

Multi-position cylinders/Adapter kits

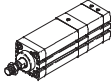
FESTO



Multi-position cylinders ADN

Product range overview

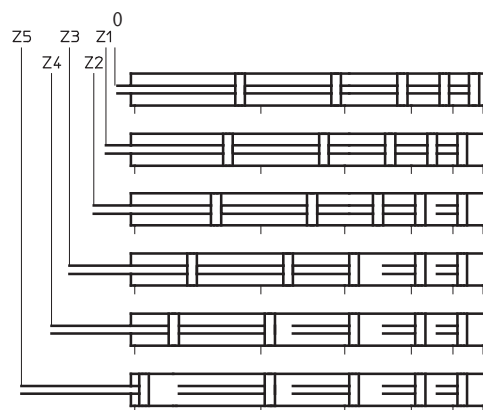
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Function	Version	Type	Piston Ø [mm]	Max. stroke [mm]	Piston rod	
					With female thread	With male thread
Double-acting		ADNM Single-ended piston rod	25	300	■	■
			40, 63, 100	1,000	■	■

Functional principle

Up to five positions Z1 ... Z5 can be approached by connecting two to five cylinders with the same piston diameter and different stroke lengths in series.

Example: ADN-..., with 5 positions



- 0 Initial position
- Z1 Position 1
- Z2 Position 2
- Z3 Position 3
- Z4 Position 4
- Z5 Position 5

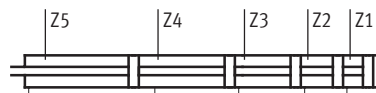
The following rules must be observed to ensure the functionality of the cylinder:

Rules

- The subsequent position (e.g. Z4) must be greater than the sum of the preceding position (Z3) plus the positional tolerance T (→ 3)

$$Z_n > Z_{n-1} + T_{n-1}$$

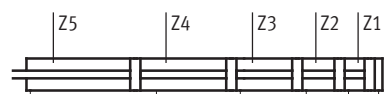
Example: ADN-25-...-50Z1-100Z2-150Z3-200Z4-300Z5, with 5 positions



$$Z5 > Z4 > Z3 > Z2 > Z1$$

- Pos. Z2 (100 mm) > pos. Z1 (50 mm) + 6.3 mm
- Pos. Z3 (150 mm) > pos. Z2: (100 mm) + 4.8 mm
- Pos. Z4 (200 mm) > pos. Z3: (150 mm) + 3.3 mm
- Pos. Z5 (300 mm) > pos. Z4: (200 mm) + 1.8 mm

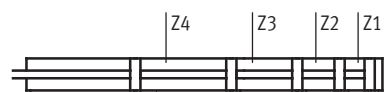
- The sum of all the positions must not exceed the following values:
 Ø 25: 1,000 mm
 Ø 40, 63, 100: 2,000 mm



$$Z5 + Z4 + Z3 + Z2 + Z1 \leq 1000$$

- Pos. Z1: 50 mm
- Pos. Z2: 100 mm
- Pos. Z3: 150 mm
- Pos. Z4: 200 mm
- Pos. Z5: 300 mm
- Sum: 800 mm ≤ 1,000 mm

- The positions of the internal cylinders must not exceed the following values:
 Ø 25: 200 mm
 Ø 40, 63: 300 mm
 Ø 100: 400 mm



- Pos. Z1: 50 mm ≤ 200 mm
- Pos. Z2: 100 mm ≤ 200 mm
- Pos. Z3: 150 mm ≤ 200 mm
- Pos. Z4: 200 mm ≤ 200 mm

- The position of the last cylinder must not exceed the following values:
 Ø 25: 300 mm
 Ø 40, 63, 100: 1,000 mm



- Pos. Z5: 300 mm ≤ 300 mm

Multi-position cylinders ADN

Product range overview



Positional tolerance T [mm]

The subsequent position must be greater than the sum of the preceding position plus the positional tolerance T.

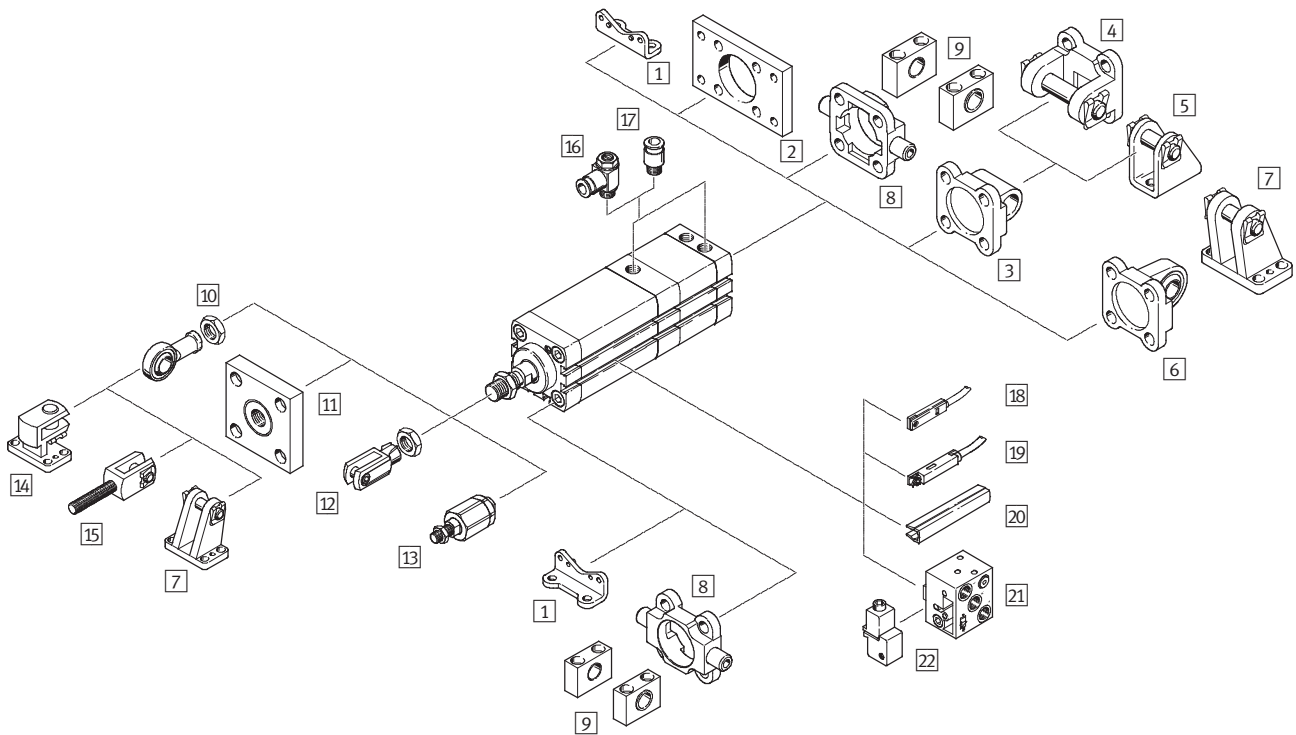
The positional tolerance depends on the number of positions.

