

Design

Datian steel ball valves are designed manufactured to provide maximum service life and dependability. All ball valves are full ported and meet the design requirements of American Petroleum Institute Standard API 608&API 6D British standard BS5351 and generally conform to American Society of Mechanical engineers standard ASME B16.34 valves are available in a complete range of body/bonnet materials and trims.

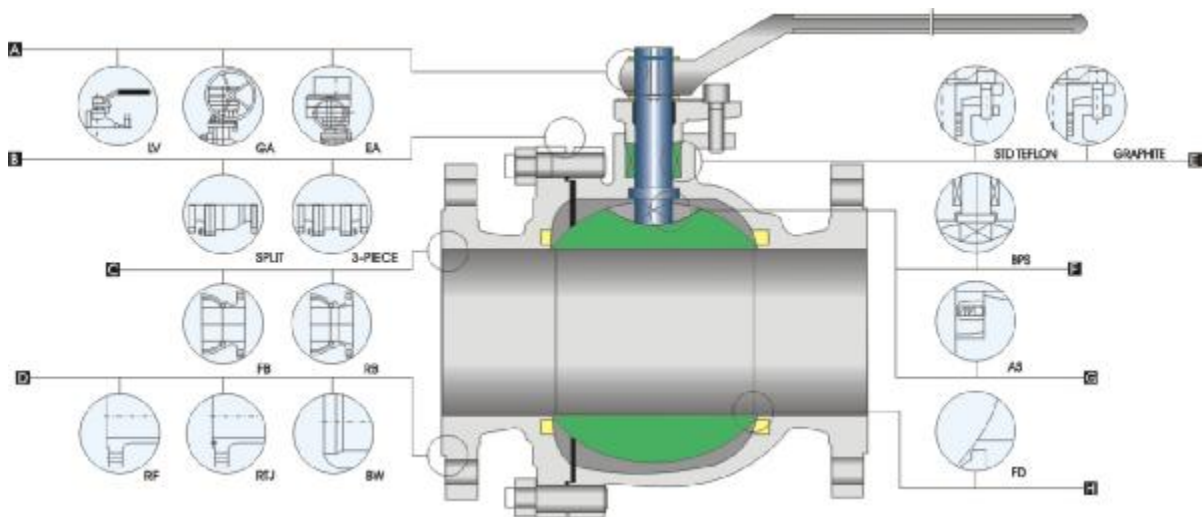
Rang of Materials

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steel, for special applications they can be supplied in other grades of alloy and stainless steel. There's a full range of trim materials to match any service optional packing and gasket materials are available for a full range of service conditions.

Available Modifications for Steel Valves

Trim changes
End connection modifications
Packing and gasket change
Operator mounting
Handwheel extensions

Pressure equalizing
As or fd
Customer specified coatings
Weld end bore changes
Oxygen&chlorine cleaning&packaging



A Operating

Extended lever for easy operation. also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services

B Body&Bonnet

Split or 3-piece, split body & bonnet for 12" & small. disassembles easily for repair components.

C BORE

Full bore or reduced bore. full-bore design provides exceptional flow control.

D End Connections

A choice of flanged RTJ flanged or butt welding end for piping flexibility.

E Packing

Std packing multiple v-teflon packing, combined with live loading, maintains packing compression under high-cycle and severe service applications. Graphite packing is used for high-temperature situation.

F BPS

Blow-out proof stem
A pressure-safe stem shoulder design that protects against failure under excess pressure.

G AS

Anti-statics. A metallic contact is always granted between ball and stem/body to discharge eventual statics build-up during service.

H FS

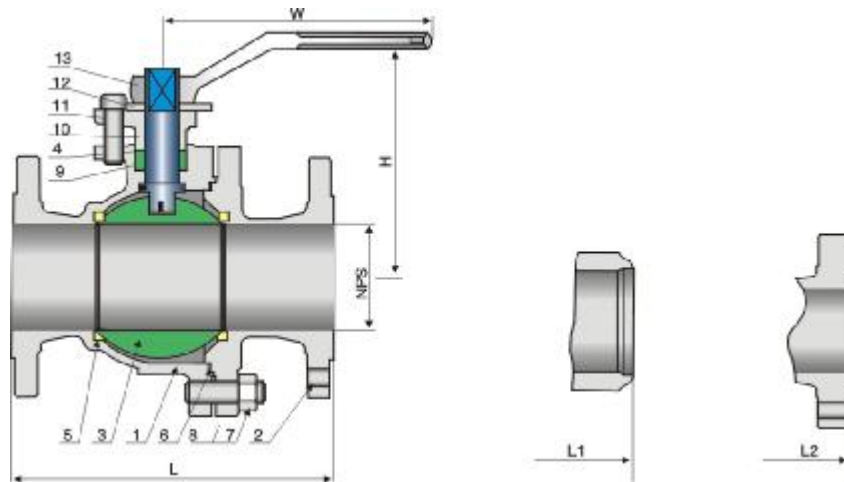
Fire safe designed to API 607 or BS 6755 to grant their operation suitability in case of fire. Secondary metal-to-metal seal acts as backup if primary seal is destroyed by fire. Valves ordered for compliance with API 607 will be provided with graphite packing and gaskets.

