

Design

KATA steel ball valves are designed and 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.

Ranges 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 KATA Cast Steel Valves

Trim changes

End connection modifications

Packing and gasket changes

Operator mounting

Handwheel extensions

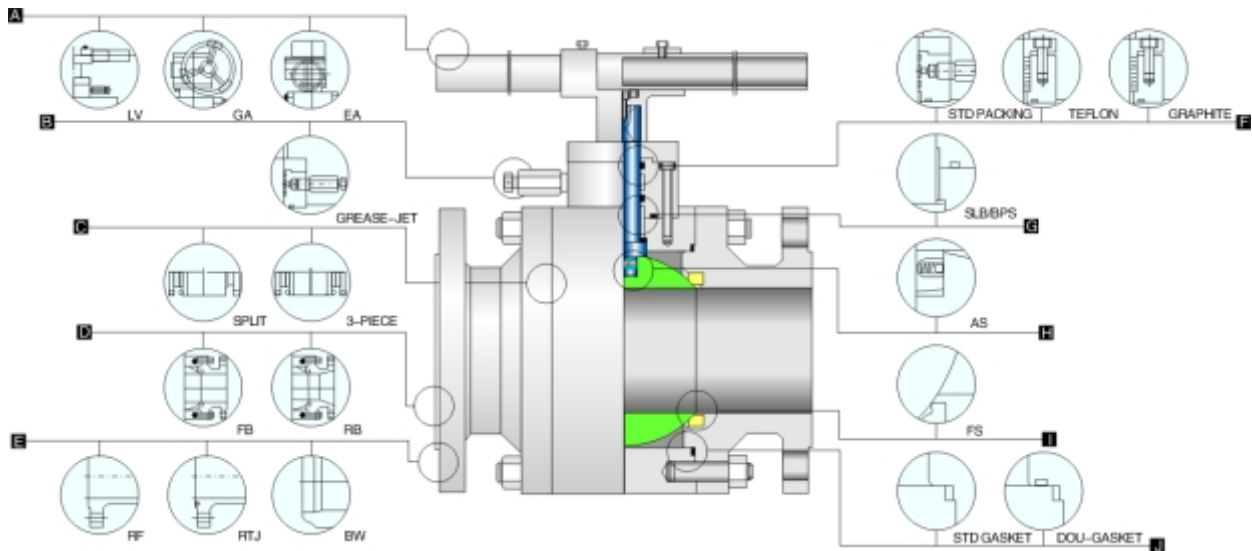
Pressure equalizing

AS OR FS

Customer specified coatings

Weld end bore changes

Oxygen & chlorine cleaning & packaging



A Operation

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

B Grease-jet joint

Installed in prescriptive part accord to the apply and satisfied with ecumenical situations and realize seal in spot with maintenance easily.

C Body & Bonnet

Split or 3-piece, split body & bonnet for 8" & small. Disassembles easily for repair or replacement of internal components.

D BORE

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

E End Connections

A choice of flanged RTJ flanged or buttwelding end for piping flexibility.

F 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.

G SLB

Self-lubrication bearing. Easy operation, low torque and longer life

H AS

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

I 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 back up if primary seal is destroyed by fire. Valves ordered for compliance with API 607 will be provided with graphite packing and gaskets.

J Gasket

Std gasket or dou-gasket. Std gasket adopt high-performance rubber seal ring. Dou-gasket adopt high-performance rubber seal ring and spiral wound graphite.

BPS

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

Floating, Forged Steel Ball Valve 150Lb

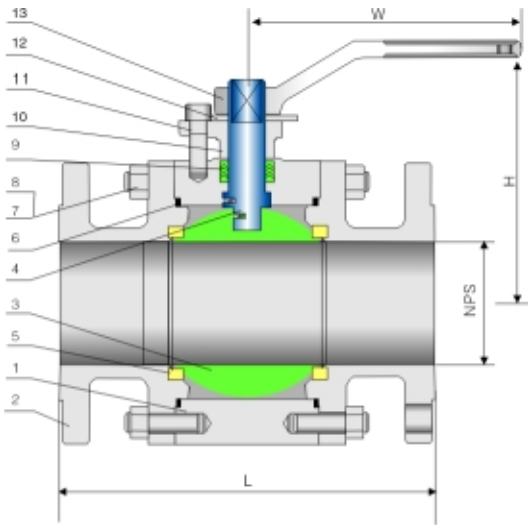


Applicable Standards:

- STEEL BALL VALVES API 608/API 6D
- STEEL BALL VALVES ISO 14313
- FIRE SAFE, API 607
- ANTI STATICS, 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 descriptions:

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



Materials of parts

No	Part Name	Carbon Steel	ASTM Materials 18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹⁾	A182-F316	A182-F304 ¹⁾
4	Stem	A276-304	A276-316	A276-304
5	Seat Ring	R.PTFE		
6	Bonnet Gasket	Graphite+304 ²⁾	PTFE	Graphite+304 ²⁾
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing	PTFE		
10	Gland Flange	A105	A182-F316	A350-LF2
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle	Carbon Steel		

Note: 1)A105+ENP optional
2)Spiral wound construction.



