Electric cylinders DNCE, with piston rod

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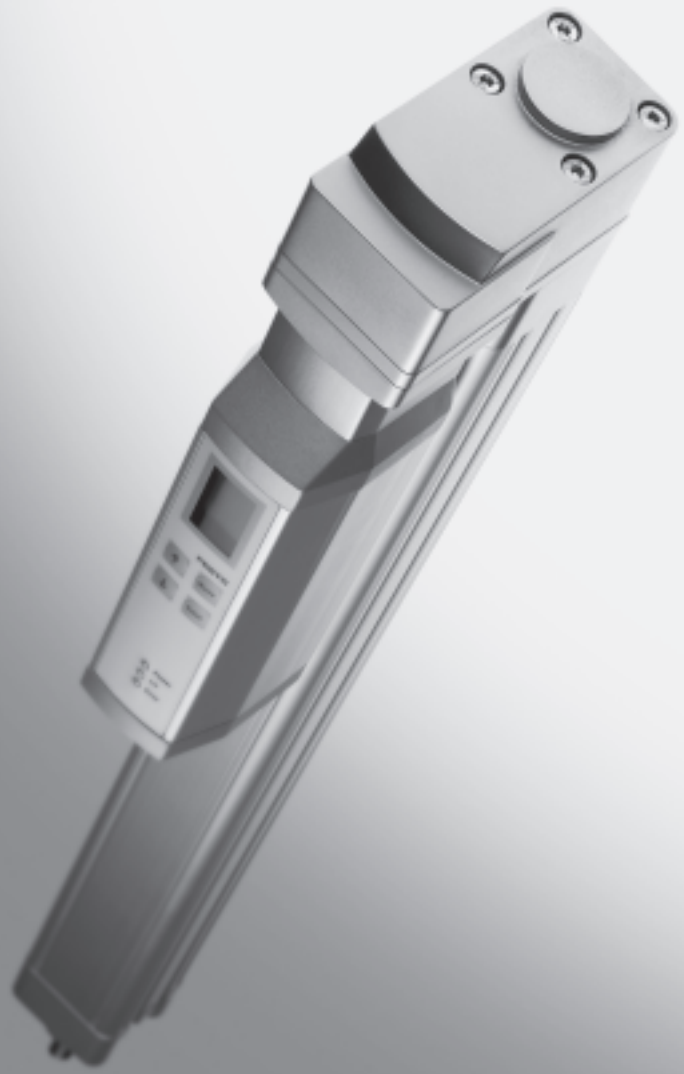


- Electromechanical linear axis with piston rod
- Standard port pattern to ISO 15552
- Linear drive with lead screw or ball screw
- Axial or parallel motor interface
- Comprehensive range of accessories from the DNC modular system

Electric cylinders DNCE, with piston rod

Key features

Key features 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 rotation of the motor into the linear motion of the piston rod.

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

Features

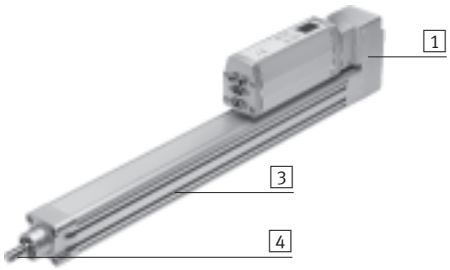
- Choice of spindle type:
  - with lead screw (LS)
  - with ball screw (BS)
- Electric piston rod cylinder with lead screw is self-retarding
- Compact dimensions

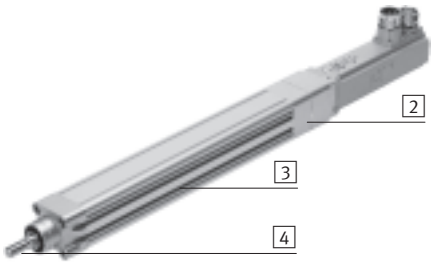
Range of applications

- Electric cylinder with lead screw
  - For applications with slow feed speeds
- Electric cylinder with ball screw
  - For applications with high feed speeds and high running performance

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

Electric piston rod cylinder → 5 / 2.1-12





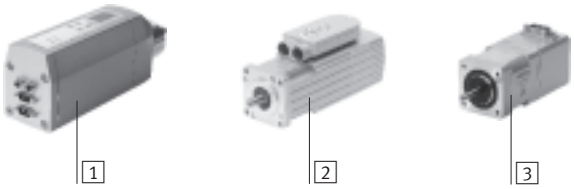
1 Parallel kit
2 Axial kit
3 Slot for proximity sensor
4 Options:
- linear drive with lead screw (LS)
- linear drive with ball screw (BS)

Note

The linear drive with lead screw is self-retarding, which means that slow movements cannot be excluded in the event of vibration.

The entire system with intelligent motor unit MTR-DCI is self-locking.

Motor/motor unit → 5 / 2.1-23



1 Intelligent motor unit MTR-DCI
2 Servo motor EMMS-AS, MTR-AC
3 Stepper motor EMMS-ST, MTR-ST

Note

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

Motor mounting kit → 5 / 2.1-23

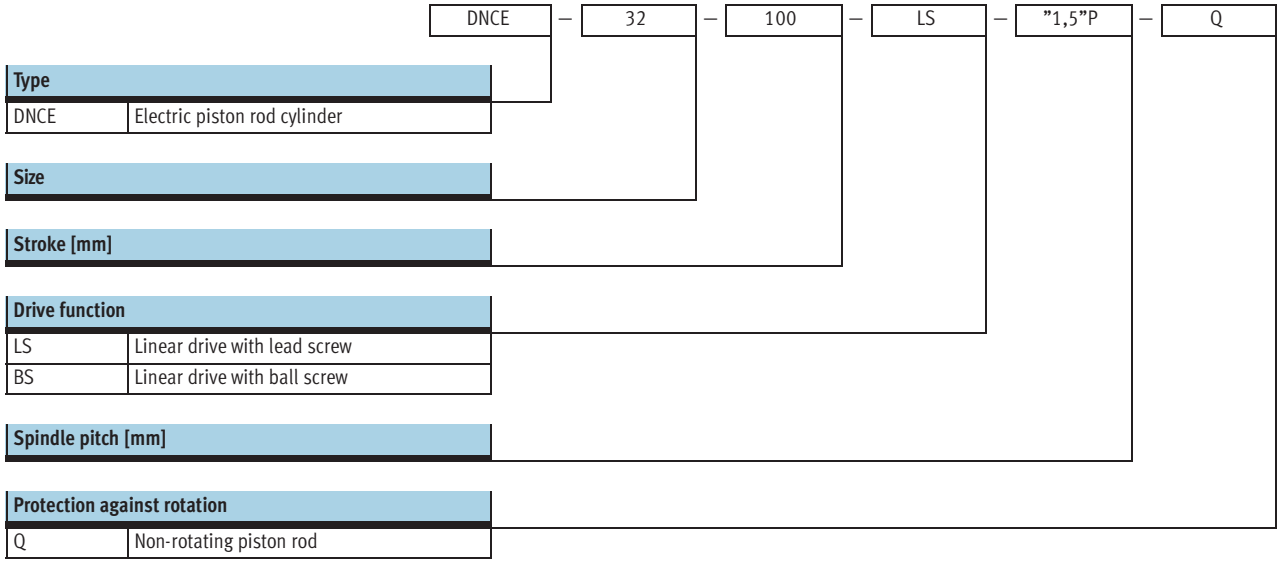
Axial kit

Parallel kit

There are complete kits for both parallel and axial motor attachment.

Electric cylinders DNCE, with piston rod

Type codes



Electric cylinders DNCE, with piston rod

Peripherals overview

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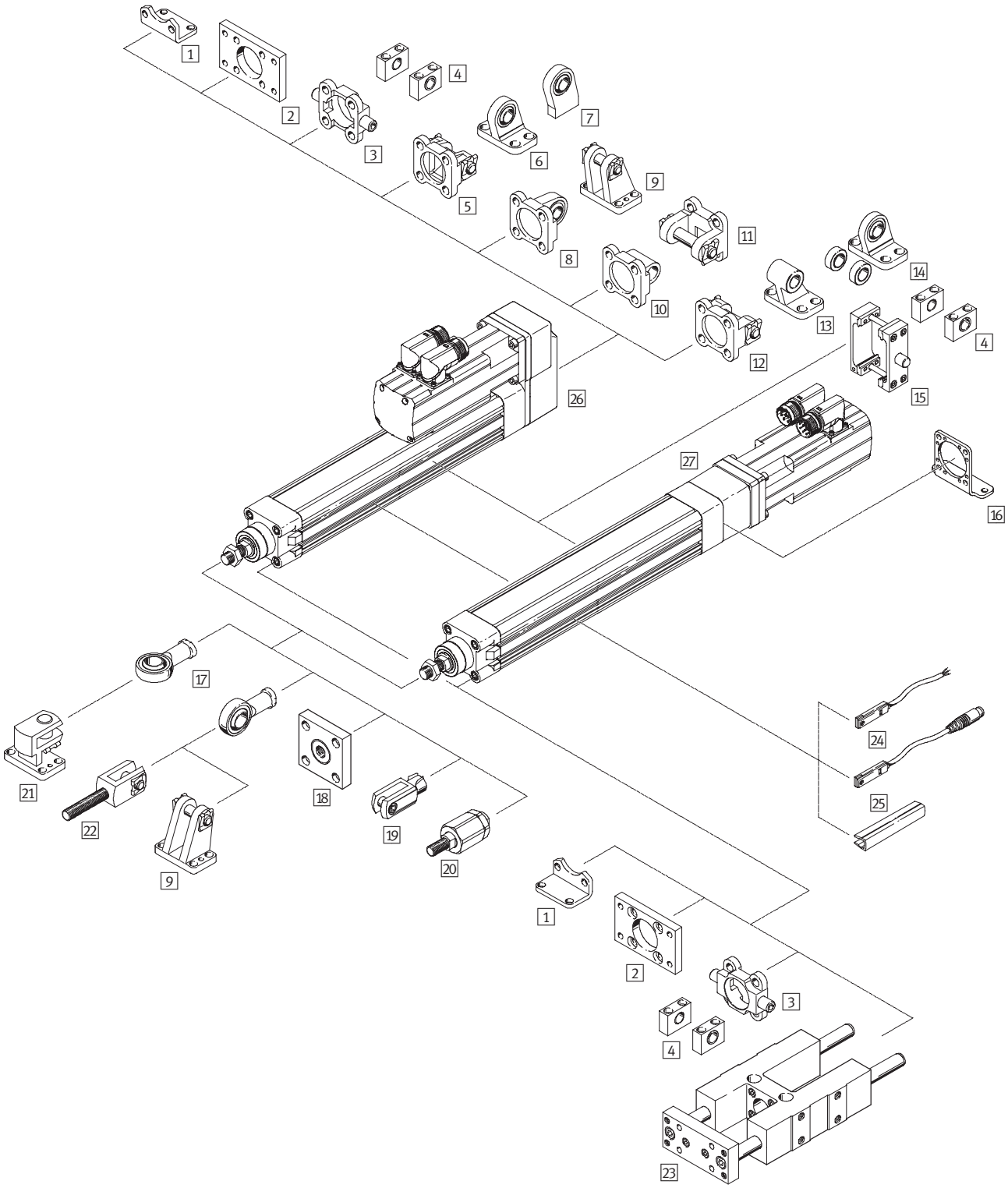

