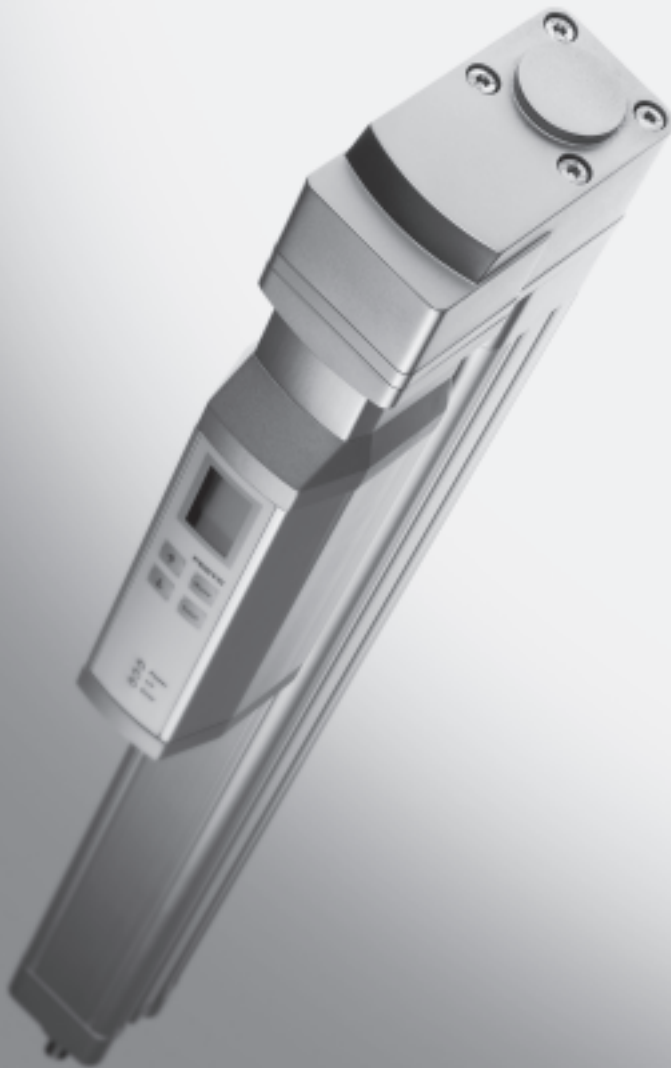


Electric cylinders DNCE, with piston rod

FESTO



- Electromechanical linear axis with piston rod
- 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

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At a glance

General

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.

Properties

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

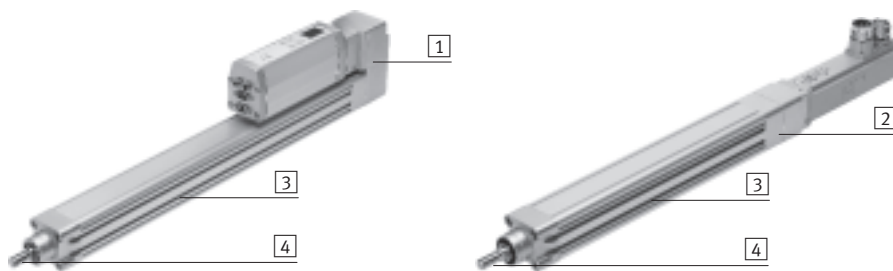
Range of applications

- 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 electrical cylinder, motor and motor mounting kit

Electrical 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)

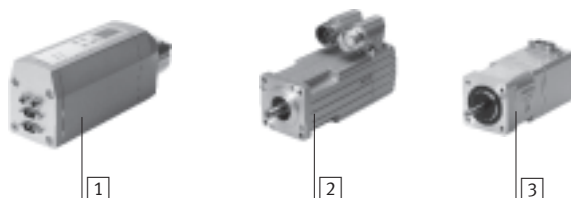
Note

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 / 2.1-19



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

Note

A range of specially adapted complete solutions is available for the electric

cylinder DNCE and the motors/motor units.

