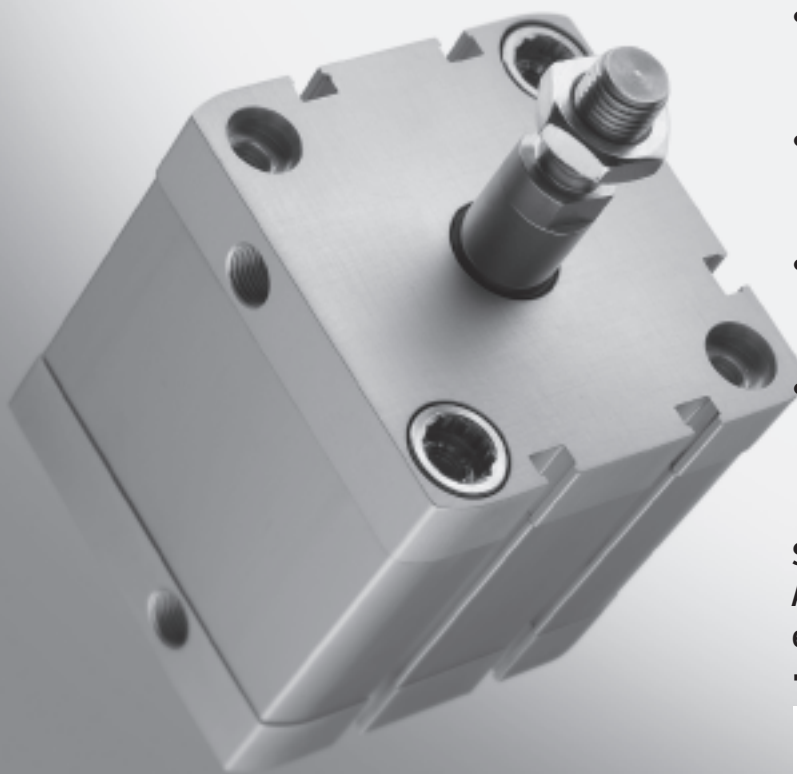




- Compact cylinders with standard dimensions
- More than the standard:
 $\varnothing$ 12 to 125 mm
- Innovative technology for best performance
- Flexible in use thanks to a comprehensive range of variants

Specified types in accordance with ATEX directive for potentially explosive atmospheres
→ www.festo.com/en/ex



Compact cylinders ADN/AEN, to ISO 21287

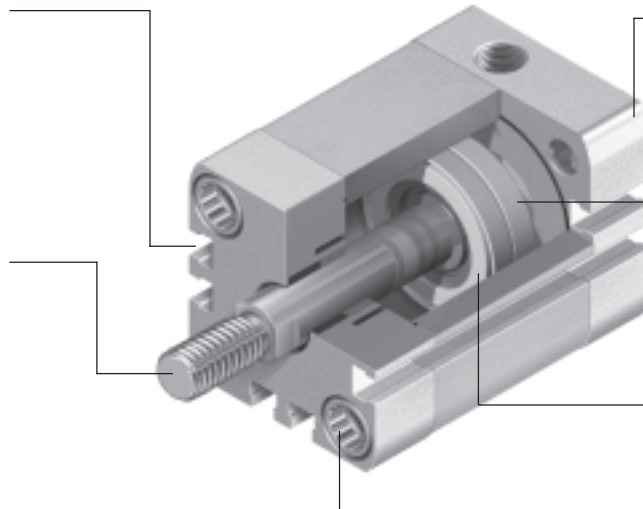
Key features

FESTO

Sensor slots on three sides for flush mounting of proximity sensors

Piston rod with choice of male or female thread

Mounting option: Female thread and through-hole



Centring hole in the end cap matches centring pins ZBS

Magnet for contactless sensing

Integrated cushioning rings for absorbing residual energy for high speeds and machine cycles

More than the standard

- Series ADN/AEN compact cylinders comply with the standard ISO 21287
- The ADN/AEN is distinguished by its compact design and broad area of application thanks to the large number of variants
- The variants can be configured according to individual needs thanks to the modular product system

Powerful

- Flexible cushioning rings as standard for absorbing the residual energy facilitate high speeds and machine cycles
- Long service life thanks to exceptional cushioning characteristics and minimal friction factors
- The ADNP with bearing and end caps made of polymer and integrated QS push-in fittings is distinguished by its low weight

Convenient

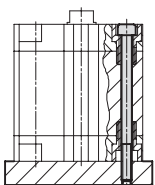
- Easy to mount with a comprehensive range of mounting accessories for just about every type of installation
- Greater flexibility thanks to the wide range of variants
- Contactless position sensing using proximity sensors

Reliable

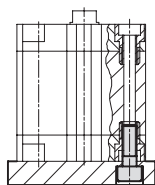
- Optimised manufacturing methods, patented technology and more than 40 years of experience in the field of cylinders make Festo and ADN/AEN a great team

Mounting options

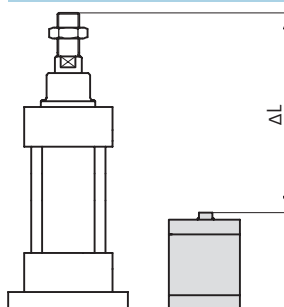
With through screw



Direct mounting



Size



- Space savings of up to 50% compared with the standard ISO 15552

Compact cylinders ADN, to ISO 21287

Key features

FESTO

Variants from the modular system		
Symbol	Features	Description
	Q Square piston rod	Protection against torsion. For correctly oriented feeding
	S1 Reinforced piston rod	Increased lateral forces. Absorbs many times more lateral force than a basic cylinder
	S2 Through piston rod	For working at both ends with the same forces in the advance and return stroke, for attaching external stops
	S20 Through, hollow piston rod	For carrying vacuum, small parts, media, etc.
	K2 Extended male piston rod thread	–
	K5 Special thread on piston rod	Metric standard thread to ISO
	K8 Extended piston rod	–
	K10 Smooth anodised aluminium piston rod	Ideal for use in welding environments: – Protection against welding spatter – Small moving loads – Harder surface compared to steel – Long service life
	S6 Heat resistant seals for temperatures up to 120 °C	Temperature resistant
	S10 Constant (slow speed) operation at low piston speeds	Suitable for slow stroke movements at a constant, judder-free speed over the full stroke of the cylinder. Seal contains silicone grease (not free of paint-wetting impairment substances)
	S11 Low friction	The special seals considerably reduce system wear. This corresponds to a considerably lower response pressure. Seal contains silicone grease (not free of paint-wetting impairment substances)
	R3 High corrosion protection	All external cylinder surfaces comply with corrosion resistance class 3 to Festo standard 940 070. The piston rod is made from corrosion and acid resistant steel
	R8 Dust protection	–
	TL Captive rating plate	Laser etched rating plate. For easy identification when it comes to replacement, even after years in a harsh environment

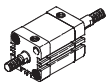
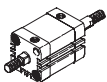
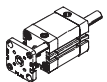


Software tools on CD-ROM:
Configuration of Festo product
modules
www.festo.com

Compact cylinders ADN, to ISO 21287

Product range overview

FESTO

Function	Version	Type	Piston Ø	Stroke		Position sensing	Cushioning
			[mm]	[mm]		A	P
Double-acting	Basic version						
		ADN Piston rod at one end	12	5, 10, 15, 20, 25, 30, 40	1 ... 300	■	■
			16	5, 10, 15, 20, 25, 30, 40, 50	1 ... 300		
			20, 25	5, 10, 15, 20, 25, 30, 40, 50, 60	1 ... 300		
			32, 40, 50	5, 10, 15, 20, 25, 30, 40, 50, 60, 80	1 ... 400		
			63	10, 15, 20, 25, 30, 40, 50, 60, 80	1 ... 400		
			80, 100	10, 15, 20, 25, 30, 40, 50, 60, 80	1 ... 500		
			125	–	1 ... 500		
		ADN-...-S2 Through piston rod	12, 16, 20, 25	–	1 ... 300	■	■
			32, 40, 50	–	1 ... 400		
			63, 80, 100, 125	–	1 ... 500		
	Reinforced piston rod						
		ADN-...-S1 Piston rod at one end	25	–	1 ... 300	■	■
			40, 63	–	1 ... 400		
			100	–	1 ... 500		
	Non-rotating with square piston rod						
		ADN-...-Q Piston rod at one end	12, 16, 20, 25	–	1 ... 300	■	■
			32, 40, 50, 63	–	1 ... 400		
			80, 100, 125	–	1 ... 500		
		ADN-...-Q-S2 Through piston rod	12, 16, 20, 25	–	1 ... 300	■	■
			32, 40, 50, 63	–	1 ... 400		
			80, 100, 125	–	1 ... 500		
	Non-rotating with yoke						
		ADNGF Piston rod at one end	12, 16	–	1 ... 200	■	■
			20, 25	–	3 ... 200		
			32, 40, 50, 63	–	5 ... 300		
			80, 100	–	5 ... 400		
		ADNGF-...-S2 Through piston rod	12, 16	–	1 ... 200	■	■
			20, 25	–	3 ... 200		
			32, 40, 50, 63	–	5 ... 300		
			80, 100	–	5 ... 400		

Compact cylinders ADN, to ISO 21287

Product range overview

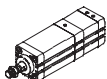
FESTO

Type	Male piston rod thread	Female piston rod thread	Through, hollow piston rod	Extended male thread	Special thread	Extended piston rod	Smooth anodised piston rod	Heat resistant seals up to max. 120°C	Slow speed (constant motion)	Low friction	High corrosion protection	Dust protection	→ Page
	A	I	S20	K2	K5	K8	K10	S6	S10	S11	R3	R8	
Basic version													
ADN Piston rod at one end	■	■	■ Ø 16 and above	■	■	■	■ Ø 20 and above	■	■	■	■	■ Ø 20 and above	1 / 1.4-13
ADN-...-S2 Through piston rod	■	■	-	■	■	■	-	■	-	-	-	-	1 / 1.4-13
Reinforced piston rod													
ADN-...-S1 Piston rod at one end	■	■	-	■	■	■	-	■	-	-	■	-	1 / 1.4-13
Non-rotating with square piston rod													
ADN-...-Q Piston rod at one end	■	■	■ Ø 16 and above	■	■	■	-	■	-	-	-	-	1 / 1.4-13
ADN-...-Q-S2 Through piston rod	■	■	■ Ø 16 and above	■	■	■	-	■	-	-	-	-	1 / 1.4-13
Non-rotating with yoke													
ADNGF Piston rod at one end	-	-	-	-	-	-	-	■	-	-	-	-	1 / 6.2-22
ADNGF-...-S2 Through piston rod	-	-	-	-	-	-	-	■	-	-	-	-	1 / 6.2-22

Compact cylinders ADN, to ISO 21287

Product range overview

FESTO

Function	Version	Type	Piston Ø	Stroke	Position sensing	Cushioning	
			[mm]	[mm]	A	P	
Double-acting	With polymer end cap						
		ADNP Piston rod at one end	20, 25	5, 10, 15, 20, 25, 30, 40, 50, 60	—	■	■
			32, 40, 50	10, 15, 20, 25, 30, 40, 50, 60, 80			
	High force cylinder						
		ADNH Piston rod at one end	25	—	1 ... 150	■	■
			40				
			63				
			100				
	Multi-position cylinder						
		ADNM Piston rod at one end	25	—	1 ... 2,000	■	■
			40				
			63				
			100				

Compact cylinders ADN, to ISO 21287

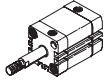
Product range overview

Type	Male piston rod thread	Female piston rod thread	Extended male thread	Special thread	Extended piston rod	Heat resistant seals up to max. 120°C	High corrosion protection	→ Page
	A	I	K2	K5	K8	S6	R3	
With polymer end cap								
ADNP Piston rod at one end	■	■	-	-	-	-	-	1 / 1.4-53
High force cylinder								
ADNH Piston rod at one end	■	■	■	■	■	■	■	1 / 5.7-39
Multi-position cylinder								
ADNM Piston rod at one end	■	■	■	■	■	■	■	1 / 5.10-8

Compact cylinders AEN, to ISO 21287

Product range overview



Function	Version	Type	Piston Ø	Stroke	Position sensing	Cushioning
			[mm]	[mm]	A	P
Single-acting	Basic version					
		AEN Piston rod at one end, pushing	12	1 ... 10		
			16, 20, 25, 32, 40, 50, 63, 80, 100	1 ... 25		
		AEN-...-Z Piston rod at one end, pulling	12	1 ... 10		
			16, 20, 25, 32, 40, 50, 63, 80, 100	1 ... 25		
	Non-rotating with square piston rod					
		AEN-...-Q Piston rod at one end	16	1 ... 25		
			20, 25, 32, 40, 50, 63, 80, 100	1 ... 25		

Compact cylinders AEN, to ISO 21287

Product range overview

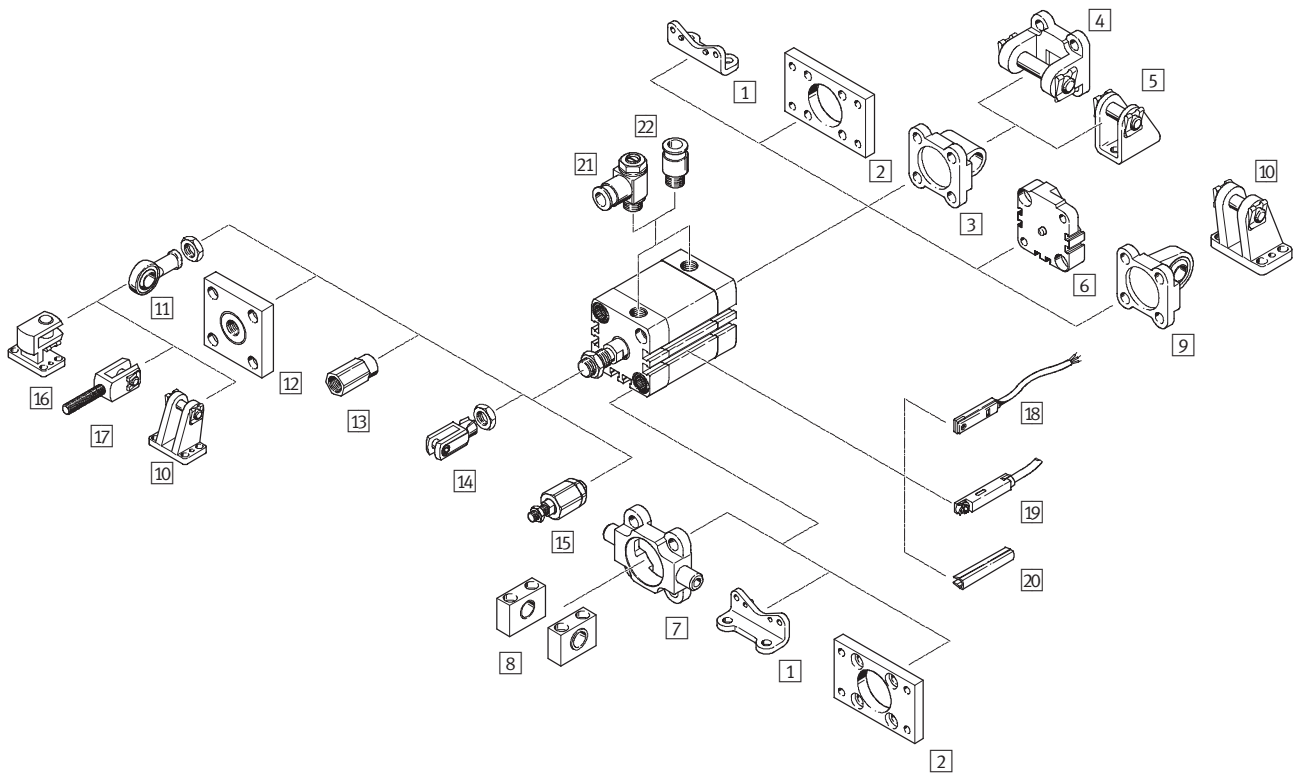
FESTO

Type	Male piston rod thread	Female piston rod thread	Extended male thread	Piston rod with special thread	Extended piston rod	Smooth anodised piston rod	Heat resistant seals up to max. 120°C	→ Page
	A	I	K2	K5	K8	K10	S6	
Basic version								
AEN Piston rod at one end, pushing	■	■	■	■	■	■ Ø 20 and above	■	1 / 1.4-38
AEN-...-Z Piston rod at one end, pulling	■	■	■	■	■	■ Ø 20 and above	■	1 / 1.4-38
Non-rotating with square piston rod								
AEN-...-Q Piston rod at one end, pulling	■	■	■	■	■	—	■	1 / 1.4-38

Compact cylinders ADN/AEN, to ISO 21287

Peripherals overview

FESTO



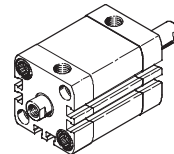
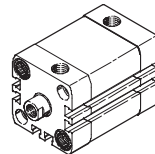
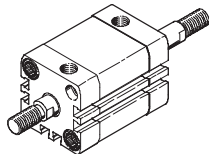
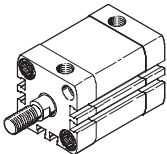
Double-acting variants

ADN- ... -A-P-A

ADN- ... -A-P-A-S2

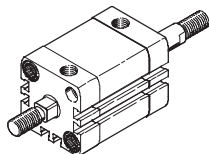
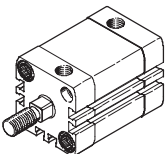
ADN- ... -I-P-A

ADN- ... -I-P-A-S2



ADN-Q

ADN-Q-S2

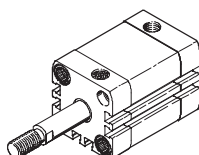
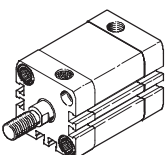


Single-acting variants

AEN- ...

