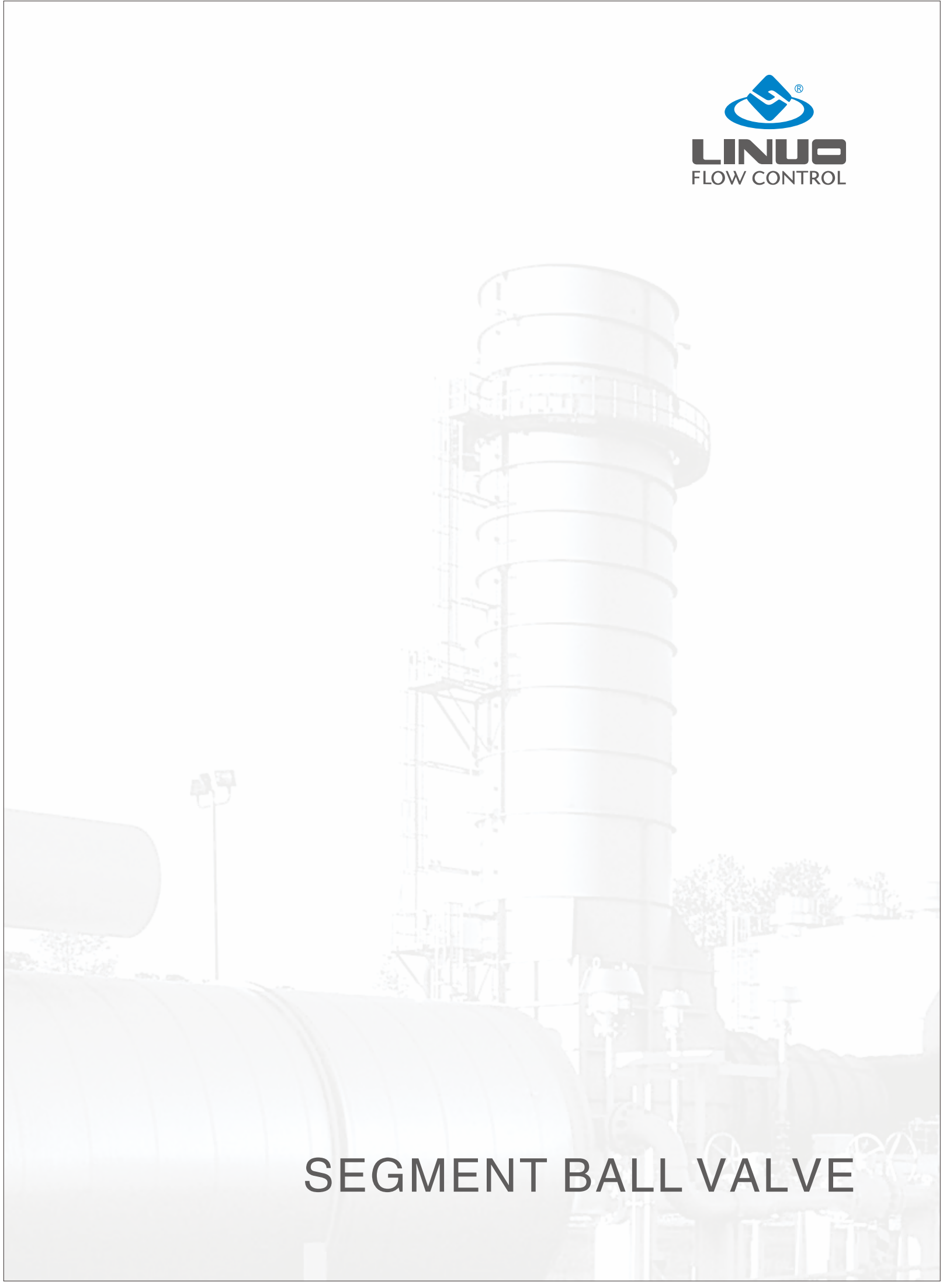




SEGMENT BALL VALVE

SERVICE

RV series is quarter turn control valve mainly recommended for throttle service, segment ball valve combines globe valve control with the efficiency of a rotary ball valve. Segment Ball is in V-notch design with strong cutting force and self-cleanness, especially suitable for control of medium containing fiber and tiny solids. Segment ball valve was from pulp and paper industry, By research and development, segment ball valve is extend to other industrial such as petrochemical, petroleum, chemical, fiber, power, metallurgy, pharmacy, environmental protection etc.

FEATURES

Precise contouring of the V-notch provides excellent control characteristics for an extensive variety of flow applications.