Applicable Standards:

- STEEL BALL VALVES API 608/API 6D
- STEEL BALL VALVES ISO 14313
- FIRE SAFE, API 607
- ANTI STATIC, API 608
- STEEL VALVES, ASME B16.34
- FACE TO FACE ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS ASME B16.25
- INSPECTION AND TEST, API 598/ API 6D

Design description

- FULL PORT DESIGN
- BG. BOLTED BONNET. SPLIT BODY
- FLOATING BALL TYPE
- BLOW-OUT PROOF STEM
- FIRE DURABLE CONSTRUCTION
- ANTI STATIC DEVICE
- STOPPER DEVICE
- ISO 5211 MOUNTING PAD
- FLANGED OR BUTTWELDING ENDS
- AVAILABLE WITH WG OPERATOR



Standard Material Specifications

No	Part Name	ASTM Material					
		Carbon steel	304 Type	316 Type	304L Type	316L Type	20 Alloy
1	Body	A216 WCB	A182 F304	A182 F316	A182 F304L	A182 F316L	20ALLOY
2	Bonnet	A216 WCB	A182 F304	A182 F316	A182 F304L	A182 F316L	20ALLOY
3	Ball	A105 ENP*1	A182 F304	A182 F316	A182 F304L	A182 F316L	20ALLOY
4	Stem	A276 410	A276 304	A276 316	A276 304L	A276 316L	20ALLOY
5	Seat Ring	R.PTFE	R.PTFE	R.PTFE	R.PTFE	R.PTFE	R.PTFE
6	Bonnet Gasket	304+Graphite	304+Graphite	304+Graphite	304+Graphite	304+Graphite	20-Alloy+Graphite
7	Bonnet Bolt	A193 B7	A 193 B8	A193 B8	A193 B8	A193 B8	A194 B8
8	Bonnet Nut	A194 2H	A194 B	A194 B	A194 B	A194 B	A194 8
9	Packing	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
10	Gland Flange	A105	A182 F304	A182 F316	A182 F304L	A182 F316L	20Alloy
11	Gland Bolt	A193 B7	A193 B8	A193 B8	A193 B8	A193 B8	A193B8
12	Stop Plane	Carbon steel	Carbon steel+Zn				Carbon steel+Zn
13	Handle	Carbon steel	Carbon steel				Carbon steel
*1	A182 F304 Optional						

Main Outline Dimensions & Weight Class 150Lb

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in mm
	15	20	25	40	50	65	80	100	150	200	250	300	
L (RF)	4.25	4.62	5.00	6.50	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	in
	108	117	127	165	178	190	203	229	394	457	533	610	mm
L1 (BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.75	3.50	4.12	6.12	7.25	8.00	10.00	11.00	13.50	16.50	in
	55	55	70	90	105	155	185	205	255	280	345	420	mm
W	5	5	6	8	14	16	20	20	24	32	32	32	in
	130	130	160	200	350	400	500	500	600	800	800	800	mm
wt(kg)	2.3	3	4.5	7	9.5	15	19	33	93	160	200	280	RF
	1.8	2.8	3.7	6.2	8.5	14	21	35	98	170	225	295	BW

Main Outline Dimensions & Weight Class 300Lb

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in mm
	15	20	25	40	50	65	80	100	150	200	250	300	
L (RF)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	in
	140	152	165	190	216	241	283	305	403	502	568	648	mm
L1 (BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.75	3.50	4.12	6.12	7.25	8.00	10.00	11.00	13.50	16.50	in
	55	55	70	90	105	153	187	206	255	280	345	420	mm
W	5	5	6	8	14	16	20	20	24	32	32	32	in
	130	130	160	200	350	400	500	500	600	800	800	800	mm
wt(kg)	2.5	3.5	5.5	10.5	14.5	23.5	30	55	118	200	250	330	RF
	1.8	2	3.2	5.5	8.7	15	18	36	85	152	182	232	BW

Main Outline Dimensions & Weight Class 600Lb

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in mm
	15	20	25	40	50	65	80	100	150	200	250	300	
L/L1 (RF/BW)	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00	22.00	-	-	-	in
	165	190	216	241	292	330	356	432	559	-	-	-	mm
L2 (RTJ)	-	-	-	-	11.62	13.12	14.12	17.12	22.12	-	-	-	in
	-	-	-	-	295	333	359	435	562	-	-	-	mm
H	2.38	2.38	3.00	4.00	4.75	6.88	8.38	9.25	11.38	-	-	-	in
	61.5	61.5	78	101	120	174	212	234	289	-	-	-	mm
W	5	6	8	14	16	20	24	24	32	-	-	-	in
	130	160	200	350	400	500	600	600	800	-	-	-	mm
wt(kg)	3.3	4.5	7.2	13.5	19	31	39	71	153	-	-	-	RF/RTJ
	2.6	3.1	4.8	8	3	22	27	53	120	-	-	-	BW