Position	Z1	Z2	Z3	Z4	Z5
Piston Ø 25					
Cylinder with 2 positions	1.8	0.8	–	–	–
Cylinder with 3 positions	3.3	1.8	0.8	–	–
Cylinder with 4 positions	4.8	3.3	1.8	0.8	–
Cylinder with 5 positions	6.3	4.8	3.3	1.8	0.8
Piston Ø 40, 63, 100					
Cylinder with 2 positions	1.8	0.8	–	–	–
Cylinder with 3 positions	3.4	1.8	0.8	–	–
Cylinder with 4 positions	5	3.4	1.8	0.8	–
Cylinder with 5 positions	6.6	5	3.4	1.8	0.8

Multi-position cylinders ADNM, standard port pattern

Peripherals overview

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Multi-position cylinders ADN, standard port pattern

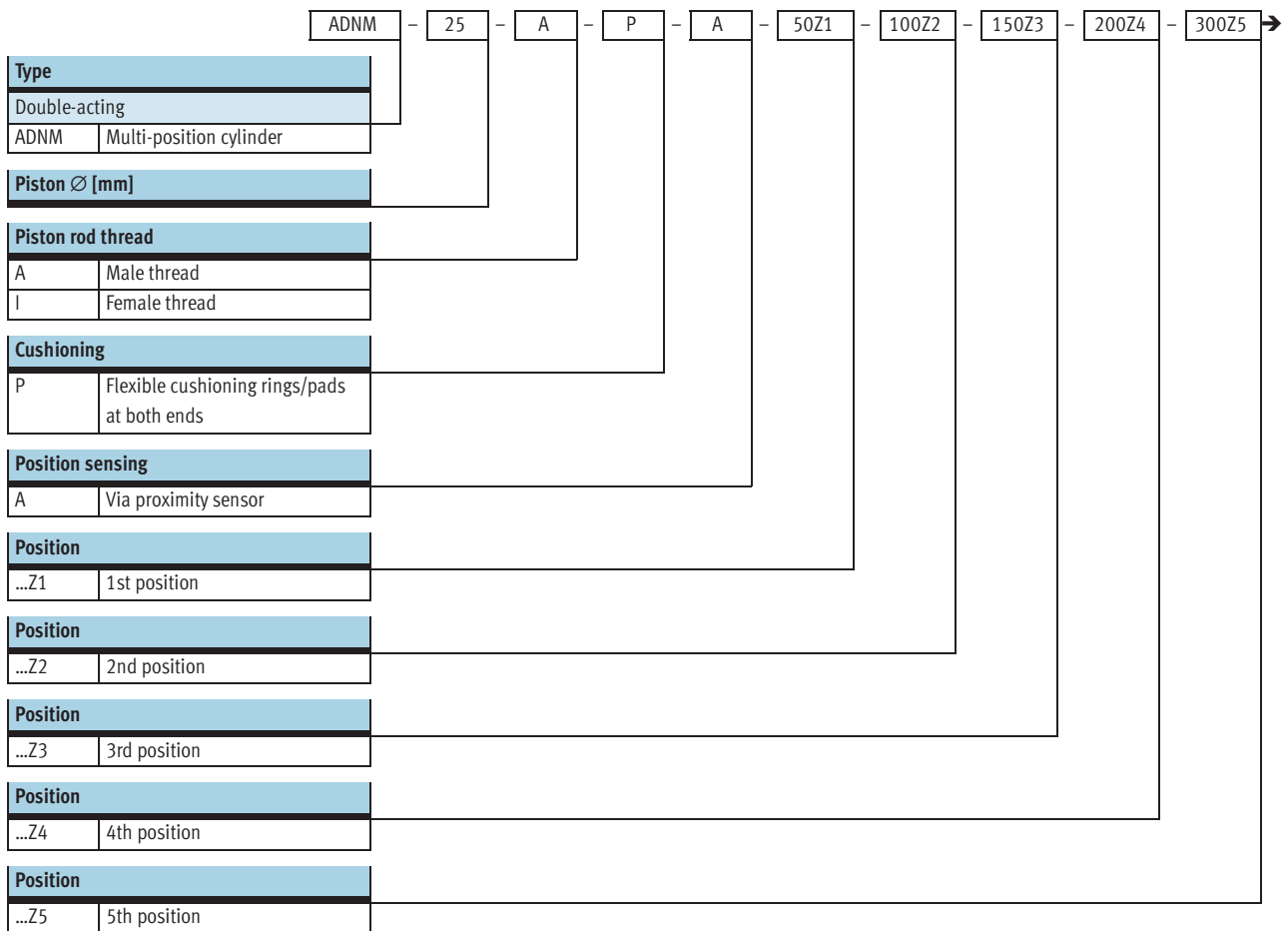
Peripherals overview

Mounting attachments and accessories				
	Brief description	Ø 25	Ø 40, 63, 100	→ Page/Internet
1	Foot mounting HNA	■	■	16
2	Flange mounting FNC	■	■	17
3	Swivel flange SNCL	■	■	18
4	Swivel flange SNCB	–	■	21
5	Clevis foot LBN/CRLBN	■	–	20
6	Swivel flange SNCS	–	■	18
7	Clevis foot LBG	–	■	23
8	Trunnion flange ZNCF/CRZNG	–	■	22
9	Trunnion support LNZG	–	■	22
10	Rod eye SGS/CRSGS	■	■	23
11	Coupling piece KSG	■	■	23
12	Rod clevis SG/CRSG	■	■	23
13	Self-aligning rod coupler FK	■	■	23
14	Right-angle clevis foot LQG	–	■	23
15	Rod clevis SGA	–	■	23
16	One-way flow control valve GRLA	■	■	23
17	Push-in fitting QS	■	■	quick star
18	Proximity sensor SME/SMT-8	■	■	24
19	Proximity sensor SME/SMT-8M	■	■	24
20	Slot cover ABP-5-S	■	■	25
21	Proximity sensor SMPO-8E	■	■	25
22	Mounting kit SMB-8E	■	■	25

Multi-position cylinders ADNM, standard port pattern

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Type codes



Multi-position cylinders ADN, standard port pattern



Type codes

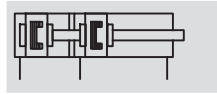
→	20K2	-		-	100K8	-	S6	-	TL
Male thread									
...K2	Extended male piston rod thread								
Special thread									
...K5	Special piston rod thread								
Piston rod									
...K8	Extended piston rod								
Temperature resistance									
S6	Heat-resistant seals up to max. 120 °C								
Captive rating plate									
TL	Laser etched rating plate								

Multi-position cylinders ADNM, standard port pattern

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Technical data

Function



- N- Diameter
25 ... 100 mm
- T- Stroke length
1 ... 2,000 mm

Variants



K2



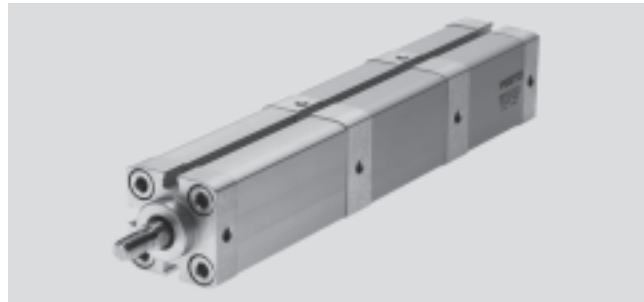
K5



K8



S6



General technical data				
Piston Ø	25	40	63	100
Pneumatic connection	M5	M5	G1/8	G1/8
Piston rod thread				
Female	M6	M10	M12	M16
Male	M8	M12x1.25	M16x1.5	M20x1.5
Constructional design	Piston			
	Piston rod			
	Cylinder barrel			
Cushioning	Flexible cushioning rings/pads at both ends			
Position sensing	Via proximity sensor			
Type of mounting	Via female threads			
	Via accessories			
Mounting position	Any			