AEN- ... -Z

➔ 1 / 1.4-37



Compact cylinders ADN/AEN, to ISO 21287

Peripherals overview

FESTO

Mounting attachments and accessories			
	Brief description	ADN/AEN	→ Page
1	Foot mounting HNA	■	1 / 1.4-57
2	Flange mounting FNC	■	1 / 1.4-58
3	Swivel flange SNCL	■	1 / 1.4-59
4	Swivel flange SNCB	■	1 / 1.4-63
5	Clevis foot LBN/CRLBN	■	1 / 1.4-62
6	Multi-position kit DPNA	■	1 / 1.4-61
7	Trunnion flange ZNCF/CRZNG	■	1 / 1.4-64
8	Trunnion supports LNZG	■	1 / 1.4-65
9	Swivel flange SNCS	■	1 / 1.4-60
10	Clevis foot LBG	■	1 / 1.4-60
11	Rod eye SGS/CRSGS	■	1 / 1.4-66
12	Coupling piece KSG/KSZ	■	1 / 1.4-66
13	Adapter AD	■	1 / 1.4-66
14	Rod clevis SG/CRSG	■	1 / 1.4-66
15	Self-aligning rod coupler FK	■	1 / 1.4-66
16	Transverse clevis foot LQG	■	1 / 1.4-67
17	Rod clevis SGA	■	1 / 1.4-66
18	Proximity sensor SME/SMT-8	■	1 / 1.4-69
19	Proximity sensor SME/SMT-8F	■	1 / 1.4-69
20	Slot cover ABP-5-S	■	1 / 1.4-69
21	One-way flow control valve GRLA/GRLZ	■	1 / 1.4-68
22	Push-in fitting QS	■	Volume 3

ISO standard cylinders
ISO 21287
1.4

Compact cylinders ADN, to ISO 21287

Type codes

FESTO

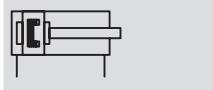
		ADN	–	50	–	50	–	A	–	P	–	A	–	S2
Type														
Double-acting														
ADN	Basic version													
Piston ∅ [mm]														
Stroke [mm]														
Piston rod thread														
A	Male thread													
I	Female thread													
Cushioning														
P	Flexible cushioning rings/plates at both ends													
Position sensing														
A	For proximity sensing													
Variant														
Q	Square piston rod													
S1	Reinforced piston rod													
S2	Through piston rod													
S20	Through, hollow piston rod													
K2	Extended male thread													
K5	Special thread													
K8	Extended piston rod													
K10	Smooth anodised piston rod													
S6	Heat resistant seals up to max. 120°C													
S10	Slow speed (constant motion)													
S11	Low friction													
R3	High corrosion protection													
R8	Dust protection													
TL	Captive rating plate													

Compact cylinders ADN, to ISO 21287

Technical data

FESTO

Function



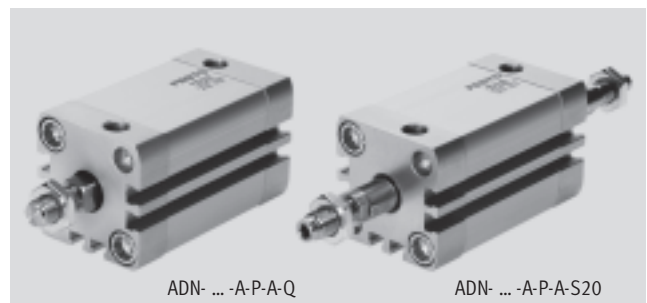
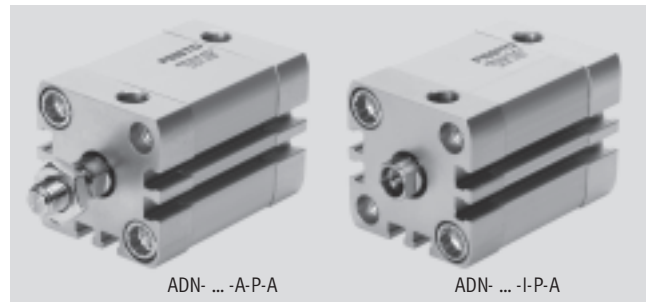
Variants → 1 / 1.4-3



Ø - Diameter
12 ... 125 mm

Stroke length
1 ... 500 mm

 [www.festo.com/en/
Spare_parts_service](http://www.festo.com/en/Spare_parts_service)



Technical data Basic version and variants							
Piston Ø		12	16	20	25	32	40
Pneumatic connection		M5	M5	M5	M5	G $\frac{1}{8}$	G $\frac{1}{8}$
Piston rod thread	Female	M3	M4	M6	M6	M8	M8
	Male	M5	M6	M8	M8	M10x1.25	M10x1.25
Torsional backlash	Q	2	1.8	1.6	1.6	1.2	1.2
Special thread variant K5	Female	–	–	M5	M5	M6	M6
	Male	M6	M8	M10, M10x1.25	M10, M10x1.25	M10, M12	M10, M12

Piston Ø		50	63	80	100	125
Pneumatic connection		G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{4}$
Piston rod thread	Female	M10	M10	M12	M12	M16
	Male	M12x1.25	M12x1.25	M16x1.5	M16x1.5	M20x1.5
Torsional backlash	Q	1	1	0.8	0.8	0.8
Special thread variant K5	Female	M8	M8	M10	M10	–
	Male	M12, M16	M12, M16	M16, M20	M16, M20, M20x1.5	M20

Technical data – Variant S1					
Piston Ø		25	40	63	100
Pneumatic connection		M5	M5	G½	G½
Piston rod thread	Female	M6	M10	M12	M16
	Male	M8	M12x1.25	M16x1.5	M20x1.5
Special thread variant K5	Female	M5	M8	M10	–
	Male	M10, M10x1.25	M10x1.25, M12	M12x1.25, M16	M16x1.5, M20

ISO standard cylinders
ISO 21287

1.4

Compact cylinders ADN, to ISO 21287

Technical data

FESTO

General technical data											
Piston Ø	12	16	20	25	32	40	50	63	80	100	125
Operating medium	Filtered compressed air, lubricated or unlubricated										
Design	Piston										
	Piston rod										
	Cylinder barrel										
Cushioning	Flexible cushioning rings/plates at both ends										
Position sensing	For proximity sensing										
Type of mounting	Via through-holes										–
	Via female threads										
	Via accessories										
Assembly position	Any										

Operating pressure [bar]											
Piston Ø	12	16	20	25	32	40	50	63	80	100	125
Basic version	1 ... 10		0.6 ... 10								
Q	1.3 ... 10		1 ... 10		0.8 ... 10			0.6 ... 10			
S1	–			1 ... 10	–	1 ... 10	–	1 ... 10	–	1 ... 10	–
S2, S20	1.5 ... 10	1.3 ... 10	1.2 ... 10		1 ... 10			0.8 ... 10			
S6	1 ... 10		0.6 ... 10								
S11	0.45 ... 10				0.25 ... 10						

Ambient conditions			
	Basic version and variants		R3
Ambient temperature ¹⁾ [°C]	–20 ... +80		–20 ... +80
Corrosion resistance class CRC ²⁾	2		3

1) Note operating range of proximity sensors

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

Components requiring moderate corrosion resistance. 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 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

Compact cylinders ADN, to ISO 21287

Technical data

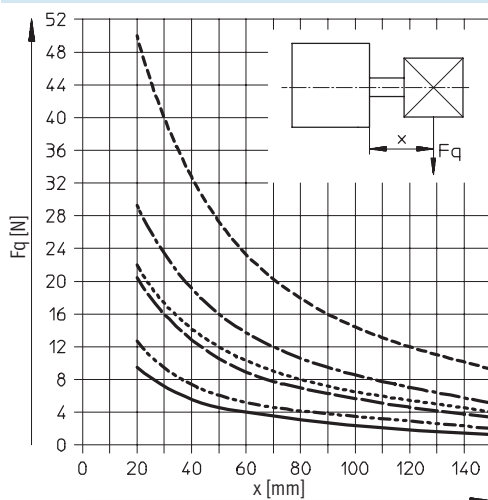
FESTO

Forces [N] and impact energy [J]												
Piston Ø		12	16	20	25	32	40	50	63	80	100	125
Theoretical force at 6 bar, advancing		68	121	188	295	483	754	1,178	1,870	3,016	4,712	7,363
	S1	–	–	–	295	–	754	–	1,870	–	4,712	–
	S2	51	90	141	247	415	686	1,057	1,750	2,827	4,524	7,069
Theoretical force at 6 bar, retracting		51	90	141	247	415	686	1,057	1,750	2,827	4,524	7,069
	S1	–	–	–	247	–	633	–	1,681	–	4,417	–
	S2	51	90	141	247	415	686	1,057	1,750	2,827	4,524	7,069
Max. impact energy at the end positions		0.07	0.15	0.2	0.3	0.4	0.7	1	1.3	1.8	2.5	3.3
	S1	–	–	–	0.3	–	0.7	–	1.3	–	2.5	–
	S6	0.035	0.075	0.1	0.15	0.2	0.35	0.5	0.65	0.9	1.25	1.75
	K10	–	–	0.16	0.24	0.32	0.56	0.8	1	1.4	2	2.6
	S20	–	0.016	0.024	0.083	0.15	0.39	0.48	0.62	0.8	0.9	0.95

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

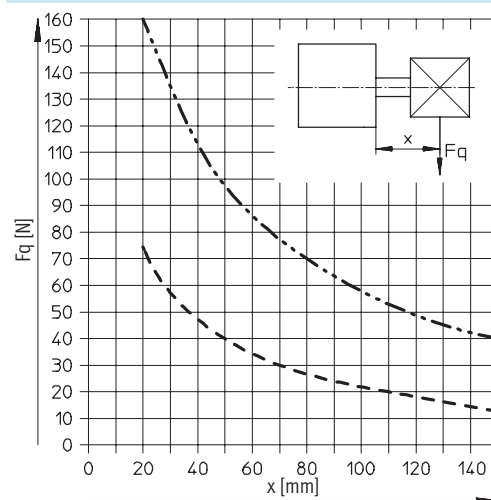
Piston rod at one end

Ø 12 ... 63



— Ø 12
 - - - - - Ø 16
 — Ø 20
 - - - - - Ø 25
 - - - - - Ø 32/40
 - - - - - Ø 50/63

Ø 80 ... 125



- - - - - Ø 80/100
 - - - - - Ø 125

ISO standard cylinders
ISO 21287

1.4

Compact cylinders ADN, to ISO 21287

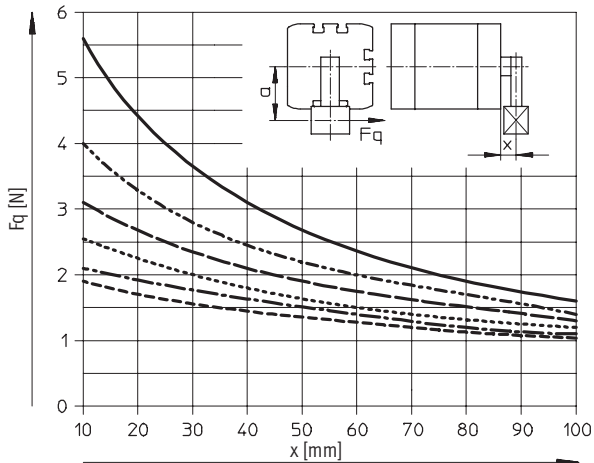
Technical data

FESTO

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

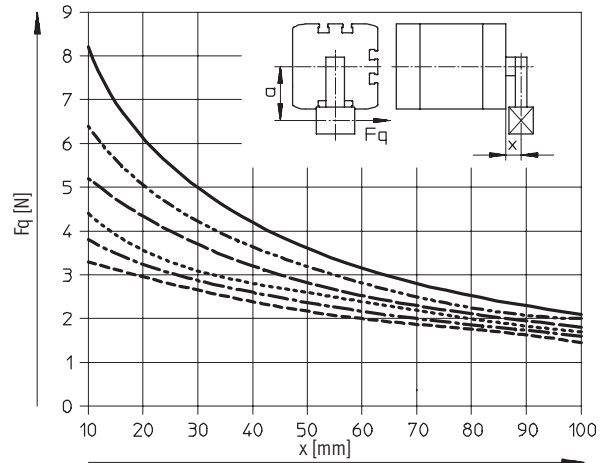
Q – Square piston rod

Ø 12



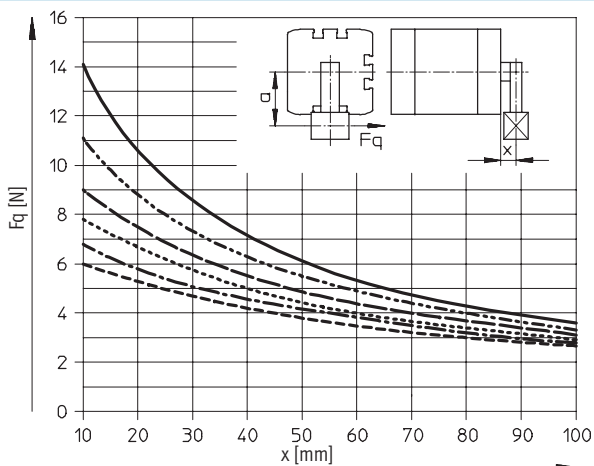
— $a = 5$ mm
 - - - $a = 10$ mm
 - · - $a = 15$ mm
 · · · $a = 20$ mm
 - · - $a = 25$ mm
 - - - $a = 30$ mm

Ø 16



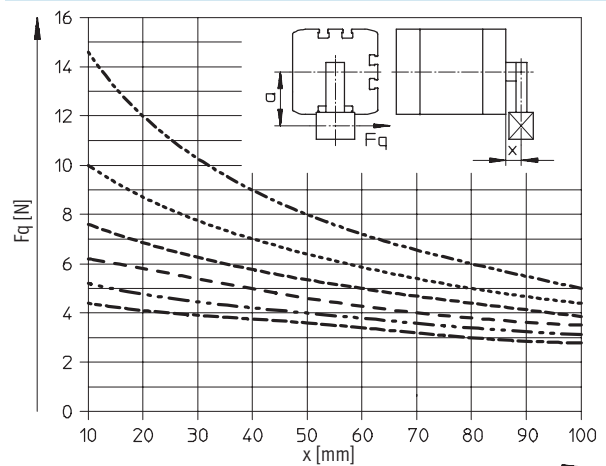
— $a = 5$ mm
 - - - $a = 10$ mm
 - · - $a = 15$ mm
 · · · $a = 20$ mm
 - · - $a = 25$ mm
 - - - $a = 30$ mm

Ø 20/25



— $a = 5$ mm
 - - - $a = 10$ mm
 - · - $a = 15$ mm
 · · · $a = 20$ mm
 - · - $a = 25$ mm
 - - - $a = 30$ mm

Ø 32/40



· · · $a = 10$ mm
 - · - $a = 20$ mm
 - - - $a = 30$ mm
 - · - $a = 40$ mm
 · · · $a = 50$ mm
 - - - $a = 60$ mm

-  - Note

• Torques on the piston rod are to be excluded with projections greater than those shown in the graphs.

• If $a = 0$, the corresponding lateral load line of the basic ADN version can be used.

Compact cylinders ADN, to ISO 21287

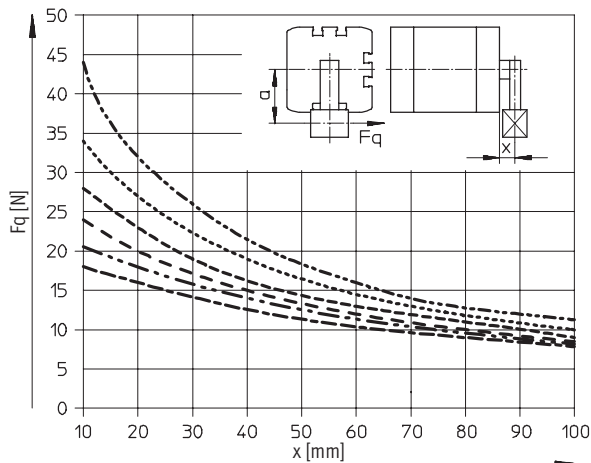
Technical data

FESTO

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

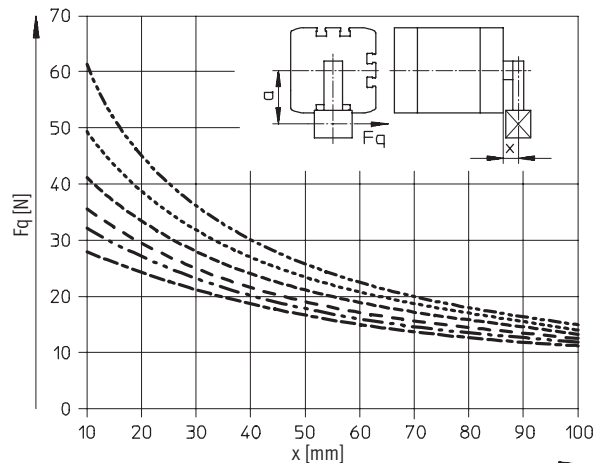
Q – Square piston rod

Ø 50/63



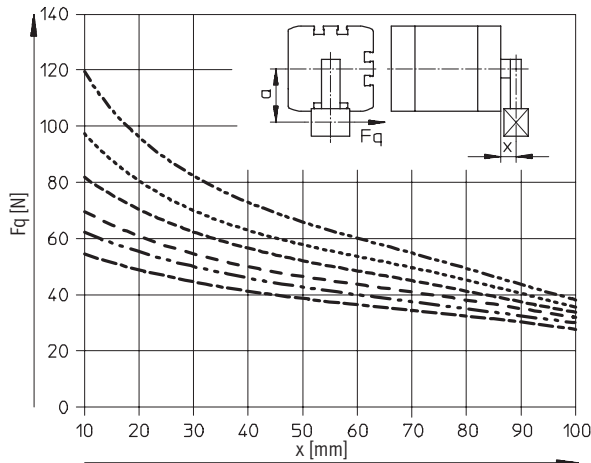
----- $a = 10$ mm
 ----- $a = 20$ mm
 ----- $a = 30$ mm
 ----- $a = 40$ mm
 ----- $a = 50$ mm
 ----- $a = 60$ mm

Ø 80/100



----- $a = 10$ mm
 ----- $a = 20$ mm
 ----- $a = 30$ mm
 ----- $a = 40$ mm
 ----- $a = 50$ mm
 ----- $a = 60$ mm

Ø 125



----- $a = 10$ mm
 ----- $a = 20$ mm
 ----- $a = 30$ mm
 ----- $a = 40$ mm
 ----- $a = 50$ mm
 ----- $a = 60$ mm

Note

• Torques on the piston rod are to be excluded with projections greater than those shown in the graphs.

• If $a = 0$, the corresponding lateral load line of the basic ADN version can be used.

ISO standard cylinders
 ISO 21287

1.4

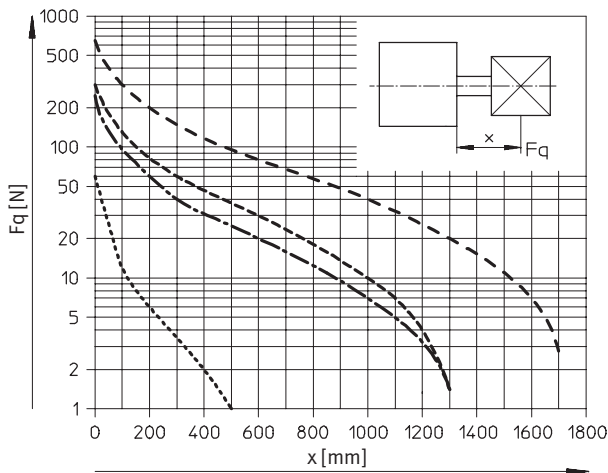
Compact cylinders ADN, to ISO 21287

Technical data

FESTO

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

S1 – Reinforced piston rod



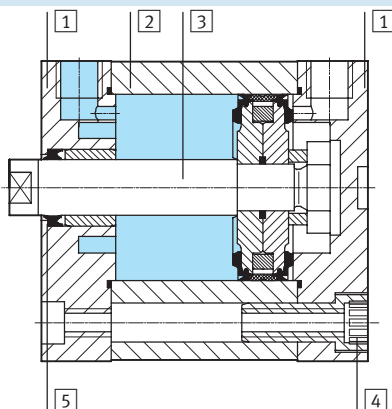
- Ø 25
- · - · - · Ø 40
- Ø 63
- Ø 100

Weight [g]

Piston Ø	12	16	20	25	32	40	50	63	80	100	125
Basic weight with 0 mm stroke	77	79	131	156	265	346	540	722	1,300	2,154	2,880
Additional weight per 10 mm stroke	12	14	21	23	30	37	51	59	79	98	117
Moving load with 0 mm stroke	9	15	30	50	60	80	140	180	400	570	1,080
Additional load per 10 mm stroke	2	4	6	6	9	9	16	16	25	25	39

Materials

Sectional view



Compact cylinder		Basic version, Q	S6, S10, S11	R3	K10
1	Cap	Anodised aluminium			
2	Cylinder barrel	Anodised aluminium			
3	Piston rod	High-alloy steel			Anodised aluminium
4	Flange screws	Ø 12 ... 16	High-alloy steel		
		Ø 20 ... 63	Galvanised steel		
		Ø 80 ... 100	Standard screws, galvanised steel		
5	Seals	Polyurethane	Fluorocarbon rubber	Polyurethane	