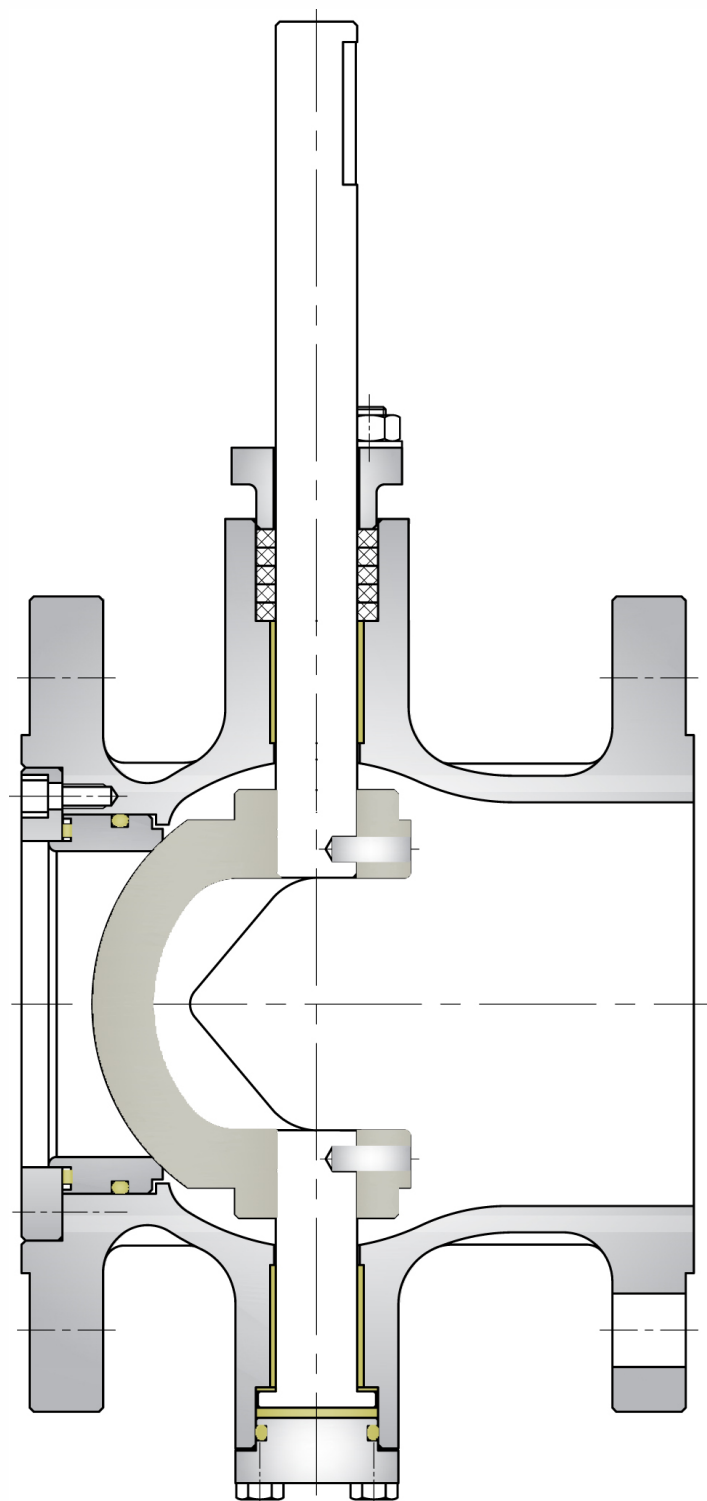
Splined connection between the shaft and ball ensures precise control and low hysteresis.

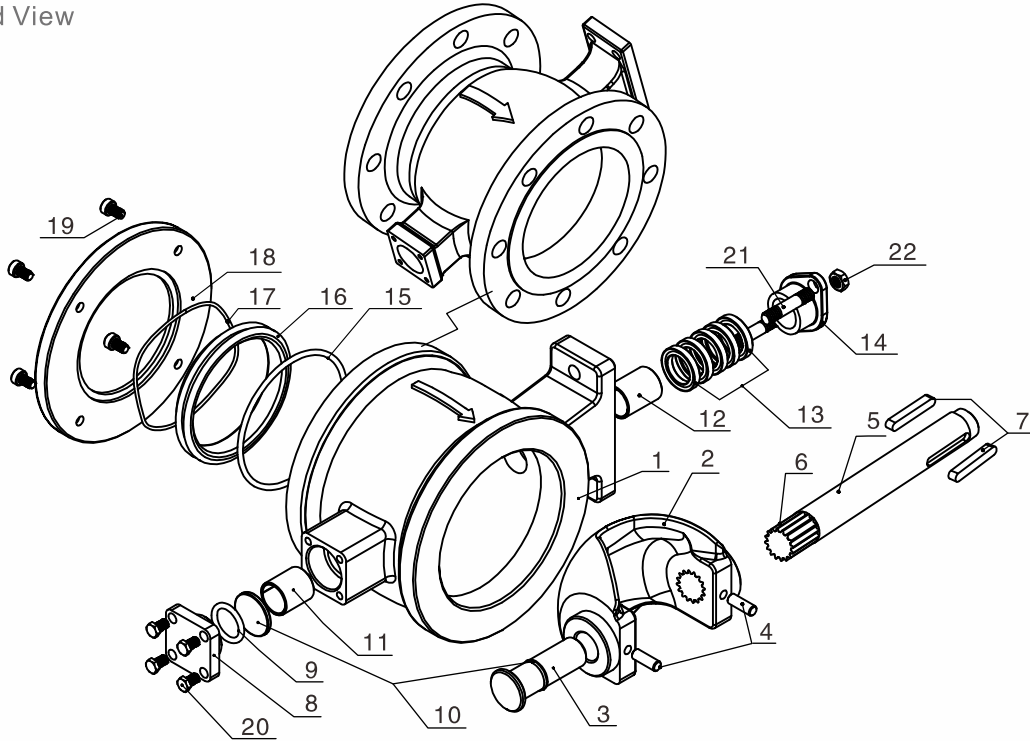
Detachable seat retainer design provides easy access to trim parts of valves through inlet of valve by simply removing the screws of retainer, therefore, easy maintenance is ensured which saves user lots of costs as seat spares can be kept instead of changing the entire valve body.

Superior trunnion bearing technology is engineered for excellent abrasion resistance.

Rugged self-adjusting metal seated option is ideally suited for high temperature applications or slurries. spring loaded seat maintains constant contact with the ball, giving enhanced sealing performance.

Shearing action between ball and seal promotes smooth, non-clogging operation-perfect for fiber or slurry application.



☐ Exploded View


PARTS LIST / MATERIALS OF CONSTRUCTION

Table 1

No.	Name	Quantity	Material
1	Body	1	WCB、CF8、CF8M
2	Ball	1	CF8, CF8M, Hard Chromium Plating or Stellite Surfacing
3	Lower shaft	1	17-4PH, SS316
4	Cylindrical pin	2	SS304, SS316
5	Upper shaft	1	17-4PH, SS316
6	Spline	1	17-4PH, SS316
7	Flat key	2	SS304, 45#
8	Blind flange	1	CF8, CF8M
9	O-ring	1	Viton, Graphite
10	Gasket	1 each	PTFE, Graphite
11	Self-lubricating bearing	1	Composite material
12	Self-lubricating bearing	1	Composite material
13	Packing	1 Set	PTFE, Graphite
14	Gland	1	CF8
15	O-ring	1	Viton, Graphite
16	Seat	1	PTFE, SS304, SS316, Hard Chrome Plating or Stellite Surfacing
17	Wavy spring	1	SS316
18	Retainer	1	Carbon Steel, SS304, SS316
19	Socked head screw	4	A193 B7, A193 B8
20	Hexagon screw	4	A193 B7, A193 B8
21	Stud	2	A193 B7, A193 B8
22	Hexagon nut	2	A194 2H, A194 8

TECHNICAL DATA

End Connection: Wafer DN25 through DN250/1" through 10", MFR standard.