Operating and environmental conditions				
Piston Ø	25	40	63	100
Operating medium	Filtered compressed air, lubricated or unlubricated			
Operating pressure				
with 2 positions	[bar]	0.8 ... 10	0.6 ... 10	
with 3 positions	[bar]	1.1 ... 10	0.9 ... 10	
with 4 positions	[bar]	1.4 ... 10	1.2 ... 10	
with 5 positions	[bar]	1.7 ... 10	1.5 ... 10	
Ambient temperature ¹⁾	[°C]	-20 ... +80		
	S6 [°C]	0 ... +120		
Corrosion resistance class CRC ²⁾		2		

1) Note operating range of proximity sensors

2) 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

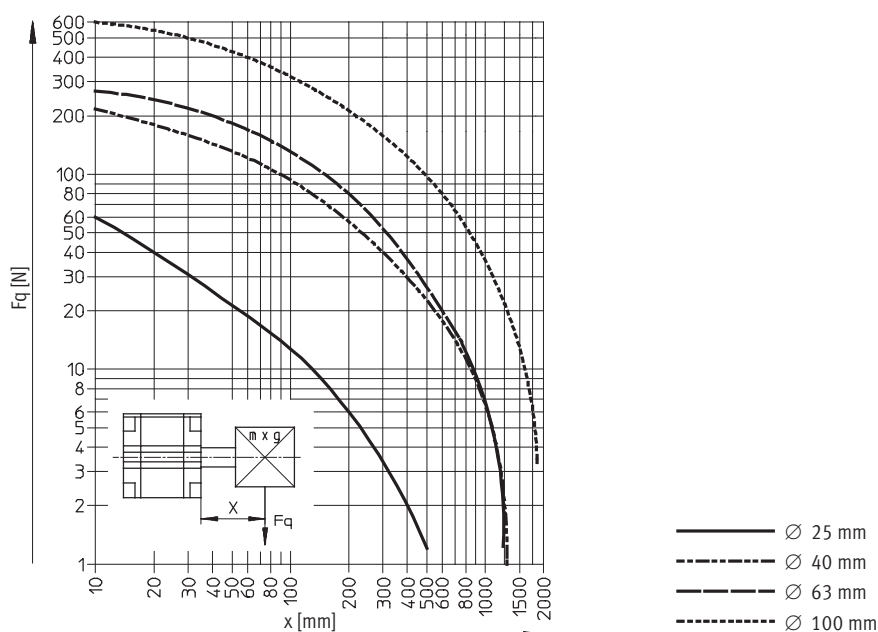
Multi-position cylinders ADN, standard port pattern

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Technical data

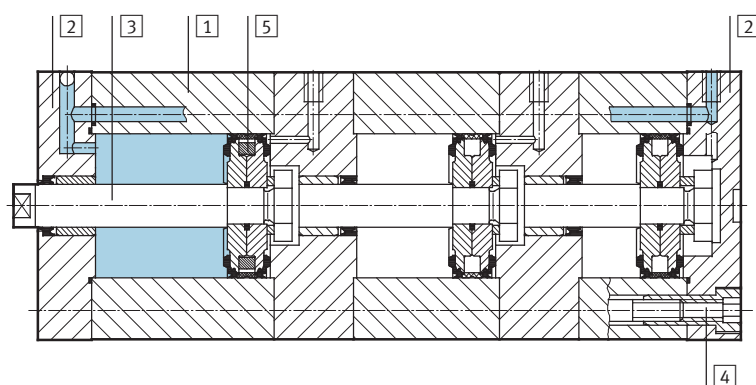
Forces [N] and impact energy [J]				
Piston Ø	25	40	63	100
Theoretical force at 6 bar, advancing	295	754	1870	4712
Theoretical force at 6 bar, retracting	247	633	1681	4417
Max. impact energy at the end positions				
	S6	0.15	0.35	0.65
		0.35	0.65	1.25

Max. lateral force F_q as a function of the projection x



Materials

Sectional view



Note

- 5 Position sensing possible:
 Ø 25: for all positions
 Ø 40, 63, 100: for the last position

Multi-position cylinder	Basic version	S6
1 Cylinder barrel	Anodised aluminium	Anodised aluminium
2 Cover	Anodised aluminium	Anodised aluminium
3 Piston rod	High-alloy steel	High-alloy steel
4 Flange screws	Galvanised steel	Galvanised steel
- Seals	Polyurethane	Fluoro elastomer
Note on materials		RoHS compliant

Multi-position cylinders ADNM, standard port pattern

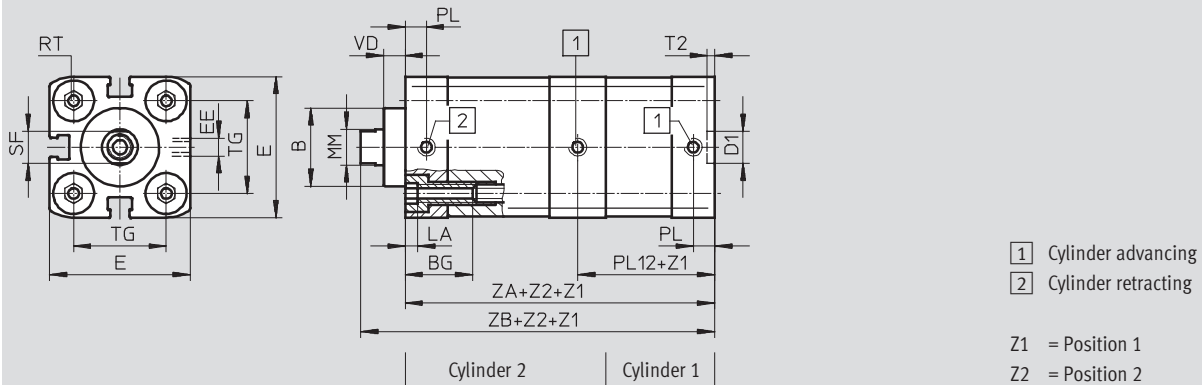
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Technical data

