

Ball Valve
Single-piece construction
Cast Steel, Floating Ball
Full Bore/ Regular Bore
Flanged Ends

1/2"-6" (15-150mm)
Class 150, 300
Design as per BS EN ISO 17292

Applications

- Process and general industry
- For water, steam, gas, oil and other media
- Other applications on request

Operating data

- Maximum allowable pressure 740 psi (51 bar)
- Maximum allowable temperature 392°F (200°C)
- Pressure/Temperature rating as per ASME B 16.34 or seat Pressure/temperature rating, whichever is less

Body Materials

- ASTM A 216 WCB Carbon Steel
- ASTM A 351 CF8 Type 304 Stainless Steel
- ASTM A 351 CF8M Type 316 Stainless Steel

Ball Materials

- ASTM A 351 CF8 Type 304 Stainless Steel
- ASTM A 351 CF8M Type 316 Stainless Steel

Seat Material

- PTFE

Design

- As per BS EN ISO 17292
- Pressure, Temperature rating as per ASME B 16.34
- Testing as per BS EN 12266 / API 598
- Blowout proof stem
- ISO 5211 Mounting Pad
- Floating Ball
- Antistatic feature

Variants on Request

- Gear execution
- Pneumatic Actuator
- Electric Actuator
- Fire safe configuration
- Alternate seats in RPTFE, PTFE + Graphite, Peek, Nylon, Acetal Resin

Remarks :

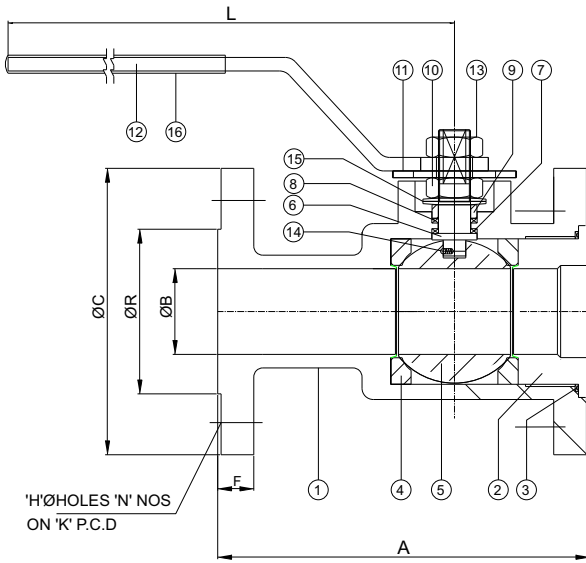
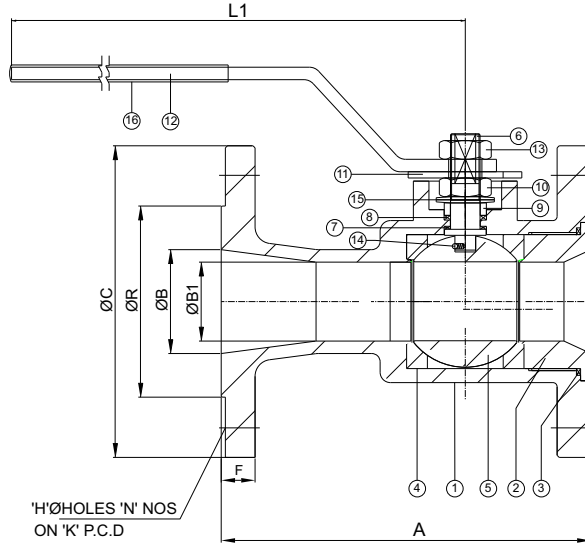
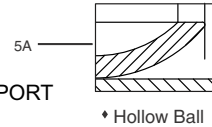
Other Type Series Booklets

ECOLINE BLC-S 400-800
ECOLINE BLD-S 150-300
ECOLINE BLT-S 150-300
Operating Instructions

On all enquiries/orders please specify :

1. Valve type
2. ANSI pressure class
3. Size
4. Design pressure
5. Design temperature
6. Operating temperature
7. Differential pressure-shut off
8. Flow medium
9. Material of construction
10. Variants
11. Type Series Booklet no.
12. Valve data sheet (if applicable)

When ordering spares, indicate valve serial number.


