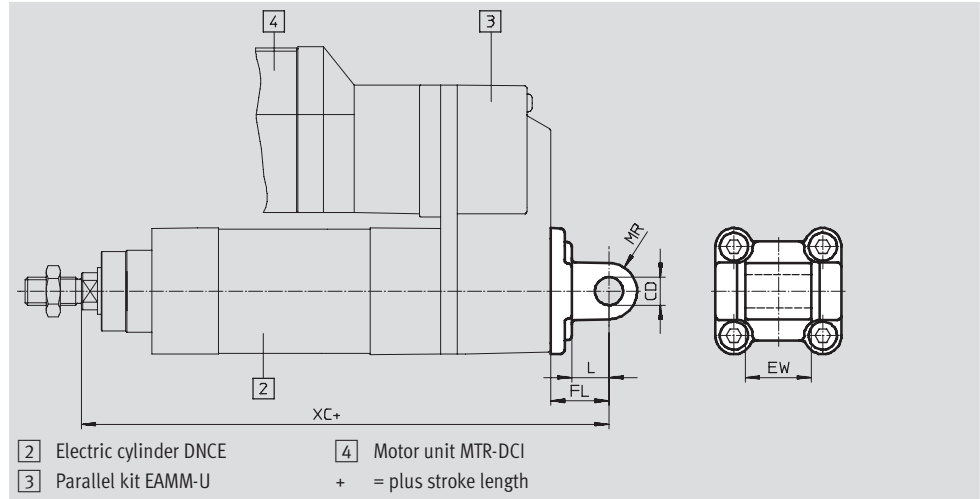
Electric cylinders DNCE, with spindle drive

Accessories



Swivel flange SNCL

Material:
Die-cast aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data										
For size	CD	EW	FL	L	MR	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	∅ H9	h12	±0.2					[g]		
32	10	26	22	13	10	210	2	75	174404	SNCL-32
40	12	28	25	16	12	248.5	2	100	174405	SNCL-40
63	16	40	32	21	16	304	2	250	174407	SNCL-63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

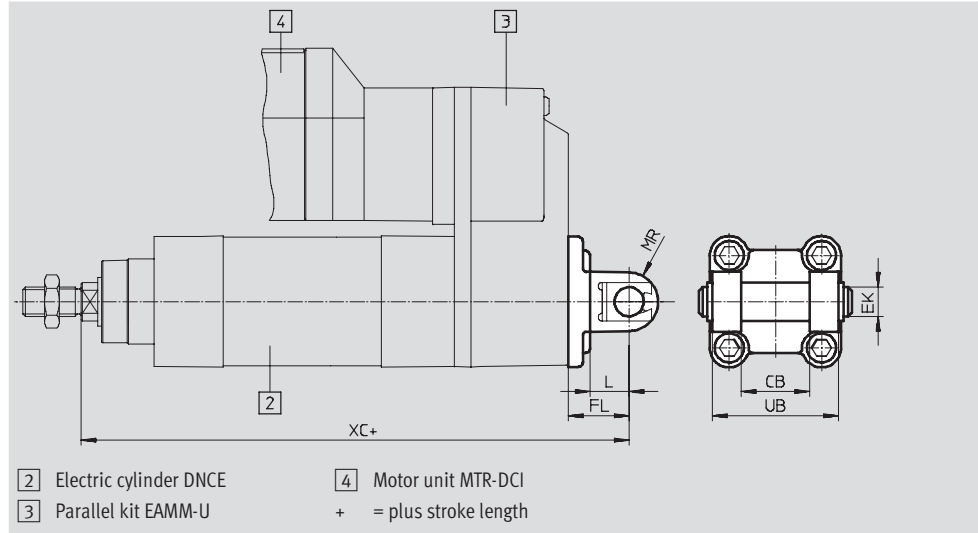
Electric cylinders DNCE, with spindle drive