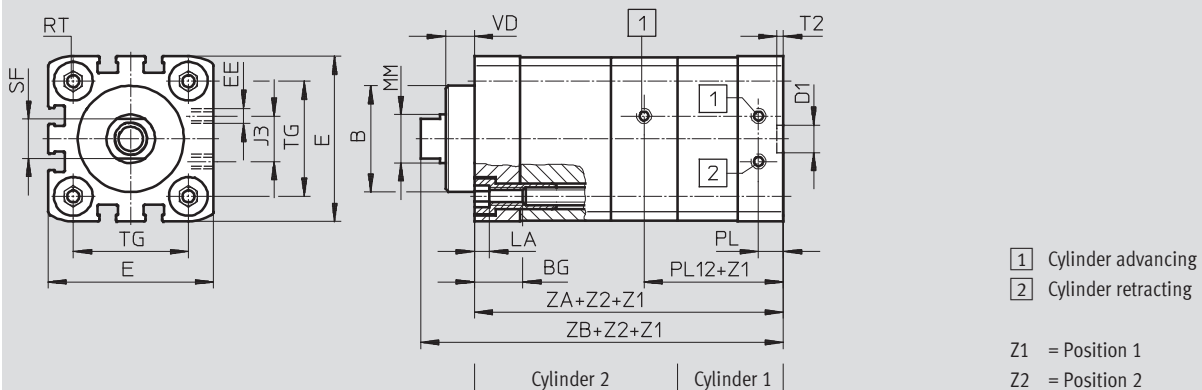
Dimensions – Basic version

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

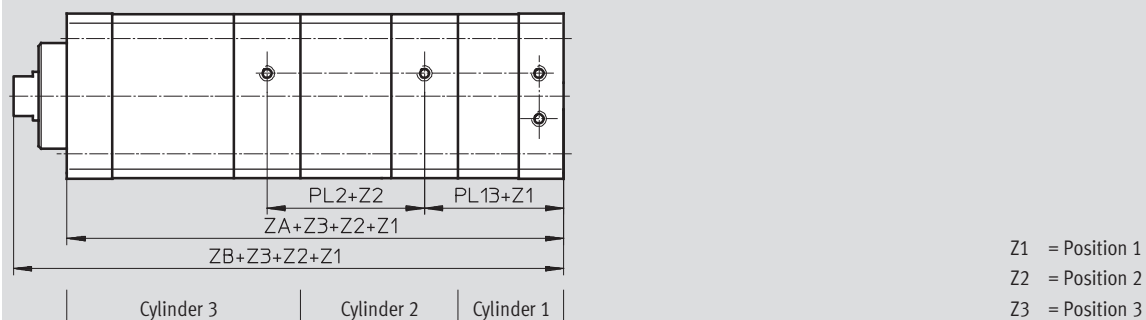
Ø 25/Z2 – 2 positions



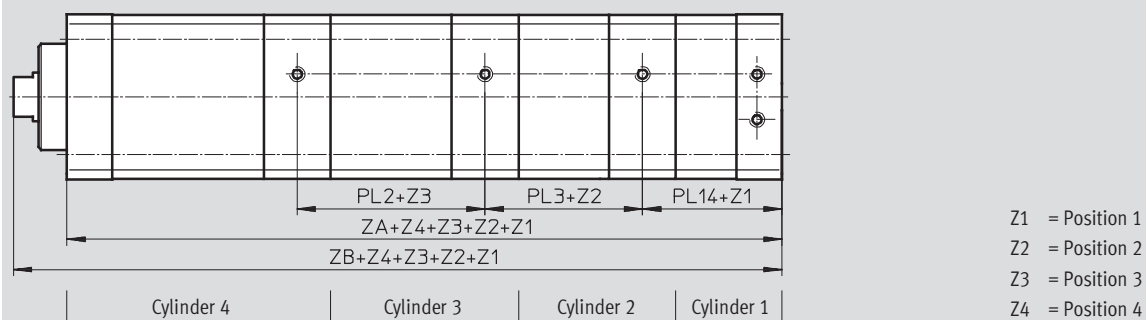
Ø 40 ... 100/Z2 – 2 positions



Z3 – 3 positions



Z4 – 4 positions



Multi-position cylinders ADN, standard port pattern

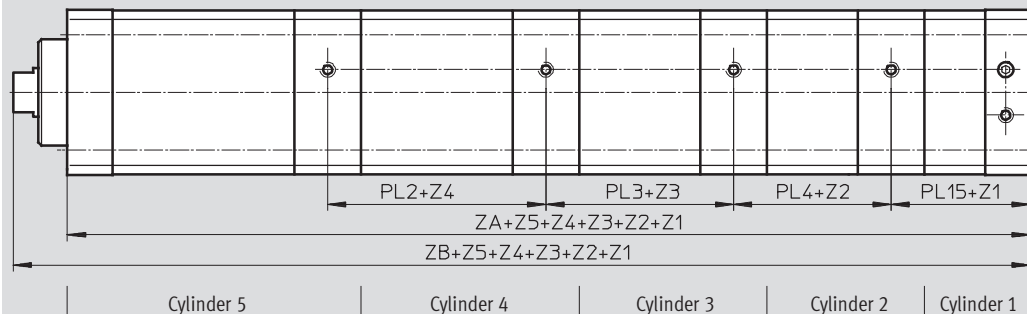
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Technical data

Dimensions – Variants

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Z5 – 5 positions



Z1 = Position 1
Z2 = Position 2
Z3 = Position 3

Z4 = Position 4
Z5 = Position 5

Ø [mm]	B Ø f8	BG min.	D1 Ø H9	E	EE	J3	LA +0.2	MM Ø h8	PL +0.2	PL2 ±0.3
25	22	15	9	39.5 ^{+0.3}	M5	–	5	10	6	32.1
40	35	16		54.5 ^{+0.3}		15		16	8.2	38.3
63	42		12	75.5 ^{+0.3}	G1½	23		20	8.2	41.4
100	55	17		113.5 ^{+0.6}		40		25	10.5	50.8

Ø [mm]	PL3 ±0.3	PL4 ±0.3	PL12 ±0.3	PL13 ±0.3	PL14 ±0.3	PL15 ±0.3	RT	SF	T2 +0.1	TG ±0.2	VD
25	33.6	35.1	41.9	44.4	45.3	44.8	M5	9	2.1	26	6
40	39.9	41.5	45.7	47.0	48.8	50.6	M6	13	2.1	38	9.5
63	43.0	44.6	49.3	50.6	52.4	54.2	M8	17	2.6	56.5	12
100	52.4	54.0	63.2	64.6	66.7	68.8	M10	21	2.6	89	15.5

Ø [mm]	ZA Number of positions				ZB Number of positions			
	2	3	4	5	2	3	4	5
25	76.3 ^{+1.2}	110.5 ^{+1.8}	144.7 ^{+2.4}	178.9 ⁺³	88.5 ^{+1.6}	122.7 ^{+2.2}	156.9 ^{+2.8}	191.1 ^{+3.5}
40	86.2 ^{+1.2}	125.5 ^{+1.8}	166.9 ^{+2.4}	209.9 ⁺³	104.6 ^{+1.6}	143.9 ^{+2.2}	185.2 ^{+2.8}	228.2 ^{+3.5}
63	93.3 ^{+1.2}	135.7 ^{+1.8}	180.2 ^{+2.4}	226.3 ⁺³	114.6 ^{+1.6}	157 ^{+2.2}	201.4 ^{+2.8}	247.5 ^{+3.5}
100	120.9 ^{+1.2}	172.8 ^{+1.8}	227 ^{+2.4}	282.8 ⁺³	147.9 ^{+1.6}	199.8 ^{+2.2}	253.9 ^{+2.8}	309.7 ^{+3.5}

