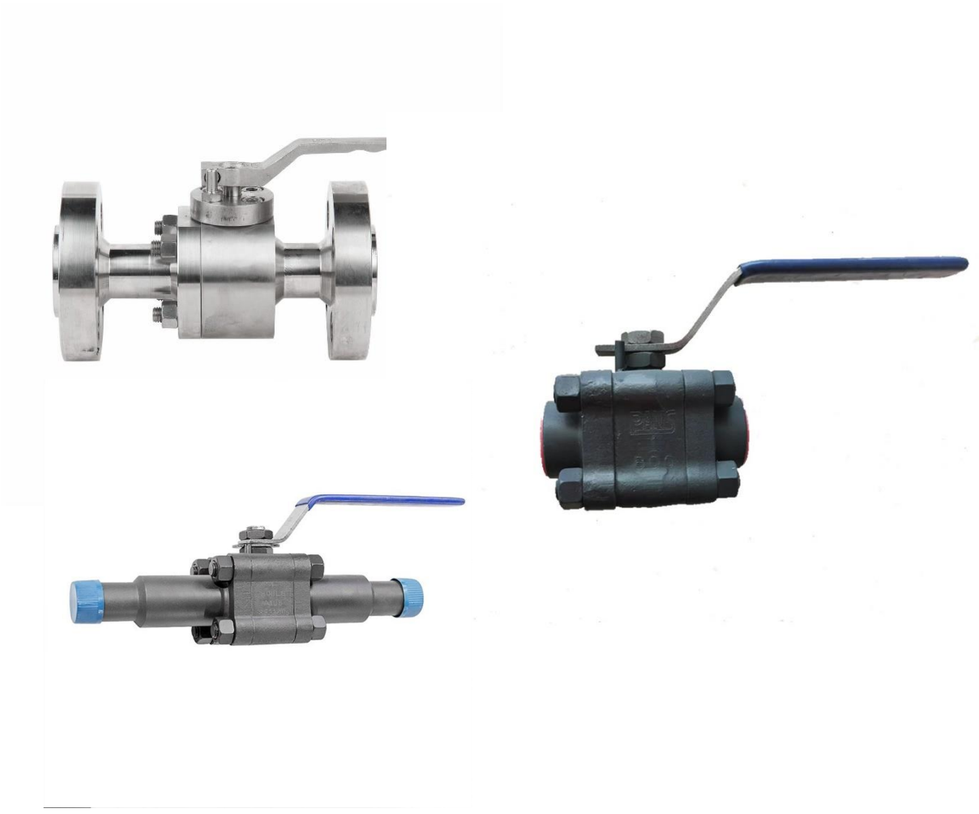
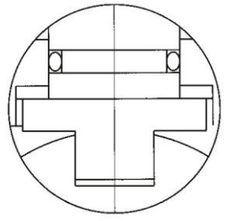
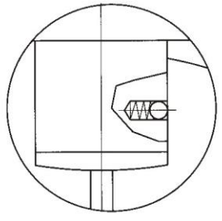
Forged steel Ball valve series

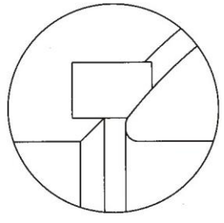




Blow out proof stem



Anti static



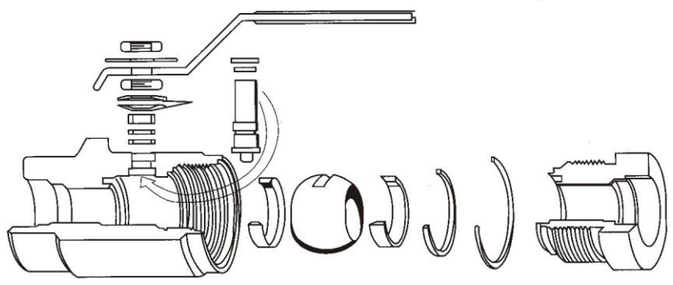
Fire safe

Compact ball valves are tructed by many customers because of ifs reasonable structures small space–occupation andgood sealing performance

Design Structure

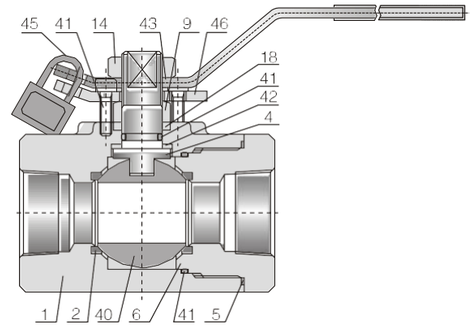
Seat is made of PTFE reinforced with 25% glass fiber of PEEK. PTFE with 25% glass fibre can gain better performances normally used for class 800 ball valves. PEEK can gain better performances under high pressure and high temperature normanlly used ofr class 1500 ball valves.