1/2" TO 6" FULL PORT

1/2" TO 6" REGULAR PORT


Dimensions in mm

Size	Class 150							FP	RP	FP	RP	
	A		C	R	F	φ K	N	φ H	L	L1	B	B1
	RP	FP										
DN 15	108	108	89	35	11.1	60.5	4	16	166	166	14	14
DN 20	117	117	98.5	43	11.1	70.0	4	16	194	166	20	20
DN 25	127	127	108	51	11.1	79.5	4	16	194	194	25	20
DN 40	165	165	127	73	14.5	98.5	4	16	235	235	38	32
DN 50	178	178	152.4	92	15.8	120.5	4	19	278	235	50	38
DN 65	190	190	178	105	17.4	140.0	4	19	322	278	63	50
DN 80	203	203	191	127	19.1	152.5	4	19	322	322	75	63
DN 100	229	229	229	157	24.0	190.5	8	19	332	322	100	75
DN 150	267	394	280	216	25.5	241.3	8	22.2	750	322	150	100

Size	Class 300							FP	RP	FP	RP	
	A		C	R	F	φ K	N	φ H	L	L1	B	B1
	RP	FP										
DN 15	140	140	95	35	12.7	66.7	4	16	166	166	14	14
DN 20	152	152	115	43	14.7	82.6	4	19	194	166	20	20
DN 25	165	165	125	51	15.9	89.0	4	19	194	194	25	20
DN 40	190	190	155	73	19.1	114.3	4	22.2	278	194	38	32
DN 50	216	216	165	92	20.7	127.0	8	19	278	278	50	38
DN 65	241	241	190	105	23.9	149.2	8	22.2	322	278	63	50
DN 80	283	283	210	127	27.0	168.3	8	22.2	322	322	75	63
DN 100	305	305	255	157	30.2	200	8	22.2	322	322	100	75
DN 150	403	403	320	216	39.7	330.2	12	25.4	750	322	150	100

Test Specifications for WCB

Test	Medium	Class - 150		Class - 300	
		kg/cm ²	psi	kg/cm ²	psi
Shell	Water	32	456	80	1138
Seat	Water	23*	328*	58*	825*
Seat	Air	6	85	6	85

* Seat test pressure shall be as per the value indicated in the table above or 1.1 times the rated seat pressure given in the Pressure/Temp. Graph, whichever is less.

Design Specifications

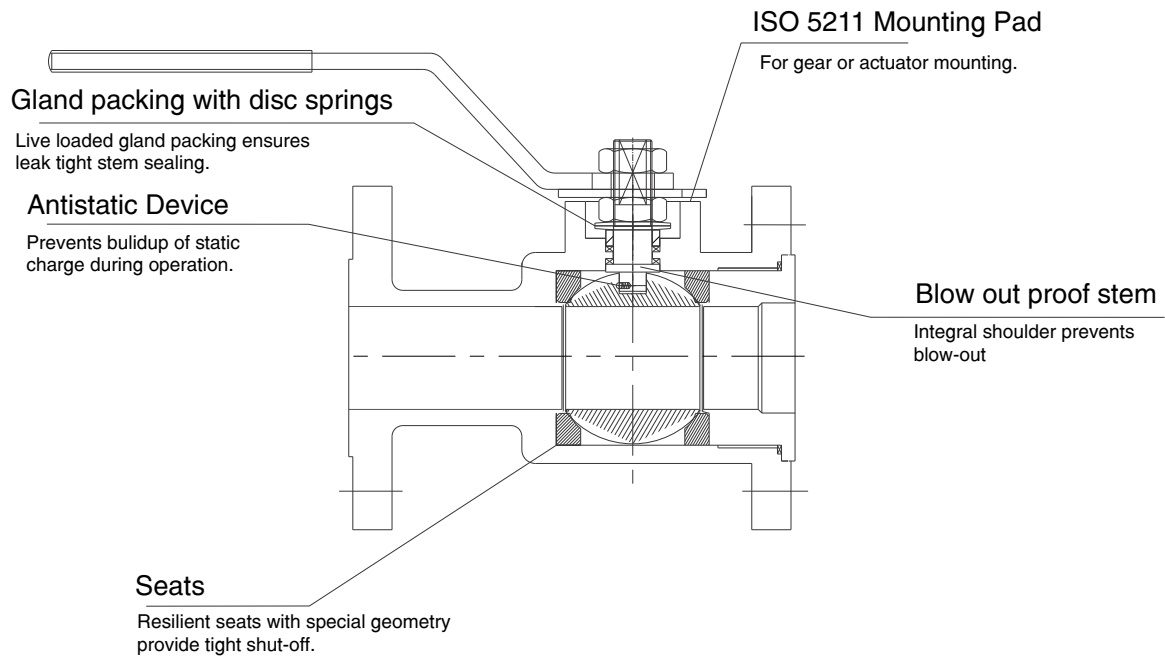
General valve design	: BS EN ISO 17292
Pressure, temperature rating	: ASME B 16.34 (within the limits of the provided seat material).
Flanged End	: ASME B 16.5
End to end / Face to face dimension	: ASME B 16.10
Testing standard	: BS EN 12266-1 / API 598