Electric cylinders DNCE, with piston rod

Peripherals overview

Mounting attachments and accessories			
		Brief description	→ Page
1	Foot mounting HNC/CRHNC	– With parallel motor attachment for bearing and gear unit end caps – With axial motor attachment for bearing end caps	5 / 2.1-30
2	Flange mounting FNC/CRFNG	– With parallel motor attachment for bearing and gear unit end caps – With axial motor attachment for bearing end caps	5 / 2.1-31
3	Trunnion flange ZNCF/CRZNG	– With parallel motor attachment for bearing and gear unit end caps – With axial motor attachment for bearing end caps	5 / 2.1-32
4	Trunnion support LNZG/CRLNZG	For cylinders with trunnion mounting	5 / 2.1-33
5	Swivel flange SNC	With parallel motor attachment	5 / 2.1-34
6	Clevis foot LSNG	With parallel motor attachment, with spherical bearing	5 / 2.1-37
7	Clevis foot LSNSG	With parallel motor attachment, weld-on, with spherical bearing	5 / 2.1-37
8	Swivel flange SNCS	With parallel motor attachment, with spherical bearing	5 / 2.1-34
9	Clevis foot LBG	With parallel motor attachment, with spherical bearing	5 / 2.1-37
10	Swivel flange SNCL	With parallel motor attachment	5 / 2.1-35
11	Swivel flange SNCB/SNCB-...-R3	With parallel motor attachment, with spherical bearing	5 / 2.1-36
12	Swivel flange SNCB/SNCB-...-R3	With parallel motor attachment	5 / 2.1-36
13	Clevis foot LNG/CRLNG	With parallel motor attachment	5 / 2.1-37
14	Clevis foot LSN	With parallel motor attachment, with spherical bearing	5 / 2.1-37
15	Trunnion mounting kit ZNCM	For mounting anywhere along the cylinder profile barrel. Cannot be mounted in the vicinty of the motor with parallel motor attachment	5 / 2.1-37
16	Foot mounting HNCE	With axial motor attachment	5 / 2.1-29
17	Rod eye SGS/CRSGS	With spherical bearing	5 / 2.1-38
18	Coupling piece KSZ	To compensate for radial deviations	5 / 2.1-38
19	Rod clevis SG/CRSG	Permits a swivelling movement of the cylinder in one plane	5 / 2.1-38
20	Self-aligning rod coupler FK	To compensate for radial and angular deviations	5 / 2.1-38
21	Clevis foot LQG	For rod eye SGS	5 / 2.1-38
22	Rod clevis SGA	For swivel attachment of cylinders	5 / 2.1-38
23	Guide unit FENG	For protecting standard cylinders against rotation at high torque loads	5 / 2.1-38
24	Proximity sensor SME/SMT-8	For position sensing. Can be integrated in sensor slot, thus no projecting parts	5 / 2.1-39
25	Slot cover ABP-5-S	For protecting against the ingress of dirt	5 / 2.1-39
26	Parallel kit EAMM-U	For parallel motor attachment	5 / 2.1-23
27	Axial kit EAMM-A	For axial motor attachment	5 / 2.1-23

Electric cylinders DNCE, with piston rod

Technical data

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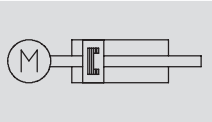
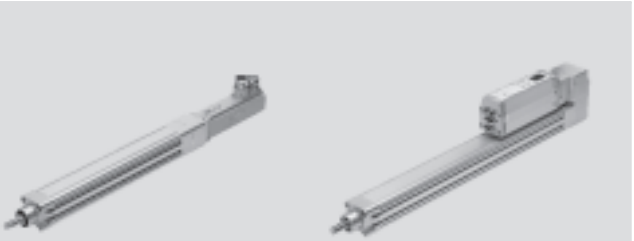
Function



Size
32 ... 63

Stroke length
1 ... 800 mm

www.festo.com/en/
Spare_parts_service



With axial kit | With parallel kit

General technical data				
Size		32	40	63
Constructional design	LS	With lead screw		
	BS	With ball screw		
Piston rod thread		M10x1.25	M12x1.25	M16x1.5
Working stroke		1 ... 400	1 ... 600	1 ... 800
Variant		Non-rotating piston rod		
Protection against torsion/guide		Plain bearing guide		
Stroke reserve	[mm]	0		
Max. angle of rotation at the piston rod	[°]	±0.30	±0.25	±0.20
Impact energy (E) at 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 threads		
		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										
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
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. static 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[1]	[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 on drive shaft	[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		2,400	3,000	3,000	1,650	3,000	3,000	1,050	3,000	3,000
Max. acceleration	[m/s²]	1	6	6	1	6	6	1	6	6
Reversing backlash[4]	[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) The feed force in the case of the variant with lead screw (LS) depends on the speed ➔ 5 / 2.1-15
The feed force in the case of the variant with ball screw (BS) ➔ 5 / 2.1-13
2) The driving torque in the case of the variant with lead screw (LS) depends on the rotational speed ➔ 5 / 2.1-16
3) Measured at a speed of 200 rpm
4) In new condition

Electric cylinders DNCE, with piston rod

Technical data

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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 ambient 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 with 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_H 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:

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

Calculation of the 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.

$F_x \leq F_{xmax.}$

and

$v_x \leq v_{xmax.}$

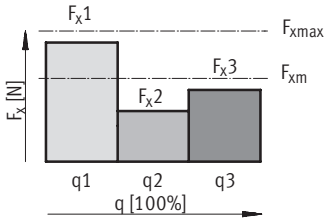
Mean feed force (to DIN 69 051-4)

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.

$F_{xm} \leq F_{xdauer}$

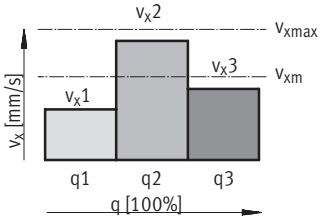
$$F_{xm} = \sqrt[3]{\sum F_x^3 \times \frac{v_x}{v_{xm}} \times \frac{q}{100}} =$$

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



Mean feed speed (to DIN 69 051-4)

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



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

Electric cylinders DNCE, with piston rod

Technical data

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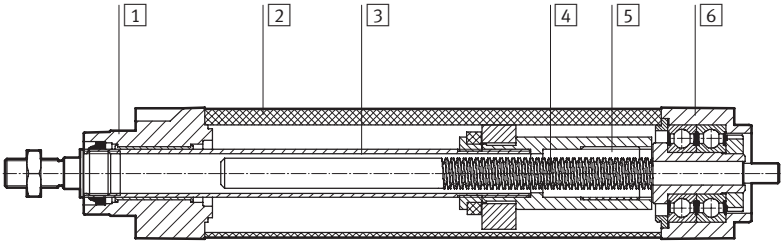
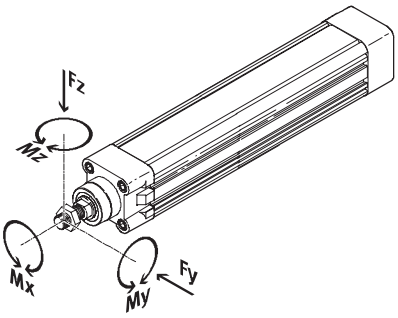
Materials

Sectional view



Electric cylinder		
1	Bearing cap	Die-cast aluminium, painted
2	Cylinder barrel	Wrought aluminium alloy, smooth anodised
3	Piston rod	High-alloy stainless steel
4	Spindle	Steel
5	Spindle nut for LS	Polyacetate
	Spindle nut for BS	Steel
6	Drive cover	Die-cast aluminium, painted

Maximum permissible loads on the piston rod



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

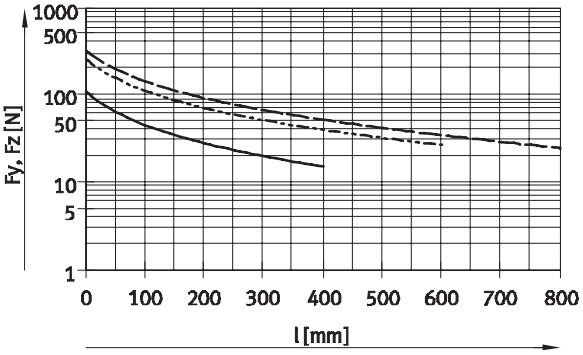
$$\frac{|Fy|}{Fy_{max.}} + \frac{|Fz|}{Fz_{max.}} + \frac{|My|}{My_{max.}} + \frac{|Mz|}{Mz_{max.}} \leq 1$$

$$|Fx| \leq Fxmax$$

$$|Mx| \leq Mxmax$$

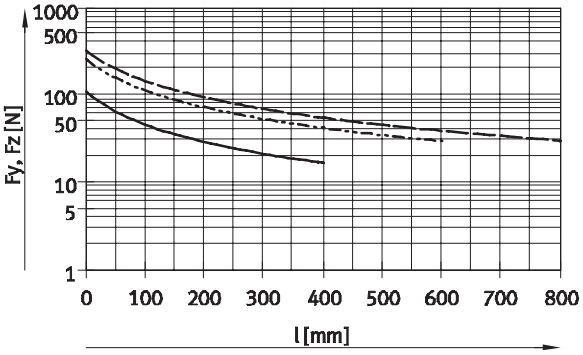
Maximum permissible lateral forces Fy_{max} and Fz_{max} on the piston rod

Horizontal mounting position



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

Vertical mounting position



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

Engineering Tool
PositioningDrives
www.festo.com/en/engineering

Size		32	40	63
Maximum permissible forces and torques				
Fx_{max} (static)	[N]	600	1,400	3,700
Mx_{max}	[Nm]	1	1	1.5
My_{max}, Mz_{max}	[Nm]	8	20	27

Electric cylinders DNCE, with piston rod

Technical data

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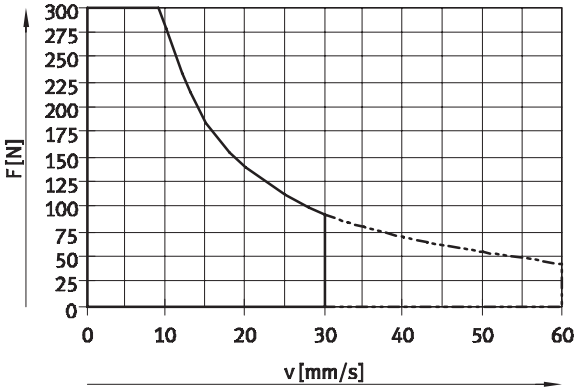
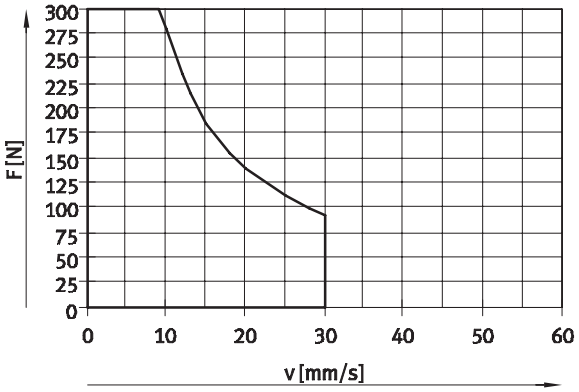
Feed force F as a function of speed v

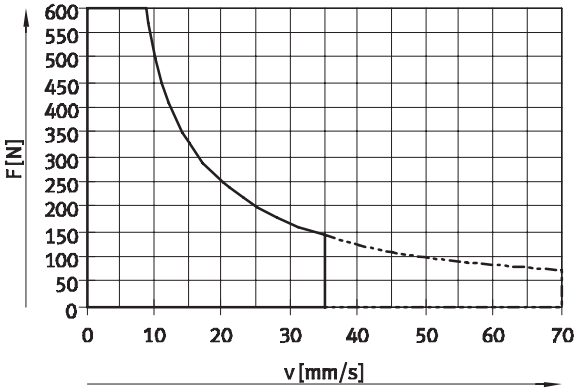
DNCE-32-1...299-LS-...



