ECOLINE BLC-S 400-800



Ball Valve Three-piece construction Cast/Forged Steel, Floating Ball Full/Regular Bore Welded and Threaded Ends

1/2"-2" (15-50mm) Class 400, 800 Design as per BS EN ISO 17292

Applications

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

Operating data

- Maximum allowable pressure 1975 psi (136 bar)
- Maximum allowable temperature 392°F (200°C)
- Pressure/Temperature rating as per ASME B 16.34 (within the limits of the provided seat material).

Body Materials

 ASTM A 216 WCB Carbon Steel (Cast) ASTM A 351 CF8 Type 304 Stainless Steel ASTM A 351 CF8M Type 316 Stainless Steel ASTM A 105 Carbon Steel (Forged)

Ball Materials

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

Seat Material

• PTFE/RPTFE up to 392°F (200°C)

Design

- As per BS EN ISO 17292
- Pressure, Temperature rating as per ASME B 16.34 (within the limits of the provided seat material).
- Testing as per BS EN 12266
- Blowout proof stem
- Socket weld ends as per ASME B 16.11
- Threaded ends to NPT/BSP as per ASME B 1.20.1 / BS 2779

Variants on Request

- Fire safe configuration
- Alternate Seats in RPTFE, PTFE + Graphite, Peek, Nylon, Acetal Resin
- Flanged Ends (150-300)
- **Buttweld Ends**
- Other material of construction

Remarks:

Other Type Series Booklets

ECOLINE BLT-S 150-300 : 8221.51/12-12 Operating Instructions : 8221.81/12-12

On all enquiries/orders please specify:

1. Valve type

2. ASME 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

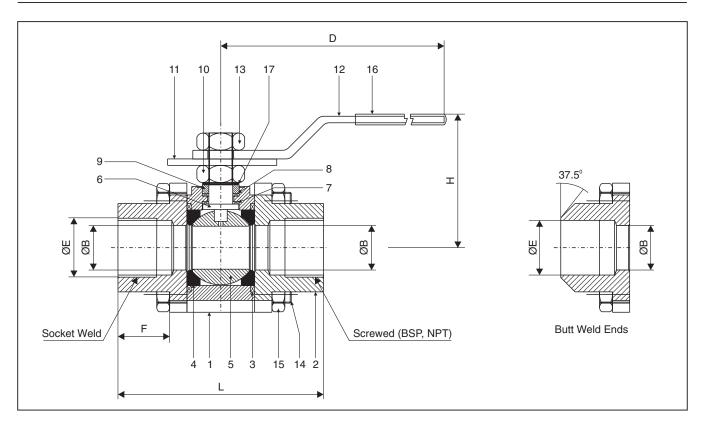
11. Type Series Booklet no.

12. Valve data sheet (if applicable)

When ordering spares, indicate valve serial number.







Design Specifications

General valve design : BS EN ISO 17292 Pressure, temperature rating : ASME B 16.34

(within the limits of the provided seat material).

: ASME B 16.11

Socket weld Butt weld : ASME B 16.9 End to end / : Manufacturer Standard

Face to face dimension

Testing standard : BS EN 12266

Dimensions in mm

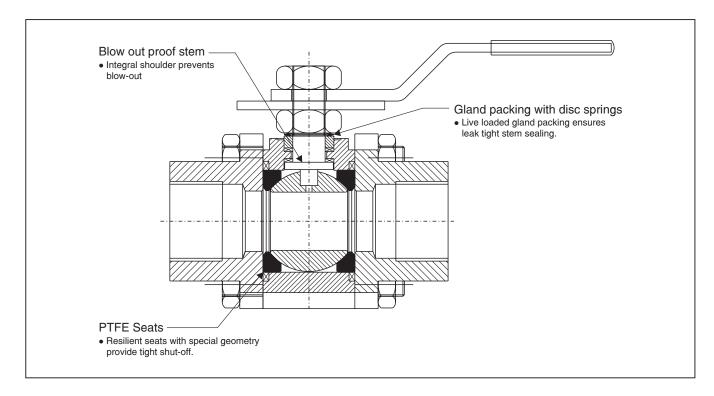
Class - 400 & 800									
Full Port			Regular Port						
L	В	Н	D	L	В	Н	D	E	F
72	14	48	114	69	11	45	114	21.72	13
								21.97	
94	20	59	143	72	14	48	114	27.05	14
								27.30	
101	25	65	143	94	20	59	143	33.78	17
								34.03	
113	32	75	180	101	25	65	143	42.35	17
								42.80	
127	38	81	180	113	32	75	180	48.64	18
								48.90	
133	50	101	200	124	38	81	180	61.11	20
	72 94 101 113	L B 72 14 94 20 101 25 113 32 127 38	Full Port L B H 72 14 48 94 20 59 101 25 65 113 32 75 127 38 81	Full Port L B H D 72 14 48 114 94 20 59 143 101 25 65 143 113 32 75 180 127 38 81 180	Full Port L B H D L 72 14 48 114 69 94 20 59 143 72 101 25 65 143 94 113 32 75 180 101 127 38 81 180 113	Full Port Regula L B H D L B 72 14 48 114 69 11 94 20 59 143 72 14 101 25 65 143 94 20 113 32 75 180 101 25 127 38 81 180 113 32	Full Port Regular Port L B H D L B H 72 14 48 114 69 11 45 94 20 59 143 72 14 48 101 25 65 143 94 20 59 113 32 75 180 101 25 65 127 38 81 180 113 32 75	Full Port Regular Port L B H D L B H D 72 14 48 114 69 11 45 114 94 20 59 143 72 14 48 114 101 25 65 143 94 20 59 143 113 32 75 180 101 25 65 143 127 38 81 180 113 32 75 180	Full Port Regular Port L B H D L B H D E