Compact cylinders ADN, to ISO 21287

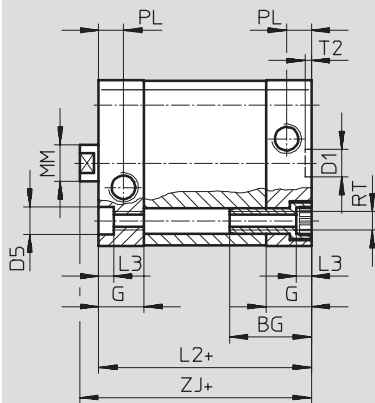
Technical data

FESTO

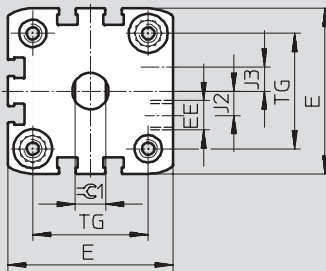
Dimensions – Basic version

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

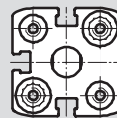
Ø 12 ... 63



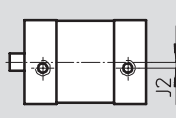
Ø 32 ... 63



Ø 12 ... 25

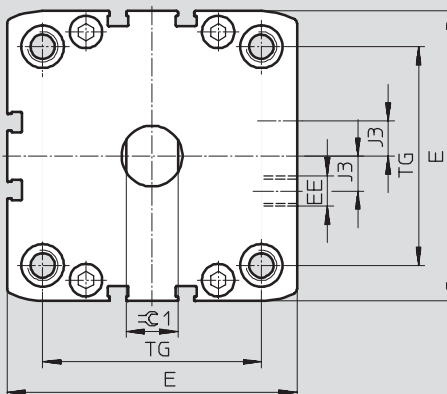
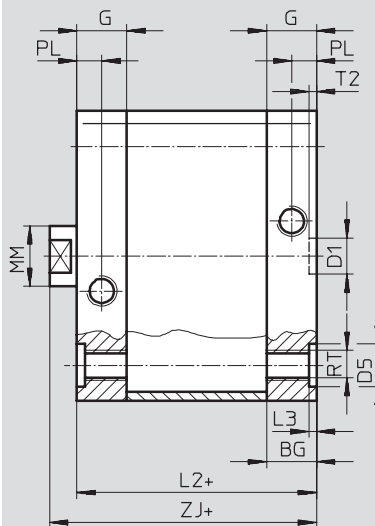


Ø 12



+ = plus stroke length

Ø 80 ... 125



+ = plus stroke length

Ø [mm]	BG	D1 Ø H9	D5 Ø F9	E	EE	G	J2	J3	L2 max.	L3 +0.2	MM Ø	PL +0.2	RT	T2 +0.1	TG ±0.2	ZJ	≡G1 h13	
12	17	9	6	27.5+0.3	M5	10.5	2	—	35	3.5	6	6	M4	2.1	16	40	5	
16				29+0.3		11	2.6				8				18		7	
20	19.5		9	35.5+0.3		12			37	10	M5				22		43	9
25				39.5+0.3					39						26		45	
32	27			47+0.3	G1/8	15	6	44	5		12	8.2	M6		32.5	50	10	
40				54.5+0.3			8	45							38	51		
50		12	65.5+0.3	11.5			49	16		M8			46.5	53	13			
63			75.5+0.3										56.5	57				
80	16.5	15	95.5+0.6			16.5	54		2.6	20	M10	72	63	17				
100	21.5		113.5+0.6			21.5						20	67		2.6	89	76	
125	20	—	134.6+0.3	G1/4		20	21.15		81	—	25	10.5	M12		110	92	21	

Compact cylinders ADN, to ISO 21287

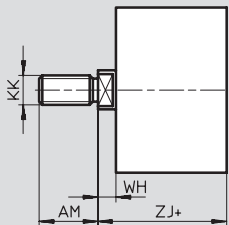
Technical data

FESTO

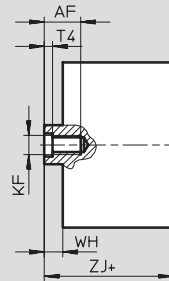
Dimensions – Variants

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

Basic version – With male thread

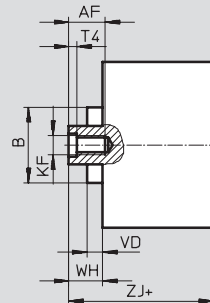
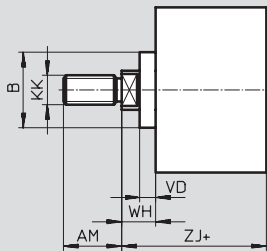


Basic version – With female thread



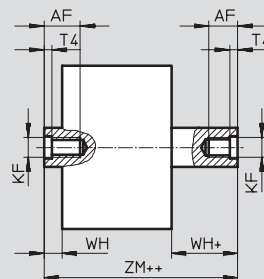
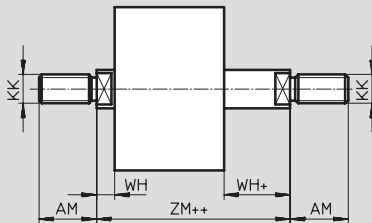
+ = plus stroke length

R8 – Dust protection



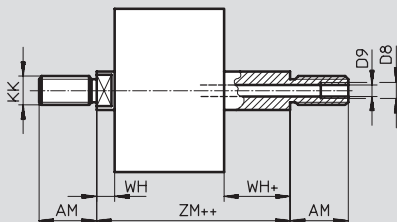
+ = plus stroke length

S2 – Through piston rod



+ = plus stroke length
++ = plus 2 stroke lengths

S20 – Through, hollow piston rod



+ = plus stroke length
++ = plus 2 stroke lengths

Compact cylinders ADN, to ISO 21287

Technical data

Ø	AF	AM	B	D8	D9	KF	KK	T4	VD	WH		ZJ		ZM
[mm]	min.	−0.5									R8		R8	
12	8	10	−	−	−	M3	M5	1.5	−	4.2 +1	−	40	−	44.2
16	10	12			3.2	M4	M6			4.85+1		40		44.85
20	14	16	18		3.8	M6	M8	2.6	5.2	5.65+1	10.85	43	48.2	48.65
25										5.65+1		45	50.2	50.65
32	16	19	27		4.5	M8	M10x1.25	3.3	6.4	6.15+1	12.55	50	56.4	56.15
40										6.15+1		51	57.4	57.15
50	20	22	31		6	M10	M12x1.25	4.7		8.25+1	14.65	53	59.4	61.25
63										8.25+1		57	63.4	65.25
80	20	28	35	G1⅝	8	M12	M16x1.5	6.1		9+1	15.4	63	69.4	72
100				G1¼						9+1		76	82.4	85
125	25	40	−	G1¼	11.7	M16	M20x1.5	7	−	10.8+1.2	−	92	−	102.8

Compact cylinders ADN, to ISO 21287

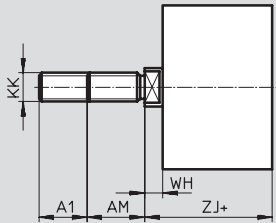
Technical data

FESTO

Dimensions – Variants

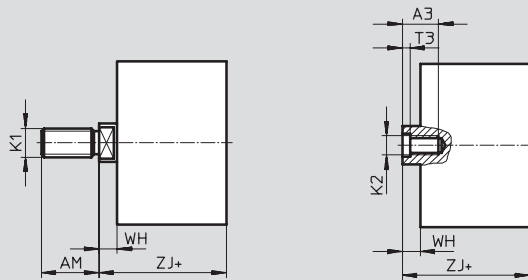
Download CAD data → www.festo.com/en/engineering

K2 – Extended male thread



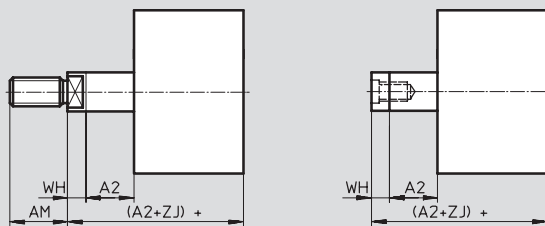
+ = plus stroke length

K5 – Special thread



+ = plus stroke length

K8 – Extended piston rod



- - Note

In combination with variant S2, the piston rod is extended on one side at the bearing cap. If variant Q is also required, the extension will be added to the square piston rod. In combina-

tion with variant S20, the piston rod is extended on both sides.

+ = plus stroke length

Compact cylinders ADN, to ISO 21287

Technical data

FESTO

Ø	A1	A2	A3	AM	K1	K2	KK	T3	WH	ZJ
[mm]			min.	−0.5						
12	1 ... 10	1 ... 300	–	10	M6	–	M5	–	4.2+1	40
16			–	12	M8	–	M6	–	4.85+1	40
20	12		16	M10	M5	M8	2	5.65+1	43	
				M10x1.25						
25	12		16	M10	M5	M8	2	5.65+1	45	
				M10x1.25						
32	1 ... 20	1 ... 400	14	19	M10	M6	M10x1.25	2.6	6.15+1	50
					M12					
40			14	19	M10	M6	M10x1.25	2.6	6.15+1	51
					M12					
50			16	22	M12	M8	M12x1.25	3.3	8.25+1	53
					M16					
63			16	22	M12	M8	M12x1.25	3.3	8.25+1	57
					M16					
80	1 ... 30	1 ... 500	20	28	M16	M10	M16x1.5	4.7	9+1	63
					M20					
					M20x1.5					
100			20	28	M16	M10	M16x1.5	4.7	9+1	76
					M20					
					M20x1.5					
125	1 ... 40		–	40	M20	–	M20x1.5	–	10.8+1.2	92

ISO standard cylinders
ISO 21287

1.4

Compact cylinders ADN, to ISO 21287

Technical data

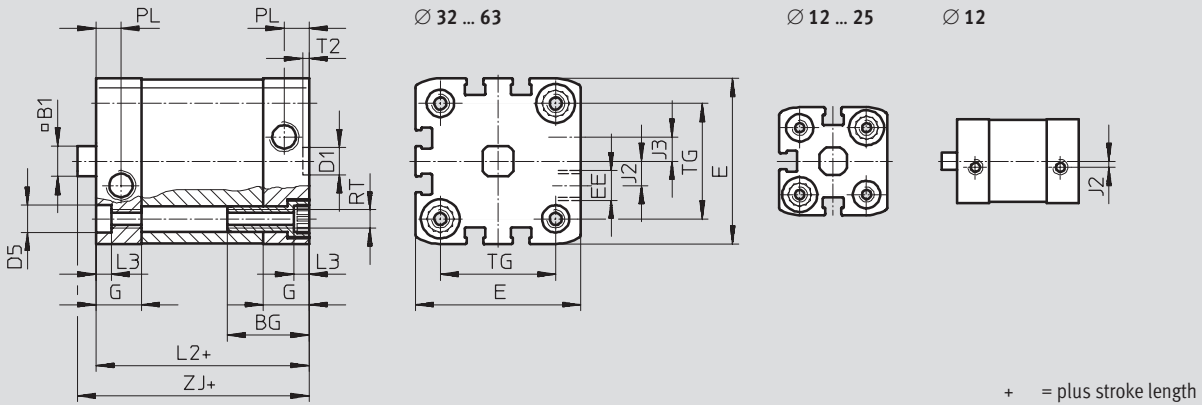
FESTO

Dimensions – Variants

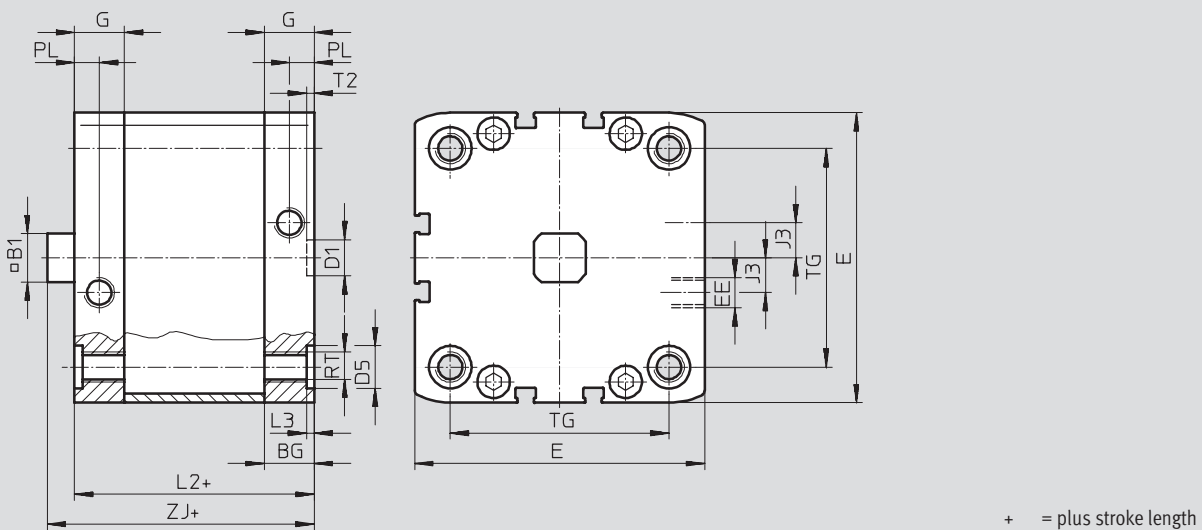
Download CAD data → www.festo.com/en/engineering

Q – Square piston rod

Ø 12 ... 63



Ø 80 ... 125



Ø [mm]	BG □	B1	D1 Ø H9	D5 Ø F9	E	EE	G	J2	J3	L2 max.	L3 +0.2	PL +0.2	RT	T2 +0.1	TG ±0.2	ZJ
12	17	5.5	9	6	27.5+0.3	M5	10.5	2	–	35	3.5	6	M4	2.1	16	40
16		7			29+0.3		11	2.6							37	
20	19.5	9		35.5+0.3	12		37			39	22		43			
25															10	39.5+0.3
32	27	10		47+0.3	G1/8	15	6	44	5	8.2	M6	32.5	50			
40															54.5+0.3	8
50	12	65.5+0.3	11.5	49		M8	56.5	57								
63									16	75.5+0.3	20	54	2.6	M10	72	63
80	16.5	95.5+0.6	21.5	67	2.6	10.5	89	76								
100	21.5								113.5+0.6	20	81	–	110	92		
125	20	20	–	134.6+0.3	G3/4	20	21.15	81							–	10.5

Compact cylinders ADN, to ISO 21287

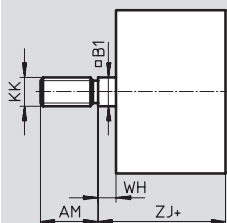
Technical data

FESTO

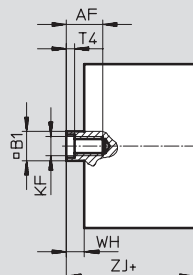
Dimensions – Variants

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

Q – Square piston rod with male thread

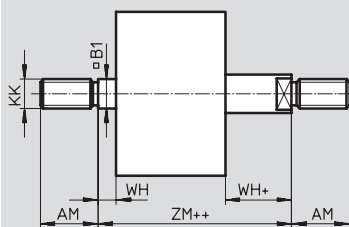


Q – With female thread

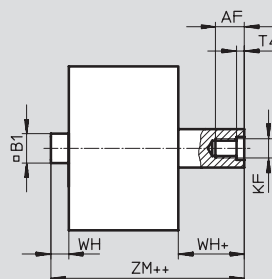


+ = plus stroke length

Q-S2 – Square, through piston rod



Q-S2 – With female thread



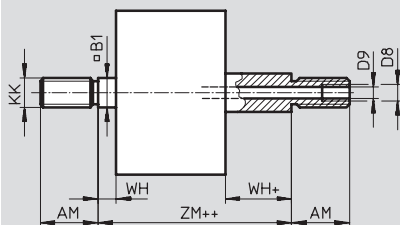
- Note

The thread types at both piston rod ends are identical. The left-hand piston rod is square, the right-hand piston rod round.

+ = plus stroke length

++ = plus 2 stroke lengths

Q-S20 – Square, through, hollow piston rod



- Note

In combination with variant K8, the piston rod is extended on one side at the bearing cap.

+ = plus stroke length

++ = plus 2 stroke lengths

Ø	AF	AM	B1 □	D8	D9	KF	KK	T4	WH	ZJ	ZM	
[mm]	min.	-0.5										
12	8	10	5.5	-	-	M3	M5	1.5	4.2 +1	40	44.2	
16	10	12	7		3.2	M4	M6		4.85+1	40	44.85	
20	12	16	9		3.8	M5	M8	2	5.65+1	43	48.65	
25						M5			5.65+1	45	50.65	
32	14	19	10		4.5	M6	M10x1.25	2.6	6.15+1	50	56.15	
40						M6			6.15+1	51	57.15	
50	16	22	12		6	M8	M12x1.25	3.3	8.25+1	53	61.25	
63						M8			8.25+1	57	65.25	
80	20	28	16		G ¹ / ₈	8.5	M10	M16x1.5	4.7	9+1	63	72
100					G ¹ / ₄		M10			9+1	76	85
125	24	40	20		11.5	M12	M20x1.5	6.1	10.8+1.2	92	102.8	

ISO standard cylinders
ISO 21287

1.4

Compact cylinders ADN, to ISO 21287

Technical data

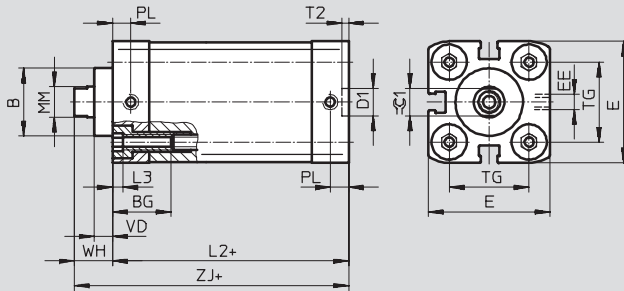
FESTO

Dimensions – Variants

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

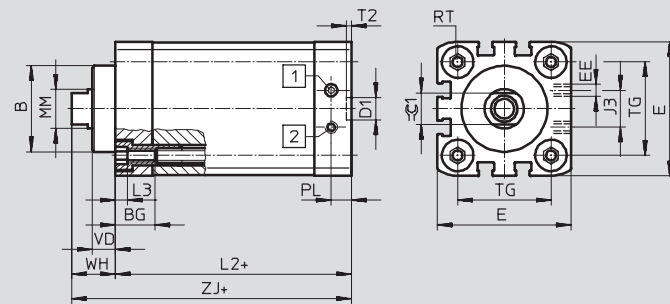
S1 – Reinforced piston rod with female thread

Ø 25



+ = plus stroke length

Ø 40 ... 100

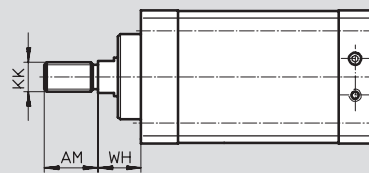
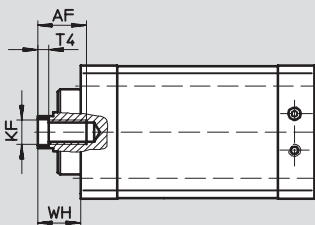


- 1 Cylinder advancing
- 2 Cylinder retracting

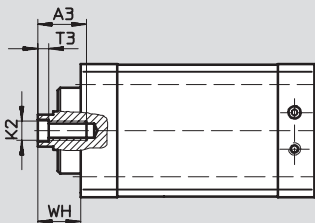
+ = plus stroke length

S1 – Reinforced piston rod with female thread

S1 – Reinforced piston rod with male thread



S1-K5 – Reinforced piston rod with special thread



Compact cylinders ADN, to ISO 21287

Technical data

FESTO

∅	A3	AF	AM	B ∅	BG	D1 ∅	E	EE	J3	K2	KF	KK	L2
[mm]	min.	min.	-0.5	F8	min.	H9	+0.3						
25	12	14	16	22	15	9	39.5	M5	–	M5	M6	M8	39
40	16	20	22	35	16	9	54.5	M5	15	M8	M10	M12x1.25	45
63	20	20	28	42	16	12	75.5	G1/8	23	M10	M12	M16x1.5	49
100	–	25	40	55	17	12	113.5	G1/8	40	–	M16	M20x1.5	67