Flanged DN25 through DN700 / 1" through 28",

Face to face dimension standard: IEC/DIN534-3-2 or ISA S75.04

Nominal Pressure Rating: 1.0, 1.6, 2.5, 4.0, 6.4 (MPa), ANSI 150, ANSI 300, ANSI 600

Working Temperature: -20~160°C / -20 ~320°F,

Optional: -20~230°C / -20 ~446°F,

-20~350°C/-20~660 °F

Please consult Linuo factory for higher temperature service range.

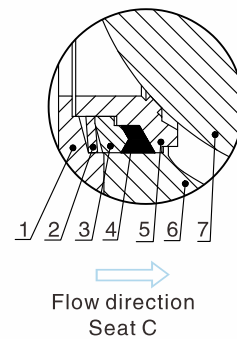
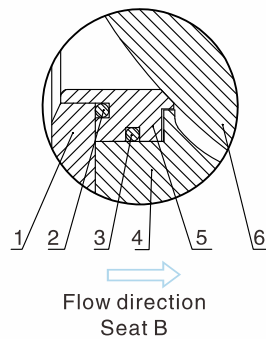
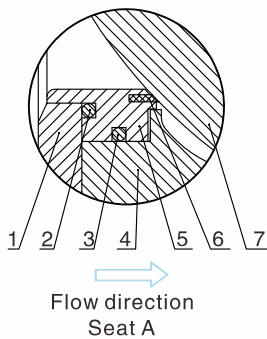
Pressure Test: Each Linuo valve undergoes hydraulic test with 1.5 X pressure rating as shell test, and seat tightness test according to ANSI/FCI 70.2.

Leakage: Soft Seat: ANSI/FCI 70.2 Class VI.

Metal Seat: Maximum allowable leakage equal to 1% of maximum allowable leakage of ANSI/FCI 70.2 Class IV.

Please consult Linuo factory for higher tightness class requirements.

VARIOUS SEAT CONSTRUCTIONS



PTFE Seat

No.	Parts	Temp. Range
1	Retainer	-20~160°C
2	Spring	
3	O ring	
4	Valve Body	
5	Seat Body	
6	Seat Seal	
7	Ball	

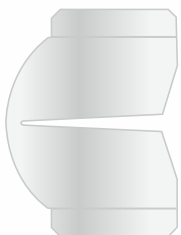
Standard Metal Seat

No.	Parts	Temp. Range
1	Retainer	-20~120°C -20~200°C
2	Spring	
3	O ring	
4	Valve Body	
5	Seat	
6	Ball	

High Temperature Version Metal Seat

No.	Parts	Temp. Range
1	Retainer	-20~450°C
2	Belville Spring	
3	Plunge Ring	
4	Graphite ring	
5	Metal Seat	
6	Valve Body	
7	Ball	

VARIOUS TRIM DESIGNS FOR LOW CV AND NOISE APPLICATIONS



When the flow rate of application is too low calling for valves with very low flow capacity for throttling that a standard DN20 or DN25 trim of segment ball valve can not manage to achieve, special low Cv trim design is available engineered as per specific Cv requirements to provide precise throttling performance, which particularly meets the control requirements of additives and coatings in paper making industry.



Low noise trim provides very good solution to applications easily subject to excessive noise level with conventional trim especially for control systems handling gas and steam and other applications where requires a limited level of noise. Meanwhile, it can also prevent the potential risk of damaged piping system and influenced life cycle and control performance of control valves resulted from the cavitation phenomenon during controlling of water and other liquids under high differential pressure.

MAXIMUM ALLOWABLE DIFFERENTIAL PRESSURE AND TORQUE

Table 2

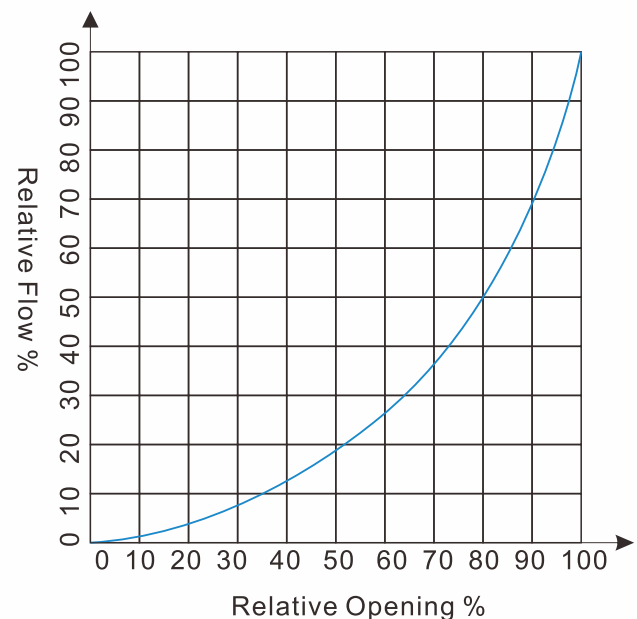
Size	Wafer/PN10/PN16/150LB								Wafer/PN40/300LB								Torque	
	Max shut-off dp.				Max control dp.				Max shut-off dp.				Max control dp.				N. M	
	Wafer		Flanged		Wafer		Flanged		Wafer		Flanged		Wafer		Flanged		16 (bar)	40 (bar)
25/1"	20	290	20	290	15	217	15	217	50	725	40	580	35	507	35	507	25	48
32/1-1/4"	20	290	20	290	15	217	15	217	50	725	40	580	35	507	35	507	25	55
40/1-1/2"	20	290	20	290	15	217	15	217	50	725	40	580	35	507	35	507	30	60
50/2"	20	290	20	290	15	217	15	217	50	725	40	580	35	507	35	507	35	70
65/2-1/2"	20	290	20	290	15	217	15	217	50	725	40	580	35	507	35	507	60	140
80/3"	20	290	20	290	15	217	15	217	50	725	40	580	35	507	35	507	80	224
100/4"	16	232	16	232	12	174	12	174	40	580	40	580	25	362	25	362	140	315
125/5"	16	232	16	232	12	174	12	174	40	580	40	580	25	362	25	362	160	480
150/6"	16	232	16	232	12	174	12	174	40	580	40	580	25	362	25	362	220	930
200/8"	16	232	16	232	12	174	12	174	35	507	40	580	25	362	25	362	350	1830
250/10"	14	203	14	203	10	145	10	145	35	507	40	580	20	290	20	290	660	3125
300/12"	/	/	14	203	/	/	10	145	/	/	40	580	/	/	20	290	1200	4000
350/14"	/	/	12	174	/	/	8	116	/	/	40	580	/	/	20	290	1700	6120
400/16"	/	/	12	174	/	/	8	116	/	/	40	580	/	/	20	290	2600	8030
450/18"	/	/	10	145	/	/	6	87	/	/	40	580	/	/	20	290	3500	12000
500/20"	/	/	10	145	/	/	6	87	/	/	30	435	/	/	10	145	3800	15000
600/24"	/	/	8	116	/	/	4	58	/	/	30	435	/	/	10	145	6000	20500

