

Features:

Two built-in cylinder double the output force.

Parallel piston rods prevent rotation.

Reed switches are non-protruded from the cylinder's housing groove, ensures proper positions, easy adjustment and space saving.

Rectangular housing, design to minimize mounting space.

The cylinder can be operated with or without lubrication and with ease of maintenance.

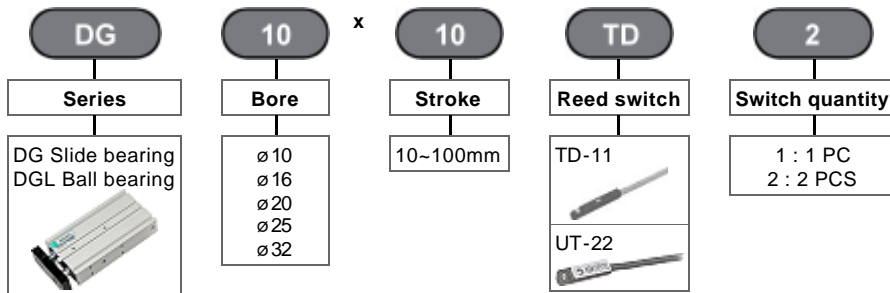
Incorporate into multi-axis configuration easily as laborsaving robot arms.



Specifications:

Bore (mm)	ø10	ø16	ø20	ø25	ø32
Series	DG/DGL				
Action	Double acting type				
Operating fluid	Compressed air				
Operating pressure	1.0-7.0kgf/cm ²		0.51-7.1kgf/cm ²		
Proof pressure	10.7kgf/cm ²				
Speed range	30-300mm/sec				
Temperature range	-10°C~+60°C				
Lubrication	Not required				

How to Order:

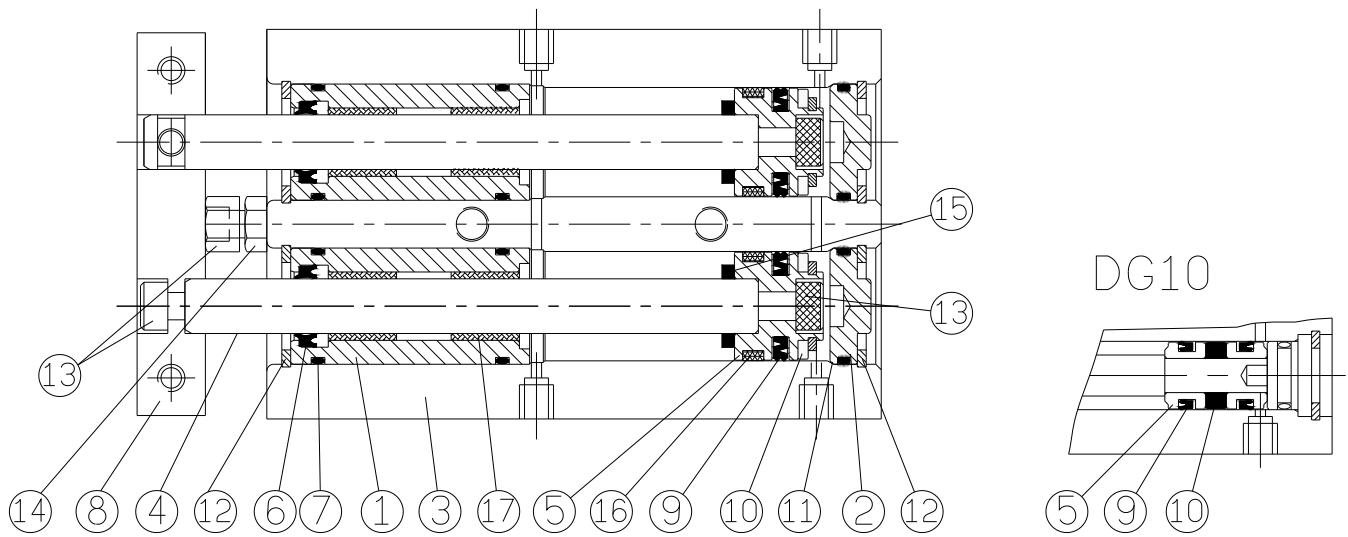


Theoretical Output Force (kgf):