Material

Part No.	Description	Material		
1	Body	ASTM A	ASTM A	ASTM A
2	Body Connector	216 WCB	351 CF8	351 CF8M
3	Body Seal	PTFE	PTFE	PTFE
4	Ball Seat	PTFE	PTFE	PTFE
5	♦Ball	CF8M/CF8	CF8	CF8M
6	Stem	SS316/SS304	SS304	SS316
7	Stem Seal	CFT	CFT	CFT
8	Gland Packing	CFT	CFT	CFT
9	Gland	SS316/SS304	SS304	SS316
10	Gland Nut	A194-2H	A194-8	A194-8M
11	Lock Plate	MS. Cd. Plated	MS. Cd. Plated	MS. Cd. Plated
12	Lever	MS. Cd. Plated	MS. Cd. Plated	MS. Cd. Plated
13	Lever Nut	A194-2H	A194-2H	A194-2H
14	Antistatic Device	SS316/SS304	SS316/SS304	SS316
15	Disc Spring	Spring Steel	Spring Steel	Spring Steel
16	Lever Sleeve	PVC	PVC	PVC

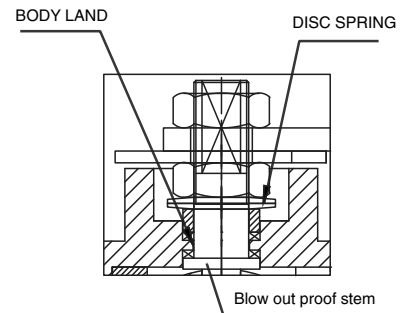
- ♦ Hollow ball for 150# (5A) 40 mm to 150 mm FP
- ♦ Hollow ball for 150# (5A) 50 mm to 150 mm RP

Product features to our customer benefit



Blow-out proof stem

“KSB” valves are of bottom entry stem design. The stem is inserted from inside the body and stem collar sits on the integral land provided in the body. Higher the line pressure, tighter will be the seal. This is a safety features and it does not allow stem to come out and eliminates possible accidents.

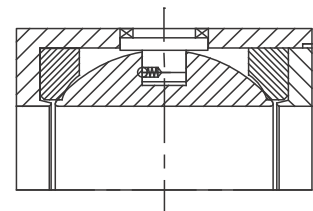


Stem Seal with Belleville Washer

Stem packing consist of stem seal and gland packing rings as per design requirement which ensures leak tight stem sealing. Disc springs are pre-compressed and ensure that gland packing load is maintained on the stuffing box. This compensates the varying forces on the sealing gland resulting from changes in pressure and temperature. This also gives excellent thermal conductivity

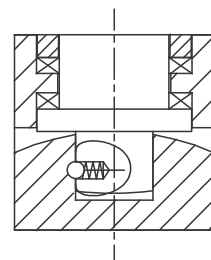
Floating Ball

In closed position, when the line pressure is acting on the upstream side ball, it moves/floats freely towards the down stream side seat giving effective tight sealing. In the open position, the fluid gets trapped in the body cavity and builds up the pressure. Hole provided on the ball prevents this and ensures no damage to the seats.



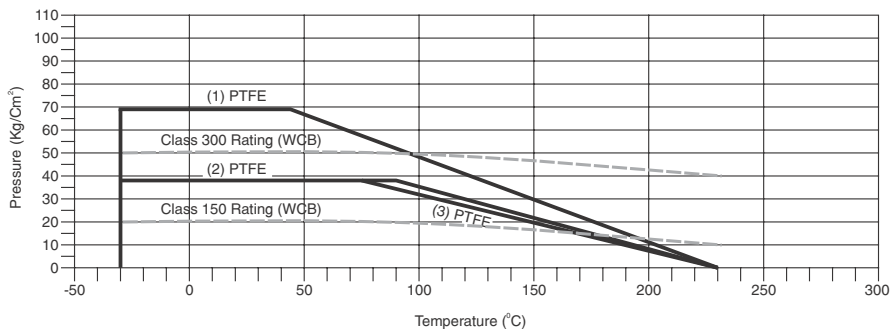
Antistatic Feature

During operation, constant rubbings of the ball and PTFE seats may generate static electricity which can lead to fire hazard especially when the service medium is of inflammable nature. A spring and a small ball fitted between ball and stem ensures electrical continuity. For smaller size valves below 40 mm, carbon filled PTFE stem seals provides/meets this continuity.

