Type Series Booklet
8221.51/12-12

ECOLINE BLT-S 150-300

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

2"-8" (50-200mm)
Class 150, 300
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 740 psi (51 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
• 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	up to 320°F (160°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
- ISO 5211 mounting pad
- Locking device
- Antistatic device

Variants on Request

- Gear execution
- Pneumatic actuator
- Fire safe configuration
- Alternate seats in RPTFE, PTFE + Graphite, Peek, Nylon, Acetal Resin
- Other material of construction

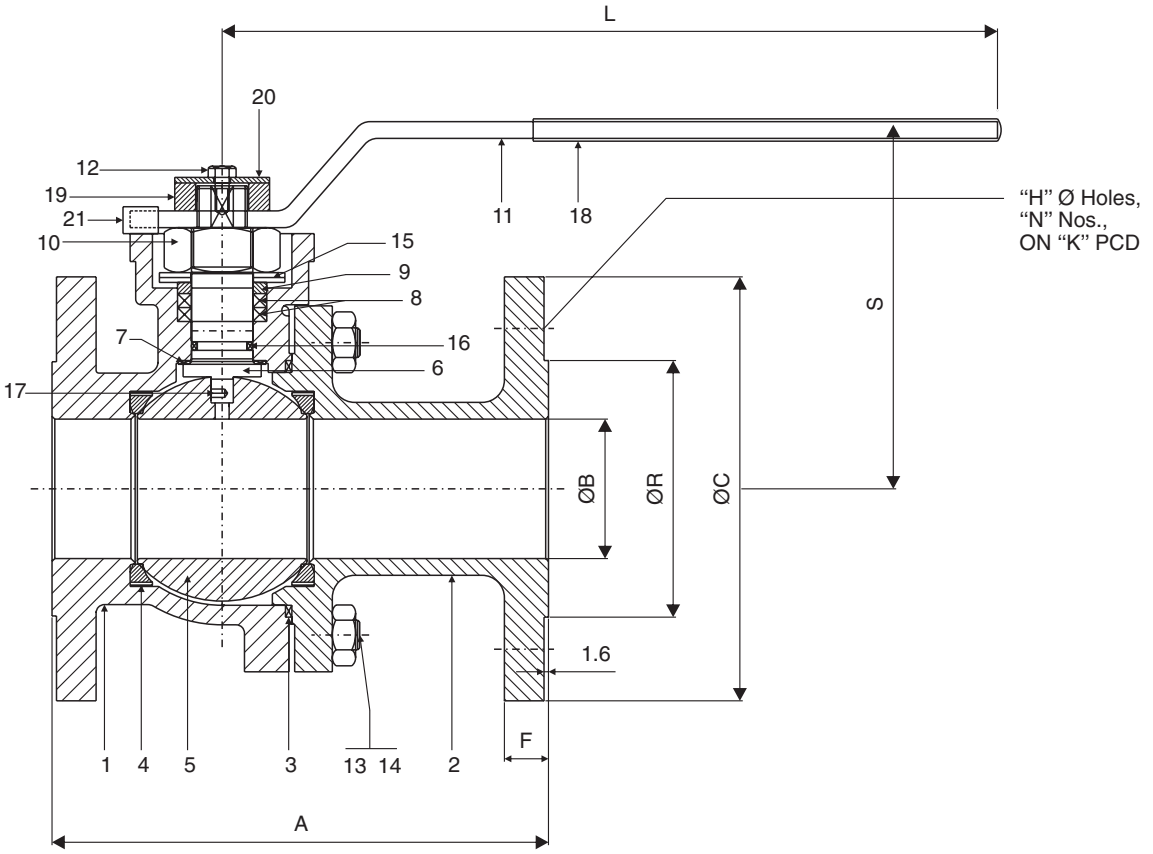
Remarks :

Other Type Series Booklets
ECOLINE BLC-S 400-800 : 8221.52/12-12
Operating Instructions : 8221.81/12-12