Material

Part No.	Description	Material				
1	Body	ASTM A	ASTM A	ASTM A	ASTM A	
2	Body Connector	216 WCB	351 CF8	351 CF8M	105	
3	Body Seal	PTFE	PTFE	PTFE	RPTFE	
4	Ball Seat	PTFE	PTFE	PTFE	RPTFE	
5	Ball	CF8M	CF8	CF8M	CF8M	
6	Stem	SS316	SS304	SS316	SS316	
7	Stem Seal	PTFE	PTFE	PTFE	RPTFE	
8	Gland Packing	PTFE	PTFE	PTFE	RPTFE	
9	Gland	SS316	SS304	SS316	SS316	
10	Gland Nut	A194-2H	A194-8	A194-8M	A194-2H	
11	Lock Plate	MS. Cd. Plated	MS. Cd. Plated	MS. Cd. Plated	MS. Cd. Plated	
12	Lever	MS. Cd. Plated	MS. Cd. Plated	MS. Cd. Plated	MS. Cd. Plated	
13	Lever Nut	A194-2H	A194-2H	A194-2H	A194-2H	
14	Body Stud	A193-B7	A193-B8	A193-B8M	A193-B7	
15	Body Nut	A194-2H	A194-8	A194-8M	A194-2H	
16	Lever Sleeve	PVC	PVC	PVC	PVC	
17	Disc Spring	Spring Steel	Spring Steel	Spring Steel	Spring Steel	



Product features to our customer benefit

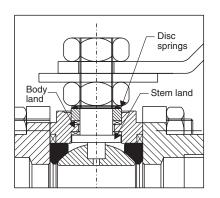


Blow-out Proof stem

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 feature and does not allow stem to come out and eliminates possible accidents.

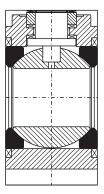
Stem seal with Disc springs

Stem packing consists 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 due to changes in pressure and temperature. It 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.



Technical matter subject to change without prior notice.

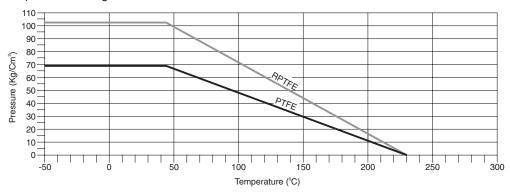
Test Specifications

Test	Medium	Class - 400		Class - 800		
		psi	bar	psi	bar	
Shell	Water	1482	103	2963	205	
Seat	Water	1087*	75*	2173*	150*	
Seat	Air	85	6	85	6	

^{*} Seat test pressure will be as per the value given above or 1.1 times the rated seat pressure given in the Pressure/Temp. Graph, whichever is less.

Pressure Temperature Graphs

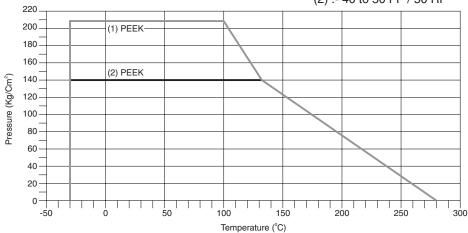
Pressure Temperature Rating: PTFE / RPTFE Seat



Pressure Temperature Rating: Peek Seat

(1):- 15 to 25 FP / 15 to 40 RP

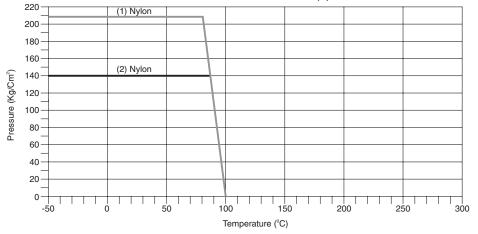
(2) :- 40 to 50 FP / 50 RP



Pressure Temperature Rating: Nylon / Delrin Seat

(1) :- 15 to 25 FP / 15 to 40 RP

(2):- 40 to 50 FP / 50 RP





KSB Pumps Limited