Bore mm	Rod dia mm	Direction	Effective area cm ²	Compressed air (kgf/cm ²)								
				2	3	4	5	6	7	8	9	
ø10	ø6	Push	1.57	3.14	4.71	6.28	7.85	9.42	10.99	12.56	14.13	
		Pull	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	
ø16	ø8	Push	4.02	8.04	12.06	16.08	20.10	24.12	28.14	32.16	36.18	
		Pull	3.01	6.02	9.03	12.04	15.05	18.06	21.07	24.08	27.09	
ø20	ø10	Push	6.28	12.56	18.84	25.12	31.40	37.68	43.96	50.24	56.52	
		Pull	4.71	9.42	14.13	18.84	23.55	28.26	32.97	37.68	42.39	
ø25	ø12	Push	9.82	19.62	29.43	39.24	49.05	58.86	68.67	78.48	88.29	
		Pull	7.55	15.10	22.65	30.20	37.75	45.3	52.85	60.40	67.95	
ø32	ø16	Push	16.08	32.16	48.24	64.32	80.4	96.48	112.56	128.64	144.72	
		Pull	12.06	24.12	36.18	48.24	60.3	72.36	84.42	96.48	108.54	

Internal Construction:

DG Slide Bearing



Parts List:

NO.	Description	Material	Qty
1	Front end cover	Anodized aluminium alloy	2
2	Rear end cover	Anodized aluminium alloy	2
3	Housing	Anodized aluminium alloy	1
4	Piston rod	Hard chrome plated carbon steel	2
5	Piston	Aluminium alloy	2
6	Front end cover seal	NBR	2
7	Front end cover seal	NBR	4
8	Tool plate	Aluminium alloy	1
9	Piston seal	NBR	2

NO.	Description	Material	Qty
10	Magnet	Resinous magnet	2
11	Rear end cover seal	NBR	2
12	Snap ring	SK5M	4
13	Set screw	Carbon steel	4
14	Nut	Carbon steel	1
15	Bumper	POM	2
16	Wear ring	POM	2
17	Slide bearing	GEB slide bearing	4

Seals List:

	6 Piston rod seal	9 Piston seal	7 Front end cover seal	11 Rear end cover seal
ø10	EM0609	DYP10X2	SM8	SM8
ø16	DRP8	COP16	SM14	SM14
ø20	DRP10	COP20	SM18	SM18
ø25	DRP12	COP25	SM22	SM22
ø32	DRP16	COP32	SM30	SM30

Standard Strokes:

Bore	Stroke
ø10	10,15,20,25,30,35,40,45,50,60,70,75,80,90,100
ø16	
ø20	
ø25	
ø32	

(Non-standard stroke are available upon request)

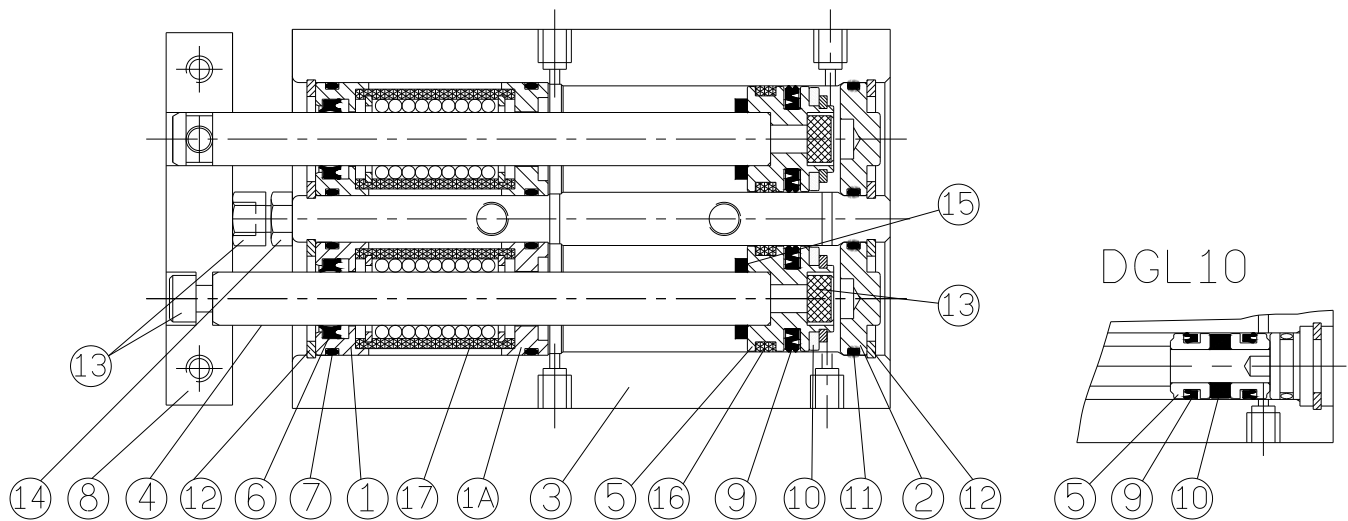
Weight Table:

Bore mm	Stroke														
	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
ø10	150	160	170	180	190	200	210	220	230	250	270	280	-	-	-
ø16	250	265	280	290	300	315	330	345	360	390	425	435	450	480	510
ø20	400	420	400	440	480	495	510	530	550	585	620	640	660	700	740
ø25	610	635	660	690	720	745	770	800	830	890	950	970	995	1060	1100
ø32	1150	1190	1230	1275	1320	1360	1400	1450	1490	1580	1665	1710	1755	1840	1930

(g)

Internal Construction:

DGL ball bearing



Parts List:

NO.	Description	Material	Qty
1	Front end cover	Anodized aluminium alloy	2
10	Rear end cover	Anodized aluminium alloy	2
2	Rear end cover	Anodized aluminium alloy	1
3	Housing	Anodized aluminium alloy	2
4	Piston rod	SUJ-2	2
5	Piston	Aluminium alloy	2
6	Piston rod seal	NBR	4
7	Front end cover seal	NBR	1
8	Tool plate	Anodized aluminium alloy	2

NO.	Description	Material	Qty
9	Piston seal	NBR	2
10	Magnet	Resinous magnet	1
11	Rear end cover seal	NBR	2
12	Snap ring	SK5M	4
13	Set screw	Carbon steel	4
14	Nut	Carbon steel	1
15	Bumper	POM	2
16	Wear ring	POM	2
17	Ball bearing	GEU type bearing	4

Seals List:

	6 Piston rod seal	9 Piston seal	7 Front end cover seal	11 Rear end cover seal
ø10	EM0609	DYP10X2	SM8	SM8
ø16	DRP8	COP16	SM14	SM14
ø20	DRP10	COP20	SM18	SM18
ø25	DRP12	COP25	SM22	SM22
ø32	DRP16	PZ32	SM30	SM30

Standard Strokes:

Bore	Stroke
ø10	10,15,20,25,30,35,40,45,50,60,70,75,80,90,100
ø16	
ø20	
ø25	
ø32	

(Non-standard stroke are available upon request)

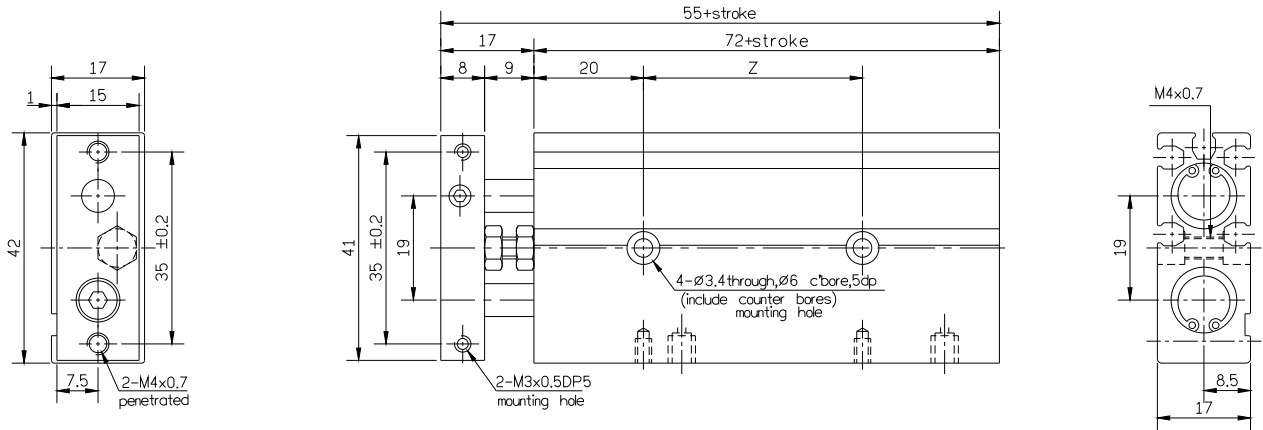
Weight Table:

(g)

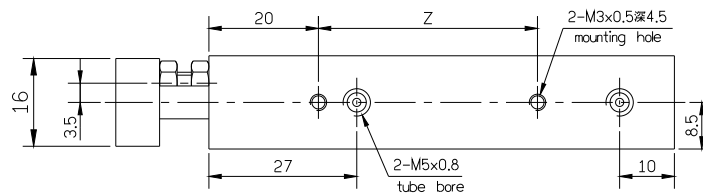
Bore mm	Stroke														
	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100
ø10	160	165	170	180	190	200	210	220	230	250	270	280	-	-	-
ø16	270	285	300	310	320	335	350	365	380	410	440	455	470	500	530
ø20	430	445	460	480	500	515	530	550	570	605	640	660	680	715	750
ø25	620	645	670	700	730	755	780	810	840	895	955	980	1005	1065	1110
ø32	1160	1205	1250	1295	1340	1380	1420	1465	1510	1595	1680	1720	1765	1855	1940

External Dimensions:

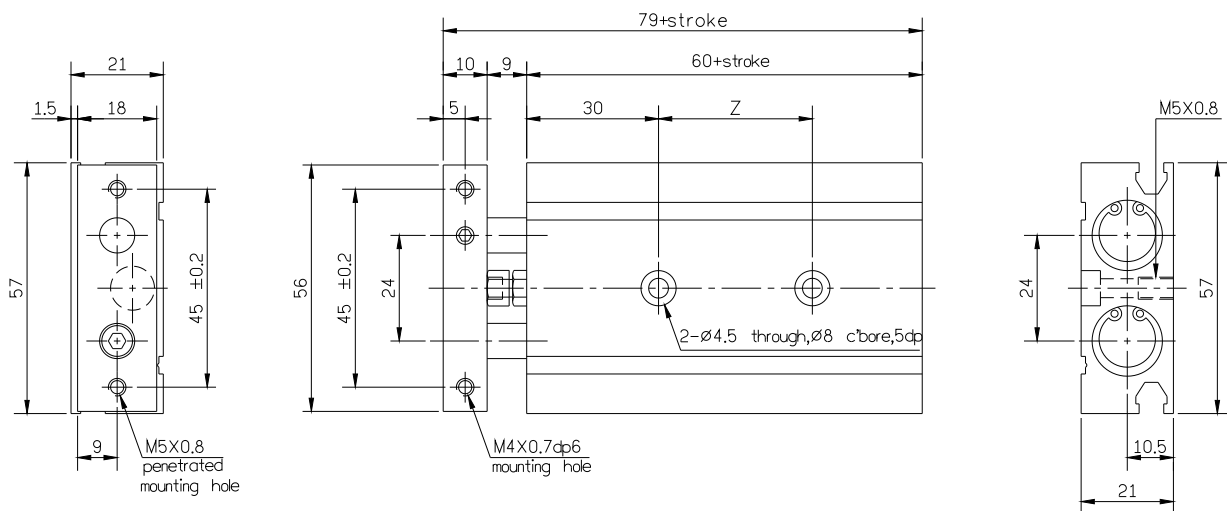
- DG10 (Slide bearing)
- DGL10 (Ball bearing)