Multi-position cylinders ADNM, standard port pattern

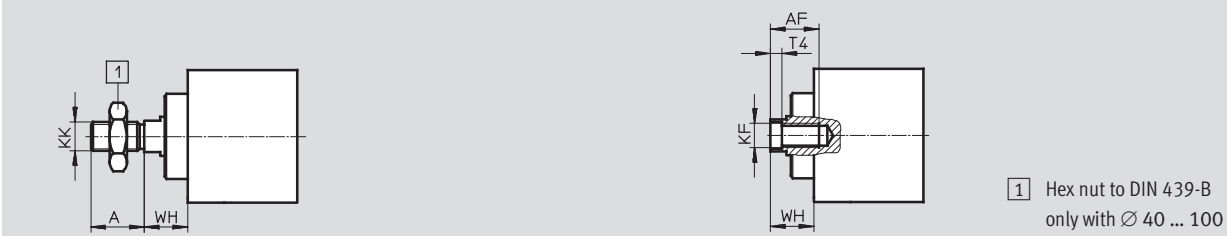
Technical data

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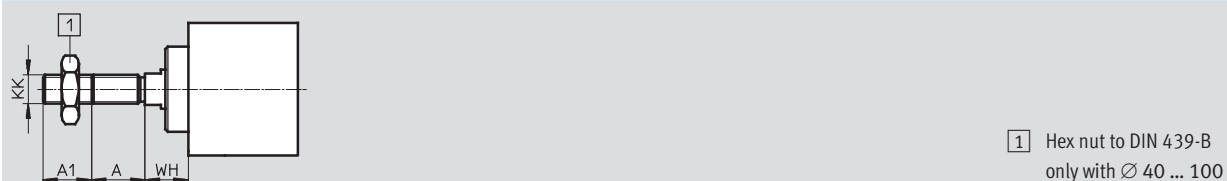
Dimensions – Variants

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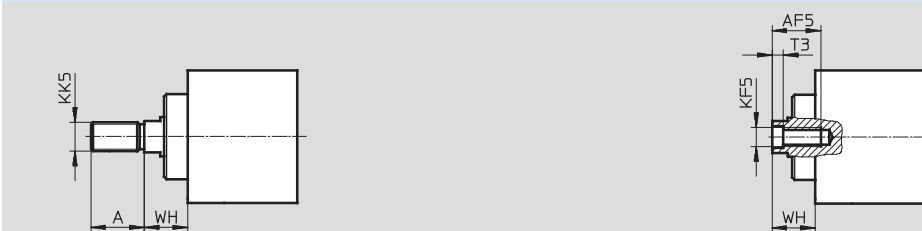
Basic version



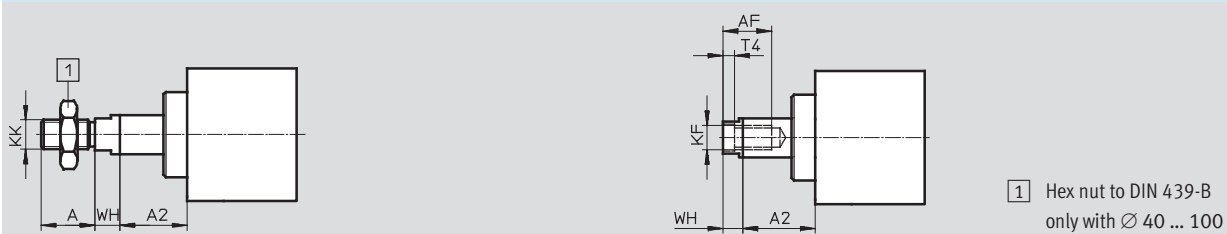
K2 – Extended male piston rod thread



K5 – Special piston rod thread



K8 – Extended piston rod



Multi-position cylinders ADN, standard port pattern

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Technical data

∅ [mm]	A -0.5	A1	A2	AF min.	AF5 min.	KF	KF5	KK	KK5	T3	T4	WH +1.3
25	16	1 ... 20	1 ... 150	14	12	M6	M5	M8	M10x1.25 M10	2	2.6	11.8
40	22			20	16	M10	M8	M12x1.25	M10x1.25 M12	3.3	4.7	18
63	28				20	M12	M10	M16x1.5	M12x1.25 M16	4.7	6.1	21
100	40	1 ... 30		25	–	M16	–	M20x1.5	M16x1.5 M20	–	7	26.5

Multi-position cylinders ADNM, standard port pattern

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Ordering data – Modular products

M Mandatory data						O Options				
Module No.	Function	Size	Type of thread	Cushioning	Position sensing	1st position	2nd position	3rd position	4th position	5th position
539 695	ADNM	25	A	P	A	...Z1	...Z2	...Z3	...Z4	...Z5
539 696		40	I							
539 697		63								
539 698		100								
Order example										
539 695	ADNM	- 25	- A	- P	- A	- 50Z1	- 100Z2	- 150Z3	- 200Z4	- 300Z5

Ordering table								
Size		25	40	63	100	Conditions	Code	Enter code
[M]	Module No.	539 695	539 696	539 697	539 698			
	Function	Multi-position cylinder, standard port pattern					ADNM	
	Size [mm]	25	40	63	100		- ...	
	Type of thread	Male thread					-A	
		Female thread					-I	
	Cushioning	Flexible cushioning rings/pads at both ends					-P	
	Position sensing	Via proximity sensor					-A	
	1st position [mm]	1 ... 200	1 ... 300	1 ... 300	1 ... 400	[1][2][3][4]	-...Z1	
	2nd position [mm]	1 ... 300	1 ... 1000	1 ... 1000	1 ... 1000	[1][2][3][4]	-...Z2	
[O]	3rd position [mm]	1 ... 300	1 ... 1000	1 ... 1000	1 ... 1000	[1][2][3][4]	-...Z3	
↓	4th position [mm]	1 ... 300	1 ... 1000	1 ... 1000	1 ... 1000	[1][2][3][4]	-...Z4	
	5th position [mm]	1 ... 300	1 ... 1000	1 ... 1000	1 ... 1000	[1][2][3][4]	-...Z5	

The end of the retracted piston rod is the reference point for all positions.

- 1 **Z2 ... Z5** The subsequent position (e.g. Z4) must be greater than the sum of the preceding position (Z3) plus the positional tolerance T.
- 2 **Z2 ... Z5** The sum of all the positions must not exceed the following values:
 Ø25: 1,000 mm
 Ø40, 63, 100: 2,000 mm

3 **Z2 ... Z5** The positions of the internal cylinders must not exceed the following values:

- Ø25: 200 mm
 Ø40, 63: 300 mm
 Ø100: 400 mm

4 **Z2 ... Z5** The position of the last cylinder must not exceed the following values:

- Ø25: 300 mm
 Ø40, 63, 100: 1,000 mm

Transfer order code

ADNM - 25 - A - P - A - ...Z1 - ...Z2 - ...Z3 - ...Z4 - ...Z5

Multi-position cylinders ADN, standard port pattern

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Ordering data – Modular products

Options				
Male thread extended	Special thread	Piston rod extended	Temperature resistance	Captive rating plate
...K2	"..."K5	...K8	S6	TL
- 20K2	- "M10"K5	- 100K8	-	-

Ordering table							
Size	25	40	63	100	Condition s	Code	Enter code
Male thread extended	Extended male piston rod thread					-...K2	
[mm]	1 ... 20	1 ... 20	1 ... 20	1 ... 30		-..."K5	
Special piston rod thread	M10x1.25	M10x1.25	M12x1.25	M16x1.5	[5]		
	M10	M12	M16	M20			
	M5	M8	M10	-	[6]		
Piston rod extended	Extended piston rod				[7]	-...K8	
[mm]	1 ... 300	1 ... 400	1 ... 400	1 ... 500			
Temperature resistance	Heat-resistant seals up to max. 120 °C					-S6	
Captive rating plate	Laser etched rating plate					-TL	