Dimensional datas of ANSI Class 150Lb

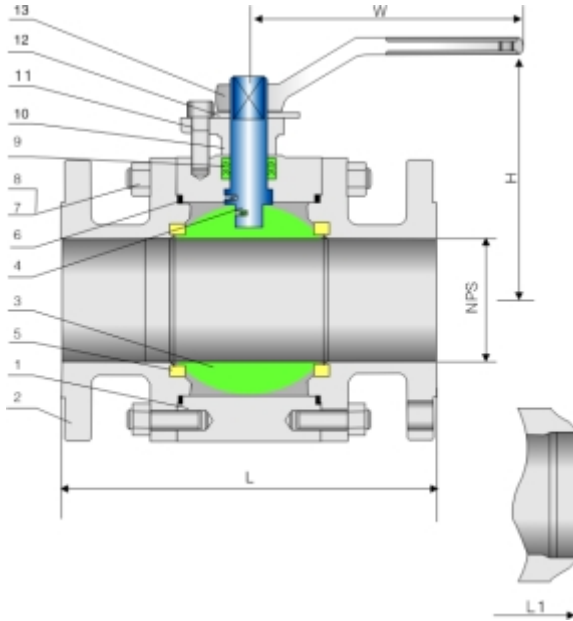
NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
L (RF)	4.25 108	4.62 117	5.00 127	6.50 165	7.00 178	7.50 190	8.00 203	9.00 229	15.50 394	18.00 457	21.00 533	24.00 610	in mm
L1 (BW)	5.50 140	6.00 152	6.50 165	7.50 190	8.50 216	9.50 241	11.12 283	12.00 305	18.00 457	20.50 521	22.00 559	25.00 635	in mm
H	2.12 55	2.12 55	2.50 65	3.38 85	4.00 100	6.00 150	7.00 180	9.25 235	9.88 250	11.00 280	12.62 320	15.38 390	in mm
W	8 200	8 200	12 300	12 300	166 400	16 400	24 600	24 600	24 600	24 600	32 800	32 800	in mm
wt(kg)	3.1 2.6	4.1 3.9	6 5.2	9.5 8.7	12.8 11.8	20 19	26 28	45 47	126 131	216 226	270 295	378 393	RF BW

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8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing	PTFE		
10	Gland Flange	A105	A182-F316	A350-LF2
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle	Carbon Steel		

Note: 1)A105+ENP optional
2)Spiral wound construction.

Dimensional datas of ANSI Class 300Lb

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in mm
L (RF)	5.50 140	6.00 152	6.50 165	7.50 190	8.50 216	9.50 241	11.12 283	12.00 305	15.88 403	19.75 502	22.38 568	25.50 648	in mm
L1 (BW)	5.50 140	6.00 152	6.50 165	7.50 190	8.50 216	9.50 241	11.12 283	12.00 305	18.00 457	20.50 521	22.00 559	25.00 635	in mm
H	2.12 55	2.12 55	2.50 65	3.38 85	16.00 400	16.00 400	24.00 600	24.00 600	9.88 250	11.00 280	12.62 320	15.38 390	in mm
W	8 200	8 200	12 300	12 300	10 250	12 300	14 350	19 480	24 600	24 600	32 800	32 800	in mm
wt(kg)	3.5 2.8	4.6 3.1	6.7 4.4	10.5 5.5	14.5 8.7	22 13.5	29 17	50 31	141 108	242 194	302 234	423 325	RF BW

Dimensional datas of ANSI Class 600Lb

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in mm
L/L1 (RF/BW)	6.50 165	7.50 190	8.50 216	9.50 241	11.50 292	13.00 330	14.00 356	17.00 432	22.00 559	-	-	-	in mm
L2 (RTJ)	-	-	-	-	11.62 295	13.12 333	14.12 359	17.12 435	22.12 562	-	-	-	in mm
H	2.25 58	2.25 58	2.62 68	3.50 89	4.12 105	6.25 158	7.50 190	9.75 247	10.38 262	-	-	-	in mm
W	8 200	12 300	12 300	16 400	16 400	24 600	24 600	24 600	32 800	-	-	-	in mm
wt(kg)	4.5 3.8	5.5 4.1	8 5.6	12.5 7	18 12	27 18	35 23	61 43	172 139	-	-	-	RF BW