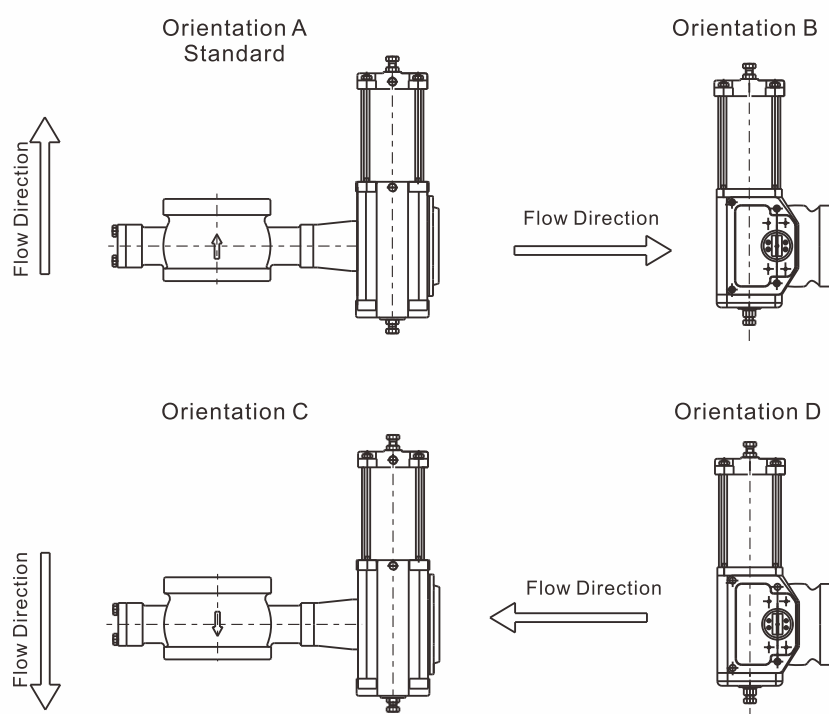
RATED CV

Table 3

Size	CV	Size	CV
DN25	27	DN200	1860
DN32	47	DN250	2900
DN40	70	DN300	4320
DN50	135	DN350	6640
DN65	210	DN400	8000
DN80	390	DN450	10000
DN100	560	DN500	12200
DN125	790	DN600	17270
DN150	1130	DN700	25000