Motor mounting kit

→ 5 / 2.1-19

Axial kit

Parallel kit



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

Electric cylinders DNCE, with piston rod

Type codes

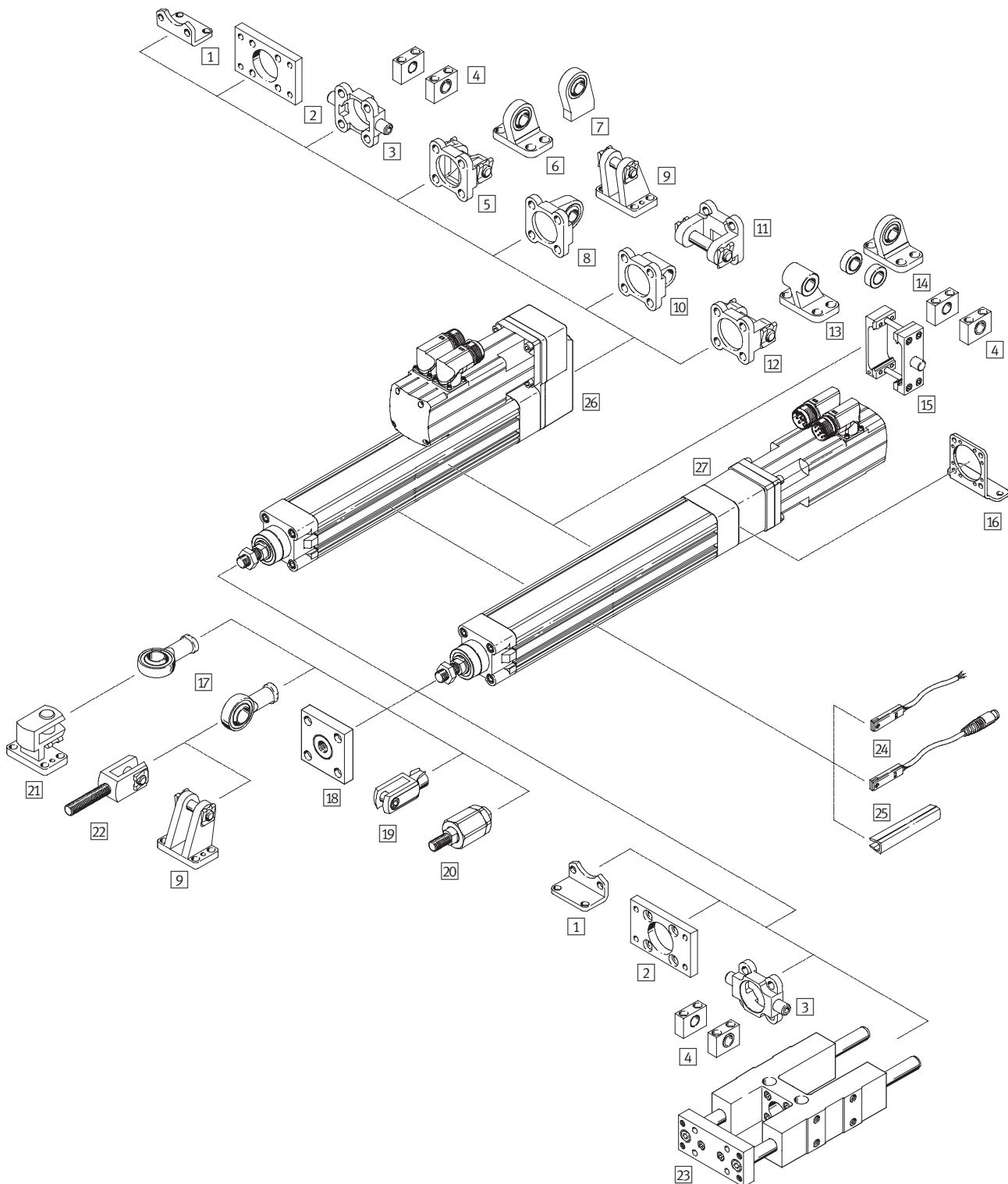
FESTO

		DNCE	–	32	–	100	–	LS	–	1,5	–	Q
Type												
DNCE	Electric cylinder											
Size												
Stroke [mm]												
Drive function												
LS	Linear drive with lead screw											
BS	Linear drive with ball screw											
Spindle pitch [mm]												
Protection against torsion												
Q	Non-rotating piston rod											

Electric cylinders DNCE, with piston rod

Peripherals overview

FESTO



Electric cylinders DNCE, with piston rod

Peripherals overview

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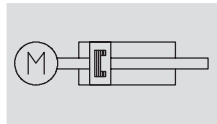
Mounting attachments and accessories		
Type/Order code	Brief description	→ Page
1 Foot mounting HNC/CRHNC	– With parallel motor attachment for bearing and gearing cap – With axial motor attachment for bearing cap	5 / 2.1-23
2 Flange mounting FNC/CRFNG	For bearing and gearing cap	5 / 2.1-24
3 Trunnion flange ZNC/CRZNG	For bearing and gearing cap	5 / 2.1-24
4 Trunnion support LNZG/CRLNZG	For cylinders with trunnion mounting	5 / 2.1-25
5 Swivel flange SNC	For gearing cap	5 / 2.1-26
6 Clevis foot LSNG	With spherical bearing	5 / 2.1-28
7 Clevis foot LSNSG	Weld-on, with spherical bearing	5 / 2.1-28
8 Swivel flange SNCS	For spherical bearing	5 / 2.1-26
9 Clevis foot LBG	For spherical bearing	5 / 2.1-28
10 Swivel flange SNCL	For gearing cap	5 / 2.1-27
11 Swivel flange SNCB/SNCB-...-R3	For spherical bearing	5 / 2.1-27
12 Swivel flange SNCB/SNCB-...-R3	For gearing cap	5 / 2.1-27
13 Clevis foot LNG/CRLNG	–	5 / 2.1-28
14 Clevis foot LSN	With spherical bearing	5 / 2.1-28
15 Trunnion mounting kit ZNCM	For mounting anywhere along the cylinder profile barrel. Cannot be mounted in the area of the motor with parallel motor attachment	5 / 2.1-28
16 Foot mounting HNCE	With axial motor attachment for bearing cap	5 / 2.1-22
17 Rod eye SGS/CRSGS	With spherical bearing	5 / 2.1-29
18 Coupling piece KSZ	For compensating radial deviations	5 / 2.1-29
19 Rod clevis SG/CRSG	Permits a swivelling movement of the cylinder in one plane	5 / 2.1-29
20 Self-aligning rod coupler FK	For compensating radial and angular deviations	5 / 2.1-29
21 Right-angle clevis mounting LQG	For rod eye SGS	5 / 2.1-29
22 Rod clevis SGA	For swivel attachment of cylinders	5 / 2.1-29
23 Guide unit FENG	For protecting standard cylinders from torsion at high torque loads	5 / 2.1-29
24 Proximity sensor SME/SMT-8	For position sensing. Can be integrated in sensor slot, thus no projecting parts	5 / 2.1-30
25 Slot cover ABP-5-S	For protecting against ingress of dirt	5 / 2.1-31
26 Parallel kit EAMM-U	For parallel motor attachment	5 / 2.1-19
27 Axial kit EAMM-A	For axial motor attachment	5 / 2.1-19

Electric cylinders DNCE, with piston rod

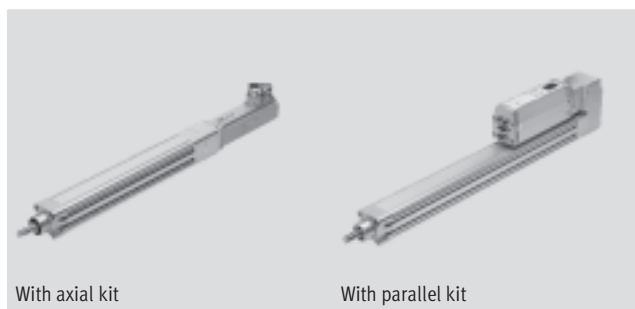
Technical data

FESTO

Function



-  - Size
32, 40
-  - Stroke length
100 ... 600 mm



With axial kit

With parallel kit

General technical data		
Size	32	40
Design	LS	With lead screw
	BS	With ball screw
Piston rod thread	M10x1.25	M12x1.25
Working stroke	100 ... 400	100 ... 600
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
Impact energy (E) at end positions [J]	0.0001 $E = 0,5 \times m \times v^2$	0.0002 $E = 0,5 \times m \times v^2$
Duty cycle ¹⁾ [%]	100	
Position sensing	For proximity sensor	
Type of mounting	With 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						
Size	32			40		
Spindle design	LS-1,5	BS-3	BS-10	LS-2,5	BS-5	BS-12,7
Lead screw pitch [mm/rev.]	1.5	3	10	2.5	5	12.7
Spindle diameter [mm]	9	10	10	12.5	12	12.7
Max. feed force $F_x^{1)}$ [N]	300	300	350	600	525	800
Continuous feed force [N]	300	240	280	600	420	640
Max. driving torque ²⁾ [Nm]	0.4	0.4	0.8	1.15	0.7	1.9
No-load driving torque with axial kit ³⁾ [Nm]	0.06	0.08	0.08	0.15	0.12	0.12
No-load driving torque with parallel kit ³⁾ [Nm]	0.11	0.13	0.13	0.25	0.22	0.22
Continuous driving torque [Nm]	0.4	0.3	0.7	1.15	0.6	1.6
Max. radial force on drive shaft [N]	45	45	45	120	120	120
Max. speed [m/s]	0.06	0.15	0.5	0.07	0.25	0.64
Max. acceleration [m/s ²]	1	6	6	1	6	6
Reversing backlash ⁴⁾ [mm]	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
Guide value for effective load, horizontal [kg]	30	30	36	60	50	80
Guide value for effective load, vertical [kg]	15	15	18	30	25	40

1) In the case of the variant with lead screw (LS), the feed force depends on the speed → 5 / 2.1-14

2) In the case of the variant with lead screw (LS), the driving torque depends on the rotational speed → 5 / 2.1-15

3) Measured at a speed of 200 rpm.