∅	L3	MM ∅	PL	RT	T2	T3	T4	TG	VD	WH	ZJ	≈C1
[mm]										+1.3		h13
25	5	10	6	M5	2.1	2	2.6	26	6	11.65	50.65	9
40	5	16	8.2	M6	2.1	3.3	4.7	38	9.5	17.75	62.75	13
63	5	20	8.2	M8	2.6	4.7	6.1	56.5	12	21	70	17
100	5	25	10.5	M10	2.6	–	7	89	15.5	26.3	93.3	21

Compact cylinders ADN, to ISO 21287

Technical data

FESTO

Ordering data – Basic version						
Type	Piston Ø [mm]	Stroke [mm]	Female piston rod thread		Male piston rod thread	
			Part No.	Type	Part No.	Type
	12	5	536 211	ADN-12-5-I-P-A	536 204	ADN-12-5-A-P-A
		10	536 212	ADN-12-10-I-P-A	536 205	ADN-12-10-A-P-A
		15	536 213	ADN-12-15-I-P-A	536 206	ADN-12-15-A-P-A
		20	536 214	ADN-12-20-I-P-A	536 207	ADN-12-20-A-P-A
		25	536 215	ADN-12-25-I-P-A	536 208	ADN-12-25-A-P-A
		30	536 216	ADN-12-30-I-P-A	536 209	ADN-12-30-A-P-A
		40	536 217	ADN-12-40-I-P-A	536 210	ADN-12-40-A-P-A
	16	5	536 226	ADN-16-5-I-P-A	536 219	ADN-16-5-A-P-A
		10	536 227	ADN-16-10-I-P-A	536 220	ADN-16-10-A-P-A
		15	536 228	ADN-16-15-I-P-A	536 221	ADN-16-15-A-P-A
		20	536 229	ADN-16-20-I-P-A	536 222	ADN-16-20-A-P-A
		25	536 230	ADN-16-25-I-P-A	536 223	ADN-16-25-A-P-A
		30	536 231	ADN-16-30-I-P-A	536 224	ADN-16-30-A-P-A
		40	536 232	ADN-16-40-I-P-A	536 225	ADN-16-40-A-P-A
		50	536 341	ADN-16-50-I-P-A	536 331	ADN-16-50-A-P-A
	20	5	536 242	ADN-20-5-I-P-A	536 234	ADN-20-5-A-P-A
		10	536 243	ADN-20-10-I-P-A	536 235	ADN-20-10-A-P-A
		15	536 244	ADN-20-15-I-P-A	536 236	ADN-20-15-A-P-A
		20	536 245	ADN-20-20-I-P-A	536 237	ADN-20-20-A-P-A
		25	536 246	ADN-20-25-I-P-A	536 238	ADN-20-25-A-P-A
		30	536 247	ADN-20-30-I-P-A	536 239	ADN-20-30-A-P-A
		40	536 248	ADN-20-40-I-P-A	536 240	ADN-20-40-A-P-A
		50	536 249	ADN-20-50-I-P-A	536 241	ADN-20-50-A-P-A
	25	60	536 362	ADN-20-60-I-P-A	536 352	ADN-20-60-A-P-A
		5	536 259	ADN-25-5-I-P-A	536 251	ADN-25-5-A-P-A
		10	536 260	ADN-25-10-I-P-A	536 252	ADN-25-10-A-P-A
		15	536 261	ADN-25-15-I-P-A	536 253	ADN-25-15-A-P-A
		20	536 262	ADN-25-20-I-P-A	536 254	ADN-25-20-A-P-A
		25	536 263	ADN-25-25-I-P-A	536 255	ADN-25-25-A-P-A
		30	536 264	ADN-25-30-I-P-A	536 256	ADN-25-30-A-P-A
		40	536 265	ADN-25-40-I-P-A	536 257	ADN-25-40-A-P-A
	32	50	536 266	ADN-25-50-I-P-A	536 258	ADN-25-50-A-P-A
		60	536 383	ADN-25-60-I-P-A	536 373	ADN-25-60-A-P-A
		5	536 278	ADN-32-5-I-P-A	536 268	ADN-32-5-A-P-A
		10	536 279	ADN-32-10-I-P-A	536 269	ADN-32-10-A-P-A
		15	536 280	ADN-32-15-I-P-A	536 270	ADN-32-15-A-P-A
		20	536 281	ADN-32-20-I-P-A	536 271	ADN-32-20-A-P-A
		25	536 282	ADN-32-25-I-P-A	536 272	ADN-32-25-A-P-A
		30	536 283	ADN-32-30-I-P-A	536 273	ADN-32-30-A-P-A
	32	40	536 284	ADN-32-40-I-P-A	536 274	ADN-32-40-A-P-A
		50	536 285	ADN-32-50-I-P-A	536 275	ADN-32-50-A-P-A
		60	536 286	ADN-32-60-I-P-A	536 276	ADN-32-60-A-P-A
		80	536 287	ADN-32-80-I-P-A	536 277	ADN-32-80-A-P-A

Compact cylinders ADN, to ISO 21287

Technical data

FESTO

Ordering data – Basic version						
Type	Piston Ø [mm]	Stroke [mm]	Female piston rod thread		Male piston rod thread	
			Part No.	Type	Part No.	Type
	40	5	536 299	ADN-40-5-I-P-A	536 289	ADN-40-5-A-P-A
		10	536 300	ADN-40-10-I-P-A	536 290	ADN-40-10-A-P-A
		15	536 301	ADN-40-15-I-P-A	536 291	ADN-40-15-A-P-A
		20	536 302	ADN-40-20-I-P-A	536 292	ADN-40-20-A-P-A
		25	536 303	ADN-40-25-I-P-A	536 293	ADN-40-25-A-P-A
		30	536 304	ADN-40-30-I-P-A	536 294	ADN-40-30-A-P-A
		40	536 305	ADN-40-40-I-P-A	536 295	ADN-40-40-A-P-A
		50	536 306	ADN-40-50-I-P-A	536 296	ADN-40-50-A-P-A
		60	536 307	ADN-40-60-I-P-A	536 297	ADN-40-60-A-P-A
		80	536 308	ADN-40-80-I-P-A	536 298	ADN-40-80-A-P-A
	50	5	536 320	ADN-50-5-I-P-A	536 310	ADN-50-5-A-P-A
		10	536 321	ADN-50-10-I-P-A	536 311	ADN-50-10-A-P-A
		15	536 322	ADN-50-15-I-P-A	536 312	ADN-50-15-A-P-A
		20	536 323	ADN-50-20-I-P-A	536 313	ADN-50-20-A-P-A
		25	536 324	ADN-50-25-I-P-A	536 314	ADN-50-25-A-P-A
		30	536 325	ADN-50-30-I-P-A	536 315	ADN-50-30-A-P-A
		40	536 326	ADN-50-40-I-P-A	536 316	ADN-50-40-A-P-A
		50	536 327	ADN-50-50-I-P-A	536 317	ADN-50-50-A-P-A
		60	536 328	ADN-50-60-I-P-A	536 318	ADN-50-60-A-P-A
		80	536 329	ADN-50-80-I-P-A	536 319	ADN-50-80-A-P-A
	63	10	536 342	ADN-63-10-I-P-A	536 332	ADN-63-10-A-P-A
		15	536 343	ADN-63-15-I-P-A	536 333	ADN-63-15-A-P-A
		20	536 344	ADN-63-20-I-P-A	536 334	ADN-63-20-A-P-A
		25	536 345	ADN-63-25-I-P-A	536 335	ADN-63-25-A-P-A
		30	536 346	ADN-63-30-I-P-A	536 336	ADN-63-30-A-P-A
		40	536 347	ADN-63-40-I-P-A	536 337	ADN-63-40-A-P-A
		50	536 348	ADN-63-50-I-P-A	536 338	ADN-63-50-A-P-A
		60	536 349	ADN-63-60-I-P-A	536 339	ADN-63-60-A-P-A
		80	536 350	ADN-63-80-I-P-A	536 340	ADN-63-80-A-P-A
	80	10	536 363	ADN-80-10-I-P-A	536 353	ADN-80-10-A-P-A
		15	536 364	ADN-80-15-I-P-A	536 354	ADN-80-15-A-P-A
		20	536 365	ADN-80-20-I-P-A	536 355	ADN-80-20-A-P-A
		25	536 366	ADN-80-25-I-P-A	536 356	ADN-80-25-A-P-A
		30	536 367	ADN-80-30-I-P-A	536 357	ADN-80-30-A-P-A
		40	536 368	ADN-80-40-I-P-A	536 358	ADN-80-40-A-P-A
		50	536 369	ADN-80-50-I-P-A	536 359	ADN-80-50-A-P-A
		60	536 370	ADN-80-60-I-P-A	536 360	ADN-80-60-A-P-A
		80	536 371	ADN-80-80-I-P-A	536 361	ADN-80-80-A-P-A
	100	10	536 384	ADN-100-10-I-P-A	536 374	ADN-100-10-A-P-A
		15	536 385	ADN-100-15-I-P-A	536 375	ADN-100-15-A-P-A
		20	536 386	ADN-100-20-I-P-A	536 376	ADN-100-20-A-P-A
		25	536 387	ADN-100-25-I-P-A	536 377	ADN-100-25-A-P-A
		30	536 388	ADN-100-30-I-P-A	536 378	ADN-100-30-A-P-A
		40	536 389	ADN-100-40-I-P-A	536 379	ADN-100-40-A-P-A
		50	536 390	ADN-100-50-I-P-A	536 380	ADN-100-50-A-P-A
		60	536 391	ADN-100-60-I-P-A	536 381	ADN-100-60-A-P-A
		80	536 392	ADN-100-80-I-P-A	536 382	ADN-100-80-A-P-A

ISO standard cylinders
ISO 21287

1.4

Compact cylinders ADN, to ISO 21287

Ordering data – Modular products, basic version

FESTO

M Mandatory data

Module No.	Function	Piston Ø	Stroke	Piston rod thread	Cushioning	Position sensing
536 203	ADN	12	1 ... 500	A	P	A
536 218		16		I		
536 233		20				
536 250		25				
536 267		32				
536 288		40				
536 309		50				
536 330		63				
536 351		80				
536 372		100				
536 393		125				
Ordering example						
536 309	ADN	50	350	A	P	A

Ordering table

Size	12	16	20	25	32	40	Condi- tions	Code	Enter code
M Module No.	536 203	536 218	536 233	536 250	536 267	536 288			
Function	Compact cylinder, double-acting, based on ISO 21287							ADN	ADN
Piston Ø [mm]	12	16	20	25	32	40		-...	
Stroke [mm]	1 ... 300				1 ... 400			-...	
Piston rod thread	Male thread							-A	
	Female thread						1	-I	
Cushioning	Flexible cushioning rings/plates at both ends							-P	-P
Position sensing	For proximity sensing							-A	-A
O Type of piston rod	Through piston rod						2	-S2	
[mm]	Through, hollow piston rod Restricted stroke 1 ... 200						2	-S20	
	1 ... 300								
Male thread extended [mm]	Extended male piston rod thread 1 ... 10			1 ... 20				-...K2	
Piston rod with special thread	Male thread	M6	M8	M10x1.25 M10	M10x1.25 M10	M10 M12	M10 M12		-“...”K5
	Female thread	–	–	M5	M5	M6	M6		
Piston rod extended [mm]	Extended piston rod 1 ... 300				1 ... 400		3	-...K8	
Improved running performance	–	–	Smooth anodised aluminium coated piston rod				4	-K10	
Temperature resistant	Heat resistant seals up to max. 120°C							-S6	
Corrosion protection	High corrosion protection						5	-R3	
Captive rating plate	Laser etched rating plate							-TL	
Wiper seal	–	–	Dust protection				6	-R8	

- | | | | |
|-----------|---|-------|---|
| 1 I | Not with piston rod type S20 | 4 K10 | Not with extended male thread K2 |
| | Not with extended male thread K2 | | Not with special thread on piston rod K5 |
| 2 S2, S20 | Not with improved running performance K10 | | Not with corrosion protection R3 |
| | Not with corrosion protection R3 | 5 R3 | Not with captive rating plate TL |
| 3 K8 | The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length | 6 R8 | Not with piston rod type S2 |
| | | | Not with improved running performance K10 |
| | | | Not with temperature resistant S6 |

Transfer order code

	ADN	-		-		-	P	-	A
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Compact cylinders ADN, to ISO 21287

Ordering data – Modular products, basic version

→ 0 Options

Type of piston rod	Male thread extended	Special thread	Piston rod extended	Improved running performance	Temperature resistant	Corrosion protection	Captive rating plate
S2 S20	...K2	"..."K5	...K8	K10	S6	R3	TL
- S2	- 15K2	- "M16"K5	- 50K8	-	- S6	-	-

Ordering table									
Size		50	63	80	100	125	Condi- tions	Code	Enter code
[M]	Module No.	536 309	536 330	536 351	536 372	536 393			
	Function	Compact cylinder, double-acting, based on ISO 21287						ADN	ADN
	Piston Ø [mm]	50	63	80	100	125		-...	
	Stroke [mm]	1 ... 400		1 ... 500				-...	
	Piston rod thread	Male thread						-A	
		Female thread					[1]	-I	
	Cushioning	Flexible cushioning rings/plates at both ends						-P	-P
	Position sensing	Via proximity sensor						-A	-A
[O]	Type of piston rod	Through piston rod					[2]	-S2	
		Through, hollow piston rod					[2]	-S20	
		Restricted stroke							
	[mm]	1 ... 300				1 ... 400			
	Male thread extended	Extended male piston rod thread							
	[mm]	1 ... 20		1 ... 30		1 ... 40		-...K2	
	Piston rod with special thread	Male thread	M12 M16	M12 M16 M20x1.5	M16 M20 M20x1.5	M20		-“...”K5	
		Female thread	M8	M8	M10	M10	-		
	Piston rod extended	Extended piston rod							
	[mm]	1 ... 400		1 ... 500			[3]	-...K8	
	Improved running performance	Smooth anodised aluminium coated piston rod					[4]	-K10	
		[mm]	2 ... 400		5 ... 400	5 ... 500			
	Temperature resistant	Heat resistant seals up to max. 120°C						-S6	
	Corrosion protection	High corrosion protection					[5]	-R3	
	Captive rating plate	Laser etched rating plate						-TL	
	Wiper seal	Dust protection				-	[6]	-R8	

[1] I Not with piston rod type S20

Not with extended male thread K2

[2] S2, S20

Not with improved running performance K10

Not with corrosion protection R3

[3] K8

The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

[4] K10

Not with extended male thread K2

Not with special thread on piston rod K5

Not with corrosion protection R3

Not with captive rating plate TL

[5] R3

Not with piston rod type S2. Not with improved running performance K10

[6] R8

Not with temperature resistant S6

Transfer order code

- [] - [] - [] - [] - [] - [] - [] - []

Compact cylinders ADN, to ISO 21287

Ordering data – Modular products, version with low friction and constant motion

FESTO

Mandatory data							
Module No.	Function	Piston Ø	Stroke	Piston rod thread	Cushioning	Position sensing	
536 203	ADN	12	1 ... 500	A	P	A	
536 218		16		I			
536 233		20					
536 250		25					
536 267		32					
536 288		40					
536 309		50					
536 330		63					
536 351		80					
536 372		100					
536 393	125						
Ordering example							
536 309	ADN	- 50	- 350	- A	- P	- A	

Ordering table										
Size	12	16	20	25	32	40	Condi- tions	Code		Enter code
M	Module No.	536 203	536 218	536 233	536 250	536 267	536 288			
	Function	Compact cylinder, double-acting, based on ISO 21287						ADN		ADN
	Piston Ø [mm]	12	16	20	25	32	40		-...	
	Stroke [mm]	1 ... 300				1 ... 400			-...	
	Piston rod thread	Male thread							-A	
		Female thread						1	-I	
	Cushioning	Flexible cushioning rings/plates at both ends						-P		-P
	Position sensing	For proximity sensing						-A		-A
O	Male thread extended [mm]	Extended male piston rod thread 1 ... 10			1 ... 20				-...K2	
	Piston rod with special thread	Male thread	M6	M8	M10x1.25 M10	M10x1.25 M10	M10 M12	M10 M12	-“...”K5	
		Female thread	—	—	M5	M5	M6	M6		
	Piston rod extended [mm]	Extended piston rod 1 ... 300				1 ... 400		2	-...K8	
	Improved running performance	—	—	Smooth anodised aluminium coated piston rod				3	-K10	
	Constant motion [mm]	Slow speed (constant motion at low piston speeds)						4	-S10	
		Restricted stroke 20 ... 300					20 ... 400			
	Low friction	Low friction						5	-S11	
	Corrosion protection	High corrosion protection						6	-R3	
	Captive rating plate	Laser etched rating plate							-TL	

- | | | | |
|-------|--|-------|----------------------------------|
| 1 I | Not with extended male thread K2 | 4 S10 | Not with low friction S11 |
| 2 K8 | The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length | 5 S11 | Not with constant motion S10 |
| 3 K10 | Not with extended male thread K2
Not with special thread on piston rod K5
Not with corrosion protection R3 | 6 R3 | Not with captive rating plate TL |

Transfer order code

	ADN	-		-		-		-	P	-	A
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Compact cylinders ADN, to ISO 21287

Ordering data – Modular products, version with low friction and constant motion

FESTO

Options

Male thread extended	Special thread	Piston rod extended	Improved running performance	Constant motion	Low friction	Corrosion protection	Captive rating plate
...K2	"..."K5	...K8	K10	S10	S11	R3	TL
-	- "M16"K5	- 50K8	-	- S10	-	- R3	-

Ordering table									
Size		50	63	80	100	125	Condi- tions	Code	Enter code
M	Module No.	536 309	536 330	536 351	536 372	536 393			
	Function	Compact cylinder, double-acting, based on ISO 21287						ADN	ADN
	Piston Ø [mm]	50	63	80	100	125		-...	
	Stroke [mm]	1 ... 400		1 ... 500				-...	
	Piston rod thread	Male thread						-A	
		Female thread					1	-I	
	Cushioning	Flexible cushioning rings/plates at both ends						-P	-P
	Position sensing	Via proximity sensor						-A	-A
0	Male thread extended	Extended male piston rod thread							
	[mm]	1 ... 20		1 ... 30		1 ... 40		-...K2	
	Piston rod with special thread	Male thread	M12 M16	M12 M16	M16 M20 M20x1.5	M16 M20 M20x1.5	M20	-“...”K5	
		Female thread	M8	M8	M10	M10	-		
	Piston rod extended	Extended piston rod							
	[mm]	1 ... 400		1 ... 500			2	-...K8	
	Improved running performance	Smooth anodised aluminium coated piston rod					3	-K10	
	Restricted stroke								
	[mm]	2 ... 400		5 ... 400		5 ... 500			
	Constant motion	Slow speed (constant motion at low piston speeds)					4	-S10	
	Restricted stroke								
	[mm]	20 ... 400		20 ... 500					
	Low friction	Low friction					5	-S11	
	Corrosion protection	High corrosion protection					6	-R3	
	Captive rating plate	Laser etched rating plate						-TL	

[1] I Not with extended male thread K2

[2] K8 The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

[3] K10 Not with extended male thread K2
Not with special thread on piston rod K5
Not with corrosion protection R3

[4] S10 Not with low friction S11

[5] S11 Not with constant motion S10

[6] R3 Not with captive rating plate TL

Transfer order code

- [] - [] - [] - [] - [] - [] - [] - []

Compact cylinders ADN, to ISO 21287

Ordering data – Modular products, version with square piston rod, non-rotating

FESTO

Mandatory data

Module No.	Function	Piston Ø	Stroke	Piston rod thread	Cushioning	Position sensing
536 203	ADN	12	1 ... 500	A	P	A
536 218		16		I		
536 233		20				
536 250		25				
536 267		32				
536 288		40				
536 309		50				
536 330		63				
536 351		80				
536 372		100				
536 393		125				
Ordering example						
536 309	ADN	50	350	A	P	A