EQUAL PERCENTAGE INHERENT FLOW CHARACTERISTIC



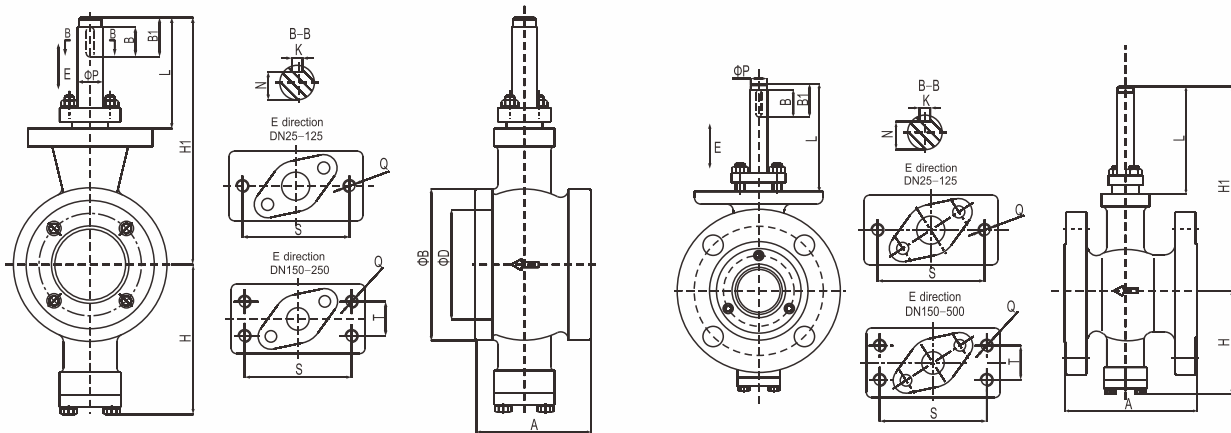


ACTUATOR SELECTION

Table 4

Size DN	Torque(Nm) 20-25bar/150- 360psi of dp	Double Acting Actuator			Single Acting Actuator
		1.6Mpa	2.5MPa or Temp.Range: 180-250℃	4.0MPa or Temp.Range: 250-350℃	1.6MPa
15/20	25	ZSQ32- ¢ 63- ¢ 14	ZSQ32- ¢ 63- ¢ 14	ZSQ32- ¢ 63- ¢ 14	ZDQ41- ¢ 100- ¢ 14
25	25	ZSQ32- ¢ 63- ¢ 16	ZSQ32- ¢ 63- ¢ 16	ZSQ32- ¢ 63- ¢ 16	ZDQ41- ¢ 100- ¢ 16
32	25	ZSQ32- ¢ 63- ¢ 16	ZSQ32- ¢ 63- ¢ 16	ZSQ32- ¢ 63- ¢ 16	ZDQ41- ¢ 100- ¢ 16
40	30	ZSQ32- ¢ 63- ¢ 16	ZSQ41- ¢ 80- ¢ 16	ZSQ41- ¢ 100- ¢ 16	ZDQ41- ¢ 100- ¢ 16
50	35	ZSQ41- ¢ 80- ¢ 16	ZSQ41- ¢ 100- ¢ 16	ZSQ41- ¢ 125- ¢ 16	ZDQ41- ¢ 100- ¢ 16
65	60	ZSQ41- ¢ 80- ¢ 16	ZSQ41- ¢ 100- ¢ 16	ZSQ41- ¢ 125- ¢ 16	ZDQ41- ¢ 125- ¢ 16
80	80	ZSQ41- ¢ 100- ¢ 20	ZSQ41- ¢ 125- ¢ 20	ZSQ50- ¢ 125- ¢ 20	ZDQ50- ¢ 125- ¢ 20
100	140	ZSQ50- ¢ 100- ¢ 20	ZSQ50- ¢ 125- ¢ 20	ZSQ50- ¢ 125- ¢ 20	ZDQ50- ¢ 160- ¢ 20
125	150	ZSQ50- ¢ 100- ¢ 25	ZSQ50- ¢ 125- ¢ 25	ZSQ50- ¢ 160- ¢ 25	ZDQ50- ¢ 160- ¢ 25
150	180	ZSQ50- ¢ 125- ¢ 30	ZSQ50- ¢ 160- ¢ 30	ZSQ60- ¢ 160- ¢ 30	ZDQ60- ¢ 200- ¢ 30
200	350	ZSQ60- ¢ 125- ¢ 30	ZSQ60- ¢ 160- ¢ 30	ZSQ60- ¢ 200- ¢ 30	ZDQ80- ¢ 200- ¢ 30
250	600	ZSQ60- ¢ 160- ¢ 40	ZSQ60- ¢ 200- ¢ 40	ZSQ80- ¢ 250- ¢ 40	ZDQ80- ¢ 250- ¢ 40
300	1200	ZSQ80- ¢ 200- ¢ 40	ZSQ80- ¢ 250- ¢ 40	ZSQ100- ¢ 300- ¢ 50	ZDQ100- ¢ 300- ¢ 40
350	1700	ZSQ80- ¢ 250- ¢ 50	ZSQ100- ¢ 300- ¢ 50	ZSQ130- ¢ 300- ¢ 50	ZDQ130- ¢ 350- ¢ 50
400	2600	ZSQ130- ¢ 300- ¢ 60	ZSQ130- ¢ 350- ¢ 60	ZSQ160- ¢ 400- ¢ 60	ZDQ160- ¢ 400- ¢ 60
450	3500	ZSQ130- ¢ 300- ¢ 70	ZSQ160- ¢ 400- ¢ 70	ZSQ160- ¢ 450- ¢ 70	ZDQ160- ¢ 450- ¢ 70
500	3800	ZSQ130- ¢ 350- ¢ 80	ZSQ160- ¢ 400- ¢ 80	ZSQ160- ¢ 400- ¢ 80 Double Cylinder	ZDQ160- ¢ 450- ¢ 80

Note: ZSQ and ZDQ series piston actuators are manufactured by Linuo. The actuators above are recommended for valves of pressure PN10, PN16, PN25, PN40, ANSI 150Lb and temp. -20~160℃, with minimum air supply pressure of 5 bar.



DIMENSIONS OF WAFER TYPE

PN10/PN16/150LB

Table 5

mm/inch

DN	A	H1	H2	ΦD	ΦB	L	ΦP	B1	B	K	N	S	Q	T	Net W. (Kg/Lbs)
20/3/4"	62/2.44	75/2.95	183/7.20	33/1.30	56/2.20	108/4.25	14/0.55	40/1.57	35/1.38	5/0.20	11/0.43	65/2.56	M10	/	2.7/5.95
25/1"	62/2.44	87/3.43	185/7.28	38/1.50	68/2.68	110/4.33	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	2.7/5.95
32/1-1/4"	62/2.44	87/3.43	193/7.60	44/1.73	78/3.07	112/4.41	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	3/6.61
40/1-1/2"	62/2.44	87/3.43	195/7.68	52/2.05	85/3.35	110/4.33	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	3.5/7.72
50/2"	75/2.95	97/3.82	198/7.80	60/2.36	100/3.94	107/4.21	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	4.2/9.26
65/2-1/2"	90/3.54	112/4.41	218/8.58	75/2.95	120/4.72	108/4.25	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	6/13.23
80/3"	100/3.94	112/4.41	237/9.33	94/3.70	130/5.12	122/4.80	20/0.79	40/1.57	35/1.38	6/0.27	16.5/0.65	90/3.54	M12	/	7.5/16.53
100/4"	115/4.53	133/5.24	240/9.45	118/4.65	158/6.22	109/4.29	20/0.79	40/1.57	35/1.38	6/0.27	16.5/0.65	90/3.54	M12	/	11/24.25
125/5"	129/5.08	153/6.02	270/10.63	140/5.52	184/7.24	120/4.72	25/0.98	40/1.57	35/1.38	8/0.31	21/0.83	100/3.94	M12	/	15.5/34.17
150/6"	160/6.30	178/7.01	311/12.24	167/6.57	216/8.50	133/5.27	30/1.18	45/1.77	40/1.57	10/0.39	25/0.98	110/4.33	M12	40/1.57	25/55.12
200/8"	200/7.87	200/7.87	328/12.91	210/8.27	268/10.55	123/4.84	30/1.18	45/1.77	40/1.57	10/0.39	25/0.98	110/4.33	M12	40/1.57	39/85.98
250/10"	240/9.45	243/9.57	378/14.88	267/10.51	322/12.68	138/5.43	40/1.57	55/2.17	50/1.97	12/0.47	35/1.38	110/4.33	M12	45/1.57	64/141.10

Note: The above dimensions are applicable for wafer connection valves of pressure rating PN10, 16, 25, 150lb. DN20-32 is not available for 150lb only. Face to face dimension of above wafer valve is as per Linuo's internal standard. ISA S75.04 face to face standard wafer valve is available by conversion from flanged type valve from size DN40 to DN600.