Accessories



Swivel flange
SNCB/SNCB-...-R3

Material:
 SNCB: Die-cast aluminium
 SNCB-...-R3: Die-cast aluminium with protective coating, high corrosion protection
 Free of copper, PTFE and silicone



Dimensions and ordering data							
For size	CB	EK	FL	L	MR	UB	XC
[mm]	H14	∅ e8	±0.2			h14	
32	26	10	22	13	10	45	210
40	28	12	25	16	12	52	248.5
63	40	16	32	21	16	70	304

For size	Basic version				Variant R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
32	2	100	174390	SNCB-32	3	100	176944	SNCB-32-R3
40	2	150	174391	SNCB-40	3	150	176945	SNCB-40-R3
63	2	365	174393	SNCB-63	3	365	176947	SNCB-63-R3

1) Corrosion resistance class 3 according to Festo standard 940 070
 Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

Electric cylinders DNCE, with spindle drive

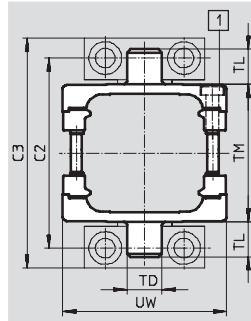
Accessories

Trunnion mounting kit ZNCM

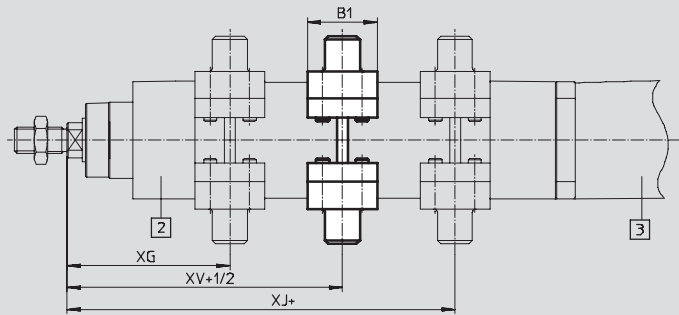
Material:
Tempered steel

The kit can be mounted at any position along the profile barrel of a cylinder.

The trunnion mounting kit cannot be mounted in the vicinity of the motor when used in combination with the parallel kit EAMM-U.



- 1 Max. tightening torque
- 2 Electric cylinder DNCE



- 3 Axial kit EAMM-A
- + = plus stroke length
+1/2 = plus stroke length

Dimensions and ordering data								
For size	B1	C2	C3	TD	TL	TM	UW	XG
[mm]				∅ e9				
32	30	71	86	12	12	50	65	65
40	32	87	105	16	16	63	75	74.5
63	41	116	136	20	20	90	105	91.5

For size	XJ	XV	Max. tightening torque	CRC ¹⁾	Weight	Part No.	Type
[mm]			[Nm]		[g]		
32	107	86	4+1	2	210	163525	ZNCM-32
40	130.5	102.5	8+1	2	385	163526	ZNCM-40
63	157.5	124.5	18+2	2	890	163528	ZNCM-63

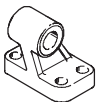
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.





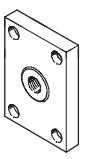
Ordering data – Mounting attachments				Technical data → Internet: clevis foot			
Designation	For size	Part No.	Type	Designation	For size	Part No.	Type
Clevis foot LNG				Clevis foot LSN			
	32	33890	LNG-32		32	5561	LSN-32
	40	33891	LNG-40		40	5562	LSN-40
	63	33893	LNG-63		63	5564	LSN-63
Clevis foot LSNG				Clevis foot LSNSG			
	32	31740	LSNG-32		32	31747	LSNSG-32
	40	31741	LSNG-40		40	31748	LSNSG-40
	63	31743	LSNG-63		63	31750	LSNSG-63
Clevis foot LBG				Right-angle clevis foot LQG			
	32	31761	LBG-32		32	31768	LQG-32
	40	31762	LBG-40		40	31769	LQG-40
	63	31764	LBG-63		63	31771	LQG-63