Anti static/fire safe/blow out proof stem



Flow Coefficient CV

NPS	CV Value	
	Full port	Reduced port
1/4	8	–
3/8	8	–
1/2	12	8
3/4	33	12
1	48	33
1 1/4	83	48
1 1/2	120	83
2	250	120



Application Standards

1、Design and manufacture according to：BS5351

2、Connection ends according to：

1) Socket weld ends dimension according to ANSI B16.11；

2) Threaded ends dimension according to ANSI B1.20.1；

3、Test and inspection according to：API 598；

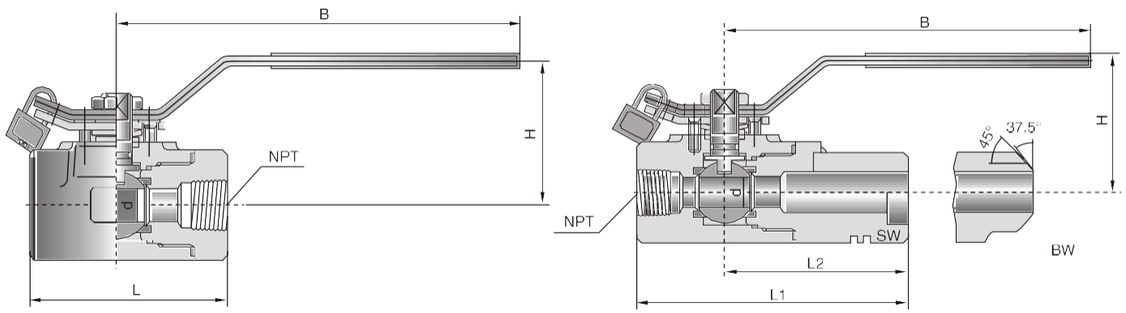
4、Structure features：Bolted bonnet; two–piece;

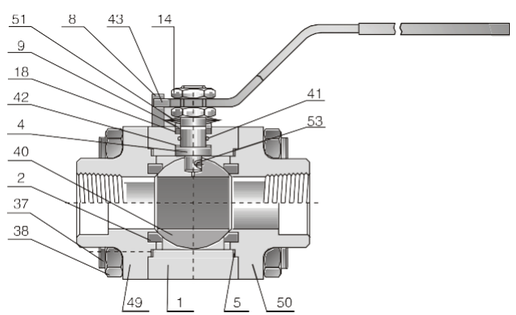
5、Materials according to ANSI/ASTM。

6、Main materials：A105；LF2；F5；F11；F22；304(L)；316(L)；F347；F321；F51；Monel；20 Alloy。

Main Parts & Material List

NO.	Part name	A105/F6a	LF2/F304	F304(L)/F304(L)	F316(L)/F316(L)	F51/F51
1	Body	A105	LF2	F304(L)	F316(L)	F51
2	Seat	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK
4	Stem	410	304	304(L)	316(L)	F51
5	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
6	Bonnet	A105	LF2	F304	F316	F51
9	Gland	410	304	304(L)	316(L)	F51
11	Gland flange	A105	LF2	F304	F316	F51
14	Flat nut	8	8	8	8	8M
18	Packing	PTFE	PTFE	PTFE	PTFE	PTFE
40	Ball	F6	F304	F304(L)	F316(L)	F51
41	O–ring	VITON	VITON	VITON	VITON	VITON
42	Back seat gasket	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK
43	Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
44	Screw	88	88	88	88	88
45	Lock	End product	End product	End product	End product	End product
46	Locator	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025





Application Standards

1、Design and manufacture according to：BS5351
2、Connection ends according to：
1) Socket weld ends dimension according to ANSI B16.11；
2) Threaded ends dimension according to ANSI B1.20.1；
3、Test and inspection according to：API 598；
4、Structure features：Bolted bonnet; two-piece;
5、Materials according to ANSI/ASTM。
6、Main materials：A105；LF2；F5；F11；
F22；304(L)；316(L)；F347；F321；F51；Monel；20 Alloy。

CL800 Connection Ends May Be Pipe-welded (Butt-welding or Socket Welding) and/or Threaded, Design to Bs5351

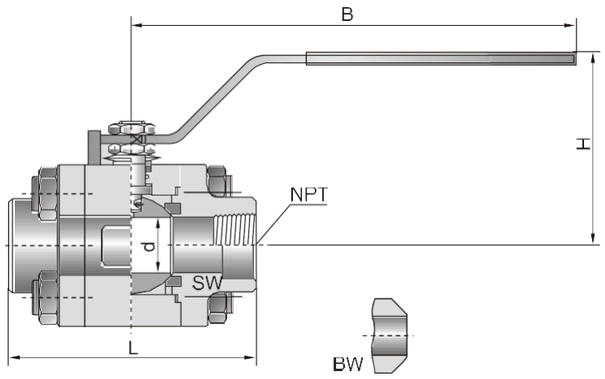
Specification(NPS)	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face(mm)	L	60	60	75	80	90	110	120	140	–
Center to handle end (mm)	B	160	160	160	160	170	230	230	280	–
Height(mm)	H	60	60	60	65	85	105	105	125	–
Flow port dimension (mm)	d	6	9	13.5	19	24	32	38	49	–
Weight(Kg)		1.2	0.9	1.3	2.2	3.5	6.5	6.5	11	–