DIMENSIONS OF FLANGED TYPE

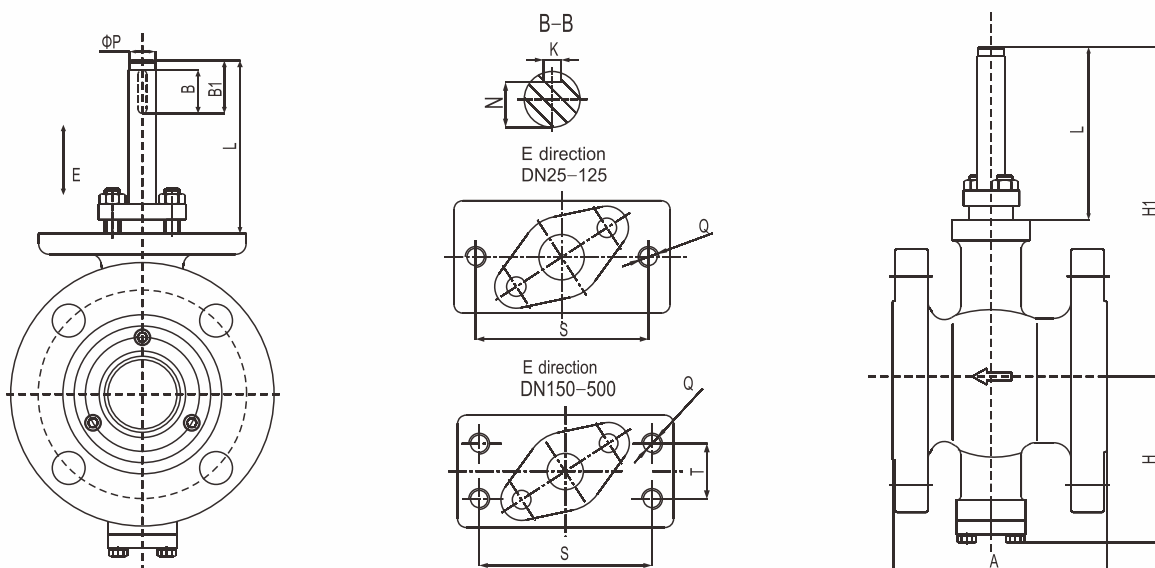
PN10/PN16/150LB

Table 6

mm/inch

DN	A	H1	H2	L	ΦP	B1	B	K	N	S	Q	T	Net W. (Kg/Lbs)
25/1"	102/4.02	87/3.43	185/7.28	107/4.21	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	4/8.82
32/1-1/4"	102/4.02	87/3.43	193/7.60	108/4.25	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	5.5/12.13
40/1-1/2"	114/4.49	87/3.43	195/7.68	110/4.33	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	6/13.23
50/2"	124/4.88	93/3.66	198/7.80	105/4.13	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	7.5/16.53
65/2-1/2"	145/5.71	117/4.61	218/8.58	106/4.17	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	9.5/20.94
80/3"	165/6.50	121/4.76	240/9.45	122/4.80	20/0.79	40/1.57	35/1.38	6/0.27	16.5/0.65	90/3.54	M12	/	14/30.86
100/4"	194/7.64	133/5.24	240/9.45	109/4.29	20/0.79	40/1.57	35/1.38	6/0.27	16.5/0.65	90/3.54	M12	/	21.5/47.40
125/5"	213/8.39	153/6.02	270/10.63	120/4.72	25/0.98	40/1.57	35/1.38	8/0.31	21/0.83	100/3.94	M12	/	23/50.71
150/6"	229/9.02	178/7.01	310/12.20	133/5.27	30/1.18	45/1.77	40/1.57	10/0.39	25/0.98	110/4.33	M12	40/1.57	37/81.57
200/8"	243/9.57	200/7.87	328/12.91	123/4.84	30/1.18	45/1.77	40/1.57	10/0.39	25/0.98	110/4.33	M12	40/1.57	58/127.87
250/10"	297/11.69	243/9.57	378/14.88	138/5.43	40/1.57	55/2.17	50/1.97	12/0.47	35/1.38	110/4.33	M12	45/1.77	85/187.39
300/12"	338/13.31	272/10.71	415/16.34	146/5.75	40/1.57	55/2.17	50/1.97	12/0.47	35/1.38	130/5.12	M12	45/1.77	131/288.80
350/14"	400/15.75	326/12.83	509/20.04	180/7.09	50/1.97	68/2.68	60/2.36	16/0.63	44/1.73	134/5.28	M16	64/2.52	199/438.72
400/16"	400/15.75	375/14.76	595/23.43	214/8.43	60/2.36	68/2.68	60/2.36	18/0.71	53/2.09	175/6.89	M20	70/2.76	345/760.59
450/18"	520/20.47	422/16.61	642/25.28	214/8.43	70/2.76	88/3.46	80/3.15	20/0.79	62.5/2.46	190/7.48	M20	90/3.54	510/1124.36
500/20"	600/23.62	510/20.08	720/28.35	230/9.06	80/3.15	88/3.46	80/3.15	22/0.87	71/2.80	215/8.46	M20	96/3.78	607/1338.21
600/24"	680/26.77	560/22.05	845/33.27	285/11.22	85/3.35	115/4.53	100/3.94	22/0.87	76/2.99	230/9.06	M30	90/3.54	720/1587.33

Note: The above dimensions are applicable for flanged valves of pressure rating PN10, 16, 25, 150lb. DN25-32 is not available for 150lb only. ISA S75.04 face to face standard wafer valve is available by conversion from flanged type valve from size DN40 to DN600.