4) In new condition

Electric cylinders DNCE, with piston rod

Technical data

FESTO

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

1) Note operating range of proximity sensors and motors

Weights [g]						
Size	32			40		
Spindle design	LS -1,5	BS-3	BS-10	LS -2,5	BS-5	BS-12,7
Basic weight with 0 mm stroke	720	750	770	1,210	1,270	1,350
Additional weight per 10 mm stroke	32.4	33	33.6	46.1	45.5	46.7
Moving load with 0 mm stroke	150	170	200	250	310	380
Moving load per 10 mm stroke	6.9	6.9	6.9	8.9	8.9	8.9

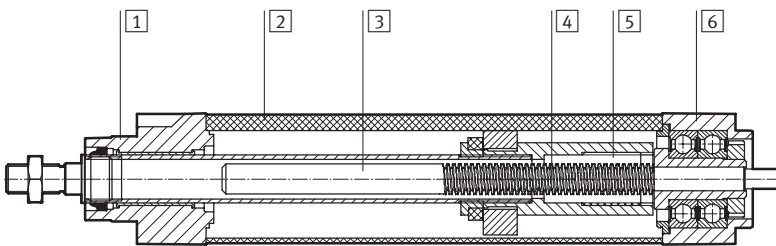
Mass moment of inertia							
Size		32			40		
Spindle design		LS-1,5	BS-3	BS-10	LS-2,5	BS-5	BS-12,7
J ₀ at 0 mm stroke	[kg cm ²]	0.0433	0.0439	0.0446	0.1316	0.1304	0.1337
j _H per metre stroke	[kg cm ² /m]	0.0361	0.0476	0.0595	0.1341	0.1163	0.1572
j _L per kg working load	[kg cm ² /Kg]	0.0006	0.0023	0.0253	0.0016	0.0063	0.0409

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

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

Materials

Sectional view



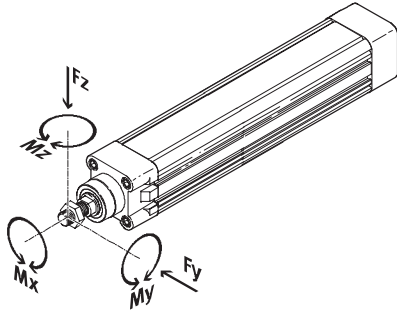
Electric cylinder		
1	Bearing cap	Die-cast aluminium, painted
2	Cylinder barrel	Wrought aluminium alloy, smooth anodised
3	Piston rod	High-alloy stainless steel
4	Spindle	Steel
5	Spindle nut for LS	Polyacetate
	Spindle nut for BS	Steel
6	Drive cover	Die-cast aluminium, painted
	Note on materials	Free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

Electric cylinders DNCE, with piston rod

Technical data

FESTO

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:

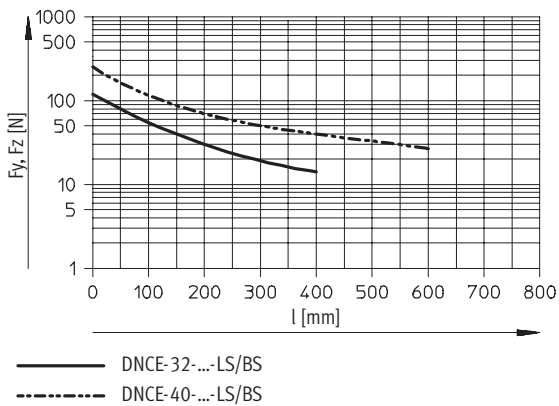
$$\frac{|F_{y1}|}{F_{y\max.}} + \frac{|F_{z1}|}{F_{z\max.}} + \frac{|M_{y1}|}{M_{y\max.}} + \frac{|M_{z1}|}{M_{z\max.}} \leq 1$$

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

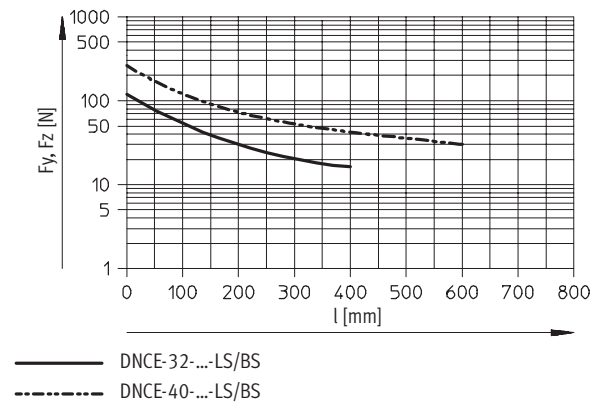
$$|M_x| \leq M_{x\max}$$

Maximum permissible lateral forces $F_{y\max}$ and $F_{z\max}$ on the piston rod

Mounting position, horizontal



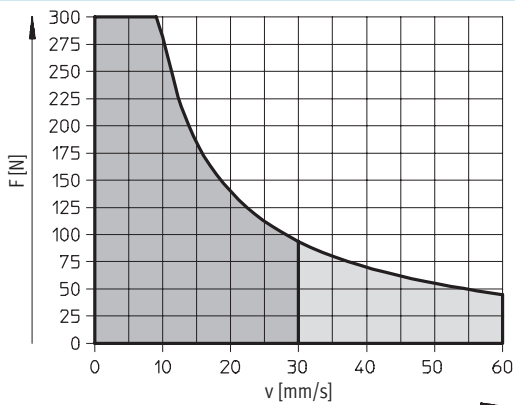
Mounting position, vertical



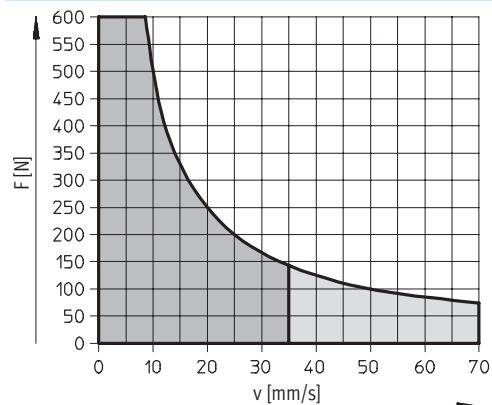
Size	32	40
Maximum permissible torques		
$M_{x\max}$ [Nm]	1	4
$M_{y\max}, M_{z\max}$ [Nm]	8	20

Feed force F as a function of speed v

DNCE-32-LS-...



DNCE-40-LS-...