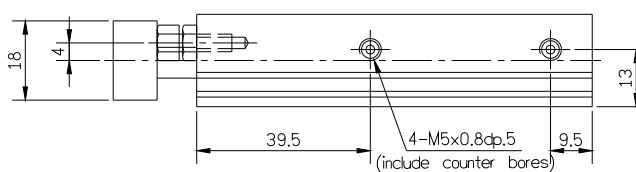
STROKE	Z
10,15,20,25	30
30,35,40,45,50	40
60,70,75	50



- DG16 (Slide bearing)
- DGL16 (Ball bearing)

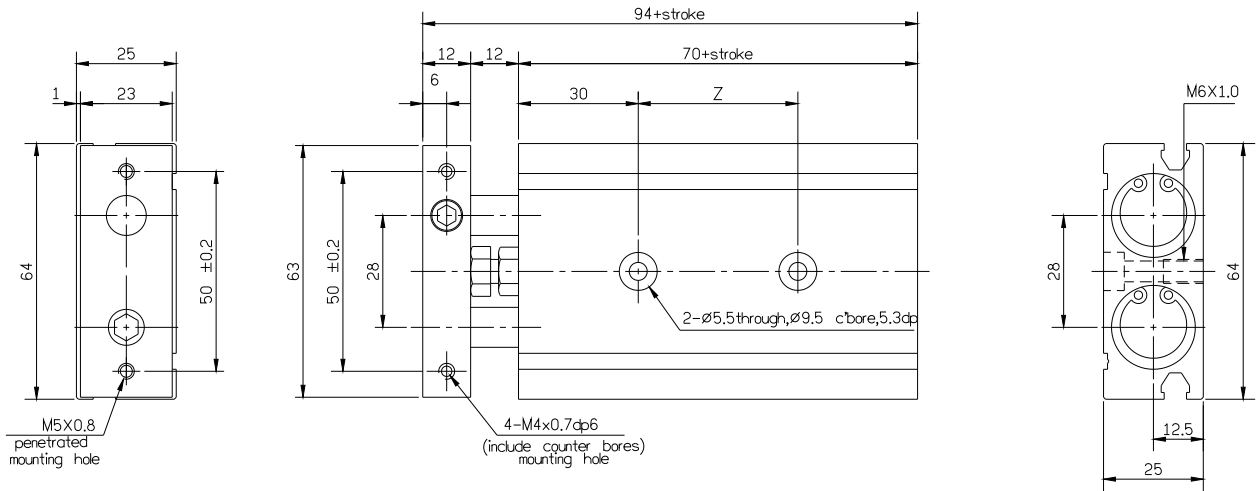


STROKE	Z
10,15,20,25	25
30,35,40,45,50	35
60,70,75,80	45
90,100	55

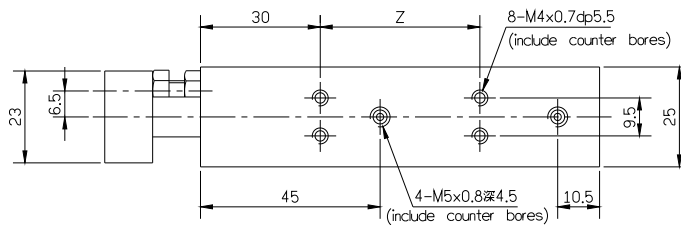


External Dimensions:

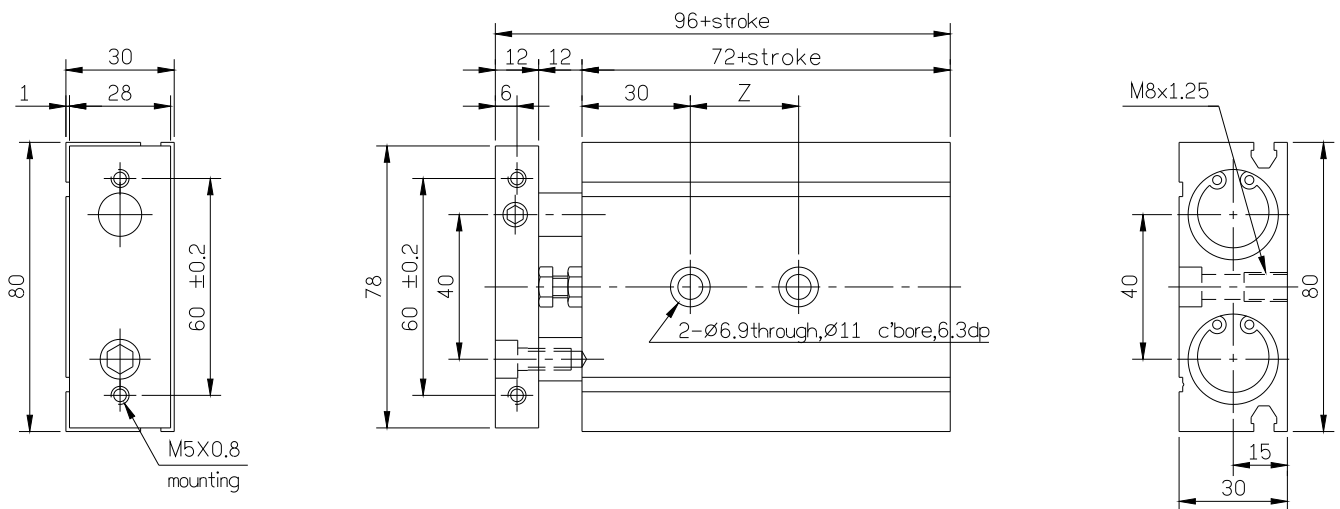
- DG20 (Slide bearing)
- DGL20 (Ball bearing)



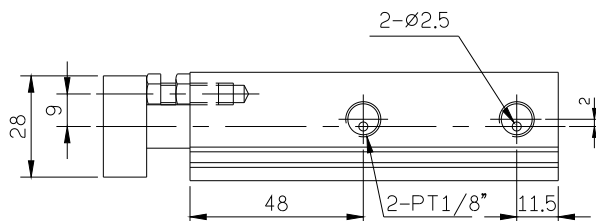
STROKE	Z
10,15,20,25	30
30,35,40,45,50	40
60,70,75,80,90,100	45



- DG25 (Slide bearing)
- DGL25 (Ball bearing)

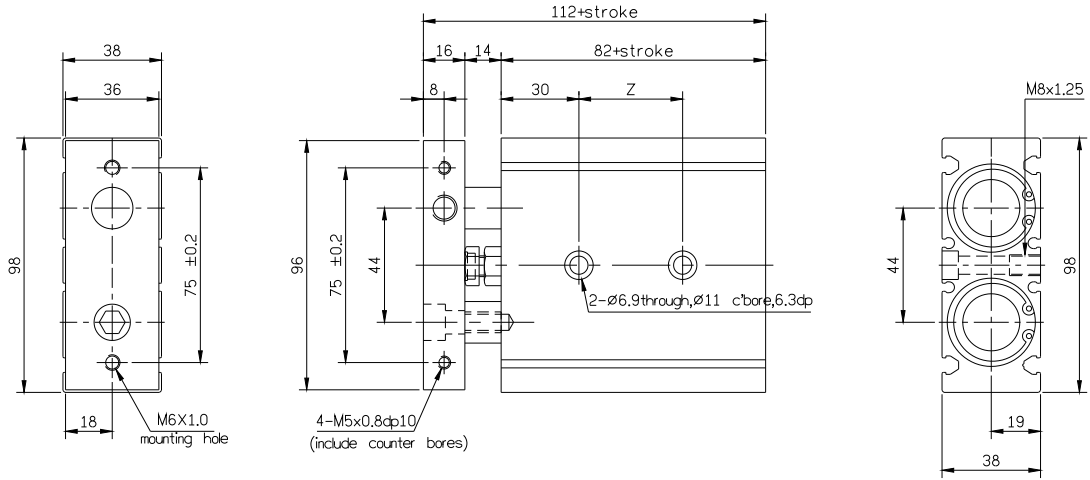


STROKE	Z
10,15,20,25	30
30,35,40,45,50	40
60,70,75,80,90,100	45



External Dimensions:

- DG32 (Slide bearing)
- DGL32 (Ball bearing)



STROKE	Z
10,15,20,25	40
30,35,40,45,50	50
60,70,75,80,90,100	70

