

METAL SEATED BALL VALVE

The Metal Seated Ball Valve offers advanced design and precision machining to provide superior metal sealing technology for critical services within various process industries.

Advances in coating technology and design allow the valve to provide absolute isolation with longer life expectancy in critical service applications.

SPLIT BODY, SIDE ENTRY, FULL PORT DESIGN

- 1/2" thru 24" Metal Seated Ball Valve
- 150 lbs thru 600 lbs ASME Class
- ASME B16.34 Design
- All Classes of Shut-Off
- End Connections: RF, RTJ, SW, BW
- Body/Trim Materials: Carbons, Stainless
- Maximum temperature for CF8M 1000°F(538°C), for WCB 800°F(426°C)
- Full port ensures large capacity and reduces the risk of clogging when handling solids or slurries
- Stem bearing reduces side thrust effect on packing and prevents stem wobbling
- Ball and seats lapped for optimum performance and tight shutoff
- Low emission stem seal
- Blowout proof stem



FEATURE SPECIFICATION

Unconditional fire-safe provision

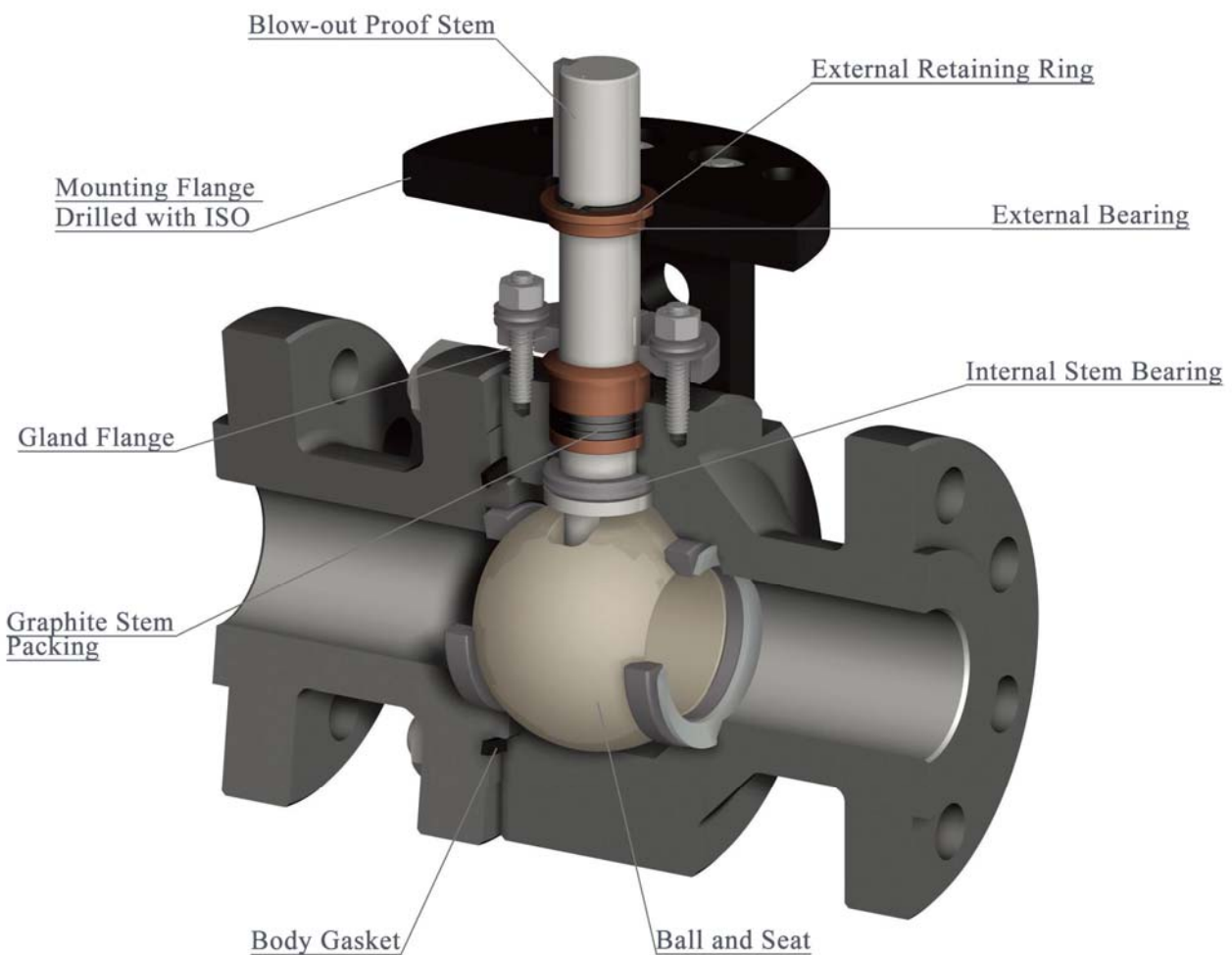
While metal or hard graphite seats are extremely heat resistant, other sealing components such as gland packing and flange gaskets are made of flexible graphite, another heat resistant material, so that no part of the valve will be affected by extraordinarily heated environments.