- [5] K5 Only with piston rod thread A (male thread)
 [6] K5 Only with piston rod thread I (female thread)

- [7] K8 The sum of the length of the last position and piston rod extension must not exceed the maximum permissible length of the last position

Transfer order code

-		-		-		-		-	
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Multi-position cylinders ADNM, standard port pattern

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Accessories

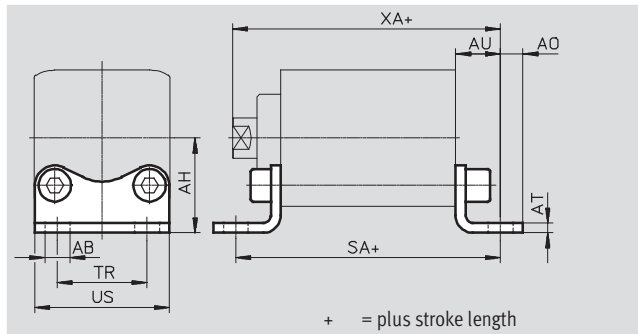
Foot mounting HNA

Material:

HNA: Galvanised steel

HNA-...-R3: Steel with protective coating

Free of copper, PTFE and silicone



Dimensions and ordering data									
For Ø	AB	AH	A0	AT	AU	SA ¹⁾			
[mm]	Ø H14	JS14		±0.5	±0.2	2	3	4	5
25	7	29	6.25	4	16	108.3	142.5	176.7	210.9
40	10	38	9		18	122.2	161.5	202.9	245.9
63		50	8	5	21	135.3	177.7	222.2	268.3
100	14.5	74	12.5	6	27	174.9	226.8	281.0	336.8

For Ø	TR	US	XA ¹⁾			
[mm]	±0.2	−0.5	2	3	4	5
25	26	38.5	104.5	138.7	172.9	207.1
40	36	54	122.6	161.9	203.2	246.2
63	50	75	135.6	178.0	222.4	268.5
100	75	110	174.9	226.8	280.9	336.7

For Ø	Basic version				R3 – High corrosion protection			
	CRC ²⁾	Weight [g]	Part No.	Type	CRC ²⁾	Weight [g]	Part No.	Type
25	2	55	537 240	HNA-25	3	55	537 255	HNA-25-R3
40	2	90	537 242	HNA-40	3	90	537 257	HNA-40-R3
63	2	180	537 244	HNA-63	3	180	537 259	HNA-63-R3
100	2	470	537 250	HNA-100	3	470	537 261	HNA-100-R3

1) Number of positions

2 = + pos. Z1 + pos. Z2

3 = + pos. Z1 + pos. Z2 + pos. Z3

4 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4

5 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4 + pos. Z5

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

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

Corrosion resistance class 3 according to Festo standard 940 070

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

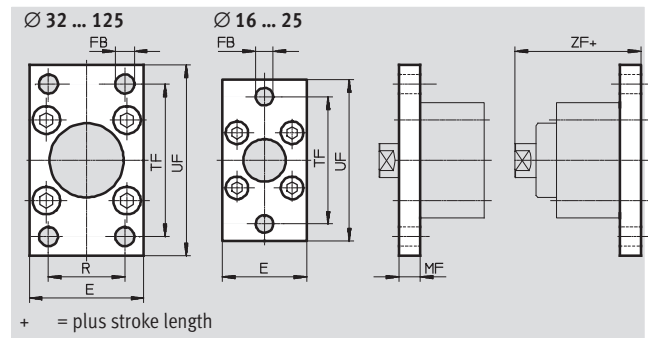
Multi-position cylinders ADNM, standard port pattern

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Accessories

Flange mounting FNC

Material:
Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data						
For Ø	E	FB Ø	MF	R	TF	UF
[mm]						±1
25	40	6.6	8	–	60	76
40	54	9	10	36	72	90
63	75		12	50	100	120
100	110	14	16	75	150	175

For Ø	ZF ¹⁾				CRC ²⁾	Weight	Part No.	Type
	2	3	4	5				
[mm]						[g]		
25	96.5	130.7	164.9	199.1	1	165	537 248	FNC-25
40	114.6	153.9	195.2	238.2	1	291	174 377	FNC-40
63	126.6	169.0	213.4	259.5	1	679	174 379	FNC-63
100	163.9	215.8	269.9	325.7	1	2,041	174 381	FNC-100

- 1) Number of positions
 2 = + pos. Z1 + pos. Z2
 3 = + pos. Z1 + pos. Z2 + pos. Z3
 4 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4
 5 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4 + pos. Z5
- 2) Corrosion resistance class 1 according to Festo standard 940 070
 Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Multi-position cylinders ADN, standard port pattern

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Accessories

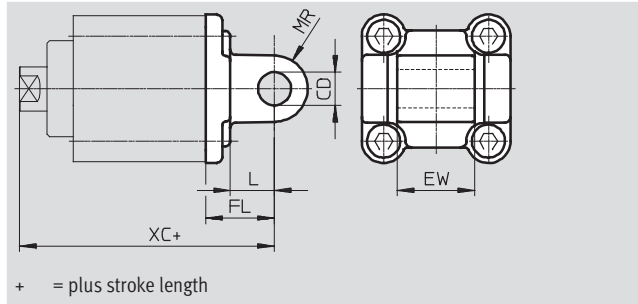
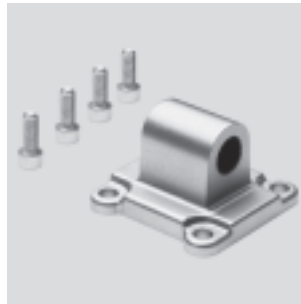
Swivel flange SNCL

Material:

SNCL: Die-cast aluminium

SNCL-...-R3: Die-cast aluminium with protective coating

Free of copper, PTFE and silicone



Dimensions and ordering data									
For Ø	CD	EW	FL	L	MR	XC ¹⁾			
[mm]	Ø H9	h12	±0.2			2	3	4	5
25	8	16	20	14	8	108.5	142.7	176.9	211.1
40	12	28	25	16	12	129.6	168.9	210.2	253.2
63	16	40	32	21	16	146.6	189.0	233.4	279.5
100	20	60	41	27	20	188.9	240.8	294.9	350.7

For Ø	Basic version				R3 – High corrosion protection			
	CRC ²⁾	Weight [g]	Part No.	Type	CRC ²⁾	Weight [g]	Part No.	Type
[mm]								
25	2	45	537 793	SNCL-25	3	45	537 797	SNCL-25-R3
40	2	115	174 405	SNCL-40	–	–	–	–
63	2	270	174 407	SNCL-63	–	–	–	–
100	2	700	174 409	SNCL-100	–	–	–	–