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

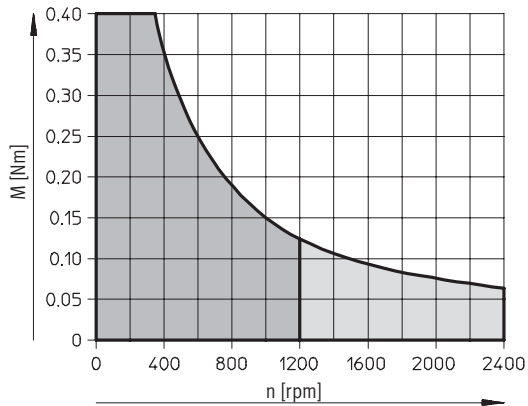
Electric cylinders DNCE, with piston rod

Technical data

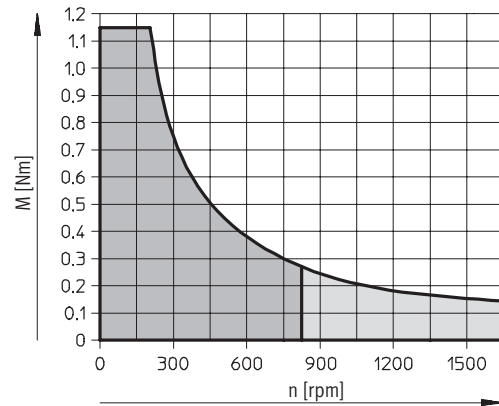
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Driving torque M as a function of rotational speed n

DNCE-32-LS-...



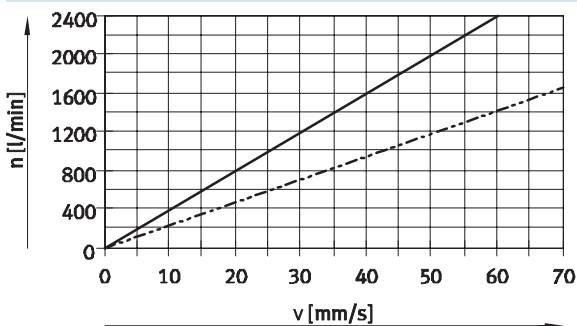
DNCE-40-LS-...



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

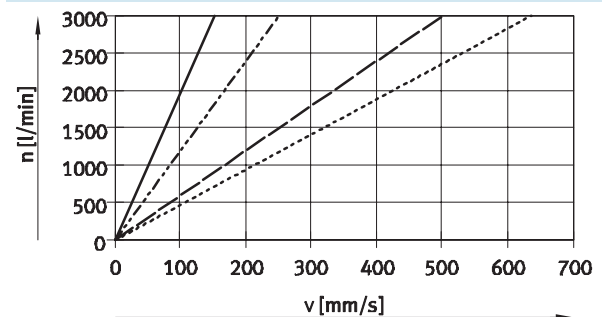
Rotational speed n as a function of speed v

DNCE-...-LS-...



- DNCE-32-LS-1,5
- - - DNCE-40-LS-2,5

DNCE-...-BS-...



- DNCE-32-BS-3
- - - DNCE-40-BS-5
- DNCE-32-BS-10
- - - DNCE-40-BS-12,7

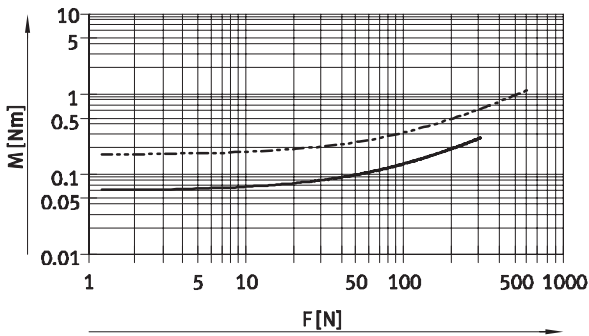
Electric cylinders DNCE, with piston rod

Technical data

FESTO

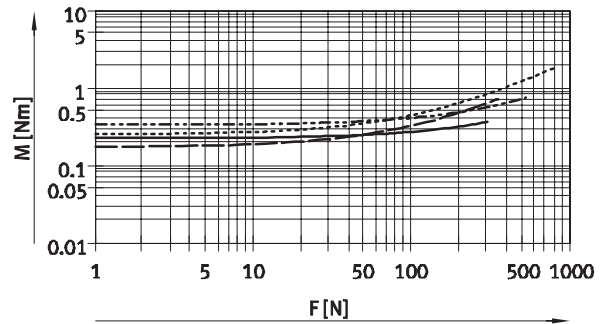
Driving torque M as a function of feed force F

DNCE-...-LS-...



— DNCE-32-LS-1,5
- - - DNCE-40-LS-2,5

DNCE-...-BS-...

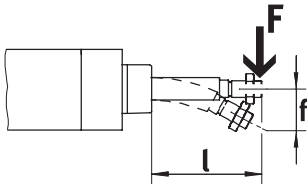


— DNCE-32-BS-3
- - - DNCE-40-BS-5
- · - DNCE-32-BS-10
···· DNCE-32-BS-12,7

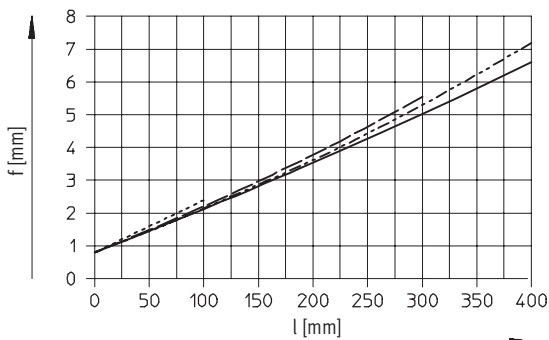
 Note

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

Piston rod displacement f as a function of stroke length l

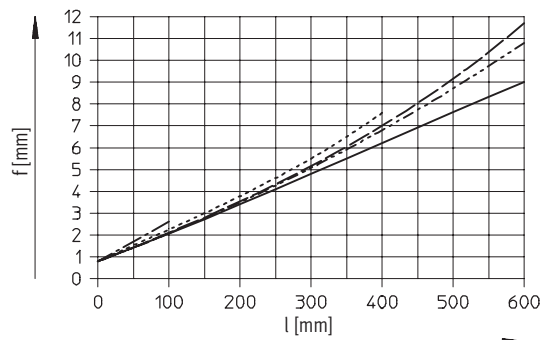


DNCE-32-...



— 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

Electric cylinders DNCE, with piston rod

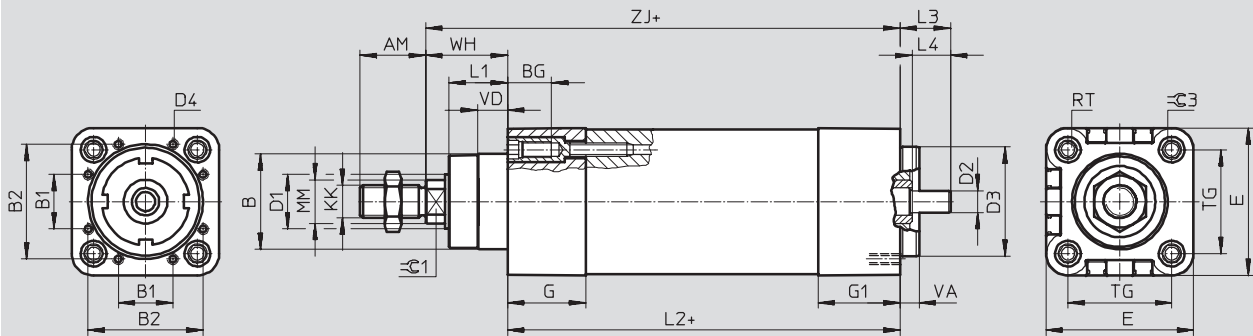
Technical data

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Dimensions

Download CAD data → www.festo.com/en/engineering

Electric cylinder DNCE



+ = plus stroke length

Size	AM	B Ø d11	B1	B2	BG	D1 Ø h9	D2 Ø h6	D3 Ø g7	D4	E	G	G1	KK
[mm]													
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