CL1500-CL2500 Connection Ends May Be Pipe-welded (Butt-welding or Socket Welding) and/or Threaded, Design to Bs5351

Specification(NPS)	F.P		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face(mm)	L1	CL1500	70	75	85	95	105	120	130	150
		CL2500	–	–	125	135	155	–	155	–
Center to handle end (mm)	B	CL1500	160	160	160	170	230	230	280	280
Height(mm)	H	CL1500	60	60	65	85	105	105	125	–
Flow port dimension (mm)	d	CL1500	6	6	13	19	25	32	38	49
Weight(Kg)		CL1500	1.2	1.5	2.5	3.7	5.8	–	11.5	13.7

Main Parts & Material List

NO.	Part name	A105/F6a	LF2/304	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	LF2	F304(L)	F316(L)	F51
2	Seat	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK
4	Stem	410	304	304(L)	316(L)	F51
5	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
8	Pin	25	304	304	304	304
9	Gland	410	304	304(L)	316(L)	F51
14	Flat nut	8	8	8	8M	8M
18	Packing	PTFE	PTFE	PTFE	PTFE	PTFE
37	Bolt	B7	B8	B8	B8M	B8M
38	Nut	2H	8	8	8M	8M
40	Ball	F6	F304	F304(L)	F316(L)	F51
41	O-ring	VITON	VITON	VITON	VITON	VITON
42	Back seat gasket	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK
43	Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
49	Left bonnet	A105	LF2	F304	F316	F51
50	Right bonnet	A105	LF2	F304	F316	F51
51	Butterfly spring	65Mn	65Mn	304	304	304
52	Elastic washer	65Mn	65Mn	304	304	304
53	Anti-static spring	304	304	304	316L	316L

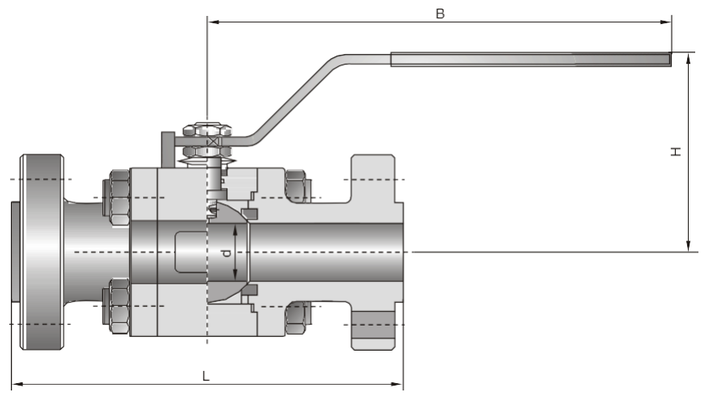


CL800–CL1500 Connection Ends May Be Pipe–welded (Butt–welding or Socket Welding) and/or Threaded, Design to Bs5351

Specification(NPS)	F.P		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face(mm)	L		75	75	85	100	115	130	150	180
Center to handle end (mm)	B		108	108	108	146	178	178	200	200
Height(mm)	H		51	51	51	108	81	85	105	105
Height (Flow port dimensions)(mm)	d	CL800	6	9	13	18	23	28	35	49
		CL1500	6	9	13	19	25	32	38	49

CL1500 Connection Ends May Be Pipe–welded (Butt–welding or Socket Welding) and/or Threaded, Design to Bs5351

Specification(NPS)	F.P		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face(mm)	L		85	85	100	120	135	160	185	220
Center to handle end (mm)	B		108	108	108	146	178	178	200	200
Height(mm)	H		51	51	51	108	81	85	105	105
Height (Flow port dimensions)(mm)	d	CL800	6	9	13	18	23	28	35	49
		CL1500	6	9	13	19	25	32	38	49



CL150–CL600 Flanged or Butt–welded Ends; Design to API 6D Face to Face according to Manufacturer Standard

Specification(NPS)	F.P		1/2	3/4	1	1 1/4	1 1/2	2
Face to Face(mm)	L	CL150	108	117	127	140	165	178
		CL300	140	152	165	178	190	216
		600	165	190	216	229	241	292
Center to Handle End (mm)	B	CL150~600	160	160	170	230	230	280
Height(mm)	H	CL150~600	75	85	85	105	110	130
Height (Flow port dimensions)(mm)	d	CL150~600	13	19	25	32	38	49

CL900–CL2500 Flanged or Butt–welded Ends; Design to API 6D Face to Face according to Manufacturer Standard

Specification(NPS)	F.P		1/2	3/4	1	1 1/4	1 1/2	2
Face to Face(mm)	L	CL900~CL1500	216	229	254	279	305	368
		CL2500	264	273	308	349	384	451
Center to Handle End (mm)	B		230	230	350	280	400	400
			280	280	95	350	400	400
Height(mm)	H		75	85	85	105	110	130
			75	85	95	105	110	130
Height (Flow port dimensions)(mm)	d		13	19	25	32	38	49
			13	19	25	32	38	42
		CL900~CL1500	2.5	5.8	5.8	6.8	11.5	13.7
		CL2500	2.7	6.3	6.3	6.8	12	15