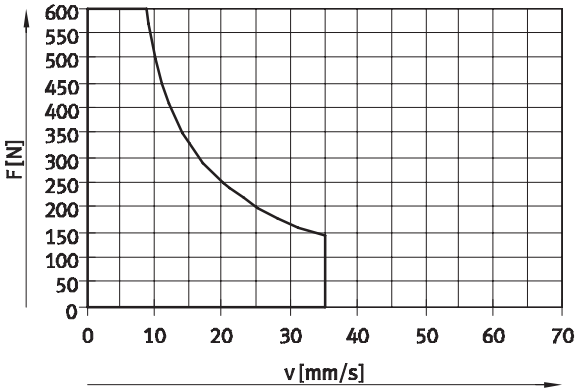
DNCE-32-300...400-LS-...



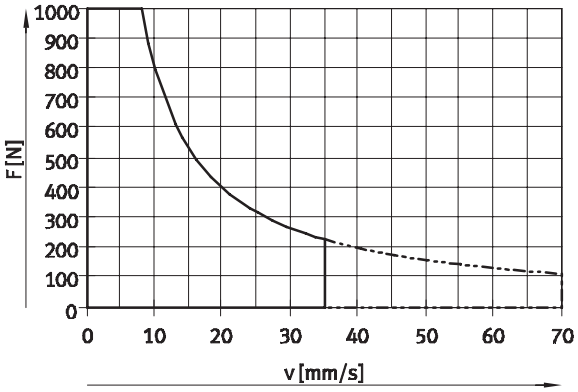
DNCE-40-1...299-LS-...



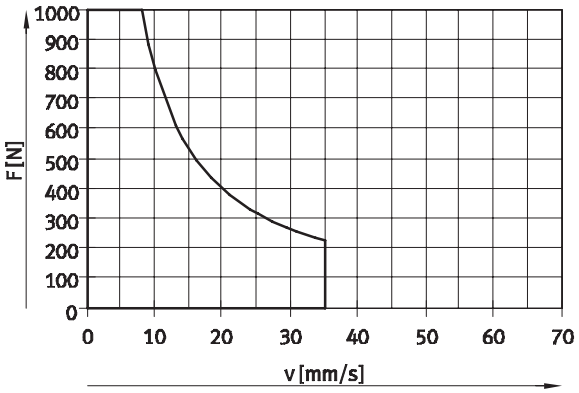
DNCE-40-300...600-LS-...



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



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



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

Electric cylinders DNCE, with piston rod

Technical data

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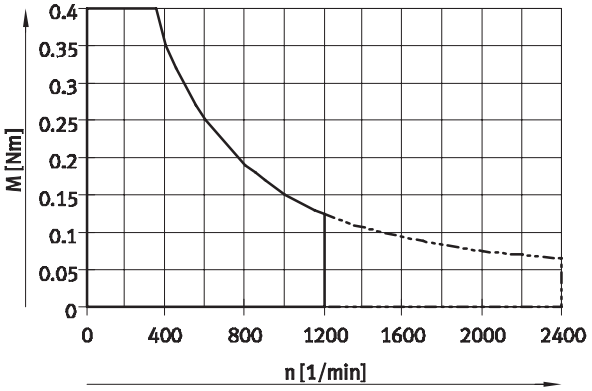
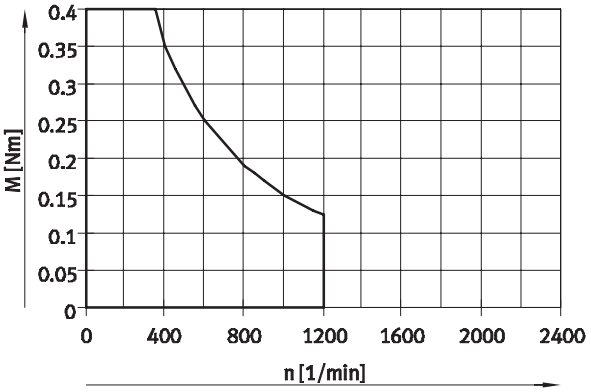
Driving torque M as a function of rotational speed n

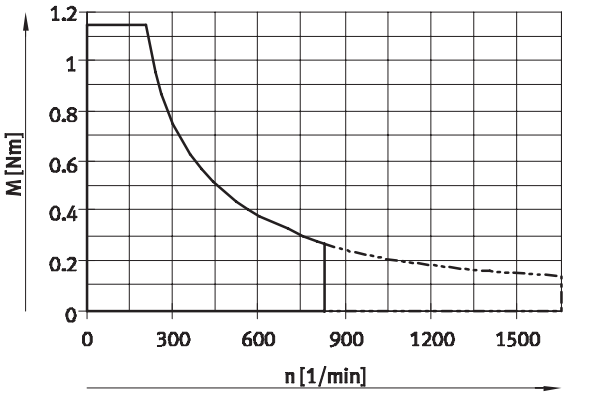
DNCE-32-1...299-LS-...



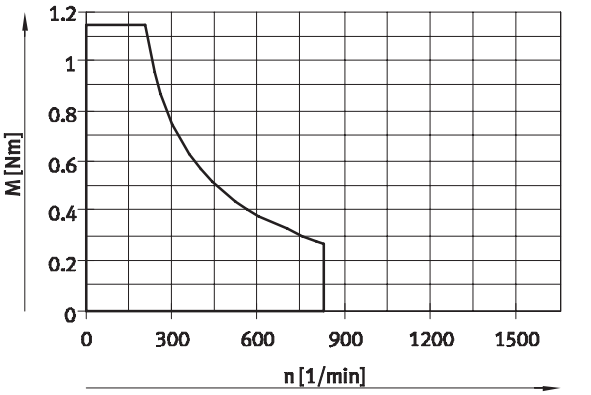
DNCE-32-300...400-LS-...



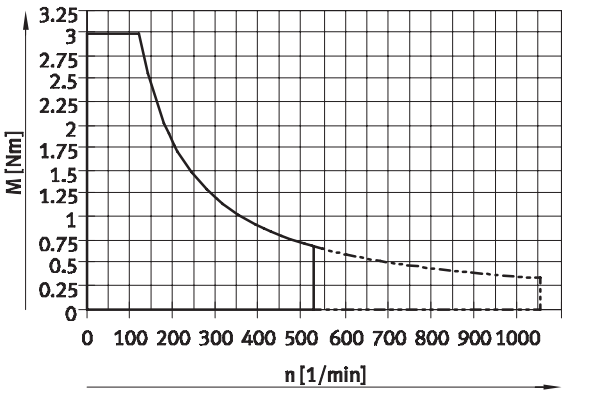
DNCE-40-1...299-LS-...



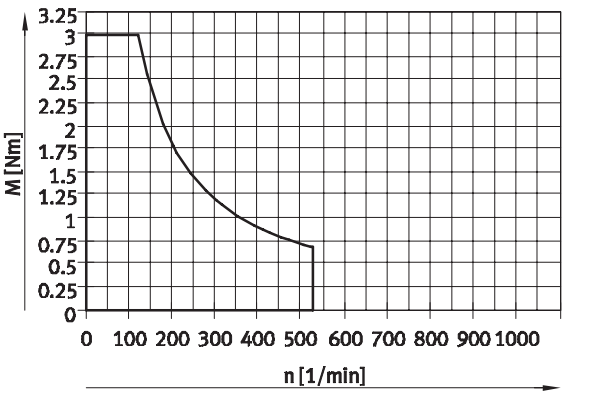
DNCE-40-300...600-LS-...



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



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



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

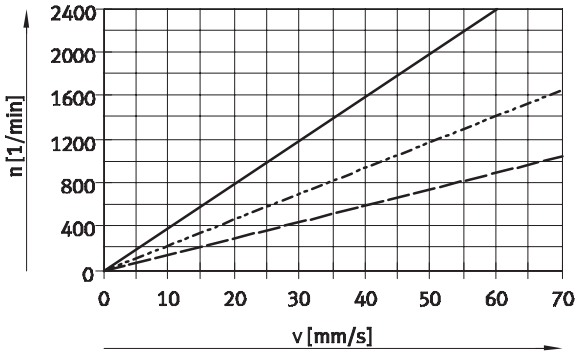
Electric cylinders DNCE, with piston rod

Technical data

FESTO

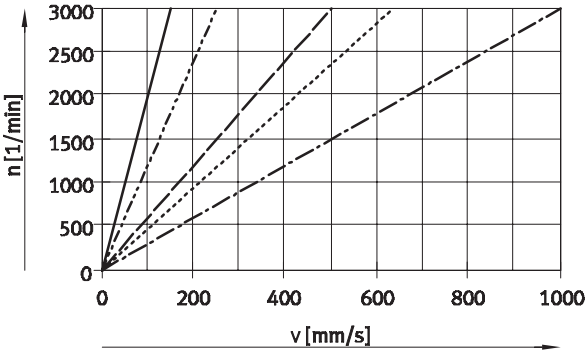
Rotational speed n as a function of speed v

DNCE-...-LS-...



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

DNCE-...-BS-...



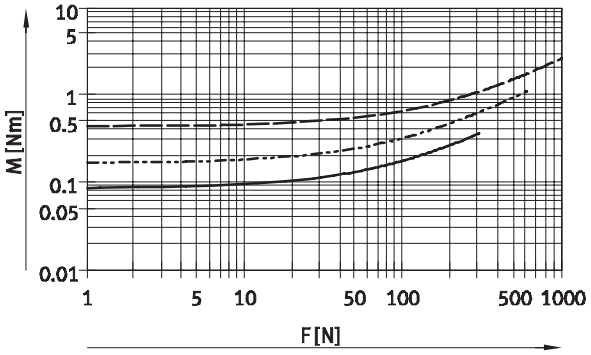
DNCE-32-BS-"3"P
DNCE-40-BS-"5"P
DNCE-63-BS-"10"P
DNCE-32-BS-"10"P
DNCE-40-BS-"12,7"P
DNCE-63-BS-"20"P

Driving torque M as a function of feed force F

Note

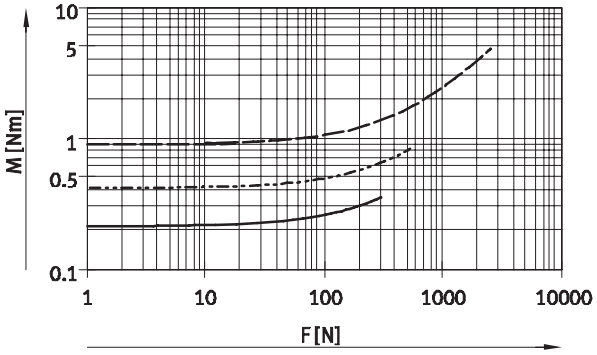
The values take the friction torques of the electric cylinder into account.