Size	L1	L2	L3	L4	MM	RT	TG	VA	VD	WH	ZJ ±1	⌀C1	⌀C3
[mm]													
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

Electric cylinders DNCE, with piston rod

Technical data

FESTO

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

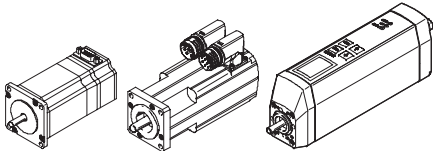
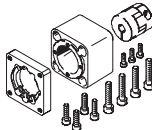
Ordering data – Size 40					
Stroke [mm]	Part No.	Type	Stroke [mm]	Part No.	Type
Linear drive with ball screw with spindle pitch 5 mm			Linear drive with lead screw with spindle pitch 2.5 mm		
100	543 127	DNCE-40-100-BS-5-Q	100	543 123	DNCE-40-100-LS-2,5-Q
200	543 128	DNCE-40-200-BS-5-Q	200	543 124	DNCE-40-200-LS-2,5-Q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

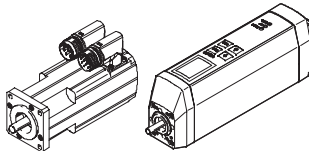
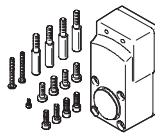
 **Note**
Variable strokes on request.

Electric cylinders DNCE, with piston rod

Accessories

FESTO

Permissible axis/motor combinations with axial kit			
	Motor/motor unit		Axial kit
			
For size	Part No.	Type	Part No. Type
32	With servo motor		
	540 299	MTR-AC-40-3S-AA	543 147 EAMM-A-D32-40A
	540 300	MTR-AC-40-3S-AB	
	With stepper motor		
	530 057	MTR-ST-42-48S-AA	543 148 EAMM-A-D32-42A
	530 058	MTR-ST-42-48S-AB	
	With intelligent motor unit		
	1)	MTR-DCI-32-...	543 149 EAMM-A-D32-32B
40	With servo motor		
	526 723	MTR-AC-55-3S-AA	543 153 EAMM-A-D40-55A
	526 724	MTR-AC-55-3S-AB	
	With stepper motor		
	530 061	MTR-ST-57-48S-AA	543 154 EAMM-A-D40-57-A
	530 062	MTR-ST-57-48S-AB	
	With intelligent motor unit		
	1)	MTR-DCI-42-G07	543 155 EAMM-A-D40-42B
	1)	MTR-DCI-42-G14	543 156 EAMM-A-D40-42C

Permissible axis/motor combinations with parallel kit				
	Motor/motor unit		Parallel kit	→ 5 / 2.1-21
				
For size	Part No.	Type	Part No.	Type
32	With servo motor			
	540 299	MTR-AC-40-3S-AA	543 150	EAMM-U-D32-40A
	540 300	MTR-AC-40-3S-AB		
	With intelligent motor unit			
	1)	MTR-DCI-32-...	543 152	EAMM-U-D32-32B
40	With servo motor			
	526 723	MTR-AC-55-3S-AA	543 157	EAMM-U-D40-55A
	526 724	MTR-AC-55-3S-AB		
	With intelligent motor unit			
	1)	MTR-DCI-42-G07	543 159	EAMM-U-D40-42B
	1)	MTR-DCI-42-G14	543 160	EAMM-U-D40-42C

1) The intelligent motor unit is a modular product; for information on configuration and ordering → 5 / 2.2-9

 Note

Some of the permissible limit values of the electric cylinder cannot be achieved with recommended axis/motor combinations. The motor data must therefore be taken into account during configuration.

Electric cylinders DNCE, with piston rod

Accessories

FESTO

Axial kit EAMM-A-...

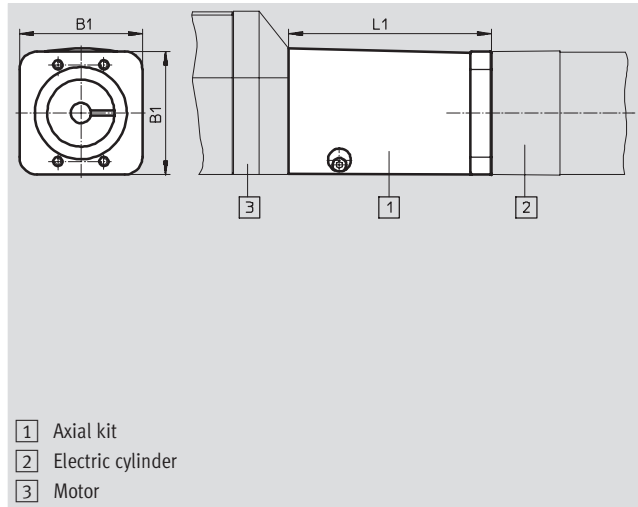
Material:

Coupling housing: Die-cast aluminium

Coupling hubs: Wrought aluminium alloy

Clamping component: High-alloy steel

Screws: Galvanised steel



General technical data								
Type EAMM-A-...		D32-32B	D32-40A	D32-42A	D40-42B	D40-42C	D40-55A	D40-57A
Transferable torque	[Nm]	1.1	1.1	0.8	8	8	8	6
Mass moment of inertia	[kgmm ²]	0.3	0.3	0.3	5.82	5.82	5.82	5.82
Max. 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
Note on materials	Free of copper and PTFE

1) Only with combined attachment of motor and axis

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-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

 **Note**
Permissible axis/motor combinations
→ 5 / 2.1-19

Electric cylinders DNCE, with piston rod

Accessories

Parallel kit EAMM-U-...

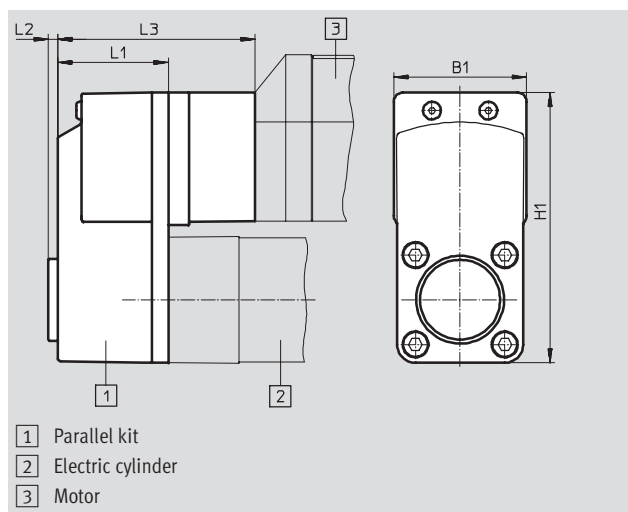
Material:

Coupling housing: Die-cast aluminium

Clamping component, clamping sleeve, toothed belt disc: High-alloy steel

Toothed belt: Polychloroprene

Screws: Galvanised steel



General technical data						
Type EAMM-U-...		D32-32B	D32-40A	D40-42B	D40-42C	D40-55A
Transferable torque	[Nm]	0.4	0.4	1.2	1.2	0.7
No-load drive torque	[Nm]	0.05	0.05	0.1	0.1	0.1
Mass moment of inertia	[kgmm ²]	2.925	2.925	10.015	10.015	10.015
Max. speed	[rpm]	500	3 000	500	500	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
Note on materials		Free of copper and PTFE

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	53.6	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

 Note

Permissible axis/motor combinations
→ 5 / 2.1-19

Electric cylinders DNCE, with piston rod

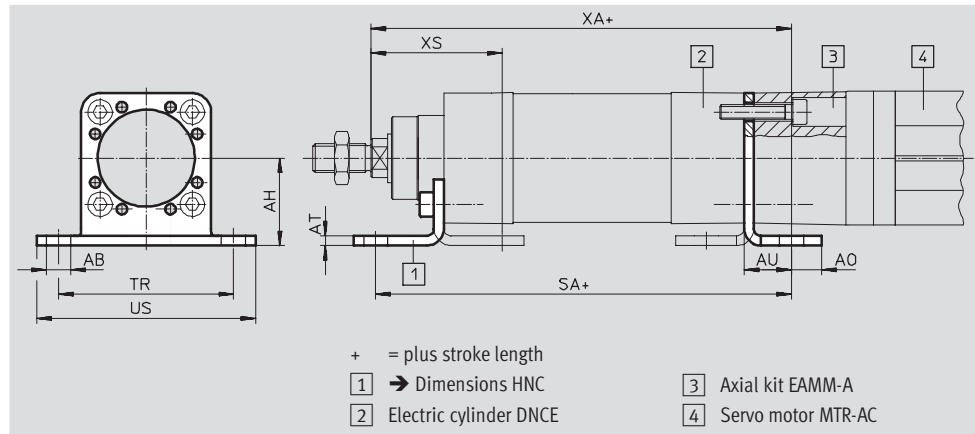
Accessories

FESTO

Foot mounting HNCE, for axial motor attachment

Material:
Galvanised steel

Copper, PTFE and silicone-free



Dimensions and ordering data										
For size	AB Ø	AH	AO	AT	AU	SA	TR	US	XA	XS
[mm]										
32	7	32	8.5	4	17.5	163.5	58	71	165.5	46
40	10	36	12.5	4	19.5	194	72	90	196	54

For size	CRC ¹⁾	Weight	Part No.	Type
[mm]	[g]	[g]		
32	2	160	547 949	HNCE-32-AX
40	2	220	547 950	HNCE-40-AX

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

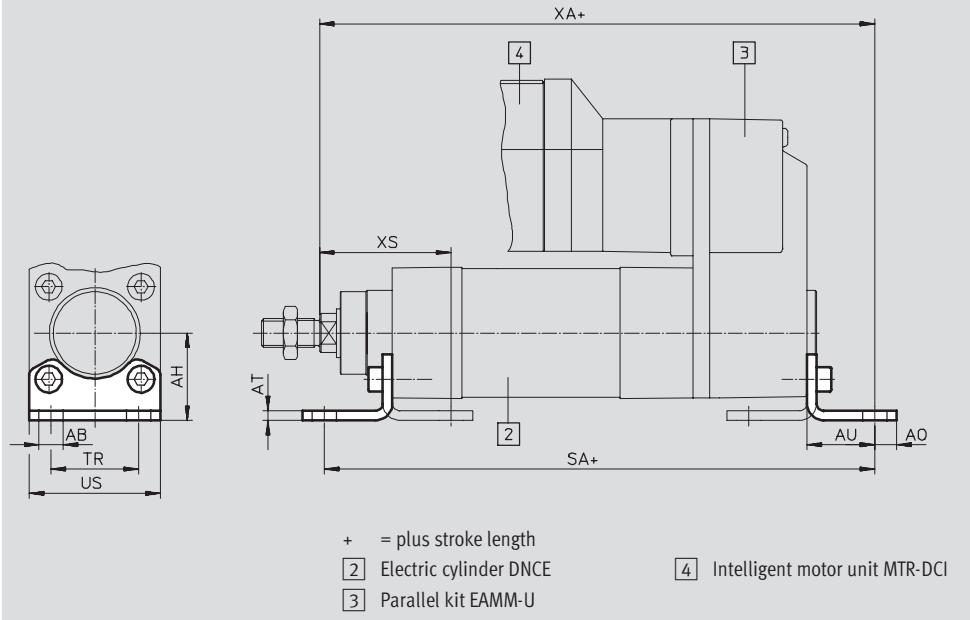
Accessories

FESTO

**Foot mounting HNC/CRHNC,
for parallel motor attachment**

Material:
HNC: Galvanised steel

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



Dimensions and ordering data										
For size	AB Ø	AH	AO	AT	AU	SA	TR	US	XA	XS
[mm]										
32	7	32	6.5	4	24	170	32	45	188	46
40	10	36	9	4	28	202.5	36	54	223.5	54

For size	Basic type				High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]								
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

- 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

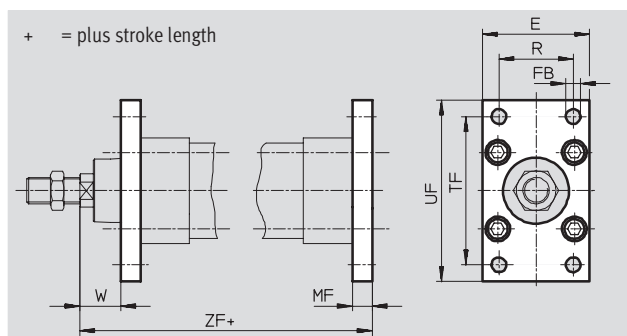
Flange mounting FNC/CRFNG

Material:

FNC: Galvanised steel

CRFNG: High-alloy steel

Copper, PTFE and silicone-free



Dimensions and ordering data

For size	E	FB Ø	MF	R	TF	UF	W	ZF
[mm]		H13						
32	45	7	10	32	64	80	16	130
40	54	9	10	36	72	90	20	145

For size	Basic type				High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]								
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

Trunnion flange ZNCF/CRZNG

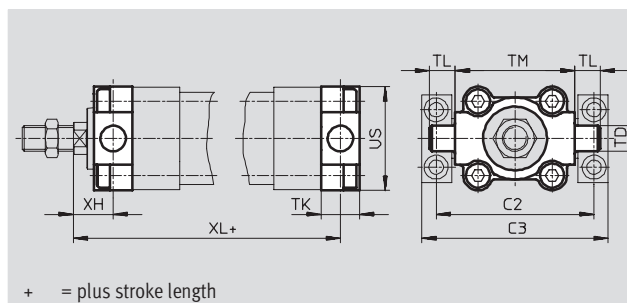
Material:

ZNCF: Stainless steel casting

CRZNG: Electrolytically polished

stainless steel casting

Copper, PTFE and silicone-free



Dimensions and ordering data

For size	C2	C3	TD Ø	TK	TL	TM	US	XH	XL
[mm]			e9						
32	71	86	12	16	12	50	45	18	128
40	87	105	16	20	16	63	54	20	145

For size	Basic type				High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]								
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

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

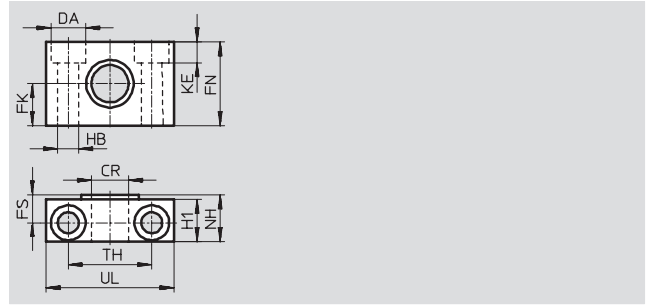
Trunnion support LNZG

Material:

Trunnion support: Anodised aluminium

Plain bearing: Plastic

Copper, PTFE and silicone-free



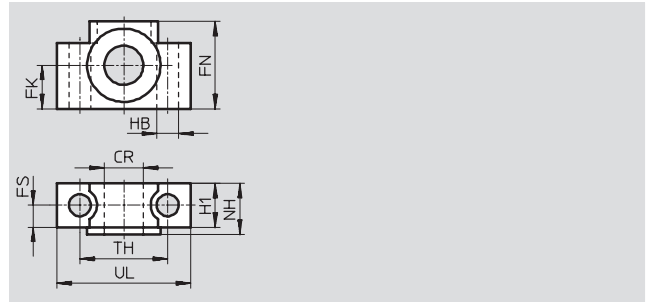
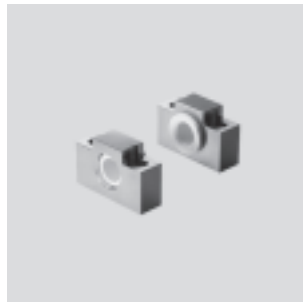
Dimensions and ordering data															
For size	CR	DA	FK	FN	FS	H1	HB	KE	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø D11	Ø H13	Ø ±0.1				Ø H13			±0.2			[g]		
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2	125	32 959	LNZG-32
40	16	15	18	36	12	18	9	9	21	36	55	2	400	32 960	LNZG-40/50

Trunnion support CRLNZG

Material:

High-alloy steel

Copper, PTFE and silicone-free



Dimensions and ordering data													
For size	CR	FK	FN	FS	H1	HB	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø D11	Ø ±0.1				Ø H13		±0.2			[g]		
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

- 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

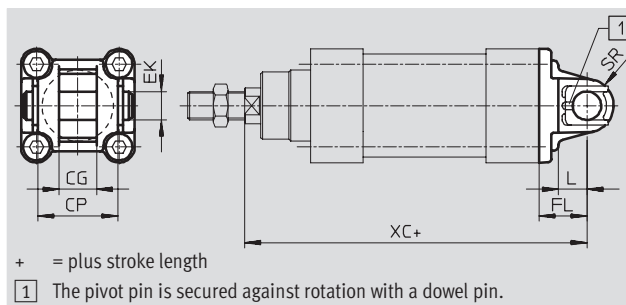
Electric cylinders DNCE, with piston rod

Accessories

FESTO

Swivel flange SNC

Material:
Die-cast aluminium

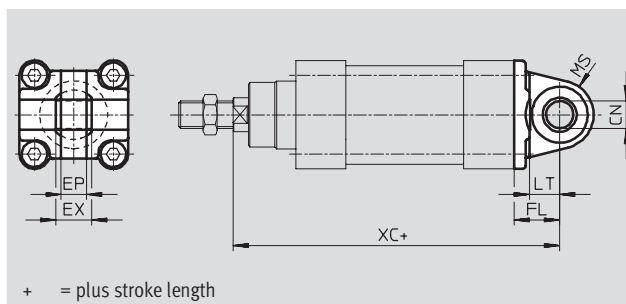
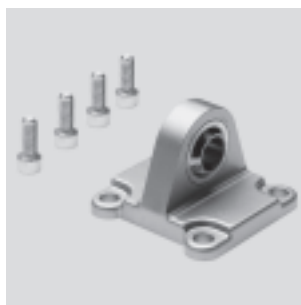


Dimensions and ordering data

For size	CG	CP	EK Ø	FL ±0.2	L	SR	XC	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]	H14	h14									
32	14	34	10	22	13	10	142	2	90	174 383	SNC-32
40	16	40	12	25	16	12	160	2	120	174 384	SNC-40

Swivel flange SNCS

Material:
Die-cast aluminium



Dimensions and ordering data

For size	CN Ø	EP +0.2	EX	FL ±0.2	LT	MS	XC	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]	H7										
32	10	10.5	14	22	13	15	142	2	85	174 397	SNCS-32
40	12	12	16	25	16	17	160	2	125	174 398	SNCS-40

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

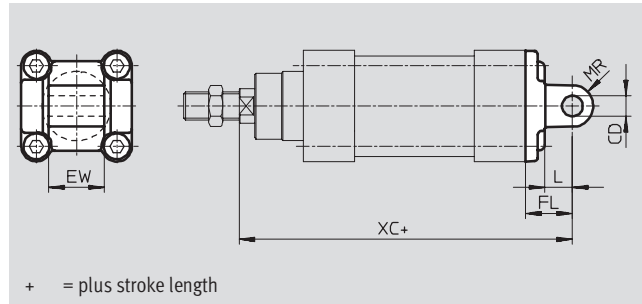
Electric cylinders DNCE, with piston rod

Accessories

FESTO

Swivel flange SNCL

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

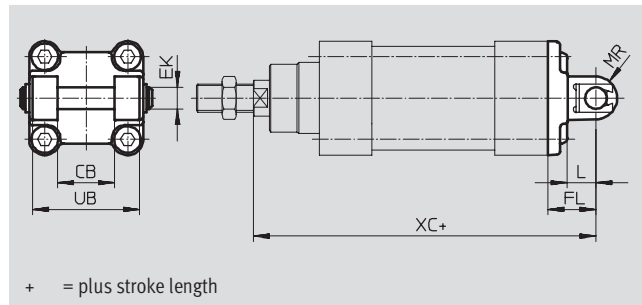


Dimensions and ordering data										
For size	CD	EW	FL	L	MR	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø	h12	±0.2					[g]		
32	10	26	22	13	10	142	2	75	174 404	SNCL-32
40	12	28	25	16	12	160	2	100	174 405	SNCL-40

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



Dimensions and ordering data							
For size	CB	EK	FL	L	MR	UB	XC
[mm]	H14	Ø	±0.2			h14	
32	26	10	22	13	10	45	142
40	28	12	25	16	12	52	160

For size	Basic type				Variant R3 – High corrosion protection			
	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

- 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 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

