





LPB12— Triple Eccentric Metal-seat Butterfly Valve



Code	Actuator	Action	Air Fail Position	Control	Structure	Body	Sealing	Disc	Connection DN	PN
LPB12-	1 Pneumatic	D Double-acting	1 Normally Open	A On-off	4 Three Eccentric	A 316L	R BODY	A 316L	1 Flange	
	2 Pneumatic & Handwheel	S Single-acting	2 Normally Closed	B Control	0 Others	B 316	S STL	E 316	2 Wafer	
	3 Electric DC24V	0 Others	3 Flexible	C Intelligent		C 304	0 Others	C 304		
	4 Electric AC220V		4 Held	0 Others		I 304L		I 304L		
	5 Electric AC380V		0 Others			D WCB		D WCB		
	7 Handle					0 Others		0 Others		
	8 Turbine									
	0 Others									

Parameter

Design Standard:

Valve body is designed to meet IEC60534-3-1-2001 and GB/T 12221-2005 API609.

Upper Flange Standard:

Valve mounting flange shall be per ISO 5211.

Flange Standard:

LPB12: JB/T79.1-94、JB/T79.4-94、HG20616-97、ANSI B16.5、ANSI B16.47.

Pressure Rating:

The highest pressure: Class600/6.3Mpa

Temperature range: -196℃ ~ 538℃

Shell Testing:

The shell strength is designed to meet ASME B16.34 and GB/T9092-1999.

Leak Standard:

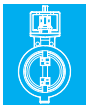
Leak standard: ANSI B16.104

Main Feature:

1. Medium can flow through the body directly for little resistance and high flow capacity.
2. The body and upper cover could be made of carbon steel, austenitic stainless steel or special alloy material.
3. The sulfur-free flexible v-graphite is heat resisting, we shall ensure the service life of packing is long-term without maintenance by increasing pre-pressure on spring gasket.
4. The self-sealing packing structure is tested 100,000 times (full travel) to ensure zero leakage and constant friction. When the stem moves at low friction state, we can get the long-term steady precision of control valve.
5. The seat adopts multi-level structure, the sealing surface is composed of metal and special non-metal materials to ensure zero leakage.
6. The shaft center deviates from the valve center bi-directionally. The asymmetric design sealing surface allows the disc to revolve in 0-90° freely.

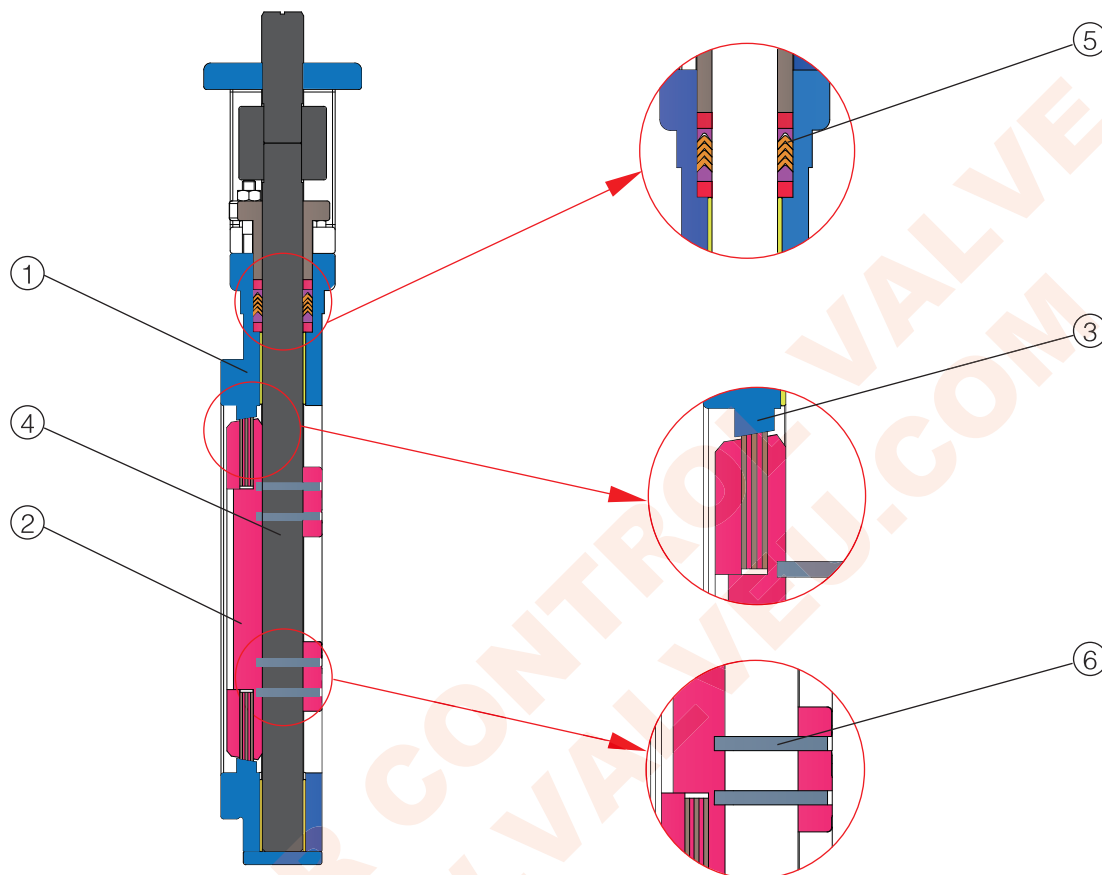
Others:

According to customer requirements.



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DN80–1200 Material



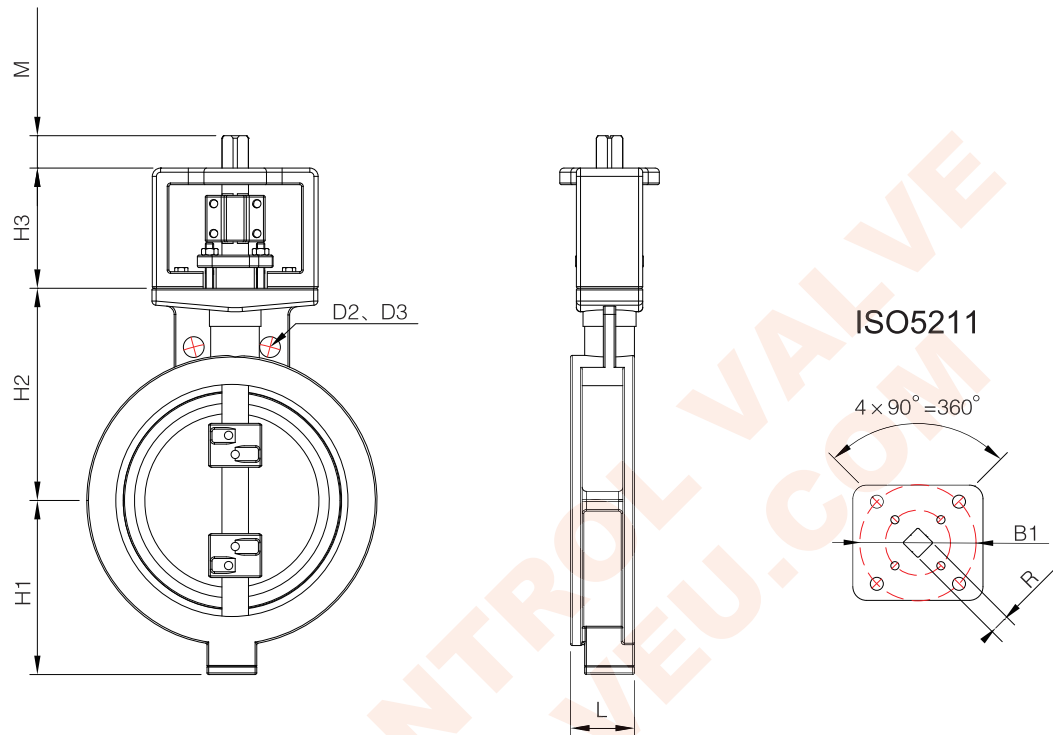
No.	Part	Material	Specification
1	Body	Stainless Steel	ASTM A351 Gr.CF3 ASTM A351 Gr.CF3M ASTM A351 Gr.CF8 ASTM A351 Gr.CF8M
		Carbon Steel	ASTM A216
2	Disc	Stainless Steel	ASTM A351 Gr.CF3 ASTM A351 Gr.CF3M ASTM A351 Gr.CF8 ASTM A351 Gr.CF8M
		Carbon Steel	ASTM A216
3	Seat	Stainless Steel	ASTM A351 Gr.CF3 ASTM A351 Gr.CF3M ASTM A351 Gr.CF8 ASTM A351 Gr.CF8M
		Carbon Steel Stellite	ASTM A216
4	Stem	Stainless Steel	ASTM A276 Gr.420 ASTM A276 Gr.CF8 ASTM A276 Gr.CF8M ASTM A276 Gr.CF3M
5	Packing	PTFE RTFE PPL	
		Graphite	
6	Pin	Stainless Steel	