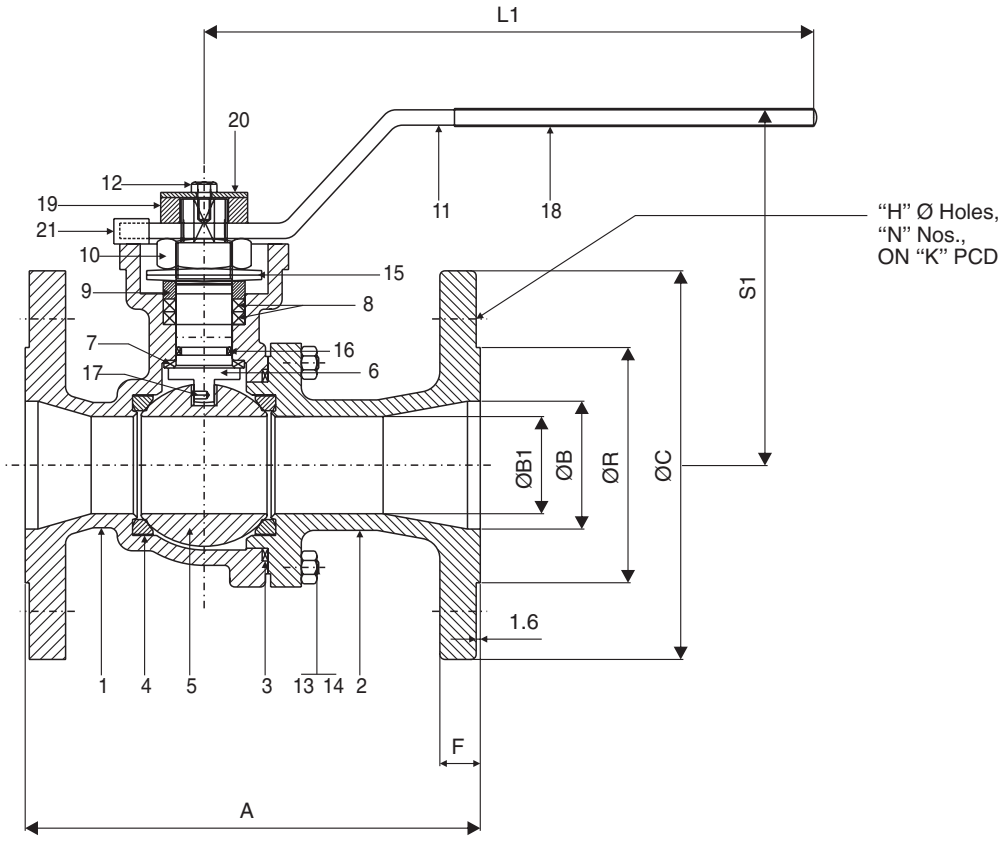
On all enquiries/orders please specify :

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.



Full Port



Regular Port

Design Specifications

General 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 dimension / Face to face : ASME B 16.10
Testing standard : BS EN 12266

Dimensions in mm

Class 150									FP	RP	FP	RP	FP & RP	RP
Size	A		C	R	F	K	N	H	S	S1	L	L1	B	B1
	RP	FP												
DN 50	178	178	152	92	15.8	120.6	4	19	135	127	278	278	50	38
DN 65	190	190	178	105	17.6	139.7	4	19	160	135	318	278	63	50
DN 80	203	203	191	127	19.1	152.4	4	19	180	160	318	318	75	63
DN 100	229	229	230	157	24.0	190.5	8	19	205	180	318	318	100	75
DN 125	254	254	254	186	24.0	216.0	8	22.2	275	205	629	318	125	100
DN 150	267	394	279.5	216	25.5	241.3	8	22.2	290	205	750	318	150	100
DN 200	292	457	343	270	28.5	298.4	8	22.2	GEAR BOX	290	GEAR BOX	750	200	150

Class 300								FP	RP	FP	RP	FP & RP	RP
Size	A	C	R	F	K	N	H	S	S1	L	L1	B	B1
DN 50	216	165	92	22.4	127.0	8	19	135	127	278	278	50	38
DN 65	241	190.5	105	25.4	149.2	8	22.2	160	135	318	278	63	50
DN 80	283	210	127	28.5	168.1	8	22.2	180	160	318	318	75	63
DN 100	305	254	157	31.8	200.1	8	22.2	205	180	318	318	100	75
DN 125	381	279.5	186	35.0	235.0	8	22.2	275	205	629	318	125	100
DN 150	457	318	216	36.5	269.8	12	22.2	290	205	750	318	150	100
DN 200	502	381	270	41.2	330.2	12	25.4	GEAR BOX	290	GEAR BOX	750	200	150