Ordering table

Size	12	16	20	25	32	40	Condi- tions	Code	Enter code	
M Module No.	536 203	536 218	536 233	536 250	536 267	536 288				
Function	Compact cylinder, double-acting, based on ISO 21287							ADN	ADN	
Piston Ø [mm]	12	16	20	25	32	40		-...		
Stroke [mm]	1 ... 300				1 ... 400			-...		
Piston rod thread	Male thread							-A		
	Female thread						1	-I		
Cushioning	Flexible cushioning rings/plates at both ends							-P	-P	
Position sensing	For proximity sensing							-A	-A	
O Protection against rotation	Square piston rod							-Q	-Q	
Type of piston rod	Through piston rod							-S2		
	–	Through, hollow piston rod Restricted stroke 1 ... 200					1 ... 300		-S20	
Male thread extended [mm]	Extended male piston rod thread 1 ... 10 1 ... 20								-...K2	
Piston rod with Male thread special thread	M6	M8	M10x1.25 M10	M10x1.25 M10	M10	M10		-“...”K5		
Piston rod extended [mm]	Extended piston rod 1 ... 300				1 ... 400		2	-...K8		
Temperature resistant	Heat resistant seals up to max. 120 °C							-S6		
Captive rating plate	Laser etched rating plate							-TL		

1 I

Not with piston rod type S20
Not with extended male thread K2

5 K8

The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

Transfer order code

	ADN	-		-		-	P	-	A
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Compact cylinders ADN, to ISO 21287

Ordering data – Modular products, version with square piston rod, non-rotating

FESTO

Options

Protection against rotation	Type of piston rod	Male thread extended	Special thread	Piston rod extended	Temperature resistant	Captive rating plate
Q	S2 S20	...K2	"..."K5	...K8	S6	TL
- Q	- S2	- 15K2	- "M16"K5	- 50K8	- S6	-

Ordering table									
Size		50	63	80	100	125	Condi- tions	Code	Enter code
[M]	Module No.	536 309	536 330	536 351	536 372	536 393			
	Function	Compact cylinder, double-acting, based on ISO 21287						ADN	
	Piston Ø [mm]	50	63	80	100	125		- ...	
	Stroke [mm]	1 ... 400			1 ... 500			- ...	
	Piston rod thread	Male thread						-A	
		Female thread					1	-I	
	Cushioning	Flexible cushioning rings/plates at both ends						-P	
	Position sensing	For proximity sensing						-A	
[O]	Protection against rotation	Square piston rod						-Q	
	Type of piston rod	Through piston rod						-S2	
		Through, hollow piston rod						-S20	
		Restricted stroke							
	Male thread extended [mm]	1 ... 300					1 ... 400		
		Extended male piston rod thread							
	Piston rod with Male thread special thread	1 ... 20		1 ... 30		1 ... 40		-...K2	
		M12	M12	M16	M16	M20		-“...”K5	
	Piston rod extended [mm]	Extended piston rod							
		1 ... 400			1 ... 500		2	-...K8	
Temperature resistant	Heat resistant seals up to max. 120 °C						-S6		
Captive rating plate	Laser etched rating plate						-TL		

[1] I

Not with piston rod type S20
Not with extended male thread K2

[2] K8

The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

Transfer order code

- Q - - - - -

Compact cylinders ADN, to ISO 21287

Ordering data – Modular products, version with reinforced piston rod

FESTO

M Mandatory data							O Options					
Module No.	Function	Piston 	Stroke	Piston rod thread	Cushioning	Position sensing	Male thread extended	Special thread	Piston rod extended	Temperature resistant	Reinforced piston rod	Captive rating plate
536 250	ADN	25	1 ... 500	A I	P	A	...K2	“...”K5	...K8	S6	S1	TL
536 288		40										
536 330		63										
536 372		100										
Ordering example												
536 288	ADN	- 40	- 320	- I	- P	- A	-	-	- 50K8	- S6	- S1	- TL

Ordering table										
Size		25	40	63	100	Condi- tions	Code		Enter code	
M	Module No.		536 250	536 288	536 330	536 372				
	Function		Compact cylinder, double-acting, based on ISO 21287					ADN		
	Piston Ø	[mm]	25	40	63	100	- ...			
	Stroke	[mm]	1 ... 300	1 ... 400		1 ... 500	- ...			
	Piston rod thread		Male thread					-A		
			Female thread				1	-I		
	Cushioning		Flexible cushioning rings/plates at both ends					-P		-P
	Position sensing		For proximity sensing					-A		-A
O	Male thread extended		Extended male piston rod thread							
		[mm]	1 ... 20				1 ... 30	-...K2		
	Special piston rod thread	Male thread	M10x1.25	M10x1.25	M12x1.25	M16x1.5	-“...”K5			
			M10	M12	M16	M20				
		Female thread	M5	M8	M10	-				
	Piston rod extended		Extended piston rod							
		[mm]	1 ... 300	1 ... 400		1 ... 500	2	-...K8		
	Temperature resistant		Heat resistant seals up to max. 120 °C					-S6		
Reinforced piston rod		Reinforced piston rod or extended piston rod bearing					-S1	-S1		
Captive rating plate		Laser etched rating plate					-TL			

1 I Not with extended male thread K2

2 K8 The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

Transfer order code

	ADN	-		-		-	P	-	A	-		-		-		-	S1	-	
--	-----	---	--	---	--	---	---	---	---	---	--	---	--	---	--	---	----	---	--

Compact cylinders AEN, to ISO 21287

Type codes

FESTO

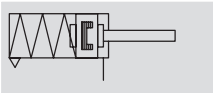
		AEN	–	50	–	25	–	A	–	P	–	A	–	Q
Type														
Single-acting														
AEN	Basic version													
Piston ∅ [mm]														
Stroke [mm]														
Piston rod thread														
A	Male thread													
I	Female thread													
Cushioning														
P	Flexible cushioning rings/plates at both ends													
Position sensing														
A	For proximity sensing													
Variant														
Z	Single-acting, pulling													
Q	Square piston rod													
K2	Extended male thread													
K5	Special thread													
K8	Extended piston rod													
K10	Smooth anodised piston rod													
S6	Heat resistant seals up to max. 120°C													
TL	Captive rating plate													

Compact cylinders AEN, to ISO 21287

Technical data

FESTO

Function



Ø - Diameter
12 ... 100 mm

Stroke length
1 ... 25 mm

 [www.festo.com/en/
Spare_parts_service](http://www.festo.com/en/Spare_parts_service)

Variants



Q



K2



K5



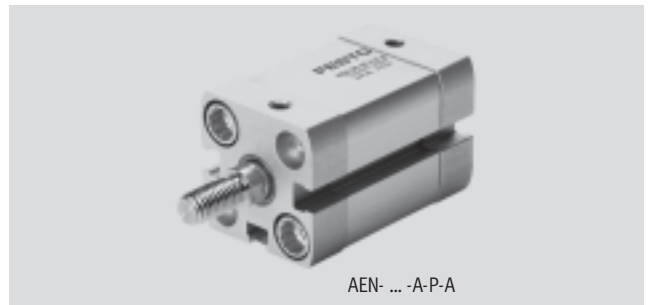
K8



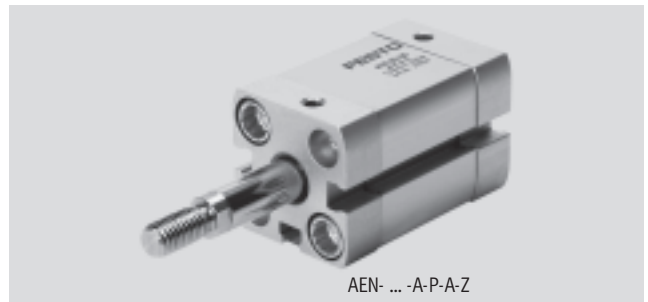
K10



S6



AEN- ... -A-P-A



AEN- ... -A-P-A-Z

General technical data											
Piston Ø	12	16	20	25	32	40	50	63	80	100	
Pneumatic connection	M5	M5	M5	M5	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$
Piston rod thread	Female	M3	M4	M6	M6	M8	M8	M10	M10	M12	M12
	Male	M5	M6	M8	M8	M10x1.25	M10x1.25	M12x1.25	M12x1.25	M16x1.5	M16x1.5
Operating medium	Filtered compressed air, lubricated or unlubricated										
Design	Piston										
	Piston rod										
	Cylinder barrel										
Cushioning	Flexible cushioning rings/plates at both ends										
Position sensing	For proximity sensing										
Type of mounting	Via through-holes										
	Via female threads										
	Via accessories										
Assembly position	Any										

Operating pressure [bar]										
Piston Ø	12	16	20	25	32	40	50	63	80	100
Basic version	1.5 ... 10		1 ... 10							
Z	1.7 ... 10	2.2 ... 10	1.3 ... 10		0.7 ... 10	0.6 ... 10				
Q	1.5 ... 10		1 ... 10							

Ambient conditions		
	Basic version	S6
Ambient temperature ¹⁾ [°C]	-20 ... +80	0 ... +120
Corrosion resistance class CRC ²⁾	2	

1) Note operating range of proximity sensors

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

Components requiring moderate corrosion resistance. 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

Compact cylinders AEN, to ISO 21287

Technical data

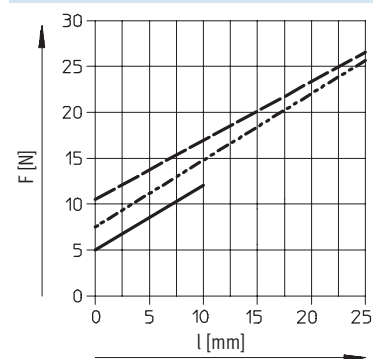
FESTO

Forces [N] and impact energy [J]										
Piston Ø	12	16	20	25	32	40	50	63	80	100
AEN										
Theoretical force at 6 bar, advancing	59	95	161	260	440	700	1,100	1,780	2,870	4,510
AEN-...Z, pulling										
Theoretical force at 6 bar, retracting	40	65	115	210	380	632	980	1,660	2,700	4,324
Max. impact energy at the end positions		0.04	0.04	0.04	0.08	0.1	0.15	0.18	0.28	0.35
	S6	0.035	0.075	0.1	0.15	0.2	0.35	0.5	0.65	0.9
	K10	0.07	0.15	0.2	0.3	0.4	0.7	1.0	1.3	1.8

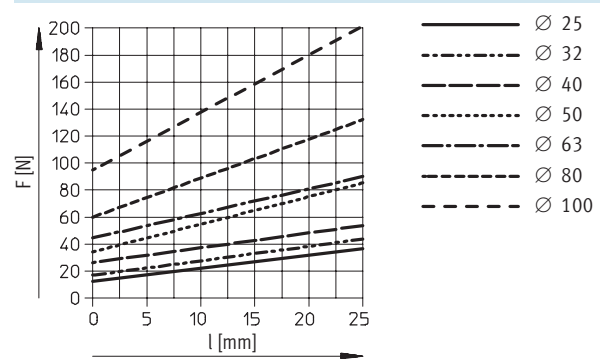
-  Note The degree of friction depends upon the assembly position and the type of load involved. Single-acting cylinders should as far as possible be operated without lateral forces.

Spring return force F as a function of the stroke l

Ø 12 ... 20



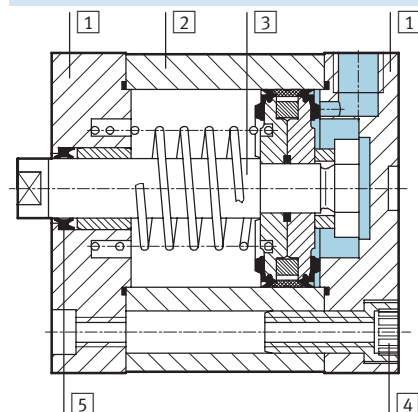
Ø 25 ... 100



Weight [g]										
Piston Ø	12	16	20	25	32	40	50	63	80	100
Basic weight with 0 mm stroke	77	79	131	156	265	346	540	722	1,300	2,154
Additional weight per 10 mm stroke	12	14	21	23	30	37	51	59	79	98
Moving load with 0 mm stroke	9	15	30	50	60	80	140	180	400	570
Additional load per 10 mm stroke	2	4	6	6	9	9	16	16	25	25

Materials

Sectional view



Compact cylinder	Basic version	S6
1 Cap	Anodised aluminium	
2 Cylinder barrel	Anodised aluminium	
3 Piston rod	High-alloy steel	
4 Flange screws	Ø 12 ... 16	High-alloy steel
	Ø 20 ... 63	Galvanised steel
	Ø 80 ... 100	Standard screws, galvanised steel
5 Seals	Polyurethane	Fluorocarbon rubber

Compact cylinders AEN, to ISO 21287

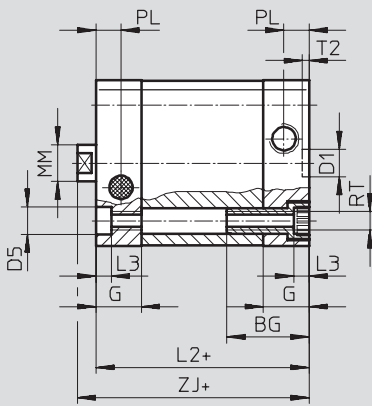
Technical data

FESTO

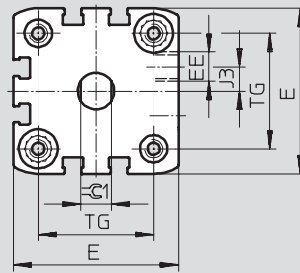
Dimensions – Basic version

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

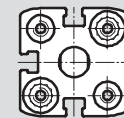
Ø 12 ... 63



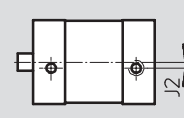
Ø 32 ... 63



Ø 12 ... 25

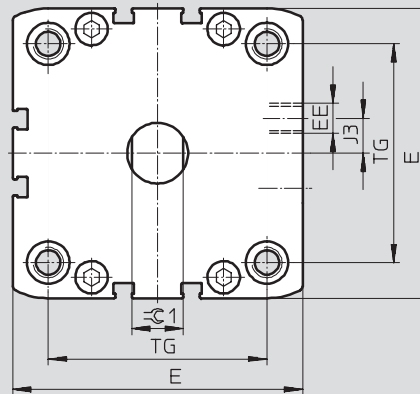
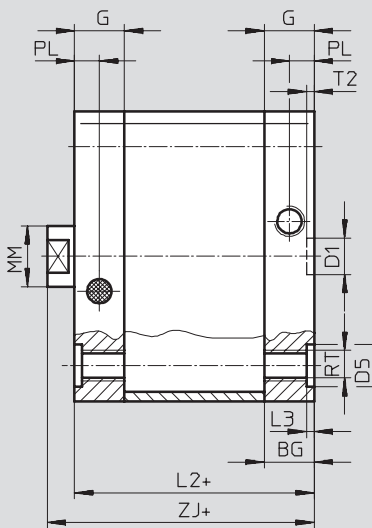


Ø 12



+ = plus stroke length

Ø 80 ... 100



+ = plus stroke length

Ø [mm]	BG	D1 Ø H9	D5 Ø F9	E	EE	G	J2	J3	L2 max.	L3 +0.2	MM Ø h8	PL +0.2	RT	T2 +0.1	TG ±0.2	ZJ	⌀1 h13		
12	17	9	6	27.5+0.3	M5	10.5	2	–	35	3.5	6	6	M4	2.1	16	40	5		
16				29+0.3		11					8				18		7		
20	19.5		9	35.5+0.3		12		2.6	37	5	10				M5		22	43	9
25				39.5+0.3					39		26						45		
32	27			12	47+0.3	G1/8	15	–	6		44	12	8.2		M6	32.5	50	10	
40					54.5+0.3				8		45					38	51		
50			12		65.5+0.3				16	M8	46.5	53	13						
63					75.5+0.3						11.5	49			56.5	57			
80	16.5	15	95.5+0.6	16.5	11.5		54	2.6	20	8.2	M10	72	63	17					
100	21.5		113.5+0.6	21.5	20		67		10.5	89		76							

Compact cylinders AEN, to ISO 21287

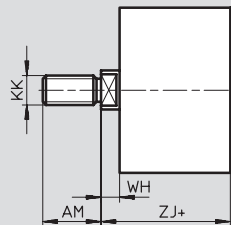
Technical data

FESTO

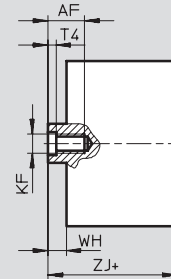
Dimensions – Variants

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

Basic version – With male thread

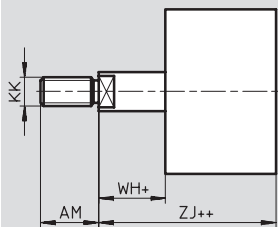


Basic version – With female thread

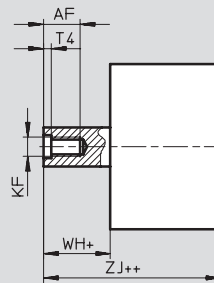


+ = plus stroke length

Pulling – With male thread



Pulling – With female thread



+ = plus stroke length

++ = plus 2 stroke lengths

Ø	AF	AM	KF	KK	T4	WH	ZJ
[mm]	min.	–0.5					
12	8	10	M3	M5	1.5	4.2+1	40
16	10	12	M4	M6	1.5	4.85+1	40
20	14	16	M6	M8	2.6	5.65+1	43
25	14	16	M6	M8	2.6	5.65+1	45
32	16	19	M8	M10x1.25	3.3	6.15+1	50
40	16	19	M8	M10x1.25	3.3	6.15+1	51
50	20	22	M10	M12x1.25	4.7	8.25+1	53
63	20	22	M10	M12x1.25	4.7	8.25+1	57
80	20	28	M12	M16x1.5	6.1	9+1	63
100	20	28	M12	M16x1.5	6.1	9+1	76

ISO standard cylinders
ISO 21287

1.4

Compact cylinders AEN, to ISO 21287

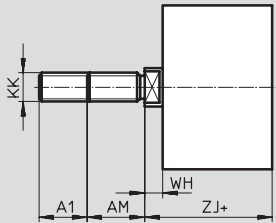
Technical data

FESTO

Dimensions – Variants

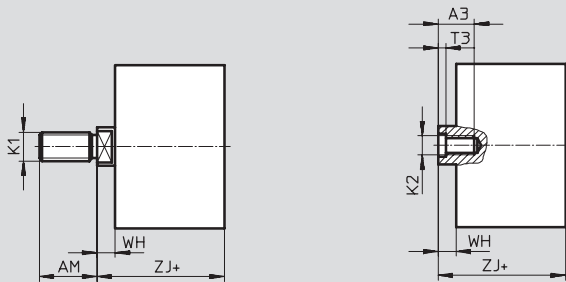
Download CAD data → www.festo.com/en/engineering

K2 – Extended male thread



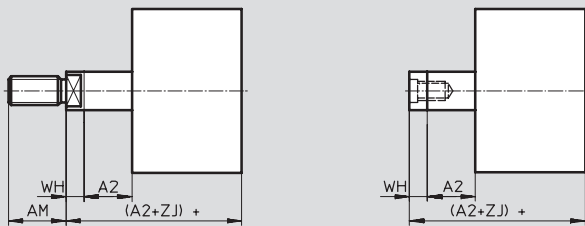
+ = plus stroke length

K5 – Special thread



+ = plus stroke length

K8 – Extended piston rod



+ = plus stroke length

Compact cylinders AEN, to ISO 21287

Technical data

FESTO

Ø [mm]	A1	A2	A3 min.	AM −0.5	K1	K2	KK	T3	WH	ZJ
12	1 ... 10	1 ... 10	–	10	M6	–	M5	–	4.2 ⁺¹	40
16	1 ... 10	1 ... 25		12	M8	–	M6		4.85 ⁺¹	40
20	1 ... 20	1 ... 25	14	16	M10	M5	M8	2	5.65 ⁺¹	43
					M10x1.25				5.65 ⁺¹	45
25					M10					
					M10x1.25					
32	1 ... 20	1 ... 25	16	19	M10	M6	M10x1.25	2.6	6.15 ⁺¹	50
					M12				6.15 ⁺¹	51
40					M10					
					M12					
50	1 ... 20	1 ... 25	20	22	M12	M8	M12x1.25	3.3	8.25 ⁺¹	53
					M16				8.25 ⁺¹	57
63					M12					
					M16					
80	1 ... 30	1 ... 25	20	28	M16	M10	M16x1.5	4.7	9 ⁺¹	63
					M20					
					M20x1.5					
100	1 ... 30	1 ... 25	20	28	M16	M10	M16x1.5	4.7	9 ⁺¹	76
					M20					
					M20x1.5					