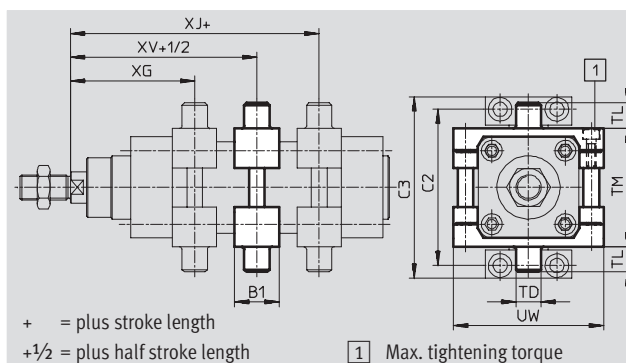
Accessories

FESTO

Trunnion mounting kit ZNCM

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

Material:
Tempered steel

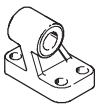
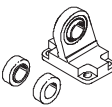
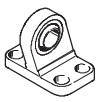
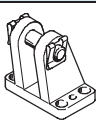
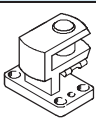


Dimensions and ordering data								
For size	B1	C2	C3	TD Ø e9	TL	TM	UW	XG
[mm]								
32	30	71	86	12	12	50	65	66.1
40	32	87	105	16	16	63	75	75.6

For size	XJ	XV	Max. tightening torque [Nm]	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]							
32	79.9	73	4+1	2	210	163 525	ZNCM-32
40	89.4	82.5	8+1	2	385	163 526	ZNCM-40

1) Corrosion resistance class 2 to Festo standard 940 070

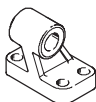
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

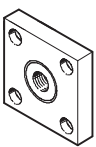
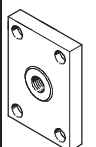
Ordering data – Mounting attachments				Technical data → 1 / 10.1-2			
Designation	For size	Part No.	Type	Designation	For size	Part No.	Type
Clevis foot LNG				Clevis foot LSN			
	32	33 890	LNG-32		32	5 561	LSN-32
	40	33 891	LNG-40		40	5 562	LSN-40
Clevis foot mounting LSNG				Weld-on clevis foot LSNSG			
	32	31 740	LSNG-32		32	31 747	LSNSG-32
	40	31 741	LSNG-40		40	31 748	LSNSG-40
Clevis foot LBG				Right-angle clevis foot LQG			
	32	31 761	LBG-32		32	31 768	LQG-32
	40	31 762	LBG-40		40	31 769	LQG-40

Electric cylinders DNCE, with piston rod

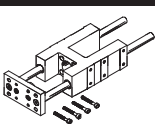
Accessories

FESTO

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	

Ordering data – Piston rod attachments				Technical data → 1 / 10.3-2			
Designation	For size	Part No.	Type	Designation	For size	Part No.	Type
Rod eye SGS				Rod clevis SGA			
	32	9 261	SGS-M10x1,25		32	32 954	SGA-M10x1,25
	40	9 262	SGS-M12x1,25		40	10 767	SGA-M12x1,25
Rod clevis SG				Self-aligning rod coupler FK			
	32	6 144	SG-M10x1,25		32	6 140	FK-M10x1,25
	40	6 145	SG-M12x1,25		40	6 141	FK-M12x1,25
Coupling piece KSG				Coupling piece KSZ			
	32	32 963	KSG-M10x1,25		32	36 125	KSZ-M10x1,25
	40	32 964	KSG-M12x1,25		40	36 126	KSZ-M12x1,25
Adapter AD							
	32	157 333	AD-M10x1,25-1/8				
		157 334	AD-M10x1,25-1/4				
	40	160 256	AD-M12x1,25-1/4				
		160 257	AD-M12x1,25-3/8				

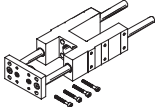
Ordering data – Piston rod attachments, corrosion-resistant				Technical data → 1 / 10.3-2			
Designation	For size	Part No.	Type	Designation	For size	Part No.	Type
Rod eye CRS GS				Rod clevis CRS G			
	32	195 582	CRSGS-M10x1,25		32	13 569	CRSG-M10x1,25
	40	195 583	CRSGS-M12x1,25		40	13 570	CRSG-M12x1,25

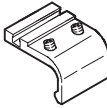
Ordering data – Guide units for fixed strokes (recirculating ball bearing guide only)				Technical data → 1 / 10.4-2			
	Stroke [mm]	Part No.	Type		Stroke [mm]	Part No.	Type
	For size 32			For size 40			
	10 ... 100	34 494	FENG-32-100-KF	10 ... 100			
	10 ... 200	34 496	FENG-32-200-KF	10 ... 200			
	10 ... 320	34 497	FENG-32-320-KF	10 ... 320			
	10 ... 400	150 290	FENG-32-400-KF	10 ... 400			
	10 ... 500	34 498	FENG-32-500-KF	10 ... 400			
				10 ... 500			

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		With plain-bearing guide	
			Part No.	Type	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-...

Ordering data – Mounting kit for proximity sensors SMT-8				Technical data → 1 / 10.2-51	
	For size	Part No.	Type		
	32	175 705	SMB-8-FENG-32/40		
	40				

2.1

Permissible proximity sensors in combination with motor units MTR-DCI						
Ordering data – Proximity sensors for T-slot (slot type 8), magneto-resistive					Technical data → 1 / 10.2-13	
	Assembly	Switching output	Electric connection	Cable length	Part No.	Type
			M8 plug	[m]		
N/O contact						
	Insertable from above	PNP	3-pin	0.3	525 899	SMT-8F-PS-24V-K0,3-M8D

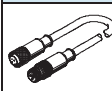
Permissible proximity sensors in combination with servo motors MTR-AC, stepper motors MTR-ST or guide units FENG

Ordering data – Proximity sensors for slot type 8 (T-slot), magneto-resistive					Technical data → 1 / 10.2-13	
	Assembly	Switching output	Electric connection	Cable length [m]	Part No.	Type
			Cable			
N/O contact						
	Insertable from above	PNP	3-wire	2.5	525 898	SMT-8F-PS-24V-K2,5-OE
	Insertable from end, flush with cylinder profile	PNP	3-wire	2.5	175 436	SMT-8-PS-K-LED-24-B

Ordering data – Proximity sensors for slot type 8 (T-slot), magnetic reed					Technical data → 1 / 10.2-18	
	Assembly	Electric connection	Cable length [m]	Part No.	Type	
		Cable				
N/O contact						
	Insertable from above	3-wire	2.5	525 895	SME-8F-DS-24V-K2,5-OE	
			5.0	525 897	SME-8F-DS-24V-K5,0-OE	
	Insertable from end, flush with cylinder profile	3-wire	2.5	150 855	SME-8-K-LED-24	

Electric cylinders DNCE, with piston rod

Accessories

Ordering data – Connecting cable				Technical data → 1 / 10.2-114	
	Assembly	Connection	Cable length [m]	Part No.	Type
Straight plug 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				
	Assembly	Length	Part No.	Type
	Insertable from above	2x 0.5 m	151 680	ABP-5-S