Maintenance ease

Split body construction of the valve body provides the convenience of easy maintenance, a critical requirement for handling slurries and other viscous fluids.

Valve automation

Quarter-turn valve drive mechanism makes mounting of valve automation measures such as electric and pneumatic actuators technically easier.



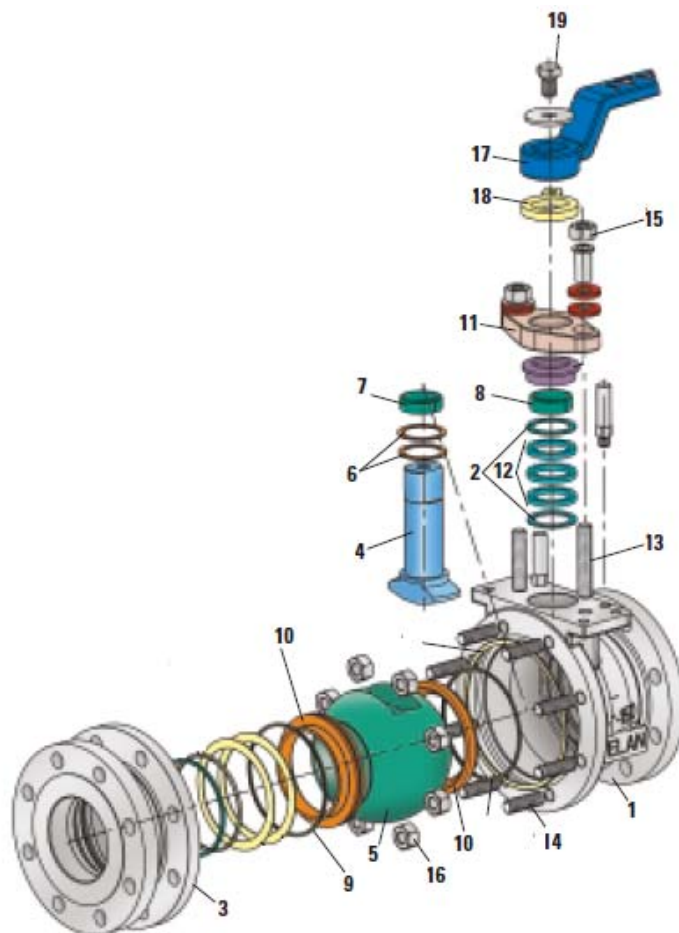
High flow efficiency

Full port design provides maximized and linearized flow characteristics with minimized pressure loss while the line flow travels through the valve bore. This is a design requirement particularly important for trouble-free service of slurries and other viscous fluids.

Metal seated ball valve

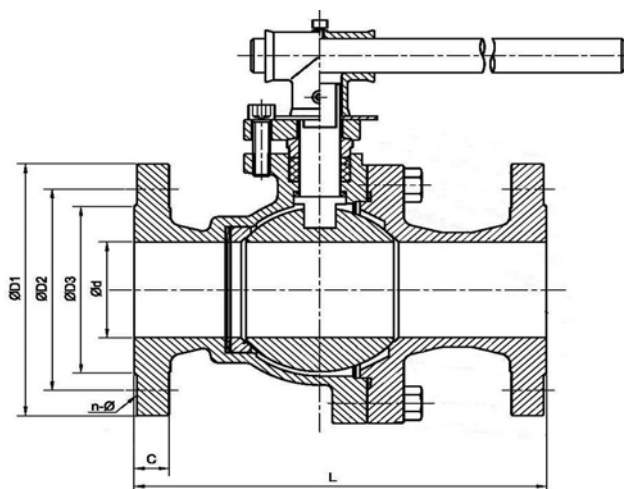
Rigid construction with fully metallic contact between the ball and seats, and high durability of trim materials make metal seated ball ideally suited to highly abrasive services handling slurries and other viscous fluids.