DNCE-...-LS-...

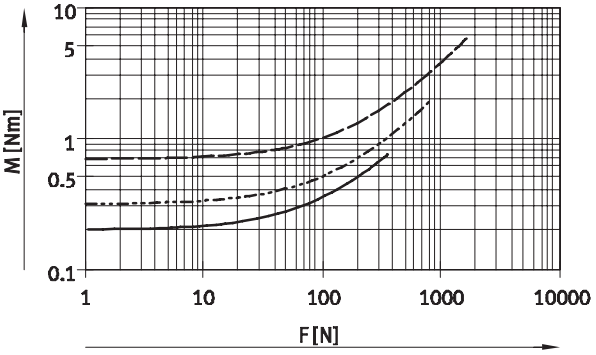


DNCE-32-LS-"1,5"P
DNCE-40-LS-"2,5"P
DNCE-63-LS-"4"P

DNCE-...-BS-...



DNCE-32-BS-"3"P
DNCE-40-BS-"5"P
DNCE-63-BS-"10"P



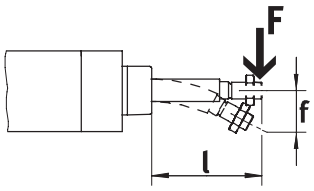
DNCE-32-BS-"10"P
DNCE-40-BS-"12,7"P
DNCE-63-BS-"20"P

Electric cylinders DNCE, with piston rod

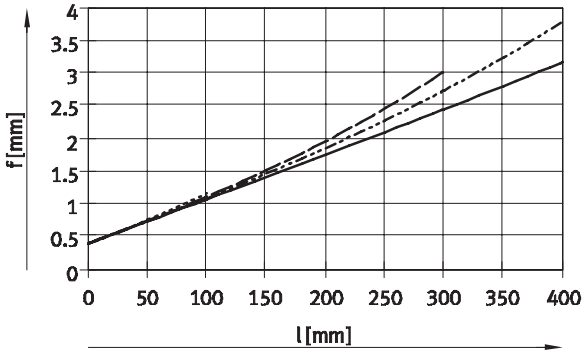
Technical data

FESTO

Piston rod displacement f as a function of stroke length l

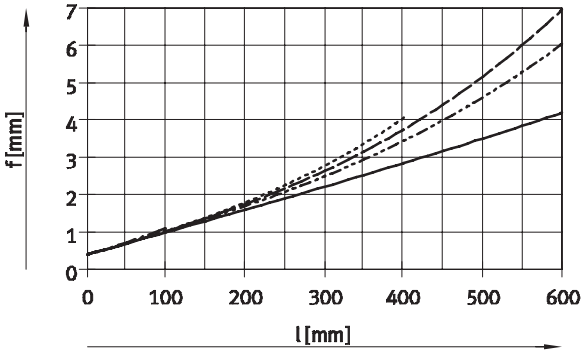


DNCE-32-...



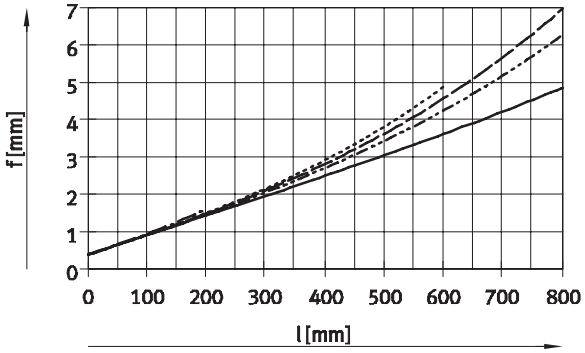
- Lateral force F = 0 N
- Lateral force F = 10 N
- Lateral force F = 20 N
- Lateral force F = 45 N

DNCE-40-...



- Lateral force F = 0 N
- Lateral force F = 20 N
- Lateral force F = 30 N
- Lateral force F = 40 N
- Lateral force F = 115 N

DNCE-63-...



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

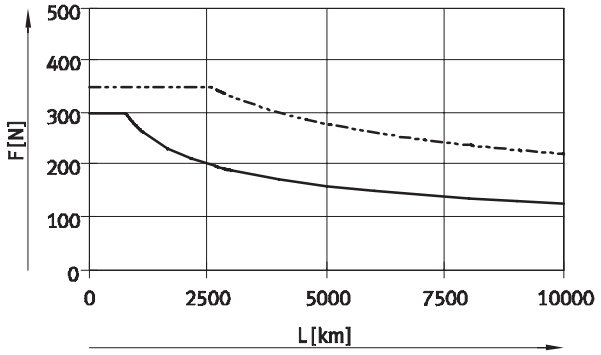
Electric cylinders DNCE, with piston rod

Technical data

FESTO

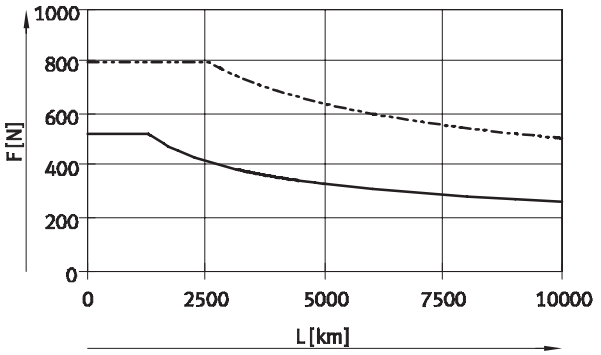
Running performance L as a function of mean feed force F (to DIN 69 051-4)

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



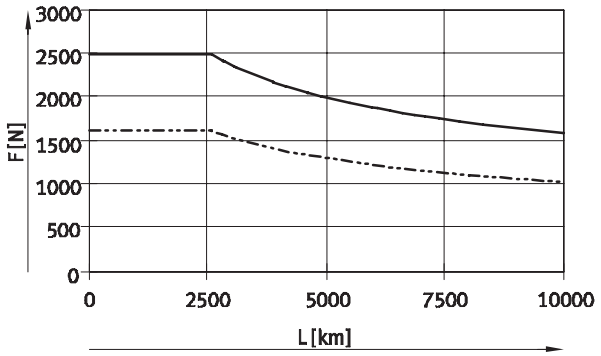
DNCE-32-BS-"3"P
DNCE-32-BS-"10"P

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



DNCE-40-BS-"5"P
DNCE-40-BS-"12,5"P

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



DNCE-63-BS-"10"P
DNCE-63-BS-"20"P

Note

- The data on running performance is based on empirically determined and theoretically calculated data. The running performance attainable in practice may deviate from the indicated curves if the parameters are different.
- Characteristic for DNCE-63-BS-"10"P applies to a mean speed of 1,500 rpm.
- Characteristic for all other DNCE-...-BS applies to a maximum speed of 3,000 rpm.

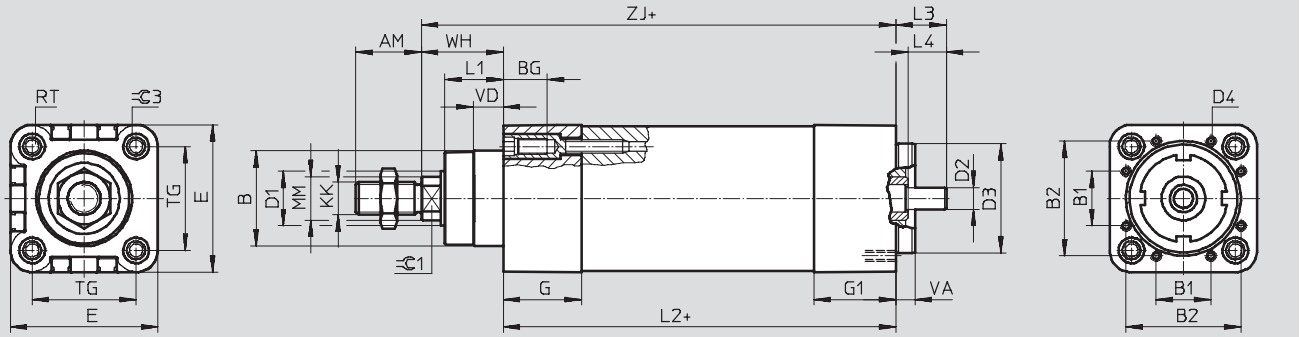
Electric cylinders DNCE, with piston rod

Technical data

FESTO

Dimensions Download CAD data ➔ **www.festo.com/en/engineering**

Electric cylinder DNCE



\+ = plus stroke length

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

Size [mm]	L1	L2	L3	L4	MM	RT	TG	VA	VD	WH	ZJ ±1	=C1	=C3
32	18	122	15.9	8	12	M6	32.5	7	10	26	148	10	6
40	21.5	146.5	18.4	14	16	M6	38	7	10.5	30	176.5	13	6
63	28.5	177	23.5	17	20	M8	56.5	9	15	37	214	17	8

Electric cylinders DNCE, with piston rod

Technical data

Ordering data – DNCE-32

Stroke [mm]	Part No.	Type
Ball screw drive with spindle pitch 3 mm		
100	543 115	DNCE-32-100-BS-”3”P-Q
200	543 116	DNCE-32-200-BS-”3”P-Q
300	543 117	DNCE-32-300-BS-”3”P-Q
400	543 118	DNCE-32-400-BS-”3”P-Q
Ball screw drive 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

Stroke [mm]	Part No.	Type
Lead screw drive with spindle pitch 1.5 mm		
100	543 111	DNCE-32-100-LS-”1,5”P-Q
200	543 112	DNCE-32-200-LS-”1,5”P-Q
300	543 113	DNCE-32-300-LS-”1,5”P-Q
400	543 114	DNCE-32-400-LS-”1,5”P-Q

Ordering data – DNCE-40

Stroke [mm]	Part No.	Type
Ball screw drive with spindle pitch 5 mm		
100	543 127	DNCE-40-100-BS-”5”P-Q
200	543 128	DNCE-40-200-BS-”5”P-Q
300	555 466	DNCE-40-300-BS-”5”P-Q
400	543 129	DNCE-40-400-BS-”5”P-Q
600	543 130	DNCE-40-600-BS-”5”P-Q
Ball screw drive 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