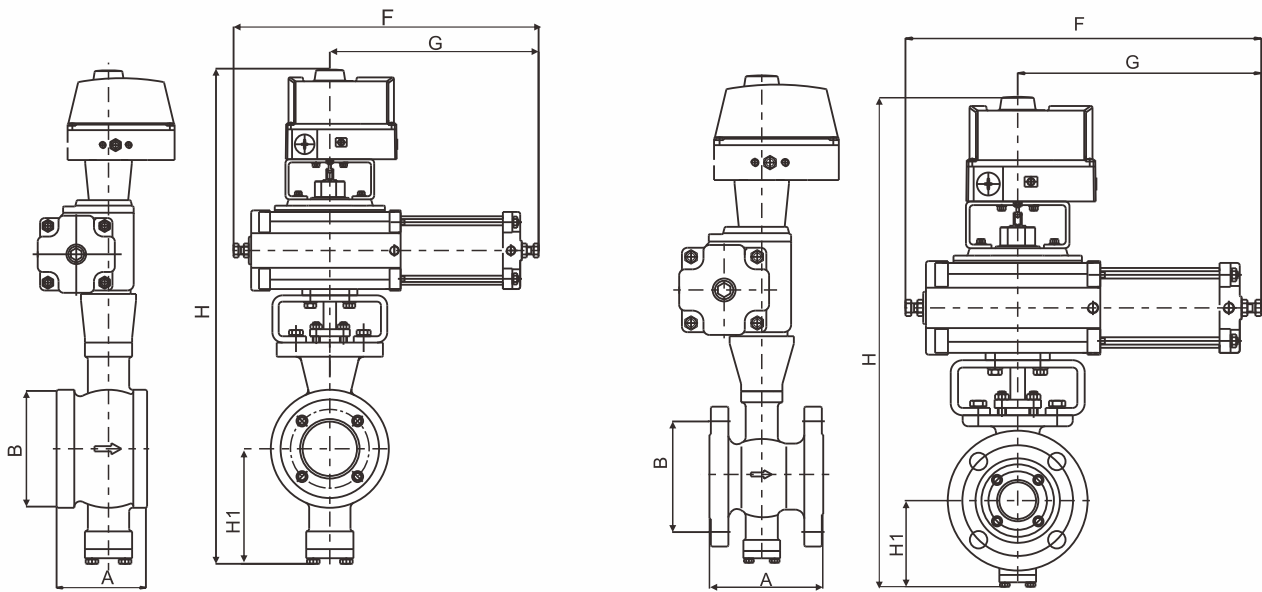
DIMENSION OF FLANGED TYPE

PN40/300LB

Table 7

mm/inch

DN	A	H1	H2	L	ΦP	B1	B	K	N	S	Q	T	Net W. (Kg/Lbs)
25/1"	102/4.02	87/3.43	185/7.28	107/4.21	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	4/8.82
32/1-1/4"	102/4.02	87/3.43	193/7.60	108/4.25	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	5.5/12.13
40/1-1/2"	114/4.49	87/3.43	195/7.68	110/4.33	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M10	/	6/13.23
50/2"	124/4.88	103/4.06	212/8.35	112/4.41	16/0.63	40/1.57	35/1.38	5/0.20	13/0.51	80/3.15	M12	/	11/24.25
80/3"	165/6.50	136/5.35	254/10.00	120/4.72	25/0.98	40/1.57	35/1.38	8/0.31	21/0.83	100/3.94	M12	32/1.26	22/48.50
100/4"	194/7.64	144/5.70	262/10.31	120/4.72	25/0.98	40/1.57	35/1.38	8/0.31	21/0.83	100/3.94	M12	32/1.26	32/70.55
150/6"	229/9.02	202/7.95	346/13.62	145/5.71	40/1.57	55/2.17	50/1.97	12/0.47	32/1.26	130/5.12	M16	45/1.77	62/136.69
200/8"	243/9.57	219/8.62	363/14.29	145/5.71	40/1.57	55/2.17	50/1.97	12/0.47	35/1.38	130/5.12	M16	45/1.77	90/198.42
250/10"	297/11.69	267/10.51	467/18.39	192/7.56	50/1.97	68/2.68	50/1.97	16/0.63	44/1.73	175/6.89	M20	70/2.76	150/330.69
300/12"	338/13.31	288/11.34	483/19.02	192/7.56	50/1.97	68/2.68	50/1.97	16/0.63	44/1.73	175/6.89	M20	70/2.76	220/485.02
350/14"	400/15.75	350/13.78	600/23.62	245/9.65	60/2.36	90/3.54	80/3.15	18/0.71	63/2.48	180/7.09	M24	70/2.76	310/683.43
400/16"	400/15.75	450/17.72	645/25.39	245/9.65	70/2.76	90/3.54	80/3.15	20/0.79	62.5/2.46	210/8.27	M27	90/3.54	450/992.08
500/20"	630/24.80	500/19.69	805/31.69	285/11.22	80/3.15	120/4.72	110/4.33	25/0.98	76/2.99	230/9.06	M30	90/3.54	956/2107.62