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Wafer Size: DN80–1200



PN10/16/ANSI 150LB

Unit:mm

SIZE		L	D2	D3	H1	H2	H3	M	R	B1	ISO5211
DN80	3"	64	160	152.4	122	147	145	17	17	70	F07
DN100	4"	64	180	190.5	132	162	145	17	17	70	F07
DN125	5"	64	210	215.9	145	152	145	17	17	70	F07
DN150	6"	70	240	241.3	159	172	145	22	22	70	F07
DN200	8"	71	295	298.5	198	208	145	22	22	102	F10
DN250	10"	76	355	362.0	224	255	145	26	26	102	F10
DN300	12"	83	410	431.8	259	275	145	26	26	102	F10
DN350	14"	92	470	476.3	304	318	165	32	32	125	F12
DN400	16"	102	525	539.8	325	340	165	32	32	125	F12
DN450	18"	114	585	577.9	364	380	165	38	38	140	F14
DN500	20"	127	650	635.0	394	420	165	38	38	140	F14
DN600	24"	154	770	749.3	449	485	165	54	54	165	F16
DN700	28"	165	840	863.6	490	510	200	54	54	165	F16
DN800	32"	190	950	977.9	545	580	200	—	—	254	F25
DN900	36"	203	1050	1085.9	603	652	200	—	—	254	F25
DN1000	40"	216	1170	1200.2	675	720	200	—	—	298	F30
DN1200	48"	254	1390	1422.4	870	880	200	—	—	298	F30

PN40/ANSI 300/600LB

Unit:mm

SIZE		L	D2	D3	H1	H2	H3	M	R	B1	ISO5211
DN100	4"	64	180	200	132	162	145	17	17	70	F07
DN150	6"	76	240	270	159	172	145	22	22	70	F07
DN200	8"	89	295	330	198	208	145	26	26	102	F10
DN250	10"	114	355	387.5	224	255	145	32	32	102	F10
DN300	12"	114	410	451	259	275	145	32	32	102	F10
DN350	14"	127	470	514.5	304	318	165	38	38	125	F12
DN400	16"	140	525	571.5	325	340	165	52	52	125	F12
DN450	18"	152	585	628.5	364	380	165	52	52	140	F14
DN500	20"	152	650	686	394	420	165	54	54	140	F14
DN600	24"	178	770	813	449	485	165	60	60	165	F16