Stroke [mm]	Part No.	Type
Lead screw drive with spindle pitch 2.5 mm		
100	543 123	DNCE-40-100-LS-”2,5”P-Q
200	543 124	DNCE-40-200-LS-”2,5”P-Q
300	555 465	DNCE-40-300-LS-”2,5”P-Q
400	543 125	DNCE-40-400-LS-”2,5”P-Q
600	543 126	DNCE-40-600-LS-”2,5”P-Q

Ordering data – DNCE-63

Stroke [mm]	Part No.	Type
Ball screw drive with spindle pitch 10 mm		
100	555 470	DNCE-63-100-BS-”10”P-Q
200	543 139	DNCE-63-200-BS-”10”P-Q
300	555 471	DNCE-63-300-BS-”10”P-Q
400	543 140	DNCE-63-400-BS-”10”P-Q
600	543 141	DNCE-63-600-BS-”10”P-Q
800	543 142	DNCE-63-800-BS-”10”P-Q
Ball screw drive 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

Stroke [mm]	Part No.	Type
Lead screw drive with spindle pitch 4 mm		
100	555 468	DNCE-63-100-LS-”4”P-Q
200	543 135	DNCE-63-200-LS-”4”P-Q
300	555 469	DNCE-63-300-LS-”4”P-Q
400	543 136	DNCE-63-400-LS-”4”P-Q
600	543 137	DNCE-63-600-LS-”4”P-Q
800	543 138	DNCE-63-800-LS-”4”P-Q

Note

Variable strokes can be ordered via the modular product system
➔ 5 / 2.1-22

Electric cylinders DNCE, with piston rod

Ordering data – Modular products

FESTO

M Mandatory data

Module No.	Function	Size	Stroke	Drive type	Spindle pitch	Protection against rotation
555 488 555 489 555 490	DNCE	32 40 63	1 ... 800	LS BS	"..."P	Q
Order example						
555 489	**DNCE** –	**40** –	**550** –	**LS** –	**"2,5"P** –	**Q**

Ordering table

Size		32	40	63	Condi-tions	Code	Enter code
M	Module No.	**555 488**	**555 489**	**555 490**			
	Function	Electric piston rod 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		
	Protection against rotation	Non-rotating piston rod				**-Q**	-Q

1 ... Additional stroke lengths upon 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**
Only with drive type BS

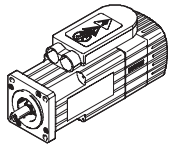
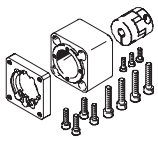
Transfer order code

	DNCE	–		–		–		–		–	Q

Electric cylinders DNCE, with piston rod

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-...	**543 147**	**552 163**	**543 420**	**552 155**
MTR-AC-40-3S-...	**EAMM-A-D32-40A**	**EAMF-A-28B-40A**	**KSE-16-20-D06-D06**	**EAMK-A-D32-28B**
EMMS-AS-55-...	**550 979**	**529 942**	**551 003**	**551 006**
MTR-AC-55-3S-...	**EAMM-A-D32-55A**	**MTR-FL44-AC55**	**KSE-30-32-D06-D09**	**EAMK-A-D32-44**
With stepper motor				
EMMS-ST-42-...	**543 148**	**552 164**	**543 419**	**552 155**
MTR-ST-42-48S-...	**EAMM-A-D32-42A**	**EAMF-A-28B-42A**	**KSE-16-20-D05-D06**	**EAMK-A-D32-28B**
EMMS-ST-57-...	**550 980**	**530 081**	**551 002**	**551 006**
MTR-ST-57-48S-...	**EAMM-A-D32-57A**	**MTR-FL44-ST57**	**KSE-30-32-D06-D06.35**	**EAMK-A-D32-44**
With intelligent motor unit				
MTR-DCI-32S-...	**543 149** **EAMM-A-D32-32B**	**–**	**543 420** **KSE-16-20-D06-D06**	**552 156** **EAMK-A-D32-32B**
DNCE-40				
With servo motor				
EMMS-AS-55-...	**543 153**	**529 942**	**543 423**	**552 157**
MTR-AC-55-3S-...	**EAMM-A-D40-55A**	**MTR-FL44-AC55**	**KSE-30-32-D08-D09**	**EAMK-A-D40-44**
EMMS-AS-70-...	**550 981**	**529 943**	**551 004**	**552 157**
MTR-AC-70-3S-...	**EAMM-A-D40-70A**	**MTR-FL44-AC70**	**KSE-30-32-D08-D11**	**EAMK-A-D40-44**
With stepper motor				
EMMS-ST-57-...	**543 154**	**530 081**	**543 421**	**552 157**
MTR-ST-57-48S-...	**EAMM-A-D40-57A**	**MTR-FL44-ST57**	**KSE-30-32-D06.35-D08**	**EAMK-A-D40-44**
EMMS-ST-87-...	**550 982**	**530 082**	**551 004**	**552 157**
MTR-ST-87-48S-...	**EAMM-A-D40-87A**	**MTR-FL44-ST87**	**KSE-30-32-D08-D11**	**EAMK-A-D40-44**
With intelligent motor unit				
MTR-DCI-42S-...-G7	**543 155** **EAMM-A-D40-42B**	**–**	**543 422** **KSE-30-32-D08-D08**	**522 158** **EAMK-A-D40-42B**
MTR-DCI-42S-...-G14	**543 156** **EAMM-A-D40-42C**	**–**	**543 422** **KSE-30-32-D08-D08**	**522 159** **EAMK-A-D40-42C**

Note

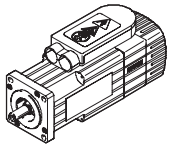
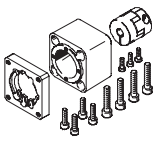
The performance data for the electric cylinder can only be determined in combination with the respective motor.

The maximum feed force of the electric cylinder may not be achieved in all circumstances.
The Positioning Drives design tool is recommended for correct sizing of components.

Electric cylinders DNCE, with piston rod

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-... **MTR-AC-70-3S-...**	**543 161** **EAMM-A-D60-70A**	**529 945** **MTR-FL64-AC70**	**543 424** **KSE-42-50-D11-D12**	**552 160** **EAMK-A-D60-64-L51**
EMMS-AS-100-... **MTR-AC-100-...**	**550 983** **EAMM-A-D60-100A**	**529 947** **MTR-FL64-AC100**	**551 005** **KSE-42-50-D12-D19**	**551 007** **EAMK-A-D60-64-L61**
With stepper motor				
EMMS-ST-87-... **MTR-ST-87-48S-...**	**543 162** **EAMM-A-D60-87A**	**530 082** **MTR-FL64-ST87**	**543 424** **KSE-42-50-D11-D12**	**552 160** **EAMK-A-D60-64-L51**
With intelligent motor unit				
MTR-DCI-52S-...-G7	**543 163** **EAMM-A-D60-52B**	**–**	**533 709** **KSE-42-50-D12-D12**	**552 161** **EAMK-A-D60-52B**
MTR-DCI-52S-...-G14	**543 164** **EAMM-A-D60-52C**	**–**	**533 709** **KSE-42-50-D12-D12**	**552 162** **EAMK-A-D60-52C**

Note

The performance data for the electric cylinder can only be determined in combination with the respective motor.

The maximum feed force of the electric cylinder may not be achieved in all circumstances.
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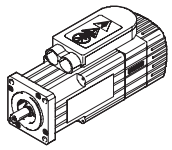
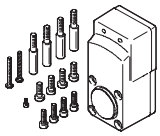
Electric cylinders DNCE, with piston rod

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-...	**543 150**	**EAMM-U-D32-40A**
MTR-AC-40-3S-...		
With intelligent motor unit		
MTR-DCI-32S-...	**543 152**	**EAMM-U-D32-32B**
DNCE-40		
With servo motor		
EMMS-AS-55-...	**543 157**	**EAMM-U-D40-55A**
MTR-AC-55-3S-...		
With intelligent motor unit		
MTR-DCI-42S-G07	**543 159**	**EAMM-U-D40-42B**
MTR-DCI-42S-G14	**543 160**	**EAMM-U-D40-42C**
DNCE-63		
With servo motor		
EMMS-AS-70-...	**543 165**	**EAMM-U-D60-70A**
MTR-AC-70-3S-...		
With intelligent motor unit		
MTR-DCI-52S-G07	**543 167**	**EAMM-U-D60-52B**
MTR-DCI-52S-G14	**543 168**	**EAMM-U-D60-52C**

Note

The performance data for the electric cylinder can only be determined in combination with the respective motor.

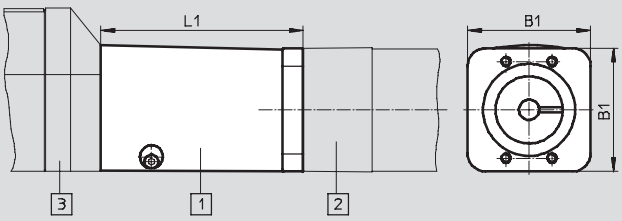
The maximum feed force of the electric cylinder may not be achieved in all circumstances.
The Positioning Drives design tool is recommended for correct sizing of components.

Electric cylinders DNCE, with piston rod

Accessories

FESTO

Axial kit EAMM-A-...
Material:
Coupling housing: Die-cast aluminium
Coupling hubs: Wrought aluminium alloy
Clamping component: High-alloy steel
Screws: Galvanised steel



Schematic diagram:
1 Axial kit
2 Electric piston rod 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. speed	[r.p.m.]	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. speed	[r.p.m.]	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 with combined attachment of motor and axis

Electric cylinders DNCE, with piston rod

Accessories

FESTO

Dimensions and ordering data					
Type	B1	L1	Weight [g]	Part No.	Type
EAMM-A-D32-32B	45	43	150	**543 149**	**EAMM-A-D32-32B**
EAMM-A-D32-40A		39.8	130	**543 147**	**EAMM-A-D32-40A**
EAMM-A-D32-42A		48	140	**543 148**	**EAMM-A-D32-42A**
EAMM-A-D32-55A	55	49.2	260	**550 979**	**EAMM-A-D32-55A**
EAMM-A-D32-57A	56.4	50.5	270	**550 980**	**EAMM-A-D32-57A**
EAMM-A-D40-42B	53.5	88	340	**543 155**	**EAMM-A-D40-42B**
EAMM-A-D40-42C		101	370	**543 156**	**EAMM-A-D40-42C**
EAMM-A-D40-55A		49.2	350	**543 153**	**EAMM-A-D40-55A**
EAMM-A-D40-57A		50.5	350	**543 154**	**EAMM-A-D40-57A**
EAMM-A-D40-70A	70	52	410	**550 981**	**EAMM-A-D40-70A**
EAMM-A-D40-87A	85.8	54	530	**550 982**	**EAMM-A-D40-87A**
EAMM-A-D60-52B	74	112	930	**543 163**	**EAMM-A-D60-52B**
EAMM-A-D60-52C		126	1,020	**543 164**	**EAMM-A-D60-52C**
EAMM-A-D60-70A		63.2	750	**543 161**	**EAMM-A-D60-70A**
EAMM-A-D60-87A		64.7	890	**543 162**	**EAMM-A-D60-87A**
EAMM-A-D60-100A	100	78.2	1,170	**550 983**	**EAMM-A-D60-100A**