DIMENSIONS OF PNEUMATIC WAFLER AND FLANGED TYPE

Table 8

DN	A		B		H1		H		G		F	
	Wafer	Flanged	Wafer	Flanged	Wafer	Flanged	ZSQ	ZDQ	ZSQ	ZDQ	ZSQ	ZDQ
20	62/2.44	/	56/2.20	/	75/2.95	/	518/20.39	555/21.85	235/9.25	480/18.90	345/13.58	635/25.00
25	62/2.44	102/4.02	68/2.68	65/2.56	87/3.43	87/3.43	525/20.67	555/21.85	235/9.25	480/18.90	345/13.58	635/25.00
32	62/2.44	102/4.02	78/3.07	76/2.99	87/3.43	87/3.43	525/20.67	555/21.85	235/9.25	480/18.90	345/13.58	635/25.00
40	62/2.44	114/4.49	85/3.35	84/3.31	87/3.43	87/3.43	525/20.67	555/21.85	235/9.25	480/18.90	345/13.58	635/25.00
50	75/2.95	124/4.88	100/3.94	99/3.90	97/3.82	93/3.66	565/22.24	605/23.82	300/11.81	480/18.90	422/16.61	635/25.00
65	90/3.54	145/5.71	120/4.72	118/4.65	112/4.41	117/4.61	585/23.03	625/24.61	300/11.81	550/21.65	422/16.61	720/28.35
80	100/3.94	165/6.50	130/5.12	132/5.20	112/4.41	121/4.76	600/23.62	640/25.20	315/12.40	620/24.41	440/17.32	770/30.31
100	115/4.53	194/7.64	158/6.22	156/6.14	133/5.24	133/5.24	625/24.61	645/25.39	328/12.91	660/25.98	474/18.66	810/31.89
125	129/5.08	213/8.39	184/7.24	184/7.24	153/6.02	153/6.02	650/25.59	700/27.56	328/12.91	660/25.98	474/18.66	810/31.89
150	160/6.30	229/9.02	216/8.50	211/8.31	178/7.01	178/7.01	720/28.35	770/30.31	328/12.91	640/25.20	474/18.66	830/32.68
200	200/7.87	243/9.57	268/10.55	266/10.47	200/7.87	200/7.87	810/31.89	870/34.25	356/14.02	680/26.77	530/20.87	870/34.25
250	240/9.45	297/11.69	322/12.68	319/12.56	243/9.57	243/9.57	900/35.43	980/35.58	396/15.59	875/34.45	570/22.44	1170/46.06
300	/	338/13.31	/	370/14.57	/	272/10.71	1025/40.35	1725/67.91	500/19.69	970/38.19	700/27.56	1260/49.61
350	/	400/15.75	/	429/16.89	/	326/12.83	1150/45.28	1250/49.21	500/19.69	1200/47.24	700/27.56	1600/62.99
400	/	400/15.75	/	480/18.90	/	375/14.76	1350/53.15	1450/57.09	750/29.53	1215/47.83	1050/41.34	1615/63.58
450	/	520/20.47	/	548/21.57	/	422/16.61	1450/57.09	1550/61.02	750/29.53	1270/50.00	1050/41.34	1660/65.35
500	/	600/23.62	/	609/23.98	/	510/20.08	1550/61.02	1650/64.96	750/29.53	1285/50.59	1050/41.34	1680/66.14
600	/	680/26.77	/	702/27.64	/	560/22.05	1695/66.73	1795/70.67	750/29.53	1285/50.59	1050/41.34	1680/66.14

ZSQ: Double Acting Actuator

ZDQ: Single Acting Actuator

Note: The dimensions above are exclusive for valves equipped with Linuo make piston cylinder type pneumatic actuator- double acting (ZSQ) and spring return (ZDQ), applicable for pressure rating PN10, PN16, 150LB with design temperature range -20~160℃. Please refer to ACTUATOR SELECTION on Page 06

How To Order

RV**100****D1 - 16****M****51****Y****56****E****ZS****1****2****3****4****5****6****7****8****9****10****1**

Valve Series

RV	Segment Ball Valve
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2

Valve Size

015	DN 15	1/2"	050	DN 50	2"	150	DN 150	6"	400	DN 400	16"
020	DN 20	3/4"	065	DN 65	2-1/2"	200	DN 200	8"	450	DN 450	18"
025	DN 25	1"	080	DN 80	3"	250	DN 250	10"	500	DN 500	20"
032	DN 32	1-1/4"	100	DN 100	4"	300	DN 300	12"	600	DN 600	24"
040	DN 40	1-1/2"	125	DN 125	5"	350	DN 350	14"	700	DN 700	26"

3

Connection Type

F1 Flanged (RF)	F2 Flanged (MF)	D1 Wafer (RF)	D2 Wafer (MF)
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4

Pressure Rating

10	PN10	01	150Lb	1K	10K
16	PN16	03	300Lb	2K	20K
25	PN 25	06	600Lb		
40	PN 40				
64	PN 64				
80	PN 100				

5

Body Material

C	WCB	G	CG8M
P	CF8	B	LCB
Q	CF3	D	LCC
M	CF8M	W	WC6
L	CF3M	S	Duplex SS

6

Disc Material and Treatment

Disc material		Surface treatment	
3	CF8	1	Hard chrome plating
4	CF3	B	6AB surfacing
5	CF8M	3	Nickle based hard alloy surfacing
6	CF3M	4	Tungsten Carbide surfacing
7	CG8M	5	Nitriding
8	Duplex ss	6	Stellite

7

Sealing Type

Standard Metal Seat	Y
Soft seat	R
High Temperature Version Metal Seat	G

8

Seat Material and Treatment

Metal seat				Soft seat	
Material		Surface treatment		Material	
3	304	1	Hard Chrome plating	PO	PTFE
4	304L	4	Tungsten Carbide spray welding	LO	PPL
5	316	5	Nitriding	NO	NYLON
6	316L	6	Stellite	RO	RTFE
7	317			KO	PEEK
8	2205				

9

O-ring Material

Soft seat, Material and temperature		
E	EPDM	-29°C~120°C
V	Viton	-29°C~230°C
A	PFA	-29°C~230°C
F	FEP	-29°C~160°C
G	Graphite	-29°C~425°C

10

Actuator

ZS	Pneumatic double acting
ZDK	Pneumatic spring to close
ZDB	Pneumatic spring to open
ZDLK	Pneumatic light spring to open
ZDLB	Pneumatic light spring to close
ZK	Electric
SD	Manual operation