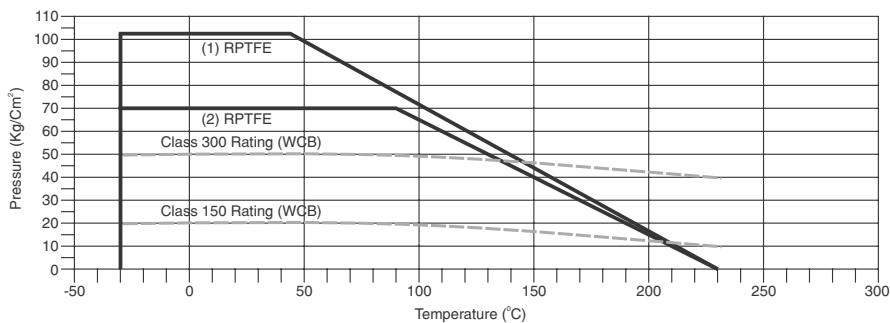


Pressure Temperature Graphs

Pressure Temperature Rating : PTFE Seat

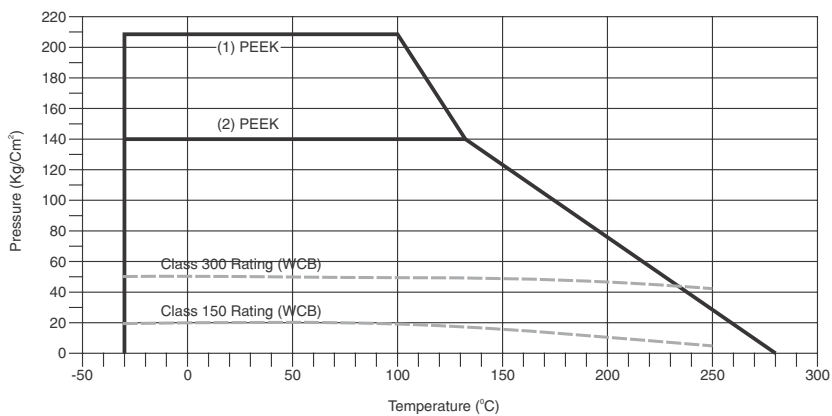


Pressure Temperature Rating : RPTFE Seat



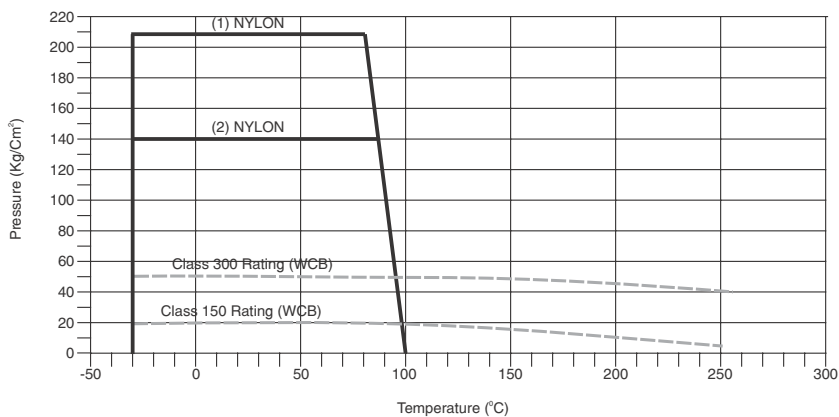
Pressure Temperature Rating : PEEK Seat

Note :- For sizes > 50mm, FP, contact KSB



Pressure Temperature Rating : Nylon / Delrin Seat

Note :- For sizes > 50mm, FP, contact KSB



KSB Pumps Limited

151, Mettupalayam Road, NSN Palayam Post, Coimbatore 641 031. India.
Tel.: +91 422 2468222 Fax: +91 422 2468232 www.ksbindia.co.in

Technical matter subject to change without prior notice.