Note

Permissible axis/motor combinations

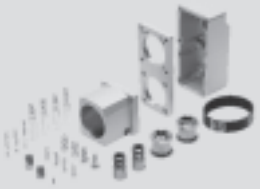
➔ 5 / 2.1-23

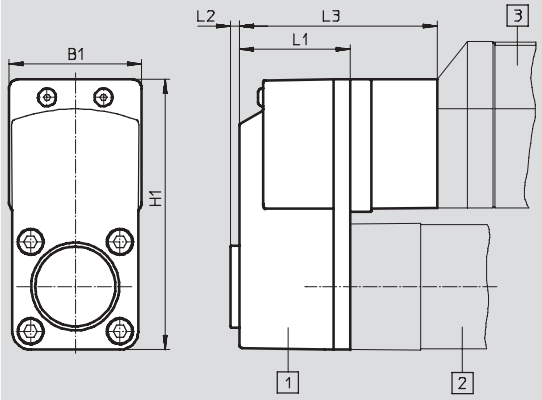
Electric cylinders DNCE, with piston rod

Accessories

FESTO

Parallel kit EAMM-U-...
Material:
Coupling housing: Die-cast aluminium
Clamping component, clamping sleeve, toothed belt gearwheel: High-alloy steel
Toothed belt: Polychloroprene
Screws: Galvanised steel





Schematic diagram:
1 Parallel kit
2 Electric piston rod cylinder
3 Motor

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 drive torque	[Nm]	0.05	0.05	0.1	0.1	0.1	0.3	0.3	0.3
Mass moment of inertia	[kgmm²]	2.931	2.931	10.016	10.016	10.016	70.5	70.5	70.5
Max. speed	[r.p.m.]	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 with combined attachment of 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	**543 152**	**EAMM-U-D32-32B**
EAMM-U-D32-40A						300	**543 150**	**EAMM-U-D32-40A**
EAMM-U-D40-42B	56.5	115	47	4	84	660	**543 159**	**EAMM-U-D40-42B**
EAMM-U-D40-42C					97	690	**543 160**	**EAMM-U-D40-42C**
EAMM-U-D40-55A					–	530	**543 157**	**EAMM-U-D40-55A**
EAMM-U-D60-52B	86	162.6	58	4	106	1,530	**543 167**	**EAMM-U-D60-52B**
EAMM-U-D60-52C					120	1,630	**543 168**	**EAMM-U-D60-52C**
EAMM-U-D60-70A					–	1,170	**543 165**	**EAMM-U-D60-70A**

Note

Permissible axis/motor combinations
➔ 5 / 2.1-25

Electric cylinders DNCE, with piston rod

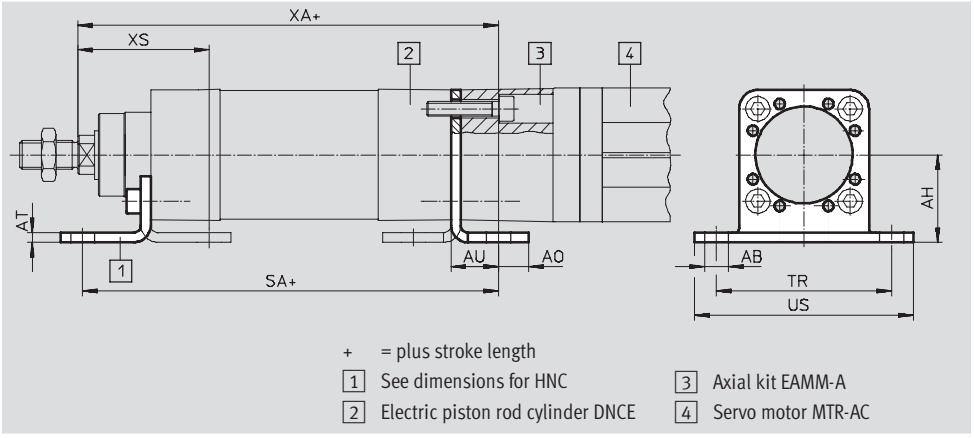
Accessories

FESTO

Foot mounting HNCE,
for axial motor attachment

Material:
Galvanised steel

Copper, PTFE and silicone-free



\+ = plus stroke length
1 See dimensions for HNC
2 Electric piston rod cylinder DNCE
3 Axial kit EAMM-A
4 Servo motor MTR-AC

Dimensions and ordering data

For size [mm]	AB ∅	AH	AO	AT	AU	SA	TR	US	XA	XS
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 [mm]	CRC[1)]	Weight [g]	Part No.	Type
32	1	160	**547 949**	**HNCE-32-AX**
40	1	220	**547 950**	**HNCE-40-AX**
63	1	470	**547 951**	**HNCE-63-AX**

1) Corrosion resistance class 1 to Festo standard 940 070
Components requiring low corrosion resistance. 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 piston rod

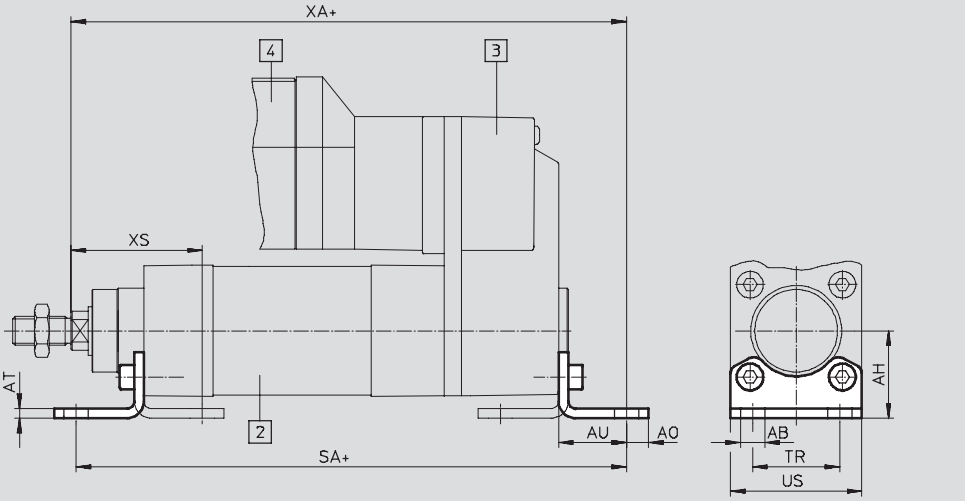
Accessories

FESTO

Foot mounting HNC/CRHNC, for parallel motor attachment

Material:
HNC: Galvanised steel

CRHNC: High-alloy steel
Copper, PTFE and silicone-free



\+ = plus stroke length
2 Electric piston rod cylinder DNCE
3 Parallel kit EAMM-U
4 Motor unit MTR-DCI

Dimensions and ordering data

For size [mm]	AB ∅	AH	AO	AT	AU	SA	TR	US	XA	XS
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			
[mm]	CRC[1]	Weight [g]	Part No.	Type	CRC[1]	Weight [g]	Part No.	Type
32	2	135	**174 369**	**HNC-32**	4	135	**176 937**	**CRHNC-32**
40	2	180	**174 370**	**HNC-40**	4	180	**176 938**	**CRHNC-40**
63	2	405	**174 372**	**HNC-63**	4	405	**176 940**	**CRHNC-63**

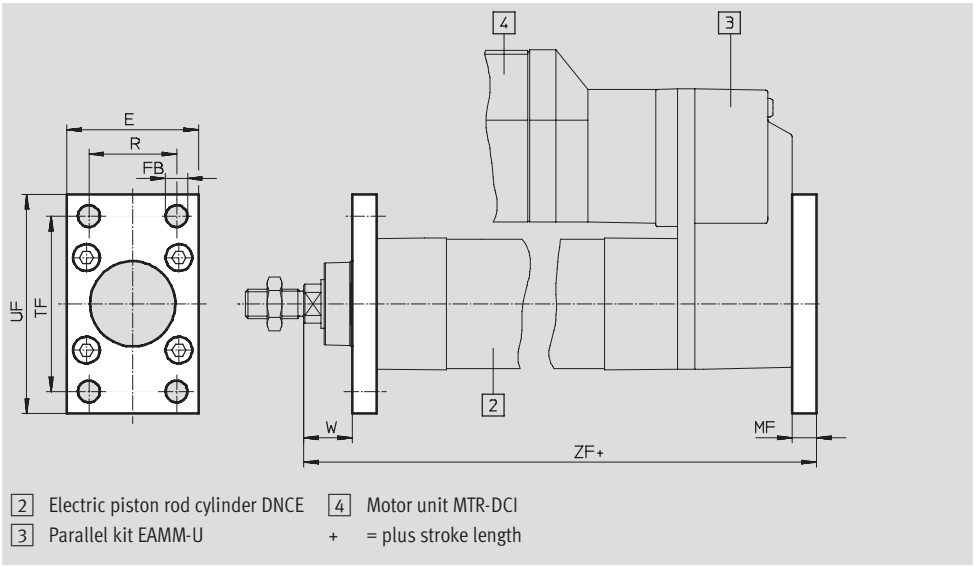
1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.
Corrosion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

Electric cylinders DNCE, with piston rod

Accessories

Flange mounting FNC/CRFNG

Material:
FNC: Galvanised steel
CRFNG: High-alloy steel
Copper, PTFE and silicone-free



2 Electric piston rod cylinder DNCE
3 Parallel kit EAMM-U
4 Motor unit MTR-DCI
\+ = plus stroke length

Dimensions and ordering data

For size [mm]	E	FB ∅ H13	MF	R	TF	UF	W	ZF
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	Basic version				High corrosion protection			
[mm]	CRC[1]	Weight [g]	Part No.	Type	CRC[1]	Weight [g]	Part No.	Type
32	2	240	**174 376**	**FNC-32**	4	240	**161 846**	**CRFNG-32**
40	2	280	**174 377**	**FNC-40**	4	300	**161 847**	**CRFNG-40**
63	2	690	**174 379**	**FNC-63**	4	710	**161 849**	**CRFNG-63**

1) Corrosion resistance class 2 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 to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

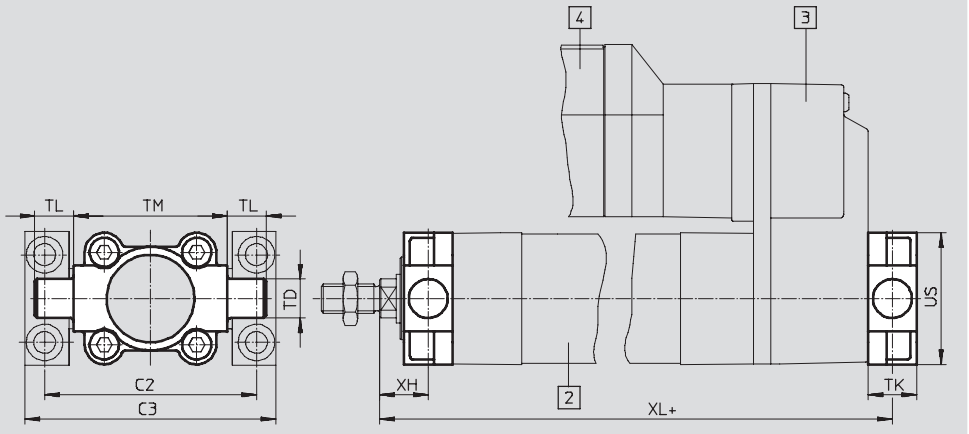
Electric cylinders DNCE, with piston rod

