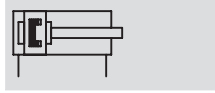


Compact cylinders ADNGF, standard port pattern

Technical data

FESTO

Function



Ø - Diameter
12 ... 100 mm

Stroke length
1 ... 400 mm

Variants



S2



S6



General technical data

Piston Ø	12	16	20	25	32	40	50	63	80	100
Pneumatic connection	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/8	G1/8	G1/8
Constructional design	Piston									
	Piston rod									
	Cylinder barrel									
Cushioning	Flexible cushioning rings/pads at both ends									
Position sensing	Via proximity sensor									
Type of mounting	Via through-holes									
	Via female threads									
	Via accessories									
Mounting position	Any									

Operating and environmental conditions

Piston Ø	12	16	20	25	32	40	50	63	80	100
Operating medium	Filtered compressed air, lubricated or unlubricated									
Operating pressure	1.5 ... 10				1 ... 10					
[bar]	S2	1.5 ... 10			1 ... 10					
Ambient temperature ¹⁾	-20 ... +80									
[°C]	S6	0 ... +120								
Corrosion resistance class CRC ²⁾	2									

1) Note operating range of proximity sensors

2) Corrosion resistance class 2 to Festo standard 940 070

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

Forces [N] and impact energy [J]

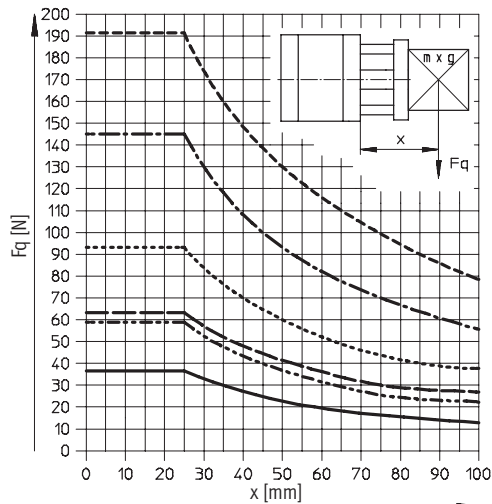
Piston Ø	12	16	20	25	32	40	50	63	80	100
Theoretical force at 6 bar, advancing	68	121	188	295	483	754	1178	1870	3016	4712
	S2 51	90	141	247	415	686	1057	1750	2827	4524
Theoretical force at 6 bar, retracting	51	90	141	247	415	686	1057	1750	2827	4524
	S2 51	90	141	247	415	686	1057	1750	2827	4524
Max. impact energy at the end positions	0.07	0.15	0.2	0.3	0.4	0.7	1.0	1.3	1.8	2.5

Compact cylinders ADNGF, standard port pattern

Technical data

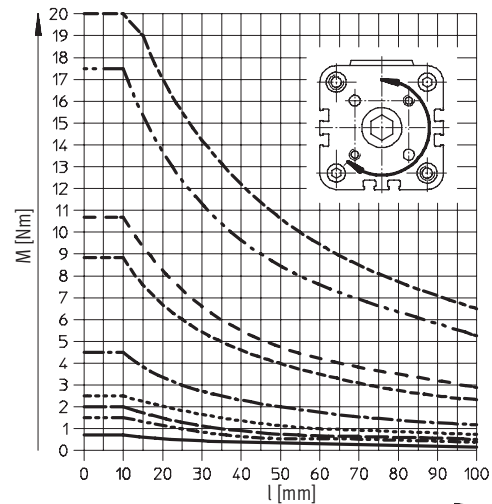
FESTO

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



$\varnothing 12/16$
 $\varnothing 20/25$
 $\varnothing 32$
 $\varnothing 40$
 $\varnothing 50/63$
 $\varnothing 80/100$

Torque M as a function of the stroke length l

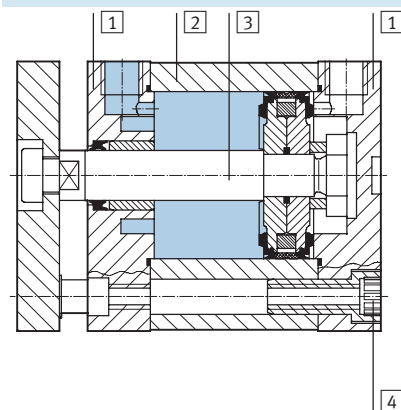


$\varnothing 12/16$
 $\varnothing 20$
 $\varnothing 25$
 $\varnothing 32$
 $\varnothing 40$
 $\varnothing 50$
 $\varnothing 63$
 $\varnothing 80$
 $\varnothing 100$

Weight [g]										
Piston \varnothing	12	16	20	25	32	40	50	63	80	100
Product weight with 0 mm stroke	90	93	161	191	327	430	687	915	1678	2673
Additional weight per 10 mm stroke	14	16	26	28	38	45	64	72	97	116
Moving load with 0 mm stroke	22	29	60	85	122	164	287	373	778	1089
Additional load per 10 mm stroke	4	6	11	11	17	17	29	29	43	43

Materials

Sectional view



Compact cylinder		Basic version	S6
1	Cover	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
–	Seals	Polyurethane	Fluoro elastomer