1) Number of positions

2 = + pos. Z1 + pos. Z2

3 = + pos. Z1 + pos. Z2 + pos. Z3

4 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4

5 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4 + pos. Z5

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

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

Corrosion resistance class 3 according to Festo standard 940 070

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

Multi-position cylinders ADN, standard port pattern

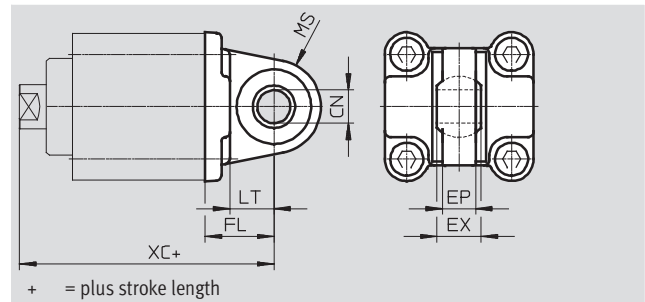
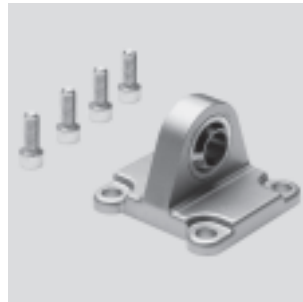
FESTO

Accessories

Swivel flange SNCS

Material:

Die-cast aluminium



Dimensions and ordering data						
For Ø	CN	EP	EX	FL	LT	MS
Ø						
[mm]	H7	±0.2	±0.2			
40	12	12	16	25	16	17
63	16	15	21	32	21	22
100	20	18	25	41	27	29

For Ø	XC ¹⁾				CRC ²⁾	Weight	Part No.	Type
	2	3	4	5				
[mm]						[g]		
40	129.6	168.9	210.2	253.2	2	125	174 398	SNCS-40
63	146.6	189.0	233.4	279.5	2	280	174 400	SNCS-63
100	188.9	240.8	294.9	350.7	2	700	174 402	SNCS-100

- 1) Number of positions
 - 2 = + pos. Z1 + pos. Z2
 - 3 = + pos. Z1 + pos. Z2 + pos. Z3
 - 4 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4
 - 5 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4 + pos. Z5
- 2) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Multi-position cylinders ADNM, standard port pattern

FESTO

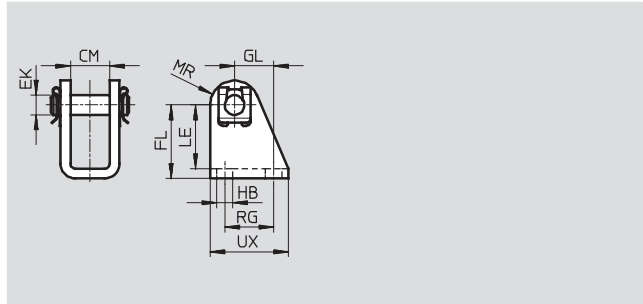
Accessories

Clevis foot LBN

Material:

Galvanised steel

Free of copper, PTFE and silicone



Dimensions and ordering data												
For Ø	CM	EK Ø	FL	GL	HB Ø	LE	MR	RG	UX	CRC ¹⁾	Weight [g]	Part No. Type
[mm]												
25	16.1	8	30 +0.4/-0.2	16	6.6	26	10	20	32	2	81	6 059 LBN-20/25

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

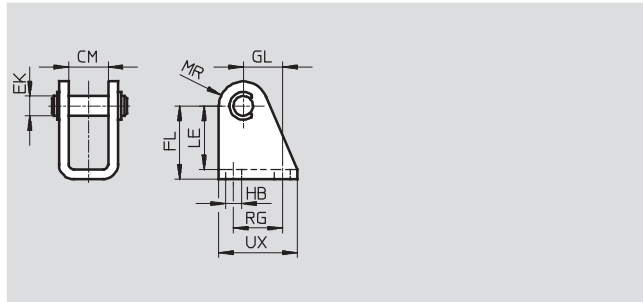
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Clevis foot CRLBN, stainless steel

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data												
For Ø	CM	EK Ø	FL	GL	HB Ø	LE	MR	RG	UX	CRC ¹⁾	Weight [g]	Part No. Type
[mm]												
25	16.1	8	30 +0.4/-0.2	16	6.6	26	10	20	32	4	62	161 863 CRLBN-20/25

1) Corrosion resistance class 4 according to Festo standard 940 070

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

Multi-position cylinders ADN, standard port pattern

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Accessories

Swivel flange

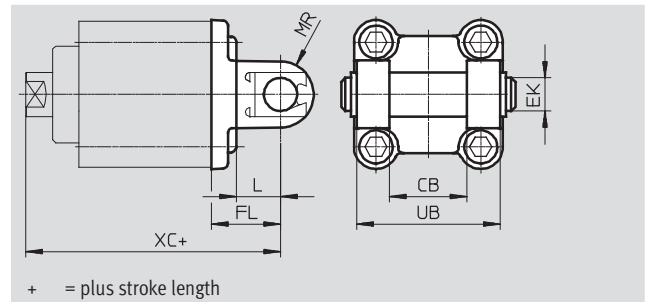
SNCB/SNCB-...-R3

Material:

SNCB: Die-cast aluminium

SNCB-...-R3: Die-cast aluminium with protective coating, high corrosion protection

Free of copper, PTFE and silicone



Dimensions and ordering data										
For Ø	CB	EK Ø	FL	L	MR	UB	XC ¹⁾			
[mm]	H14	e8	±0.2			h14	2	3	4	5
40	28	12	25	16	12	52	129.6	168.9	210.2	253.2
63	40	16	32	21	16	70	146.6	189.0	233.4	279.5
100	60	20	41	27	20	110	188.9	240.8	294.9	350.7

For Ø [mm]	Basic version				R3 – High corrosion protection			
	CRC ²⁾	Weight [g]	Part No.	Type	CRC ²⁾	Weight [g]	Part No.	Type
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
100	2	925	174 395	SNCB-100	3	925	176 949	SNCB-100-R3

1) Number of positions

2 = + pos. Z1 + pos. Z2

3 = + pos. Z1 + pos. Z2 + pos. Z3

4 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4

5 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4 + pos. Z5

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

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

Corrosion resistance class 3 according to Festo standard 940 070

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

Multi-position cylinders ADN, standard port pattern

FESTO

Accessories

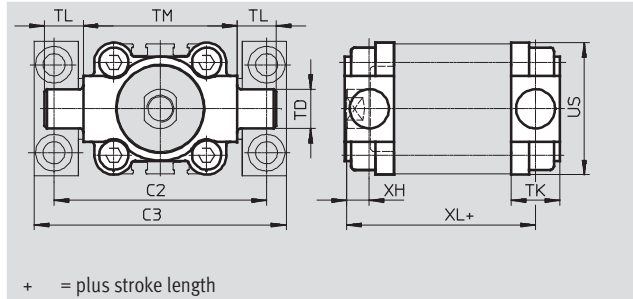
Trunnion flange ZNCF/CRZNG

Material:

ZNCF: Stainless steel casting

CRZNG: Electropolished stainless steel casting

Free of copper, PTFE and silicone



Dimensions and ordering data

For Ø	C2	C3	TD	TK	TL	TM	US	XH	XL ¹⁾			
[mm]			Ø e9						2	3	4	5
40	87	105	16	20	16	63	54	8.4±1	114.6	153.9	195.2	238.2
63	116	136	20	24	20	90	75	9.3±1.2	126.6	169.0	213.4	259.5
100	164	189	25	38	25	132	110	8±1.2	166.9	218.8	272.9	328.7