Accessories

FESTO

Trunnion flange ZNCF/CRZNG

Material:
ZNCF: Special steel casting
CRZNG: Electrolytically polished special steel casting
Copper, PTFE and silicone-free



2 Electric piston rod cylinder DNCE
3 Parallel kit EAMM-U
4 Motor unit MTR-DCI
\+ = plus stroke length

Dimensions and ordering data

For size [mm]	C2	C3	TD ∅ e9	TK	TL	TM	US	XH	XL
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	Basic version				High corrosion protection			
	CRC[1]	Weight	Part No.	Type	CRC[1]	Weight	Part No.	Type
[mm]		[g]				[g]		
32	2	130	**174 411**	**ZNCF-32**	4	150	**161 852**	**CRZNG-32**
40	2	240	**174 412**	**ZNCF-40**	4	260	**161 853**	**CRZNG-40**
63	2	600	**174 414**	**ZNCF-63**	4	640	**161 855**	**CRZNG-63**

1) Corrosion resistance class 2 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 to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

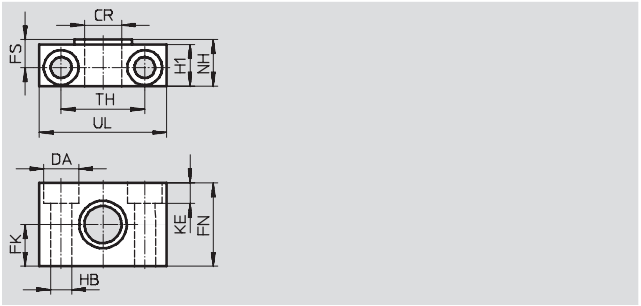
Electric cylinders DNCE, with piston rod

Accessories

FESTO

Trunnion support LNZG

Material:
Trunnion support:
Anodised aluminium
Plain bearing: Polymer
Copper, PTFE and silicone-free

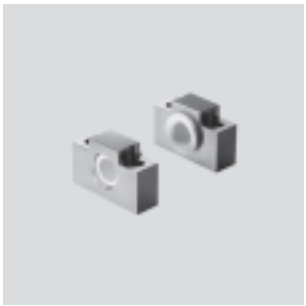


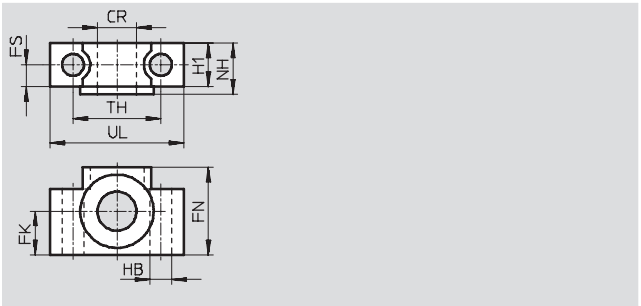
Dimensions and ordering data

For size [mm]	CR ∅ D11	DA ∅ H13	FK ∅ ±0.1	FN	FS	H1	HB ∅ H13	KE	NH	TH ±0.2	UL	CRC[1]	Weight [g]	Part No.	Type
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2	125	**32 959**	**LNZG-32**
40	16	15	18	36	12	18	9	9	21	36	55	2	400	**32 960**	**LNZG-40/50**
63	20	18	20	40	13	20	11	11	23	42	65	2	480	**32 961**	**LNZG-63/80**

Trunnion support CRLNZG

Material:
High-alloy steel
Copper, PTFE and silicone-free





Dimensions and ordering data

For size [mm]	CR ∅ D11	FK ∅ ±0.1	FN	FS	H1	HB ∅ H13	NH	TH ±0.2	UL	CRC[1]	Weight [g]	Part No.	Type
32	12	15	30	10.5	15	6.6	18	32	46	4	200	**161 874**	**CRLNZG-32**
40	16	18	36	12	18	9	21	36	55	4	330	**161 875**	**CRLNZG-40/50**
63	20	20	40	13	20	11	23	42	65	4	440	**161 876**	**CRLNZG-63/80**

1) Corrosion resistance class 2 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 to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

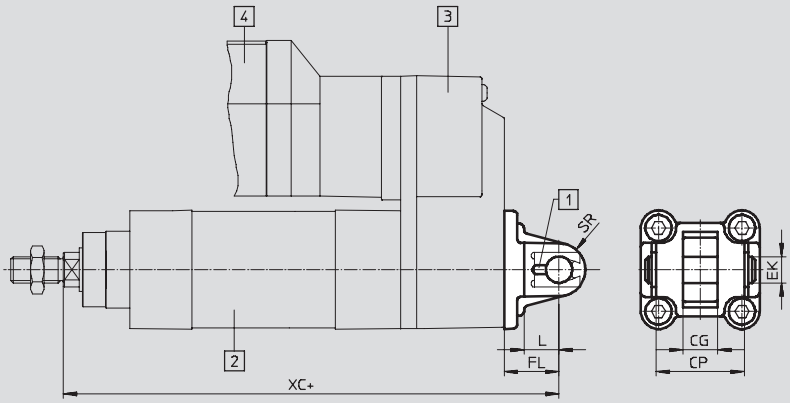
Electric cylinders DNCE, with piston rod

Accessories

FESTO

Swivel flange SNC

Material:
Die-cast aluminium
Copper, PTFE and silicone-free



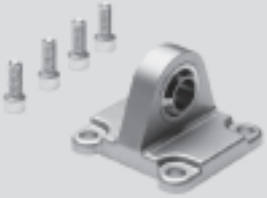
1 The pivot pin is secured against rotation with a dowel pin
2 Electric piston rod cylinder DNCE + = plus stroke length
3 Parallel kit EAMM-U
4 Motor unit MTR-DCI

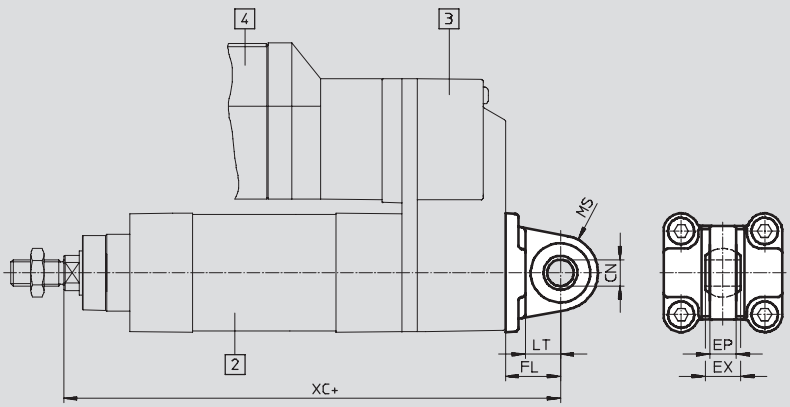
Dimensions and ordering data

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	**174 383**	**SNC-32**
40	16	40	12	25	16	12	248.5	2	120	**174 384**	**SNC-40**
63	21	51	16	32	21	16	304	2	320	**174 386**	**SNC-63**

Swivel flange SNCS

Material:
Die-cast aluminium
Copper, PTFE and silicone-free





2 Electric piston rod cylinder DNCE
3 Parallel kit EAMM-U
4 Motor unit MTR-DCI
+ = plus stroke length

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	**174 397**	**SNCS-32**
40	12	12	16	25	16	17	248.5	2	125	**174 398**	**SNCS-40**
63	16	15	21	32	21	22	304	2	280	**174 400**	**SNCS-63**

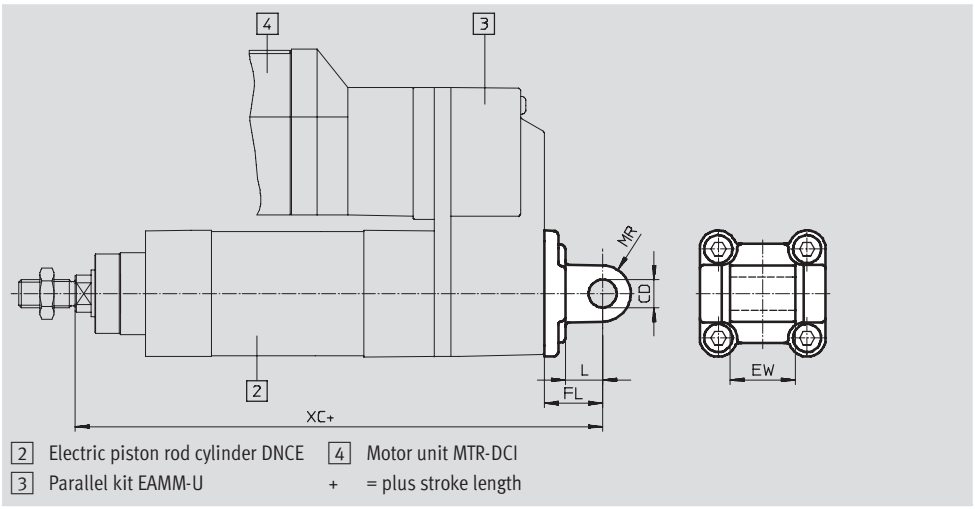
1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

Electric cylinders DNCE, with piston rod

Accessories

Swivel flange SNCL

Material:
Die-cast aluminium
Copper, PTFE and silicone-free



2 Electric piston rod cylinder DNCE
3 Parallel kit EAMM-U
4 Motor unit MTR-DCI
\+ = plus stroke length

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	**174 404**	**SNCL-32**
40	12	28	25	16	12	248.5	2	100	**174 405**	**SNCL-40**
63	16	40	32	21	16	304	2	250	**174 407**	**SNCL-63**

1) Corrosion resistance class 2 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

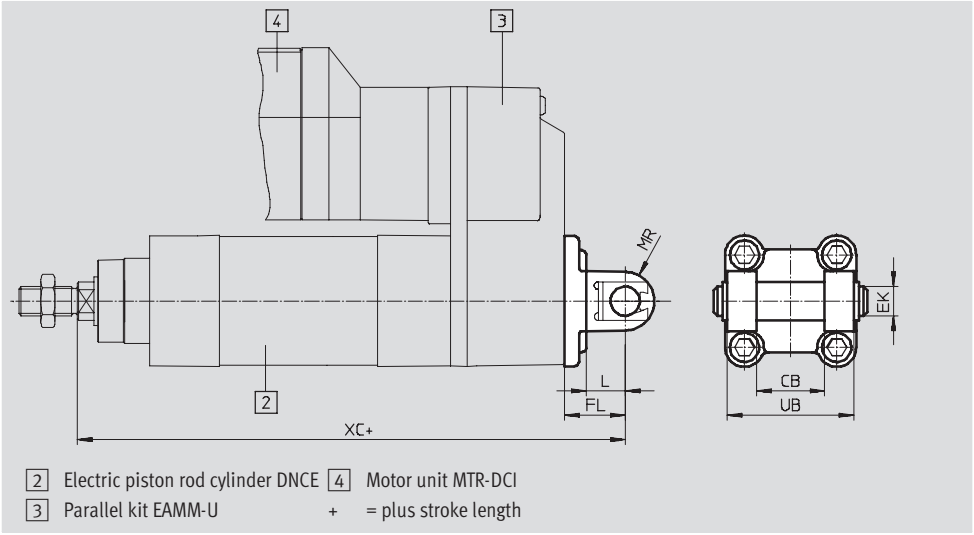
Electric cylinders DNCE, with piston rod