Note: D2 is designed to meet GB9113.1

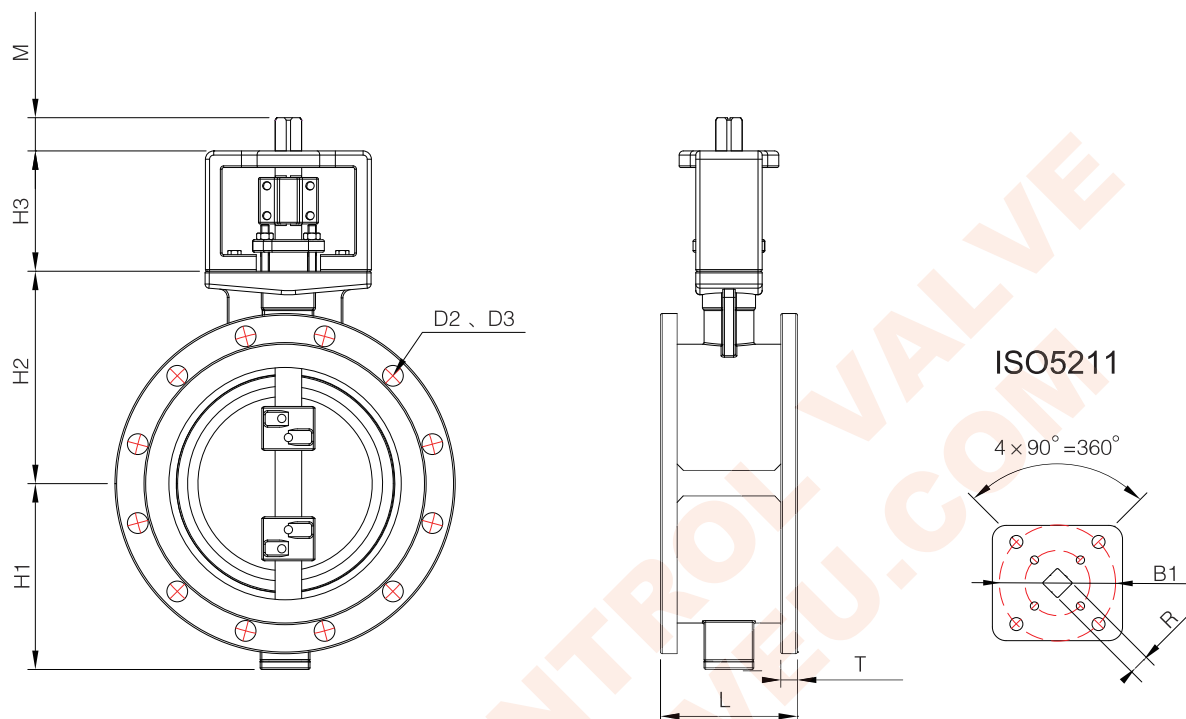
D3 is designed to meet ANSI 150 B16.5



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LAPAR
Lapar Control Valve

Flange Size: DN80-1200



PN10/16/ANSI 150LB

Unit:mm

SIZE	L	D2	D3	H1	H2	H3	T	M	R	B1	ISO5211
DN80 3"	114	160	152.4	122	147	145	20	17	17	70	F07
DN100 4"	127	180	190.5	132	162	145	22	17	17	70	F07
DN125 5"	140	210	215.9	145	152	145	22	17	17	70	F07
DN150 6"	140	240	241.3	159	172	145	24	22	22	70	F07
DN200 8"	152	295	298.5	198	208	145	24	22	22	102	F10
DN250 10"	165	355	362.0	224	255	145	26	26	26	102	F10
DN300 12"	178	410	431.8	259	275	145	28	26	26	102	F10
DN350 14"	190	470	476.3	304	318	165	30	32	32	125	F12
DN400 16"	216	525	539.8	325	340	165	32	32	32	125	F12
DN450 18"	222	585	577.9	364	380	165	40	38	38	140	F14
DN500 20"	229	650	635.0	394	420	165	44	38	38	140	F14
DN600 24"	267	770	749.3	449	485	165	54	54	54	165	F16
DN700 28"	292	840	863.6	490	510	200	40	54	54	165	F16
DN800 32"	318	950	977.9	545	580	200	42	-	-	254	F25
DN900 36"	330	1050	1085.9	603	652	200	44	-	-	254	F25
DN1000 40"	410	1170	1200.2	675	720	200	46	-	-	298	F30
DN1200 48"	470	1390	1422.4	870	880	200	52	-	-	298	F30

PN40/ANSI 300/600LB

Unit:mm

SIZE	L	D2	D3	H1	H2	H3	T	M	R	B1	ISO5211
DN100 4"	190	180	190.5	132	162	145	24	17	17	70	F07
DN150 6"	210	240	241.3	159	172	145	28	22	22	70	F07
DN200 8"	230	295	298.5	198	208	145	34	26	26	102	F10
DN250 10"	250	355	362.0	224	255	145	38	32	32	102	F10
DN300 12"	270	410	431.8	259	275	145	42	32	32	102	F10
DN350 14"	290	470	476.3	304	318	165	46	38	38	125	F12
DN400 16"	310	525	539.8	325	340	165	50	52	52	125	F12
DN450 18"	330	585	577.9	364	380	165	57	52	52	140	F14
DN500 20"	350	650	635.0	394	420	165	57	54	54	140	F14
DN600 24"	390	770	749.3	449	485	165	72	60	60	165	F16

Note: D2 is designed to meet GB9113.1

D3 is designed to meet ANSI 150 B16.5

Lapar Control Valve





Torque (Nm)

DN		Closing Differential Pressure (bar)						
		0.6Mpa	1.0Mpa	1.6Mpa	2.0Mpa	2.5Mpa	4.0Mpa	5.0Mpa
50	2"	39	50	60	100	147	176	200
65	2-1/2"	47	60	80	120	177	211	240
80	3"	63	80	100	160	236	282	320
100	4"	79	100	150	200	294	352	400
125	5"	118	150	200	300	442	528	600
150	6"	160	200	450	400	590	704	800
200	8"	360	450	600	900	1320	1584	1800
250	10"	470	600	900	1200	1770	2112	2400
300	12"	710	900	1200	1800	2650	3168	3600
350	14"	950	1200	2000	2400	3530	4224	4800
400	16"	1580	2000	2500	4000	5890	7040	8000
450	18"	1970	2500	3000	5000	7360	8800	10000
500	20"	2370	3000	5000	6000	8830	10560	12000
600	24"	3950	5000	6500	10000	14720	17600	20000
700	28"	5130	6500	9000	13000	19130	22880	26000
800	32"	7110	9000	15000	18000	26490	31680	36000
900	36"	11840	15000	25000	30000	44160	52800	60000
1000	40"	19740	25000	30000	50000	73600	88000	100000
1100	44"	23690	30000	32000	60000	88310	105600	120000
1200	48"	25650	33100	35000	65500	95320	116500	131000
1400	56"	27630	35000	42000	70000	103030	123200	140000
1600	64"	33160	42000	55000	84000	123640	147840	168000
1800	72"	44770	56700	74250	113400	166910	199580	226800

Including a 30% safety factor.

Do not apply a safety factor to above torque value when determining actuator.