ISO standard cylinders
ISO 21287

1.4

Compact cylinders AEN, to ISO 21287

Technical data

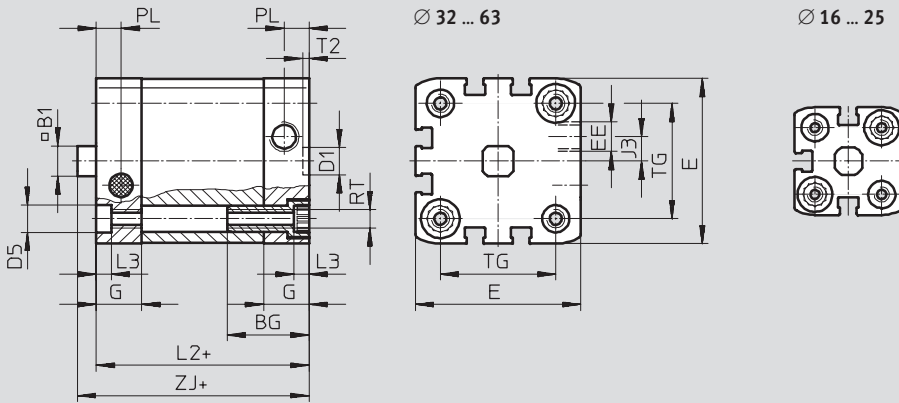
FESTO

Dimensions – Variants

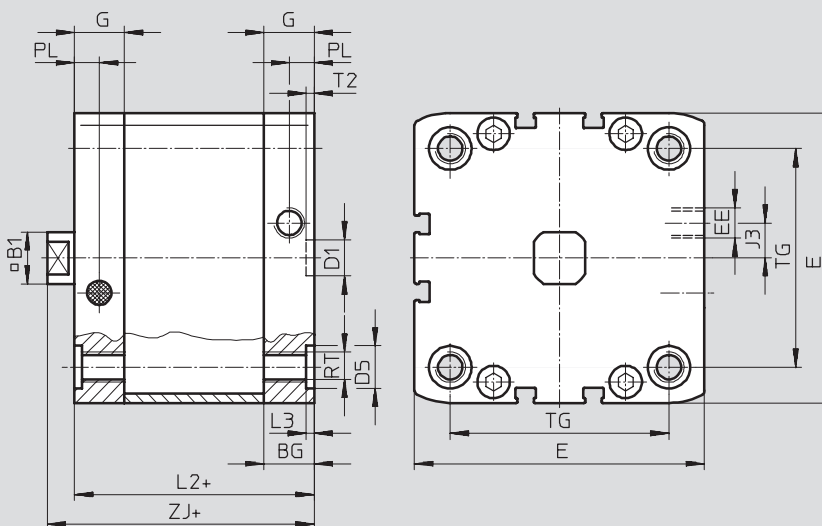
Download CAD data → www.festo.com/en/engineering

Q – Square piston rod

Ø 16 ... 63



Ø 80 ... 100



Ø [mm]	BG	B1 □	D1 Ø H9	D5 Ø F9	E	EE	G	J3	L2 max.	L3 +0.2	PL +0.2	RT	T2 +0.1	TG ±0.2	ZJ
16	17	7	9	6	29+0.3	M5	11	2.6	35	3.5	6	M4	2.1	18	40
20	19.5	9		9	35.5+0.3		12		37	5		M5		22	43
25					39.5+0.3				39			26		45	
32	27	10			12	12	G1/8	15	6		44	8.2		M6	32.5
40		54.5+0.3	8	45					38	51					
50		12	12	11.5					49	M8	46.5		53		
63						75.5+0.3			54		2.6		56.5	57	
80	16.5	16	15	95.5+0.6		16.5		54	2.6	M10	72		63		
100	21.5	16		113.5+0.6		21.5		20	67		2.6	10.5	89	76	

Compact cylinders AEN, to ISO 21287

Technical data

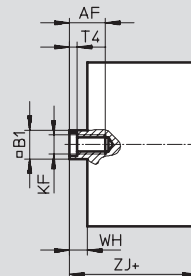
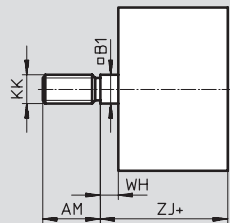
FESTO

Dimensions

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

Q – Square piston rod with male thread

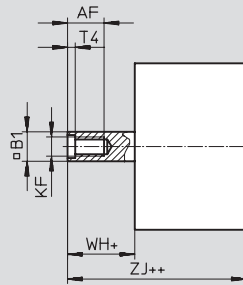
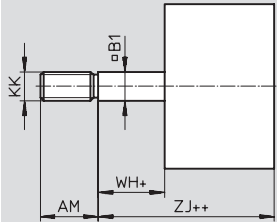
Square piston rod with female thread



+ = plus stroke length

Pulling – With male thread

Pulling – With female thread

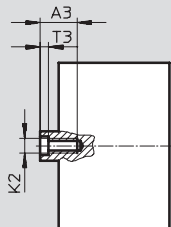


+ = plus stroke length
++ = plus 2 stroke lengths

Dimensions – Variants

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

Q K5 – Square piston rod with special thread



Ø	A3	AF	AM	B1	K2	KF	KK	T3	T4	WH	ZJ
[mm]	min.	min.	-0.5	□						+1	
16	–	10	12	7	–	M4	M6	–	1.5	4.85	40
20	12	12	16	9	M5	M5	M8	2	2	5.65	43
25					M5	M5				5.65	45
32	14	14	19	10	M6	M6	M10x1.25	2.6	2.6	6.15	50
40					M6	M6				6.15	51
50	16	16	22	12	M8	M8	M12x1.25	3.3	3.3	8.25	53
63					M8	M8				8.25	57
80	20	20	28	16	M10	M10	M16x1.5	4.7	4.7	9	63
100					M10	M10				9	76

ISO standard cylinders
ISO 21287

1.4

Compact cylinders AEN, to ISO 21287

Ordering data – Modular products, basic version

FESTO

Mandatory data

Module No.	Function	Piston Ø	Stroke	Type of thread	Cushioning	Position sensing
536 414	AEN	12	1 ... 25	A	P	A
536 415		16		I		
536 416		20				
536 417		25				
536 418		32				
536 419		40				
536 420		50				
536 421		63				
536 422		80				
536 423		100				
Ordering example						
536 423	AEN	- 100	- 21	- A	- P	- A

Ordering table										
Size		12	16	20	25	32	Condi- tions	Code	Enter code	
M	Module No.	536 414	536 415	536 416	536 417	536 418				
	Function	Standard compact cylinder, single-acting, based on ISO 21287						AEN		
	Piston Ø [mm]	12	16	20	25	32		-...		
	Stroke [mm]	1 ... 10	1 ... 25					-...		
	Type of thread	Male thread						-A		
		Female thread					1	-I		
	Cushioning	Flexible cushioning rings/plates at both ends						-P		
	Position sensing	For proximity sensing						-A		
O	Active direction	Single-acting, pulling						-Z		
	Male thread extended [mm]	Extended male piston rod thread								
		1 ... 10		1 ... 20			2	-...K2		
	Piston rod with special thread	Male thread	M6	M8	M10x1.25 M10	M10x1.25 M10	M10 M12	2		-“...”K5
		Female thread	–	–	M5	M5	M6			
	Piston rod extended [mm]	Extended piston rod								
		1 ... 10	1 ... 25				3	-...K8		
	Improved running performance	–	–	Smooth anodised aluminium coated piston rod				-K10		
	Temperature resistant	Heat resistant seals up to max. 120 °C						-S6		
	Captive rating plate	Laser etched rating plate						-TL		

- 1 I Not with extended male thread K2
2 K2, K5 Not with improved running performance K10

- 3 K8 The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

Transfer order code

	AEN	-		-		-	P	-	A
--	-----	---	--	---	--	---	---	---	---

Compact cylinders AEN, to ISO 21287

Ordering data – Modular products, basic version

FESTO

Options

Active direction	Male thread extended	Special thread	Piston rod extended	Improved running performance	Temperature resistant	Captive rating plate
Z	...K2	"... "K5	...K8	K10	S6	TL
-	- 25K2	-	- 4K8	-	- S6	- TL

Ordering table									
Size	40	50	63	80	100	Condi- tions	Code	Enter code	
[M] Module No.	536 419	536 420	536 421	536 422	536 423				
Function	Standard compact cylinder, single-acting, based on ISO 21287						AEN		AEN
Piston Ø [mm]	40	50	63	80	100		-...		
Stroke [mm]	1 ... 25						-...		
Type of thread	Male thread						-A		
	Female thread					[1]	-I		
Cushioning	Flexible cushioning rings/plates at both ends						-P		-P
Position sensing	For proximity sensing						-A		-A
[O] Active direction	Single-acting, pulling						-Z		
Male thread extended [mm]	Extended male piston rod thread								
	1 ... 20			1 ... 30		[2]	-...K2		
Piston rod with special thread	Male thread	M10	M12	M12	M16	M16	[2]	-"... "K5	
		M12	M16	M16	M20	M20			
	Female thread	M6	M8	M8	M10	M10			
Piston rod extended [mm]	Extended piston rod					[3]	-...K8		
Improved running performance	Smooth anodised aluminium coated piston rod						-K10		
Temperature resistant	Heat resistant seals up to max. 120 °C						-S6		
Captive rating plate	Laser etched rating plate						-TL		

- [1] I Not with extended male thread K2
[2] K2, K5 Not with improved running performance K10

- [3] K8 The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

Transfer order code

- - - - - - -

Compact cylinders AEN, to ISO 21287

Ordering data – Modular products, version with square piston rod, non-rotating

FESTO

Mandatory data

Module No.	Function	Piston Ø	Stroke	Type of thread	Cushioning	Position sensing
536 415	AEN	16	1 ... 25	A	P	A
536 416		20		I		
536 417		25				
536 418		32				
536 419		40				
536 420		50				
536 421		63				
536 422		80				
536 423		100				
Ordering example						
536 423	AEN	100	21	A	P	A

Ordering table

Size	16	20	25	32	Condi- tions	Code	Enter code
M Module No.	536 415	536 416	536 417	536 418			
Function	Standard compact cylinder, single-acting, based on ISO 21287					AEN	AEN
Piston Ø [mm]	16	20	25	32		-...	
Stroke [mm]	1 ... 25					-...	
Type of thread	Male thread					-A	
	Female thread				1	-I	
Cushioning	Flexible cushioning rings/plates at both ends					-P	-P
Position sensing	For proximity sensing					-A	-A
O Active direction	Single-acting, pulling					-Z	
Protection against rotation	Square piston rod					-Q	-Q
Male thread extended [mm]	Extended male piston rod thread					-...K2	
	1 ... 10	1 ... 20					
Piston rod with Male thread special thread	M8	M10x1.25 M10	M10x1.25 M10	M10		-“...”K5	
Piston rod extended [mm]	Extended piston rod					-...K8	
	1 ... 25				2		
Temperature resistant	Heat resistant seals up to max. 120 °C					-S6	
Captive rating plate	Laser etched rating plate					-TL	

1 I Not with extended male thread K2

2 K8 The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

Transfer order code

	AEN	-		-		-		-	P	-	A
--	-----	---	--	---	--	---	--	---	---	---	---

Compact cylinders AEN, to ISO 21287

Ordering data – Modular products, version with square piston rod, non-rotating

FESTO

Options

Active direction	Protection against rotation	Male thread extended	Special thread	Piston rod extended	Temperature resistant	Captive rating plate
Z	Q	...K2	"...K5	...K8	S6	TL
- Z	- Q	- 25K2	-	- 4K8	-	- TL

Ordering table									
Size	40	50	63	80	100	Condi- tions	Code		Enter code
M Module No.	536 419	536 420	536 421	536 422	536 423				
Function	Standard compact cylinder, single-acting, based on ISO 21287						AEN		AEN
Piston Ø [mm]	40	50	63	80	100		-...		
Stroke [mm]	1 ... 25						-...		
Type of thread	Male thread						-A		
	Female thread					¹	-I		
Cushioning	Flexible cushioning rings/plates at both ends						-P		-P
Position sensing	For proximity sensing						-A		-A
O Active direction	Single-acting, pulling						-Z		
Protection against rotation	Square piston rod						-Q		-Q
Male thread extended [mm]	Extended male piston rod thread 1 ... 20					1 ... 30	-...K2		
Piston rod with special thread	Male thread M10	M12	M12	M16	M16		-"...K5		
Piston rod extended [mm]	Extended piston rod 1 ... 25					²	-...K8		
Temperature resistant	Heat resistant seals up to max. 120 °C						-S6		
Captive rating plate	Laser etched rating plate						-TL		

¹ I Not with extended male thread K2

² K8 The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length

Transfer order code

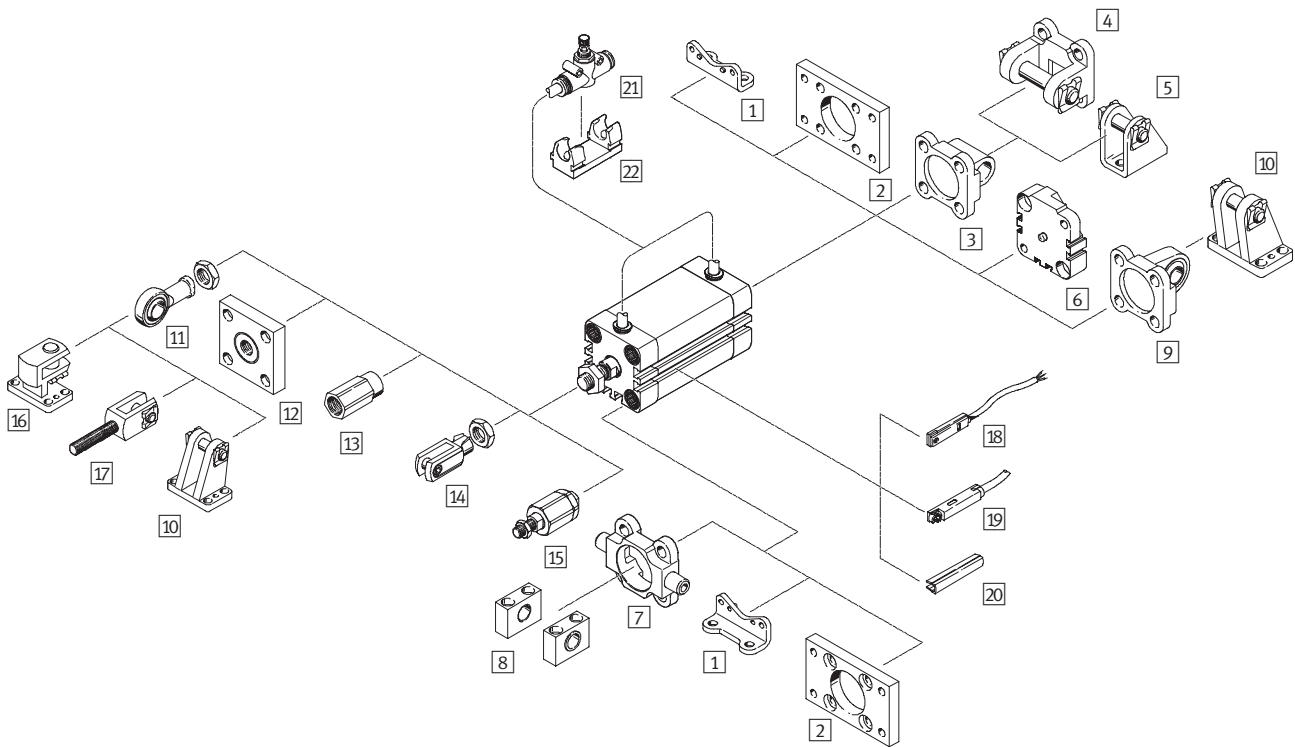
- - Q - - - - -

ISO standard cylinders
ISO 21287
1.4

Compact cylinders ADNP, to ISO 21287, with polymer end caps

Peripherals overview

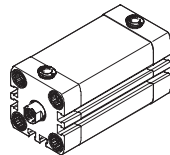
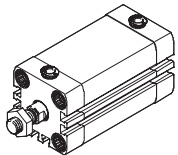
FESTO



Double-acting variants

ADNP- ... -A-P-A

ADNP- ... -I-P-A



Compact cylinders ADNP, to ISO 21287, with polymer end caps

Peripherals overview

FESTO

Mounting attachments and accessories		
	Brief description	→ Page
1	Foot mounting HNA	For bearing or end caps
2	Flange mounting FNC	For bearing or end caps
3	Swivel flange SNCL	For end caps
4	Swivel flange SNCB	For swivel flange SNCL
5	Clevis foot LBN/CRLBN	For swivel flange SNCL
6	Multi-position kit DPNA	For connecting two cylinders with identical piston $\varnothing$ to form a multi-position cylinder
7	Trunnion flange ZNCF/CRZNG	For bearing caps
8	Trunnion supports LNZG	For trunnion flange ZNCF/CRZNG
9	Swivel flange SNCS	For end caps
10	Clevis foot LBG	For swivel flange SNCS
11	Rod eye SGS/CRSGS	With spherical bearing
12	Coupling piece KSG/KSZ	For compensating radial deviations
13	Adapter AD	For mounting a vacuum suction cup on a hollow cylinder piston rod
14	Rod clevis SG/CRSG	Permits a swivelling movement of the cylinder in one plane
15	Self-aligning rod coupler FK	For compensating radial and angular deviations
16	Transverse clevis foot LQG	For rod eye SGS
17	Rod clevis SGA	With male thread
18	Proximity sensor SME/SMT-8	Can be integrated in the cylinder profile barrel
19	Proximity sensor SME/SMT-8F	Can be integrated in the cylinder profile barrel
20	Slot cover ABP-5-S	For protecting the sensor cable and keeping dirt out of the sensor slots
21	One-way flow control valve GR-QS	For regulating speed
22	Holder GR-H-QS	For panel mounting
–	Protective cover GRK	For one-way flow control valve GR-QS
–	Hex nut GRM	For one-way flow control valve GR-QS

Compact cylinders ADNP, to ISO 21287, with polymer end caps

Type codes

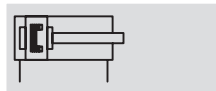
FESTO

		ADNP	–	20	–	50	–	A	–	P	–	A
Type												
Double-acting												
ADNP	Basic version, with bearing and end caps made of polymer											
Piston Ø [mm]												
Stroke [mm]												
Piston rod thread												
A	Male thread											
I	Female thread											
Cushioning												
P	Flexible cushioning rings/plates at both ends											
Position sensing												
A	For proximity sensing											

Compact cylinders ADNP, to ISO 21287, with polymer end caps

Technical data

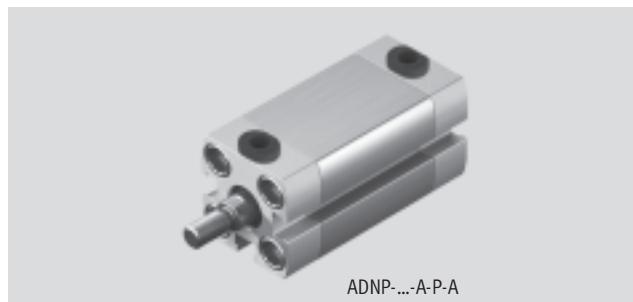
Function



-  - Diameter
20 ... 50 mm

-  - Stroke length
5 ... 80 mm

-  - [www.festo.com/en/
Spare_parts_service](http://www.festo.com/en/Spare_parts_service)



