

How to order

Bore (mm)	Stroke (mm)	Options	Working Temperature
80	25 to 2000	Nil	P = Normal temp. (-20 °C to +80°C)
100	25 to 2000	G = Position Detection	P1 = High temp. (-20 °C to +120°C)
125	25 to 2000		P2 = Low temp. (-40 °C to +80°C)
160	50 to 2000		
200	75 to 2000		
250	75 to 2000		
320	100 to 2000		

DFZ 160 - 250 - G - P

DFZ Series Linear Pneumatic Actuator



Output Force

Bore (mm)	Piston Rod (mm)	Force (N)	Air Pressure (bar)						
			2	3	4	5	6	7	8
80	22	F1	1005	1507	2010	2512	3014	3517	4019
		F2	929	1393	1858	2322	2786	3251	3715
100	22	F1	1570	2355	3140	3925	4710	5495	6280
		F2	1494	2241	2988	3735	4482	5229	5976
125	30	F1	2453	3680	4906	6133	7359	8586	9813
		F2	2312	3468	4624	5780	6935	8091	9247
160	30	F1	4019	6029	8038	10048	12058	14067	16077
		F2	3878	5817	7755	9695	11634	13573	15512
200	40	F1	6280	9420	12560	15700	18840	21980	25120
		F2	6029	9043	12058	15072	18086	21101	24115
250	40	F1	9813	14719	19625	24531	29438	34344	39250
		F2	9561	14342	19123	23903	29684	33465	38245
320	40	F1	16077	24115	32154	40192	48230	56269	64307
		F2	15826	23738	31651	39564	47477	55390	63302

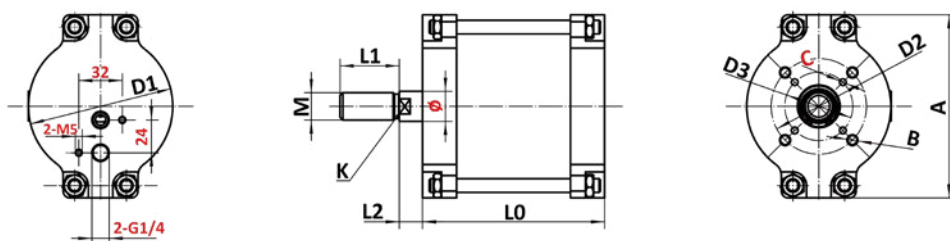
Remark:

1) F1 refer to the output force when piston rod moving forward the cylinder;

F2 refer to the force when piston rod moving backward.

2) When actuator is assembled vertically, the output force value will be smaller than indicated data in the above table due to gravity effect, larger reserve force should be considered when select the model.

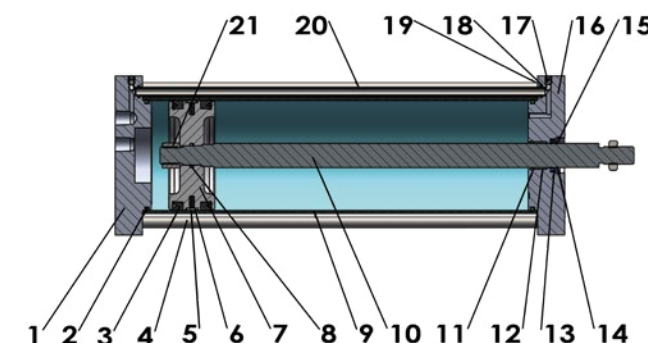
Dimensional Information



Bore (mm)	80	100	125	160	200	250	320
A	124	145	175	220	270	320	400
B	M8	M8	M10	M10	M16	M20	M20
C	M6	M6	M8	M8	M10	M10	M10
D1	88	108	135	172	215	265	335
D2	70	70	102	102	140	165	165
D3	50	50	70	70	102	102	102
φ	22	22	30	30	40	40	40
K	19		27		36		
L0	104	112	144	174	160	170	190
L1	32	32	54	54	72	72	72
L2	16	16	24	24	30	30	30
M	M16x1.5		M27x2		M36x2		

Remark: L0 refers to the length when stroke is 0 and the total length should add the corresponding stroke value.

Part List



No	Description	Qty.	Material	Surface
1	End cap	1	Aluminum	Anodized hardening + epoxy polyester coating
2	O ring	2	NBR	
3	Studs	4	304	
4	O ring	2	NBR	
5	Wearing ring	1	Composite	
6	Magnetic ring	2	Ferrite	
7	Piston	1	Aluminum	Anodized hardening
8	O ring	1	NBR	
9	Cylinder	1	Aluminum	Anodized hardening + epoxy polyester coating
10	Piston rod	1	304	
11	Check ring	1	304	
12	Oil-free bearing	1	Composite	
13	O ring	1	NBR	
14	Washer	1	304	
15	Snap ring	1	304	
16	End cap	1	Aluminum	Anodized hardening + epoxy polyester coating
17	Set screw	2	304	
18	O ring	2	NBR	
19	Nut	4	304	
20	Air pipe	1	304	
21	Nut	1	304	

Weight and Air Consumption

Bore(mm)	80	100	125	160	200	250	320
Air consumption- Push (Nl/min)	0.28	0.45	0.72	1.18	1.77	2.87	4.69
Air consumption- Pull (Nl/min)	0.26	0.43	0.67	1.13	1.76	2.79	4.62
Basic Weight (g)	1981	2974	4571	7681	18864	26664	34527
Added weightg/10mm)	78	86	124	167	192	295	350

Remark: 1) The air consumption values are theoretic data based on 10mm stroke 0.5Mpa

2) Basic weight refers to the weight when stroke is 0 and the added weight refers to the weight added per 10mm stroke.