Electric cylinders DNCE, with spindle drive

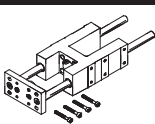
Accessories

FESTO

Ordering data – Mounting attachments, corrosion-resistant			Technical data → Internet: clevis foot	
Designation	For size	Part No.	Type	
Clevis foot CRLNG				
	32	161840	CRLNG-32	
	40	161841	CRLNG-40	
	63	161843	CRLNG-63	

Ordering data – Piston rod attachments				Technical data → Internet: piston rod attachment			
Designation	For size	Part No.	Type	Designation	For size	Part No.	Type
Rod eye SGS				Rod clevis SGA			
	32	9261	SGS-M10x1,25		32	32954	SGA-M10x1,25
	40	9262	SGS-M12x1,25		40	10767	SGA-M12x1,25
	63	9263	SGS-M16x1,5		63	10768	SGA-M16x1,5
Rod clevis SG				Self-aligning rod coupler FK			
	32	6144	SG-M10x1,25		32	6140	FK-M10x1,25
	40	6145	SG-M12x1,25		40	6141	FK-M12x1,25
	63	6146	SG-M16x1,5		63	6142	FK-M16x1,5
Coupling piece KSZ							
	32	36125	KSZ-M10x1,25				
	40	36126	KSZ-M12x1,25				
	63	36127	KSZ-M16x1,5				

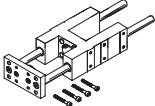
Ordering data – Piston rod attachments, corrosion-resistant				Technical data → Internet: piston rod attachment			
Designation	For size	Part No.	Type	Designation	For size	Part No.	Type
Rod eye CRSGS				Rod clevis CRSG			
	32	195582	CRSGS-M10x1,25		32	13569	CRSG-M10x1,25
	40	195583	CRSGS-M12x1,25		40	13570	CRSG-M12x1,25
	63	195584	CRSGS-M16x1,5		63	13571	CRSG-M16x1,5


Ordering data – Guide units for fixed strokes (recirculating ball bearing guide only)				Technical data → Internet: feng			
	Stroke [mm]	Part No.	Type	Stroke [mm]	Part No.	Type	
	For size 32			For size 40			
	10 ... 100	34494	FENG-32-100-KF	10 ... 100	34500	FENG-40-100-KF	
	10 ... 200	34496	FENG-32-200-KF	10 ... 200	34502	FENG-40-200-KF	
	10 ... 320	34497	FENG-32-320-KF	10 ... 320	34504	FENG-40-320-KF	
	10 ... 400	150290	FENG-32-400-KF	10 ... 400	150291	FENG-40-400-KF	
	10 ... 500	34498	FENG-32-500-KF	10 ... 500	34505	FENG-40-500-KF	
	For size 63						
	10 ... 100	34514	FENG-63-100-KF				
	10 ... 200	34516	FENG-63-200-KF				
	10 ... 320	34518	FENG-63-320-KF				
	10 ... 400	34519	FENG-63-400-KF				
	10 ... 500	34520	FENG-63-500-KF				

Electric cylinders DNCE, with spindle drive


Accessories

FESTO


Ordering data – Guide units for variable strokes					Technical data → Internet: feng	
	For size [mm]	Stroke [mm]	With recirculating ball bearing guide		With plain-bearing guide	
			Part No.	Type	Part No.	Type
	32	10 ... 500	34487	FENG-32-...-KF	34481	FENG-32-...
	40	10 ... 500	34488	FENG-40-...-KF	34482	FENG-40-...
	63	10 ... 500	34490	FENG-63-...-KF	34484	FENG-63-...