General technical data						
Piston Ø		20	25	32	40	50
Pneumatic connection		QS-4	QS-4	QS-6	QS-6	QS-6
Piston rod thread	Female	M6	M6	M8	M8	M10
	Male	M8	M8	M10x1.25	M10x1.25	M10x1.25
Operating medium		Filtered compressed air, lubricated or unlubricated				
Design		Piston				
		Piston rod				
		Cylinder barrel				
Cushioning		Flexible cushioning rings/plates at both ends				
Position sensing		For proximity sensing				
Type of mounting		Via through-holes				
		Via female threads				
		Via accessories				
Assembly position		Any				

Operating and environmental conditions		
Operating pressure	[bar]	0.6 ... 10
Ambient temperature ¹⁾	[°C]	-10 ... +60
Corrosion resistance class CRC ²⁾		2

1) Note operating range of proximity sensors

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

Components requiring moderate corrosion resistance. 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

Compact cylinders ADNP, to ISO 21287, with polymer end caps

Technical data

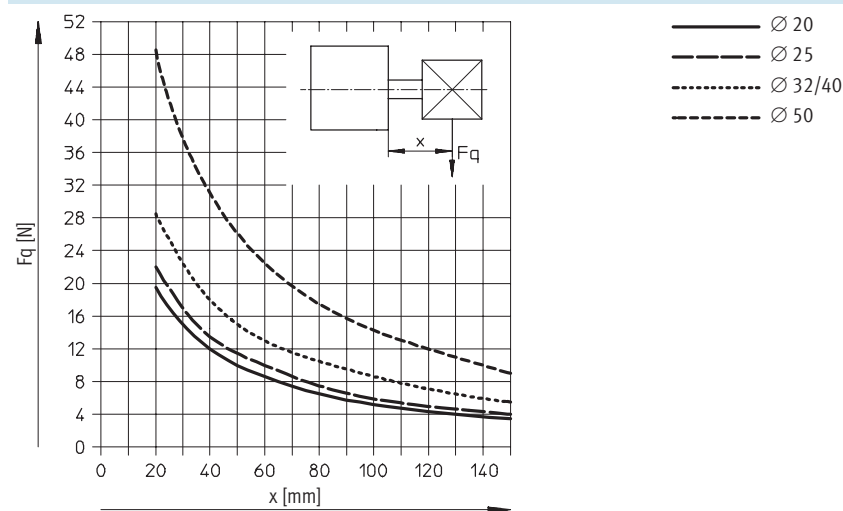
FESTO

Forces [N] and impact energy [J]					
Piston Ø	20	25	32	40	50
Theoretical force at 6 bar, advancing	188	295	483	754	1,178
Theoretical force at 6 bar, retracting	141	247	415	686	1,057
Max. impact energy at the end positions	0.16	0.24	0.32	0.56	0.80

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

Piston rod at one end

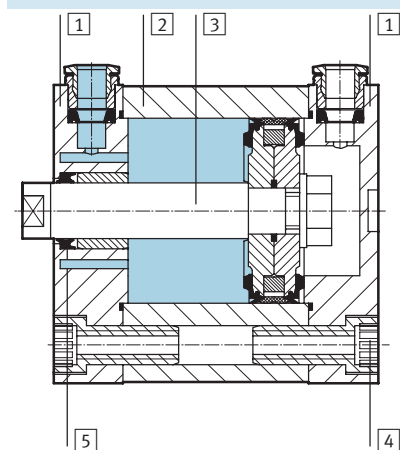
Ø 20 ... 50



Weight [g]					
Piston Ø	20	25	32	40	50
Basic weight with 0 mm stroke	115	116	204	240	380
Additional weight per 10 mm stroke	17	19	24	32	41
Moving load with 0 mm stroke	20	20	45	55	94
Additional load per 10 mm stroke	2	2	3	3	6

Materials

Sectional view



Compact cylinder	
1 Cap	Polyarylamide
2 Cylinder barrel	Smooth anodised aluminium
3 Piston rod	Smooth anodised aluminium, steel insert with male thread
4 Flange screws	Galvanised steel
5 Seals	Polyurethane, nitrile rubber

Compact cylinders ADNP, to ISO 21287, with polymer end caps

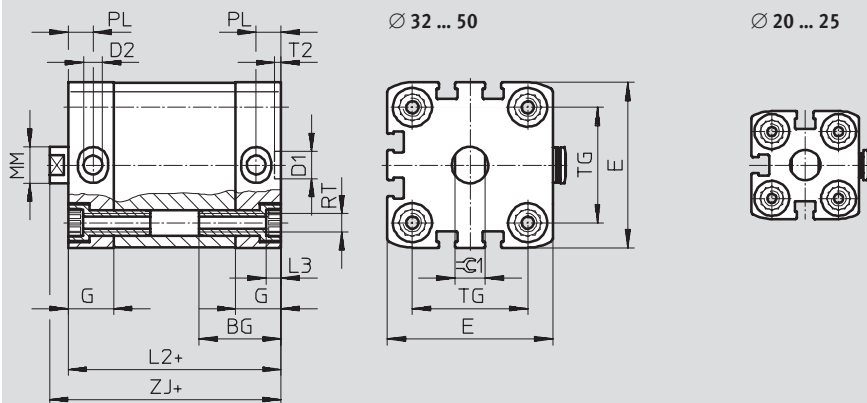
Technical data

FESTO

Dimensions – Basic version

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

Ø 20 ... 50



Ø	BG	D1 Ø H9	D2 Ø	E +0.3	G	L2 max.	L3	MM Ø	PL	RT	T2	TG ±0.2	ZJ	≈C1
[mm]														
20	19.5	9	4	35.5	12	37	5	10	6	M5	2.1	22	43	8
25	19.5	9	4	39.5	12	39	5	10	6	M5	2.1	26	45	8
32	26	9	6	47	15	44	5	12	8.2	M6	2.1	32.5	50	10
40	26	9	6	54.5	15	45	5	12	8.2	M6	2.1	38	51	10
50	27	12	6	65.5	15	45	5	16	8.2	M8	2.6	46.5	53	13

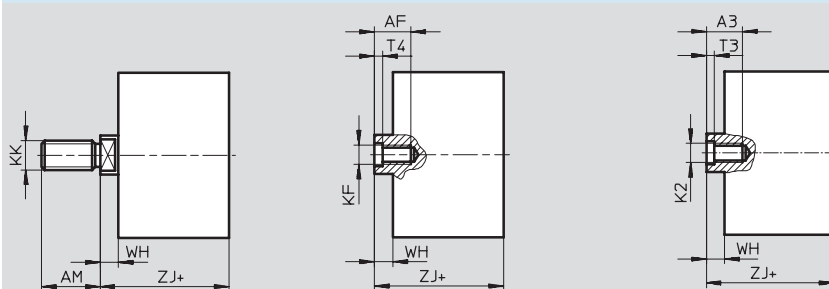
Dimensions – Variants

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

Basic version – With male thread

Basic version – With female thread

K5 – With special thread



Ø	A3	AF	AM	D9	K2	KF	KK	T3	T4	WH	ZJ
[mm]	min.	min.	-0.5								
20	12	14	16	3.8	M5	M6	M8	2	2.6	5.65 ⁺¹	43
25										5.65 ⁺¹	45
32	14	16	19	4.5	M6	M8	M10x1.25	2.6	3.3	6.15 ⁺¹	50
40										6.15 ⁺¹	51
50	16	20	22	6	M8	M10	M12x1.25	3.3	4.7	8.25 ⁺¹	53

Compact cylinders ADNP, to ISO 21287, with polymer end caps

Technical data

FESTO

Ordering data – Basic version						
Type	Piston Ø [mm]	Stroke [mm]	Female piston rod thread		Male piston rod thread	
			Part No.	Type	Part No.	Type
	20	5	539 435	ADNP-20-5-I-P-A-QS-4	539 390	ADNP-20-5-A-P-A-QS-4
		10	539 436	ADNP-20-10-I-P-A-QS-4	539 391	ADNP-20-10-A-P-A-QS-4
		15	539 437	ADNP-20-15-I-P-A-QS-4	539 392	ADNP-20-15-A-P-A-QS-4
		20	539 438	ADNP-20-20-I-P-A-QS-4	539 393	ADNP-20-20-A-P-A-QS-4
		25	539 439	ADNP-20-25-I-P-A-QS-4	539 394	ADNP-20-25-A-P-A-QS-4
		30	539 440	ADNP-20-30-I-P-A-QS-4	539 395	ADNP-20-30-A-P-A-QS-4
		40	539 441	ADNP-20-40-I-P-A-QS-4	539 396	ADNP-20-40-A-P-A-QS-4
		50	539 442	ADNP-20-50-I-P-A-QS-4	539 397	ADNP-20-50-A-P-A-QS-4
		60	539 443	ADNP-20-60-I-P-A-QS-4	539 398	ADNP-20-60-A-P-A-QS-4
	25	5	539 444	ADNP-25-5-I-P-A-QS-4	539 399	ADNP-25-5-A-P-A-QS-4
		10	539 445	ADNP-25-10-I-P-A-QS-4	539 400	ADNP-25-10-A-P-A-QS-4
		15	539 446	ADNP-25-15-I-P-A-QS-4	539 401	ADNP-25-15-A-P-A-QS-4
		20	539 447	ADNP-25-20-I-P-A-QS-4	539 402	ADNP-25-20-A-P-A-QS-4
		25	539 448	ADNP-25-25-I-P-A-QS-4	539 403	ADNP-25-25-A-P-A-QS-4
		30	539 449	ADNP-25-30-I-P-A-QS-4	539 404	ADNP-25-30-A-P-A-QS-4
		40	539 450	ADNP-25-40-I-P-A-QS-4	539 405	ADNP-25-40-A-P-A-QS-4
		50	539 451	ADNP-25-50-I-P-A-QS-4	539 406	ADNP-25-50-A-P-A-QS-4
		60	539 452	ADNP-25-60-I-P-A-QS-4	539 407	ADNP-25-60-A-P-A-QS-4
	32	10	539 453	ADNP-32-10-I-P-A-QS-6	539 408	ADNP-32-10-A-P-A-QS-6
		15	539 454	ADNP-32-15-I-P-A-QS-6	539 409	ADNP-32-15-A-P-A-QS-6
		20	539 455	ADNP-32-20-I-P-A-QS-6	539 410	ADNP-32-20-A-P-A-QS-6
		25	539 456	ADNP-32-25-I-P-A-QS-6	539 411	ADNP-32-25-A-P-A-QS-6
		30	539 457	ADNP-32-30-I-P-A-QS-6	539 412	ADNP-32-30-A-P-A-QS-6
		40	539 458	ADNP-32-40-I-P-A-QS-6	539 413	ADNP-32-40-A-P-A-QS-6
		50	539 459	ADNP-32-50-I-P-A-QS-6	539 414	ADNP-32-50-A-P-A-QS-6
		60	539 460	ADNP-32-60-I-P-A-QS-6	539 415	ADNP-32-60-A-P-A-QS-6
		80	539 461	ADNP-32-80-I-P-A-QS-6	539 416	ADNP-32-80-A-P-A-QS-6
	40	10	539 462	ADNP-40-10-I-P-A-QS-6	539 417	ADNP-40-10-A-P-A-QS-6
		15	539 463	ADNP-40-15-I-P-A-QS-6	539 418	ADNP-40-15-A-P-A-QS-6
		20	539 464	ADNP-40-20-I-P-A-QS-6	539 419	ADNP-40-20-A-P-A-QS-6
		25	539 465	ADNP-40-25-I-P-A-QS-6	539 420	ADNP-40-25-A-P-A-QS-6
		30	539 466	ADNP-40-30-I-P-A-QS-6	539 421	ADNP-40-30-A-P-A-QS-6
		40	539 467	ADNP-40-40-I-P-A-QS-6	539 422	ADNP-40-40-A-P-A-QS-6
		50	539 468	ADNP-40-50-I-P-A-QS-6	539 423	ADNP-40-50-A-P-A-QS-6
		60	539 469	ADNP-40-60-I-P-A-QS-6	539 424	ADNP-40-60-A-P-A-QS-6
		80	539 470	ADNP-40-80-I-P-A-QS-6	539 425	ADNP-40-80-A-P-A-QS-6
	50	10	539 471	ADNP-50-10-I-P-A-QS-6	539 426	ADNP-50-10-A-P-A-QS-6
		15	539 472	ADNP-50-15-I-P-A-QS-6	539 427	ADNP-50-15-A-P-A-QS-6
		20	539 473	ADNP-50-20-I-P-A-QS-6	539 428	ADNP-50-20-A-P-A-QS-6
		25	539 474	ADNP-50-25-I-P-A-QS-6	539 429	ADNP-50-25-A-P-A-QS-6
		30	539 475	ADNP-50-30-I-P-A-QS-6	539 430	ADNP-50-30-A-P-A-QS-6
		40	539 476	ADNP-50-40-I-P-A-QS-6	539 431	ADNP-50-40-A-P-A-QS-6
		50	539 477	ADNP-50-50-I-P-A-QS-6	539 432	ADNP-50-50-A-P-A-QS-6
		60	539 478	ADNP-50-60-I-P-A-QS-6	539 433	ADNP-50-60-A-P-A-QS-6
		80	539 479	ADNP-50-80-I-P-A-QS-6	539 434	ADNP-50-80-A-P-A-QS-6

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

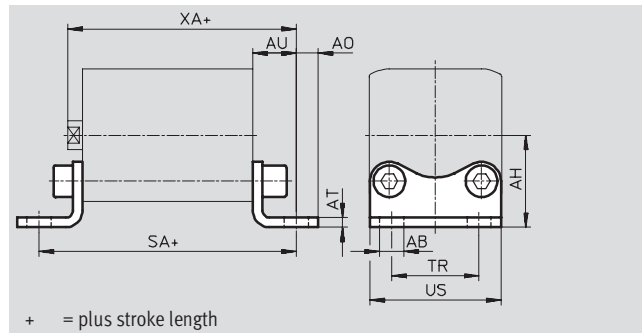
Foot mounting HNA

Material:

HNA: Galvanised steel

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

Free of copper, PTFE and silicone



Dimensions and ordering data									
For Ø	AB Ø	AH	AO	AT	AU	SA	TR	US	XA
[mm]	H14	JS14		±0.5	±0.2		±0.2	−0.5	
12	5.8	21	5	3	13	61	16	26	53
16		22	4.75				18	27.5	
20	7	27	6.25	4	16	69	22	34.5	59
25		29				71	26	38.5	61
32		33.5				7	76	32	46
40	10	38	9		18	81	36	54	69
50		45	8	5	21	87	45	64	74
63		50			91	50	75	78	
80	12	63	10.5	6	26	106	63	63	89
100	14.5	74	12.5		27	121	75	110	103

For Ø [mm]	Basic version				R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
12	2	25	537 237	HNA-12	3	25	537 252	HNA-12-R3
16	2	30	537 238	HNA-16	3	30	537 253	HNA-16-R3
20	2	50	537 239	HNA-20	3	50	537 254	HNA-20-R3
25	2	55	537 240	HNA-25	3	55	537 255	HNA-25-R3
32	2	70	537 241	HNA-32	3	70	537 256	HNA-32-R3
40	2	90	537 242	HNA-40	3	90	537 257	HNA-40-R3
50	2	160	537 243	HNA-50	3	160	537 258	HNA-50-R3
63	2	180	537 244	HNA-63	3	180	537 259	HNA-63-R3
80	2	380	537 249	HNA-80	3	380	537 260	HNA-80-R3
100	2	470	537 250	HNA-100	3	470	537 261	HNA-100-R3

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

Components requiring moderate corrosion resistance. 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 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

Compact cylinders ADN/AEN, to ISO 21287

Accessories

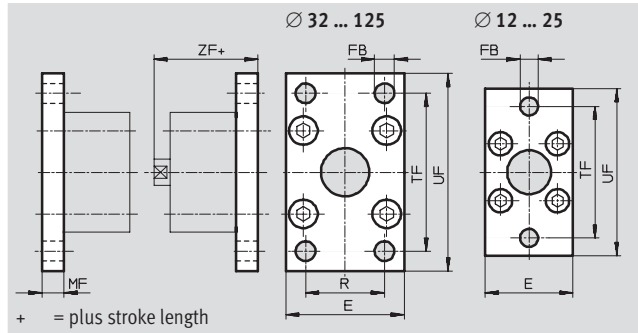
FESTO

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	ZF	CRC ¹⁾	Weight	Part No.	Type
[mm]						±1			[g]		
12	28	5.5	8	-	40	50	48	2	80	537 245	FNC-12
16	29				43	55		2	90	537 246	FNC-16
20	36				6.6	55	70	51	2	145	537 247
25	40	60				76	53	2	170	537 248	FNC-25
32	45	7	10	32	64	80	60	2	240	174 376	FNC-32
40	54	9		36	72	90	61	2	280	174 377	FNC-40
50	65		12	45	90	110	65	2	520	174 378	FNC-50
63	75			50	100	120	69	2	690	174 379	FNC-63
80	93	12	16	63	126	150	79	2	1,650	174 380	FNC-80
100	110	14		75	150	175	92	2	2,400	174 381	FNC-100
125	132	16	20	90	180	210	112	2	3,750	174 382	FNC-125

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

Components requiring moderate corrosion resistance. 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

Compact cylinders ADN/AEN, to ISO 21287

Accessories

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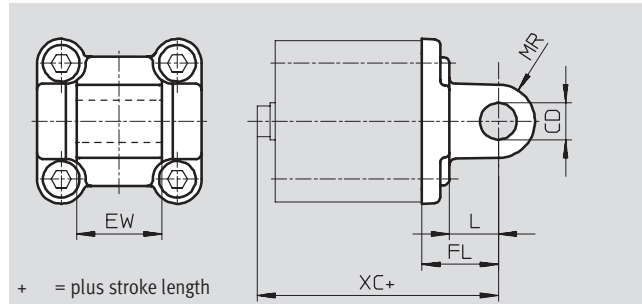
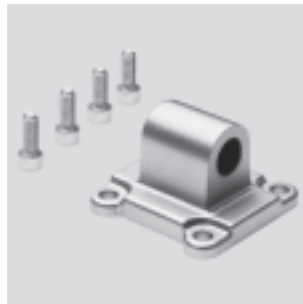
Swivel flange SNCL

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 Ø	EW	FL	L	MR	XC
[mm]	H9	h12	±0.2			
12	6	12	16	10	6	56
16						
20						63
25	8	16	20	14	8	65
32						72
40						76
50	12	26	22	13	10	80
63						89
80						99
100	16	28	25	16	12	117
125						142

For Ø	Basic version				R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]								
12	2	20	537 790	SNCL-12	3	20	537 794	SNCL-12-R3
16	2	25	537 791	SNCL-16	3	25	537 795	SNCL-16-R3
20	2	40	537 792	SNCL-20	3	40	537 796	SNCL-20-R3
25	2	45	537 793	SNCL-25	3	45	537 797	SNCL-25-R3
32	2	85	174 404	SNCL-32	–	–	–	–
40	2	115	174 405	SNCL-40	–	–	–	–
50	2	180	174 406	SNCL-50	–	–	–	–
63	2	270	174 407	SNCL-63	–	–	–	–
80	2	480	174 408	SNCL-80	–	–	–	–
100	2	700	174 409	SNCL-100	–	–	–	–
125	2	1,300	174 410	SNCL-125	–	–	–	–

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

Components requiring moderate corrosion resistance. 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 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

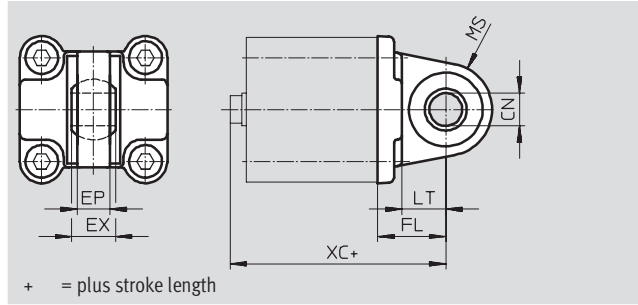
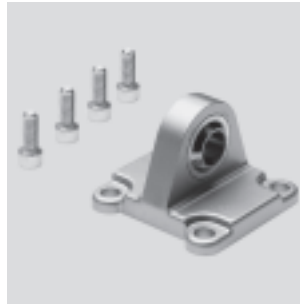
Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

Swivel flange SNCS

Material:
Die-cast aluminium



Dimensions and ordering data											
For Ø	CN	EP	EX	FL	LT	MS	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø H7	+0.2		±0.2					[g]		
32	10	10.5	14	22	13	15	66	2	85	174 397	SNCS-32
40	12	12	16	25	16	17	70	2	125	174 398	SNCS-40
50	16	15	21	27	16	20	72	2	210	174 399	SNCS-50
63	16	15	21	32	21	22	81	2	280	174 400	SNCS-63
80	20	18	25	36	22	27	90	2	540	174 401	SNCS-80
100	20	18	25	41	27	29	108	2	700	174 402	SNCS-100
125	30	25	37	50	30	39	131	2	1,410	174 403	SNCS-125

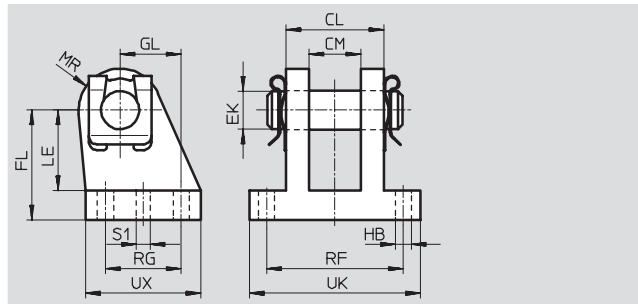
1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. 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 LBG

The pivot pin is secured against rotation with a dowel pin.