For Ø	Basic version				R3 – High corrosion protection			
	CRC ²⁾	Weight [g]	Part No.	Type	CRC ²⁾	Weight [g]	Part No.	Type
[mm]								
40	2	285	174 412	ZNCF-40	4	285	161 853	CRZNG-40
63	2	687	174 414	ZNCF-63	4	687	161 855	CRZNG-63
100	2	2,254	174 416	ZNCF-100	4	2,254	161 857	CRZNG-100

1) Number of positions

2 = + pos. Z1 + pos. Z2

3 = + pos. Z1 + pos. Z2 + pos. Z3

4 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4

5 = + pos. Z1 + pos. Z2 + pos. Z3 + pos. Z4 + pos. Z5

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

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

Corrosion resistance class 4 according to Festo standard 940 070

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

Trunnion support LN2G

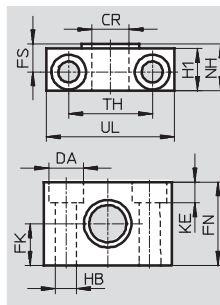
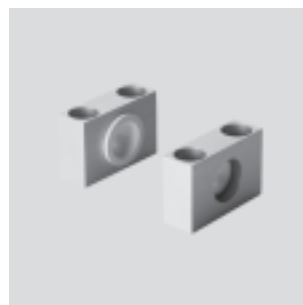
Material:

Trunnion support:

Anodised aluminium

Plain bearing: Plastic

Free of copper, PTFE and silicone



Dimensions and ordering data

For Ø	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]		
40	16	15	18	36	12	18	9	9	21	36	55	2	129	32 960	LN2G-40/50
63	20	18	20	40	13	20	11	11	23	42	65	2	178	32 961	LN2G-63/80
100	25	20	25	50	16	24.5	14	13	28.5	50	75	2	306	32 962	LN2G-100/125

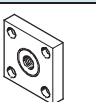
1) Corrosion resistance class 2 according to Festo standard 940 070

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

Multi-position cylinders ADNM, standard port pattern

FESTO

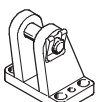
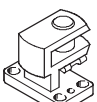
Accessories

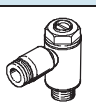
Ordering data – Piston rod attachments				Technical data → Internet: piston rod attachment			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Rod eye SGS				Rod clevis SGA for rod eye SGS			
	25	9 255	SGS-M8		25	–	
	40	9 262	SGS-M12x1,25		40	10 767	SGA-M12x1,25
	63	9 263	SGS-M16x1,5		63	10 768	SGA-M16x1,5
	100	9 264	SGS-M20x1,5		100	10 769	SGA-M20x1,5
Rod clevis SG				Self-aligning rod coupler FK			
	25	3 111	SG-M8		25	2 062	FK-M8
	40	6 145	SG-M12x1,25		40	6 141	FK-M12x1,25
	63	6 146	SG-M16x1,5		63	6 142	FK-M16x1,5
	100	6 147	SG-M20x1,5		100	6 143	FK-M20x1,5
Coupling piece KSG							
	25	–					
	40	32 964	KSG-M12x1,25				
	63	32 965	KSG-M16x1,5				
	100	32 966	KSG-M20x1,5				

Ordering data – Corrosion and acid-resistant piston rod attachments				Technical data → Internet: piston rod attachment			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Rod eye CRS GS				Rod clevis CRS G			
	25	195 581	CRSGS-M8		25	13 568	CRSG-M8
	40	195 583	CRSGS-M12x1,25		40	13 570	CRSG-M12x1,25
	63	195 584	CRSGS-M16x1,5		63	13 571	CRSG-M16x1,5
	100	195 585	CRSGS-M20x1,5		100	13 572	CRSG-M20x1,5

Note

Piston rod attachments for cylinders with special piston rod thread (variant K5) → www.festo.com

Ordering data – Mounting attachments				Technical data → Internet: clevis foot			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Clevis foot LBG for rod eye SGS				Right-angle clevis foot LQG for rod eye SGS			
	25	–			25	–	
	40	31 762	LBG-40		40	31 769	LQG-40
	63	31 764	LBG-63		63	31 771	LQG-63
	100	31 766	LBG-100		100	31 773	LQG-100

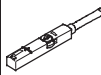
Ordering data – One-way flow control valves					Technical data → Internet: grla	
	Connection		Material	Part No.	Type	
	For Ø	For tubing O.D.				
For exhaust air						
	25, 40	3	Metal design	193 137	GRLA-M5-QS-3-D	
		4		193 138	GRLA-M5-QS-4-D	
	63, 100	4		193 143	GRLA-1/8-QS-4-D	
		6		193 144	GRLA-1/8-QS-6-D	
		8		193 145	GRLA-1/8-QS-8-D	

Multi-position cylinders ADN, standard port pattern

Accessories

FESTO

Ordering data – Proximity sensors for T-slot, magneto-resistive					Technical data → Internet: smt	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with the cylinder profile	PNP	Cable, 3-wire	2.5	543 867	SMT-8M-PS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543 866	SMT-8M-PS-24V-K-0,3-M8D
			Plug M12x1, 3-pin	0.3	543 869	SMT-8M-PS-24V-K-0,3-M12
		NPN	Cable, 3-wire	2.5	543 870	SMT-8M-NS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543 871	SMT-8M-NS-24V-K-0,3-M8D
	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
			Plug M8x1, 3-pin	0.3	175 484	SMT-8-PS-S-LED-24-B
N/C contact						
	Insertable in the slot from above, flush with the cylinder profile	PNP	Cable, 3-wire	7.5	543 873	SMT-8M-PO-24V-K7,5-OE

Ordering data – Proximity sensors for T-slot, magnetic reed					Technical data → Internet: sme	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with the 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
			Cable, 2-wire	2.5	543 872	SME-8M-ZS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543 861	SME-8M-DS-24V-K-0,3-M8D
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	150 855	SME-8-K-LED-24
			Plug M8x1, 3-pin	0.3	150 857	SME-8-S-LED-24
N/C contact						
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	160 251	SME-8-O-K-LED-24

Ordering data – Connecting cables				Technical data → Internet: nebu	
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541 333	NEBU-M8G3-K-2.5-LE3
			5	541 334	NEBU-M8G3-K-5-LE3
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541 363	NEBU-M12G5-K-2.5-LE3
			5	541 364	NEBU-M12G5-K-5-LE3
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541 338	NEBU-M8W3-K-2.5-LE3
			5	541 341	NEBU-M8W3-K-5-LE3
	Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541 367	NEBU-M12W5-K-2.5-LE3
			5	541 370	NEBU-M12W5-K-5-LE3

Multi-position cylinders ADN, standard port pattern

FESTO

Accessories

Ordering data – Block-shaped proximity sensors, pneumatic			Technical data → Internet: smpo	
	Pneumatic connection	Part No.	Type	
3/2-way valve, normally closed				
	Female thread M5	178 563	SMPO-8E	

Ordering data – Mounting kit for proximity sensors SMPO-8E			Technical data → Internet: smb	
	Mounting	Part No.	Type	
	Clamped in T-slot	178 230	SMB-8E	

Ordering data – Slot cover for T-slot				
	Mounting	Length	Part No.	Type
	Insertable	2x 0.5 m	151 680	ABP-5-S

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