PARTS LIST AND MATERIAL



Item	Parts Name	Standard Material		
1	Body	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M
2	Retaining ring	ASTM A182 F6a/304/316	ASTM A182 F304	ASTM A182 F316
3	Body end	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M
4	Stem	ASTM A182 F6a/304/316	ASTM A182 F304	ASTM A182 F316
5	Ball	ASTM A182 F6a/304/316	ASTM A182 F304	ASTM A182 F316
6	Thrust washer	Carbon steel	Stainless steel	Stainless steel
7/8	Stem bushing	Graphite	Graphite	Graphite
9	Back-up ring	Carbon steel	Stainless steel	Stainless steel
10	Seat	ASTM A182 F6a/304/316	ASTM A182 F304	ASTM A182 F316
11	Gland flange	ASTM A182 F6a/304/316	ASTM A182 F304	ASTM A182 F316
12	Packing ring	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M
13	Gland stud	ASTM A194 B7	ASTM A193 B8	ASTM A193 B8M
14	Body stud	ASTM A194 B7	ASTM A193 B8	ASTM A193 B8M
15	Gland nut	ASTM A194 2H	ASTM A194 8	ASTM A194 8M
16	Body gasket	304+Graphite	304+Graphite	316+Graphite
17	Handle	Carbon steel	Carbon steel	Carbon steel

DIMENSION



Nominal Pressure (MPa)	DN (mm)	L (mm)	d (mm)	D1 (mm)	D2 (mm)	D3 (mm)	C (mm)	n-Φ (mm)
PN1.0	DN15	130	15	95	65	46	14	4-14
	DN20	140	20	105	75	56	16	4-14
	DN25	150	25	115	85	65	16	4-14
	DN32	165	32	140	100	76	18	4-18
	DN40	180	40	145	110	85	18	4-18
	DN50	203	50	165	125	99	20	4-18
	DN65	222	65	180	145	120	18	4-18
	DN80	241	80	200	160	132	20	8-18
	DN100	305	100	215	180	155	20	8-18
	DN125	356	125	245	210	185	22	8-18
	DN150	394	150	280	240	210	22	8-22
	DN200	457	200	340	295	266	24	8-22
PN1.6	DN15	130	15	95	65	46	14	4-14
	DN20	140	20	105	75	56	16	4-14
	DN25	150	25	115	85	65	18	4-14
	DN32	165	32	140	100	76	18	4-18
	DN40	180	40	150	110	84	20	4-18
	DN50	203	50	165	125	99	20	4-18
	DN65	222	65	185	145	118	20	4-18
	DN80	241	80	200	160	132	20	8-18
	DN100	305	100	220	180	156	22	8-18
	DN125	356	125	250	210	184	22	8-18
	DN150	394	150	285	240	211	24	8-22
	DN200	457	200	340	295	266	24	12-22
PN2.5	DN15	130	15	95	65	45	16	4-14
	DN20	140	20	105	75	55	16	4-14
	DN25	150	25	115	85	65	16	4-14
	DN32	165	32	135	100	78	18	4-18

Nominal Pressure (MPa)	DN (mm)	L (mm)	d (mm)	D1 (mm)	D2 (mm)	D3 (mm)	C (mm)	n-Φ (mm)
	DN40	180	40	145	110	85	18	4-18
	DN50	203	50	160	125	100	20	4-18
	DN65	222	65	180	145	120	22	8-18
	DN80	241	80	195	160	135	22	8-18
	DN100	305	100	230	190	160	24	8-23
	DN125	356	125	270	220	188	28	8-25
	DN150	394	150	300	250	218	30	8-25
	DN200	457	200	360	310	278	34	12-25
PN4.0	DN15	140	15	95	65	45	16	4-14
	DN20	152	20	105	75	55	16	4-14
	DN25	165	25	115	85	65	16	4-14
	DN32	180	32	140	100	76	18	4-18
	DN40	190	40	150	110	85	18	4-18
	DN50	216	50	160	125	100	20	4-18
	DN65	241	65	180	145	120	22	8-18
	DN80	283	80	195	160	135	22	8-18
	DN100	305	100	230	190	160	24	8-23
	DN125	381	125	270	220	188	28	8-25
	DN150	403	150	300	250	218	30	8-25
	DN200	502	200	375	320	282	38	12-30
PN6.3	DN15	160	15	105	75	55	18	4-14
	DN20	170	20	125	90	68	20	4-18
	DN25	180	25	135	100	78	22	4-18
	DN32	200	32	155	110	76	24	4-22
	DN40	190	40	165	125	95	24	4-23
	DN50	216	50	175	135	105	26	4-23
	DN65	241	65	200	160	130	28	8-23
	DN80	283	80	210	170	140	30	8-23
	DN100	305	100	250	200	168	32	8-25
	DN125	381	125	295	240	202	36	8-30
PN10.0	DN15	160	15	105	75	46	20	4-14
	DN20	170	20	125	90	55	22	4-18
	DN25	180	25	140	100	65	24	4-18
	DN32	200	32	155	110	76	24	4-22
	DN40	220	40	170	125	84	26	4-22
	DN50	250	50	195	145	99	28	4-26
	DN65	270	65	220	170	138	32	8-25
	DN80	300	80	230	180	148	34	8-25
DN100	330	100	265	210	172	38	8-30	

*Other dimension is on request.