Ordering data – Compensating components in combination with guide unit FENG			
Designation	For size	Part No.	Type
	32	570305	EADC-V1-32
	40	570306	EADC-V1-40
	63	570307	EADC-V1-50/63

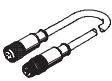
Permissible proximity sensors in combination with motor units MTR-DCI

Ordering data – Proximity sensors for T-slot, magneto-resistive						Technical data → Internet: smt	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type	
N/O contact							
	Insertable in slot lengthwise, flush with cylinder profile	PNP	Plug M8x1, 3-pin	0.3	175484	SMT-8-PS-S-LED-24-B	

Permissible proximity sensors in combination with servo motors EMMS-AS, stepper motors EMMS-ST or with guide units FENG

Ordering data – Proximity sensors for T-slot, magneto-resistive						Technical data → Internet: smt	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type	
N/O contact							
	Insertable in slot lengthwise, flush with cylinder profile	PNP	Cable, 3-wire	2.5	175436	SMT-8-PS-K-LED-24-B	

Ordering data – Proximity sensors for T-slot, magnetic reed						Technical data → Internet: sme	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type	
N/O contact							
	Insertable in slot from above, flush with cylinder profile	Contacting	Cable, 3-wire	2.5	543862	SME-8M-DS-24V-K-2,5-OE	
				5.0	543863	SME-8M-DS-24V-K-5,0-OE	
	Insertable in slot lengthwise, flush with cylinder profile	Contacting	Cable, 3-wire	2.5	150855	SME-8-K-LED-24	

Ordering data – Connecting cable					Technical data → Internet: km8	
	Mounting	Connection	Cable length [m]	Part No.	Type	
Straight socket						
	Union nut M8 at both ends	3-pin	0.5	175488	KM8-M8-GSGD-0,5	
			1	175489	KM8-M8-GSGD-1	
			2.5	165610	KM8-M8-GSGD-2,5	
			5	165611	KM8-M8-GSGD-5	

Ordering data – Slot cover for T-slot				
	Mounting	Length	Part No.	Type
	Insertable from above	2x 0.5 m	151680	ABP-5-S

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Festo North America

Festo Regional Contact Center

5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Canada

USA Customers:

For ordering assistance,

Call: 1.800.99.FESTO (1.800.993.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: customer.service@us.festo.com

For technical support,

Call: 1.866.GO.FESTO (1.866.463.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: product.support@us.festo.com

Canadian Customers:

Call: 1.877.GO.FESTO (1.877.463.3786)

Fax: 1.877.FX.FESTO (1.877.393.3786)

Email: festo.canada@ca.festo.com

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
www.festo.com/us

USA Sales Offices

Appleton

North 922 Tower View Drive, Suite N
Greenville, WI 54942, USA

Boston

120 Presidential Way, Suite 330
Woburn, MA 01801, USA

Chicago

1441 East Business Center Drive
Mt. Prospect, IL 60056, USA

Dallas

1825 Lakeway Drive, Suite 600
Lewisville, TX 75057, USA

Detroit – Automotive Engineering Center

2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326, USA

New York

395 Moreland Road
Hauppauge, NY 11788, USA

Silicon Valley

4935 Southfront Road, Suite F
Livermore, CA 94550, USA

United States



USA Headquarters, East: Festo Corp., 395 Moreland Road, Hauppauge, NY 11788

Phone: 1.631.435.0800; Fax: 1.631.435.8026;

Email: info@festo-usa.com

www.festo.com/us

Canada



Headquarters: Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4

Phone: 1.905.624.9000; Fax: 1.905.624.9001;

Email: festo.canada@ca.festo.com

www.festo.ca

Mexico



Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquahuac,
54020 Tlalneantla, Edo. de México

Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;

Email: festo.mexico@mx.festo.com

www.festo.com/mx

Central USA

Festo Corporation
1441 East Business
Center Drive
Mt. Prospect, IL 60056, USA
Phone: 1.847.759.2600
Fax: 1.847.768.9480



Western USA

Festo Corporation
4935 Southfront Road,
Suite F
Livermore, CA 94550, USA
Phone: 1.925.371.1099
Fax: 1.925.245.1286



Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark
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