Material:
Nodular graphite cast iron
Free of copper, PTFE and silicone



Dimensions and ordering data														
For Ø	CL	CM	EK	FL	GL	HB	LE	MR	RF	RG	S1	UK	UX	CRC ¹⁾
[mm]			Ø			Ø					Ø			[g]
32	28	14.1	10	32	16	6.8	24	12	42	20	4.8	56	36	2
40	30	16.1	12	36	20	6.8	26	14	44	26	5.8	58	41.5	2
50	40	21.1	16	45	25	9.2	33	15	56	31	5.8	70	47	2
63	40	21.1	16	50	25	9	38	17	56	31	7.8	70	47	2
80	50	25.1	20	63	30	11	49	18	70	36	7.8	89	57	2
100	50	25.1	20	71	41	11	56	22	70	46	9.8	89	67.5	2
125	80	37.2	30	90	60	14	70	26	106	70	11.8	128	96	2

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

Components requiring moderate corrosion resistance. 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

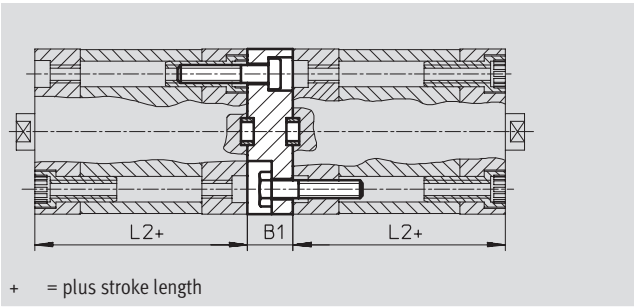
Compact cylinders ADN/AEN, to ISO 21287

Accessories



Multi-position kit DPNA

Material:
Flange: Aluminium
Screws: Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data						
For Ø	L2	B1	Max. overall stroke length	CRC ¹⁾	Part No.	Type
[mm]			[mm]			
12	35	13	600	2	537 263	DPNA-12
16			600	2	537 264	DPNA-16
20			600	2	537 265	DPNA-20
25			600	2	537 266	DPNA-25
32			800	2	537 267	DPNA-32
40	45	15	800	2	537 268	DPNA-40
50			800	2	537 269	DPNA-50
63			800	2	537 270	DPNA-63
80	54	17	1,000	2	537 271	DPNA-80
100	67	19.5	1,000	2	537 272	DPNA-100

 - Note
The maximum overall stroke length must not be exceeded when combining cylinders using the multi-position kit.

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. 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

Compact cylinders ADN/AEN, to ISO 21287

Accessories

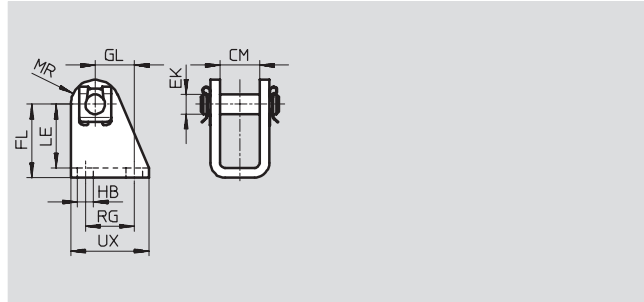
FESTO

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]												
12/16	12.1	6	27 +0.3/-0.2	13	5.5	24	7	15	25	2	40	6 058 LBN-12/16
20/25	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

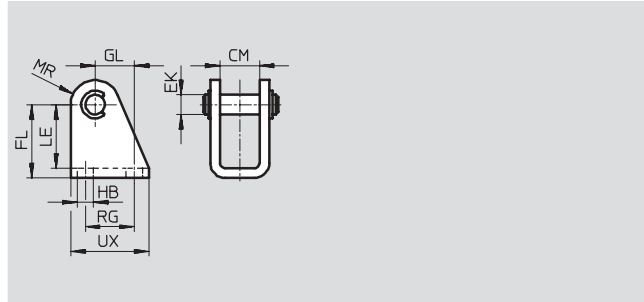
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

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]												
12/16	12.1	6	27 +0.3/-0.2	13	5.5	24	7	15	25	4	55	161 862 CRLBN-12/16
20/25	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 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

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

Swivel flange

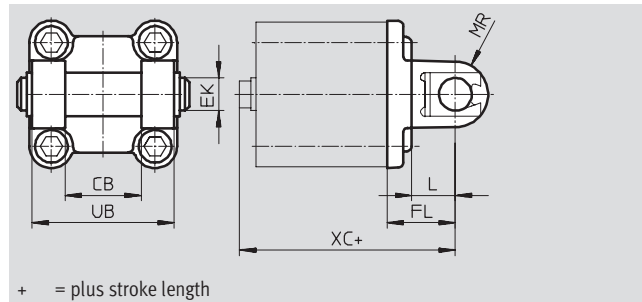
SNCB/SNCB-...-R3

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	FL	L	MR	UB	XC
[mm]	H14	Ø e8	±0.2			h14	
32	26	10	22	13	10	45	72
40	28	12	25	16	12	52	76
50	32	12	27	16	12	60	80
63	40	16	32	21	16	70	89
80	50	16	36	22	16	90	99
100	60	20	41	27	20	110	117
125	70	25	50	30	25	130	142

For Ø	Basic version				R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]								
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
50	2	225	174 392	SNCB-50	3	225	176 946	SNCB-50-R3
63	2	365	174 393	SNCB-63	3	365	176 947	SNCB-63-R3
80	2	610	174 394	SNCB-80	3	610	176 948	SNCB-80-R3
100	2	925	174 395	SNCB-100	3	925	176 949	SNCB-100-R3
125	2	1,785	174 396	SNCB-125	3	1,785	176 950	SNCB-125-R3

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. 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 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

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

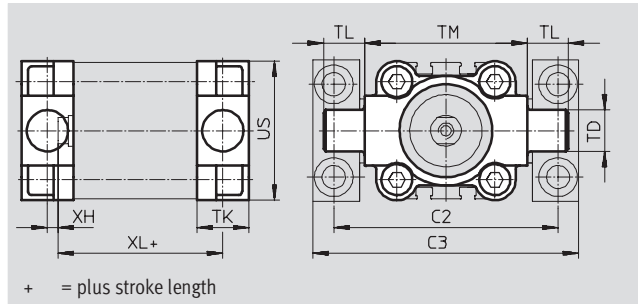
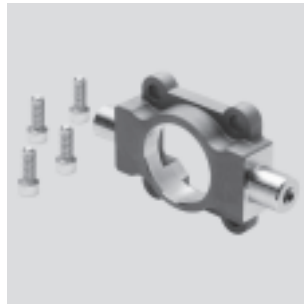
Trunnion flange ZNCF/CRZNG

Material:

ZNCF: Stainless steel casting

CRZNG: Electrolytically polished stainless steel casting

Free of copper, PTFE and silicone



Dimensions and ordering data									
For Ø	C2	C3	TD Ø e9	TK	TL	TM	US	XH	XL
[mm]									
32	71	86	12	16	12	50	45	2	52
40	87	105	16	20	16	63	54	4	55
50	99	117	16	24	16	75	64	4	57
63	116	136	20	24	20	90	75	4	61
80	136	156	20	28	20	110	93	5	81
100	164	189	25	38	25	132	110	10	86
125	192	217	25	50	25	160	131	14	106

For Ø	Basic version				R3 – 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
50	2	390	174 413	ZNCF-50	4	430	161 854	CRZNG-50
63	2	600	174 414	ZNCF-63	4	640	161 855	CRZNG-63
80	2	1,150	174 415	ZNCF-80	4	1,300	161 856	CRZNG-80
100	2	2,030	174 416	ZNCF-100	4	2,400	161 857	CRZNG-100
125	2	3,490	174 417	ZNCF-125	4	3,600	185 362	CRZNG-125

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

Components requiring moderate corrosion resistance. 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 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

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

Trunnion support LN2G

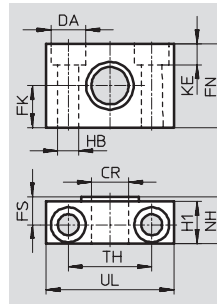
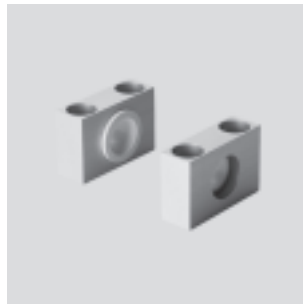
Material:

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]		
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2	125	32 959	LN2G-32
40, 50	16	15	18	36	12	18	9	9	21	36	55	2	400	32 960	LN2G-40/50
63, 80	20	18	20	40	13	20	11	11	23	42	65	2	480	32 961	LN2G-63/80
100, 125	25	20	25	50	16	24.5	14	13	28.5	50	75	2	960	32 962	LN2G-100/125

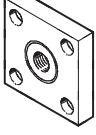
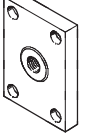
1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. 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

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

Ordering data – Piston rod attachments				Technical data → 1 / 10.3-2			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Rod eye SGS				Rod clevis SGA for rod eye SGS			
	12	–			12	–	
	16	9 254	SGS-M6		16	–	
	20	9 255	SGS-M8		20	–	
	25				25		
	32	9 261	SGS-M10x1,25		32	32 954	SGA-M10x1,25
	40				40		
	50	9 262	SGS-M12x1,25		50	10 767	SGA-M12x1,25
	63				63		
	80	9 263	SGS-M16x1,5		80	10 768	SGA-M16x1,25
	100				100		
	125	9 264	SGS-M20x1,5		125	10 769	SGA-M20x1,25
Rod clevis SG				Self-aligning rod coupler FK			
	12	–			12	30 984	FK-M5
	16	3 110	SG-M6		16	2 061	FK-M6
	20	3 111	SG-M8		20	2 062	FK-M8
	25				25		
	32	6 144	SG-M10x1,25		32	6 140	FK-M10x1,25
	40				40		
	50	6 145	SG-M12x1,25		50	6 141	FK-M12x1,25
	63				63		
	80	6 146	SG-M16x1,5		80	6 142	FK-M16x1,5
	100				100		
	125	6 147	SG-M20x1,5		125	6 143	FK-M20x1,5
Coupling piece KSG				Coupling piece KSZ			
	12	–			12	–	
	16				16	36 123	KSZ-M6
	20	–			20	36 124	KSZ-M8
	25				25		
	32	32 963	KSG-M10x1,25		32	36 125	KSZ-M10x1,25
	40				40		
	50	32 964	KSG-M12x1,25		50	36 126	KSZ-M12x1,25
	63				63		
	80	32 965	KSG-M16x1,5		80	36 127	KSZ-M16x1,5
	100				100		
	125	32 966	KSG-M20x1,5		125	36 128	KSZ-M20x1,5
Adapter AD							
	12	–					
	16	157 328	AD-M6-M5				
		157 329	AD-M6-1/8				
		157 330	AD-M6-1/4				
	20	157 331	AD-M8-1/8				
	25	157 332	AD-M8-1/4				
	32	157 333	AD-M10x1,25-1/8				
	40	157 334	AD-M10x1,25-1/4				
	50	160 256	AD-M12x1,25-1/4				
	63	160 257	AD-M12x1,25-3/8				

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

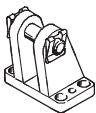
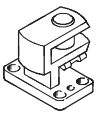
Ordering data – Corrosion and acid resistant piston rod attachments				Technical data → 1 / 10.3-2			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Rod eye CRSGS				Rod clevis CRSG			
	12	–	–		12	–	–
	16	195 580	CRSGS-M6		16	13 567	CRSG-M6
	20	195 581	CRSGS-M8		20	13 568	CRSG-M8
	25				25		
	32	195 582	CRSGS-M10x1,25		32	13 569	CRSG-M10x1,25
	40				40		
	50	195 583	CRSGS-M12x1,25		50	13 570	CRSG-M12x1,25
	63				63		
	80	195 584	CRSGS-M16x1,5		80	13 571	CRSG-M16x1,5
	100				100		
	125	195 585	CRSGS-M20x1,5		125	13 572	CRSG-M20x1,5



Note

Piston rod attachments for cylinders with special thread (variant K5)

→ Chapter 10.3

Ordering data – Mounting attachments				Technical data → 1 / 10.1-2			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Clevis foot LBG for rod eye SGS				Transverse clevis foot LQG for rod eye SGS			
	32, 40	31 761	LBG-32		32, 40	31 768	LQG-32
	50, 63	31 762	LBG-40		50, 63	31 769	LQG-40
	80, 100	31 763	LBG-50		80, 100	31 770	LQG-50
		31 764	LBG-63			31 771	LQG-63
	125	31 765	LBG-80		125	31 772	LQG-80
		31 766	LBG-100			31 773	LQG-100

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

Ordering data – One-way flow control valves				Technical data ➔ Volume 2		
	Connection		Material	Part No.	Type	
	For Ø	For tubing O.D.				
For exhaust air						
	12, 16, 20, 25	3	Metal design	193 137	GRLA-M5-QS-3-D	
		4		193 138	GRLA-M5-QS-4-D	
		6		193 139	GRLA-M5-QS-6-D	
	32, 40, 50, 63, 80, 100	3		193 142	GRLA-1/8-QS-3-D	
		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	
	125	6		193 146	GRLA-1/4-QS-6-D	
		8		193 147	GRLA-1/4-QS-8-D	
		10		193 148	GRLA-1/4-QS-10-D	
	For supply air					
	12, 16, 20, 25	3	Metal design	193 153	GRLZ-M5-QS-3-D	
		4		193 154	GRLZ-M5-QS-4-D	
		6		193 155	GRLZ-M5-QS-6-D	
	32, 40, 50, 63, 80, 100	3		193 156	GRLZ-1/8-QS-3-D	
		4		193 157	GRLZ-1/8-QS-4-D	
		6		193 158	GRLZ-1/8-QS-6-D	
		8		193 159	GRLZ-1/8-QS-8-D	
	125	–		151 195	GRLZ-1/4-B	

Ordering data – Inline one-way flow control valves				Technical data ➔ Volume 2	
	Connection		Flow rate characteristic ¹⁾	Part No.	Type
	For Ø	For tubing O.D.			
Inline					
	20, 25	4	Medium flow	193 967	GR-QS-4
			Low flow	193 966	GR-QS-4-LF
	32, 40, 50	6	Medium flow	193 969	GR-QS-6
			Low flow	193 968	GR-QS-6-LF

- 1) Low flow: Precision adjustment for low speed
Medium flow: Precision adjustment for medium speed

Ordering data – Accessories for one-way flow control valves GR-QS				
	for push-in connection	Material	Part No.	Type
Holder				
	QS-4	Polyacetate	195 495	GR-H-QS-3-4
	QS-6		195 496	GR-H-QS-6-8
Hex nut				
	QS-4	Steel	6 444	GRM-M5
	QS-6		2 107	GRM-1/8
Protective cover				
	QS-4	Polypropylene	6 436	GRK-M5
	QS-6		2 105	GRK-1/8

Compact cylinders ADN/AEN, to ISO 21287

Accessories

FESTO

Ordering data – Proximity sensors for T-slot, magneto-resistive							Technical data ➔ 1 / 10.2-13	
	Assembly	Switch output	Electrical connection			Cable length [m]	Part No.	Type
			Cable	Plug M8	Plug M12			
N/O contact								
	Insertable from above	PNP	3-wire	–	–	2.5	525 898	SMT-8F-PS-24V-K2,5-OE
		NPN					525 909	SMT-8F-NS-24V-K2,5-OE
		–	2-wire	–	–	2.5	525 908	SMT-8F-ZS-24V-K2,5-OE
		PNP	–	3-pin	–	0.3	525 899	SMT-8F-PS-24V-K0,3-M8D
		NPN					525 910	SMT-8F-NS-24V-K0,3-M8D
		PNP	–	–	3-pin	0.3	525 900	SMT-8F-PS-24V-K0,3-M12
	Insertable from end, flush with the cylinder profile	PNP	3-wire	–	–	2.5	175 436	SMT-8-PS-K-LED-24-B
		–	3-pin	–	0.3	175 484	SMT-8-PS-S-LED-24-B	
N/C contact								
	Insertable from above	PNP	3-wire	–	–	7.5	525 911	SMT-8F-PO-24V-K7,5-OE

Ordering data – Proximity sensors for T-slot, magnetic reed						Technical data ➔ 1 / 10.2-18	
	Assembly	Electrical connection		Cable length [m]	Part No.	Type	
		Cable	Plug M8				
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	
		2-wire	–	2.5	525 907	SME-8F-ZS-24V-K2,5-OE	
		–	3-pin	0.3	525 896	SME-8F-DS-24V-K0,3-M8D	
	Insertable from end, flush with the cylinder profile	3-wire	–	2.5	150 855	SME-8-K-LED-24	
		–	3-pin	0.3	150 857	SME-8-S-LED-24	
N/C contact							
	Insertable from end, flush with the cylinder profile	3-wire	–	7.5	160 251	SME-8-O-K-LED-24	

Ordering data – Plug sockets with cable							Technical data → 1 / 10.2-114	
	Assembly	Switch output		Connection	Cable length [m]	Part No.	Type	
		PNP	NPN					
Straight socket								
	Union nut M8	■	■	3-pin	2.5	159 420	SIM-M8-3GD-2,5-PU	
					5	159 421	SIM-M8-3GD-5-PU	
	Union nut M12	■	■	3-pin	2.5	159 428	SIM-M12-3GD-2,5-PU	
					5	159 429	SIM-M12-3GD-5-PU	
Angled socket								
	Union nut M8	■	■	3-pin	2.5	159 422	SIM-M8-3WD-2,5-PU	
					5	159 423	SIM-M8-3WD-5-PU	
	Union nut M12	■	■	3-pin	2.5	159 430	SIM-M12-3WD-2,5-PU	
					5	159 431	SIM-M12-3WD-5-PU	

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