Accessories

FESTO

Swivel flange
SNCB/SNCB-...-R3

Material:
SNCB: Die-cast aluminium
SNCB-...-R3: Die-cast aluminium with protective coating, high corrosion protection
Copper, PTFE and silicone-free



2 Electric piston rod cylinder DNCE
3 Parallel kit EAMM-U
4 Motor unit MTR-DCI
+ = plus stroke length

Dimensions and ordering data

For size [mm]	CB H14	EK ∅ e8	FL ±0.2	L	MR	UB h14	XC
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			
[mm]	CRC[1]	Weight [g]	Part No.	Type	CRC[1]	Weight [g]	Part No.	Type
32	2	100	**174 390**	**SNCB-32**	3	100	**176 944**	**SNCB-32-R3**
40	2	150	**174 391**	**SNCB-40**	3	150	**176 945**	**SNCB-40-R3**
63	2	365	**174 393**	**SNCB-63**	3	365	**176 947**	**SNCB-63-R3**

1) Corrosion resistance class 3 to Festo standard 940 070
Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

Electric cylinders DNCE, with piston rod

Accessories

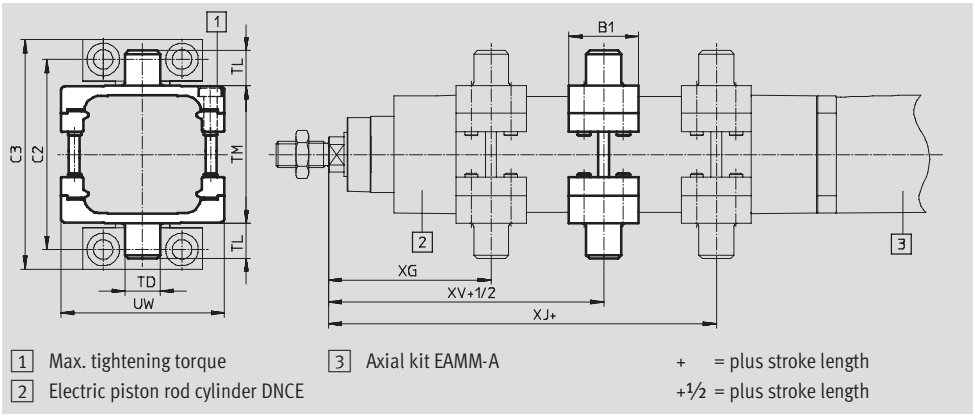
FESTO

Trunnion mounting kit ZNCM

Material:
Tempered steel

The mounting kit can be attached at any position on the cylinder profile barrel.

In combination with the parallel kit EAMM-U, the trunnion mounting kit cannot be mounted in the vicinity of the motor.



1 Max. tightening torque
2 Electric piston rod cylinder DNCE
3 Axial kit EAMM-A

\+ = plus stroke length
+½ = plus stroke length

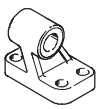
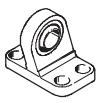
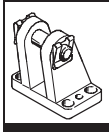
Dimensions and ordering data

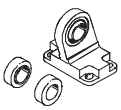
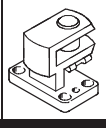
For size [mm]	B1	C2	C3	TD ∅ e9	TL	TM	UW	XG
32	30	71	86	12	12	50	65	65
40	32	87	105	16	16	63	75	74.5
63	41	116	136	20	20	90	105	91.5

For size [mm]	XJ	XV	Max. tightening torque [Nm]	CRC[1)]	Weight [g]	Part No.	Type
32	107	86	4+1	2	210	**163 525**	**ZNCM-32**
40	130.5	102.5	8+1	2	385	**163 526**	**ZNCM-40**
63	157.5	124.5	18+2	2	890	**163 528**	**ZNCM-63**

1) Corrosion resistance class 2 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 ➔ 1 / 10.1-2

Designation	For size	Part No.	Type
Clevis foot LNG			
	32	**33 890**	**LNG-32**
	40	**33 891**	**LNG-40**
	63	**33 893**	**LNG-63**
Clevis foot LSNG			
	32	**31 740**	**LSNG-32**
	40	**31 741**	**LSNG-40**
	63	**31 743**	**LSNG-63**
Clevis foot LBG			
	32	**31 761**	**LBG-32**
	40	**31 762**	**LBG-40**
	63	**31 764**	**LBG-63**

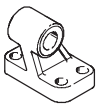
Designation	For size	Part No.	Type
Clevis foot LSN			
	32	**5 561**	**LSN-32**
	40	**5 562**	**LSN-40**
	63	**5 564**	**LSN-63**
Clevis foot LSNSG			
	32	**31 747**	**LSNSG-32**
	40	**31 748**	**LSNSG-40**
	63	**31 750**	**LSNSG-63**
Right-angle clevis foot LQG			
	32	**31 768**	**LQG-32**
	40	**31 769**	**LQG-40**
	63	**31 771**	**LQG-63**

Electric cylinders DNCE, with piston rod

Accessories

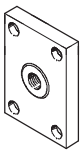
Ordering data – Mounting attachments, corrosion resistant

Technical data → 1 / 10.1-2

Designation	For size	Part No.	Type
Clevis foot CRLNG			
	32	161 840	CRLNG-32
	40	161 841	CRLNG-40
	63	161 843	CRLNG-63

Ordering data – Piston-rod attachments

Technical data → 1 / 10.3-2

Designation	For size	Part No.	Type
Rod eye SGS			
	32	9 261	SGS-M10x1,25
	40	9 262	SGS-M12x1,25
	63	9 263	SGS-M16x1,5
Rod clevis SG			
	32	6 144	SG-M10x1,25
	40	6 145	SG-M12x1,25
	63	6 146	SG-M16x1,5
Coupling piece KSZ			
	32	36 125	KSZ-M10x1,25
	40	36 126	KSZ-M12x1,25
	63	36 127	KSZ-M16x1,5

Designation	For size	Part No.	Type
Rod clevis SGA			
	32	32 954	SGA-M10x1,25
	40	10 767	SGA-M12x1,25
	63	10 768	SGA-M16x1,5
Self-aligning rod coupler FK			
	32	6 140	FK-M10x1,25
	40	6 141	FK-M12x1,25
	63	6 142	FK-M16x1,5

Ordering data – Piston rod attachments, corrosion resistant

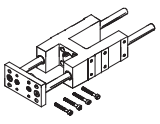
Technical data → 1 / 10.3-2

Designation	For size	Part No.	Type
Rod eye CRSGS			
	32	195 582	CRSGS-M10x1,25
	40	195 583	CRSGS-M12x1,25
	63	195 584	CRSGS-M16x1,5

Designation	For size	Part No.	Type
Rod clevis CRSG			
	32	13 569	CRSG-M10x1,25
	40	13 570	CRSG-M12x1,25
	63	13 571	CRSG-M16x1,5

Ordering data – Guide units for fixed strokes (recirculating ball bearing guide only)

Technical data → 1 / 10.4-2

	Stroke [mm]	Part No.	Type
	For size 32		
	10 ... 100	34 494	FENG-32-100-KF
	10 ... 200	34 496	FENG-32-200-KF
	10 ... 320	34 497	FENG-32-320-KF
	10 ... 400	150 290	FENG-32-400-KF
	10 ... 500	34 498	FENG-32-500-KF
	For size 63		
	10 ... 100	34 514	FENG-63-100-KF
	10 ... 200	34 516	FENG-63-200-KF
	10 ... 320	34 518	FENG-63-320-KF
	10 ... 400	34 519	FENG-63-400-KF
	10 ... 500	34 520	FENG-63-500-KF

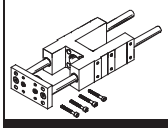
Stroke [mm]	Part No.	Type
For size 40		
10 ... 100	34 500	FENG-40-100-KF
10 ... 200	34 502	FENG-40-200-KF
10 ... 320	34 504	FENG-40-320-KF
10 ... 400	150 291	FENG-40-400-KF
10 ... 500	34 505	FENG-40-500-KF

Electric cylinders DNCE, with piston rod

Accessories

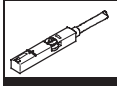
FESTO

Ordering data – Guide units for variable strokes — Technical data → 1 / 10.4-2

	For size [mm]	Stroke [mm]	With recirculating ball bearing guide Part No.	Type	With plain-bearing guide Part No.	Type
	32	10 … 500	**34 487**	**FENG-32-…-KF**	**34 481**	**FENG-32-…**
	40	10 … 500	**34 488**	**FENG-40-…-KF**	**34 482**	**FENG-40-…**
	63	10 … 500	**34 490**	**FENG-63-…-KF**	**34 484**	**FENG-63-…**

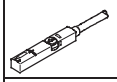
Permissible proximity sensors in combination with motor units MTR-DCI

Ordering data – Proximity sensor for T-slot, magneto-resistive — Technical data → www.festo.com/catalogue/sm

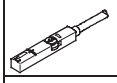
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Plug M8x1, 3-pin	0.3	**543 866**	**SMT-8M-PS-24V-K-0,3-M8D**

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

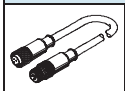
Ordering data – Proximity sensor for T-slot, magneto-resistive — Technical data → www.festo.com/catalogue/sm

	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	2.5	**543 867**	**SMT-8M-PS-24V-K-2,5-OE**
	Insertable in the slot lengthwise, flush with the cylinder profile	PNP	Cable, 3-wire	2.5	**175 436**	**SMT-8-PS-K-LED-24-B**

Ordering data – Proximity sensors for T-slot, magnetic reed — Technical data → www.festo.com/catalogue/sm

	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	Contacting	Cable, 3-wire	2.5	**543 862**	**SME-8M-DS-24V-K-2,5-OE**
				5.0	**543 863**	**SME-8M-DS-24V-K-5,0-OE**
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	**150 855**	**SME-8-K-LED-24**

Ordering data – Connecting cables — Technical data → 7 / 1.1-30

	Mounting	Connection	Cable length [m]	Part No.	Type
Straight socket					
	Union nut M8, both ends	3-pin	0.5	**175 488**	**KM8-M8-GSGD-0,5**
			1	**175 489**	**KM8-M8-GSGD-1**
			2.5	**165 610**	**KM8-M8-GSGD-2,5**
			5	**165 611**	**KM8-M8-GSGD-5**

Ordering data – Slot cover for T-slot

	Mounting	Length	Part No.	Type
	Insertable from above	2x 0.5 m	**151 680**	**ABP-5-S**