FP - Full Port
RP - Regular Port

Materials

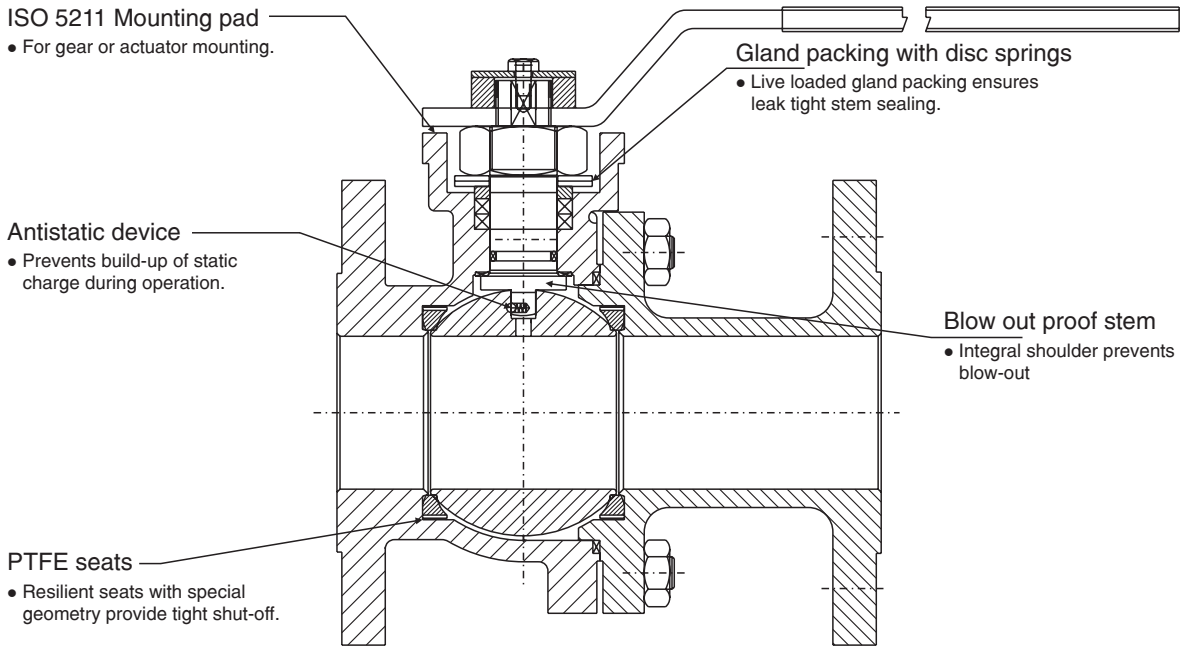
Part No.	Description	Material		
1	Body	ASTM A	ASTM A	ASTM A
2	Body Connector	216 WCB	351 CF8	351 CF8M
3	Body Seal	PTFE	PTFE	PTFE
4	Ball Seat	PTFE	PTFE	PTFE
5	Ball	CF8M	CF8	CF8M
6	Stem	SS316	SS304	SS316
7	Stem Seal	PTFE	PTFE	PTFE
8	Gland Packing	PTFE	PTFE	PTFE
9	Gland	SS316	SS304	SS316
10	Gland Nut	A 194-2H	A 194-8	A194-8M
11	Lever	MS. Cd. Plated	MS. Cd. Plated	MS. Cd. Plated
12	Lever Bolt	A 194-2H	A 194-2H	A194-2H
13	Body Stud	A 193-B7	A 193-B8	A193-B8M
14	Body Nut	A 194-2H	A 194-8	A194-8M
15	Disc Spring	Spring Steel	Spring Steel	Spring Steel
16	'O' Ring	FKM	FKM	FKM
17	Antistatic Device	SS316	SS316	SS316
18	Lever Sleeve	PVC	PVC	PVC
19	Lever Spacer	Carbon Steel	Carbon Steel	Carbon Steel
20	Lever Washer	Carbon Steel	Carbon Steel	Carbon Steel
21	Stopper Pin	Carbon Steel	Carbon Steel	Carbon Steel

Test Specifications

Test	Medium	Class - 150		Class - 300	
		kg/cm^2	psi	kg/cm^2	psi
Shell	Water	32	427	80	1125
Seat	Water	22*	315*	58*	825*
Seat	Air	6	85	6	85

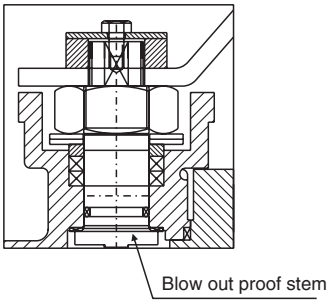
* Seat test pressure will be as per the value given above or 1.1 times the rated seat pressure given in the Pressure/Temp. Graph, whichever is less.

Product features to our customer benefit



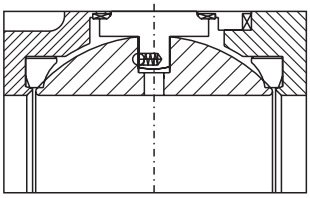
Blow-out proof stem

"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 the will be the seal. This is a safety features and it does not allow stem to come out and eliminates possible accidents.



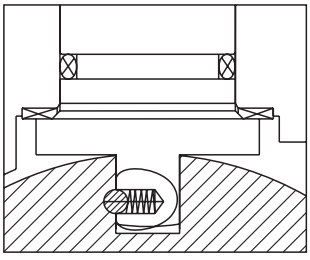
Floating Ball

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

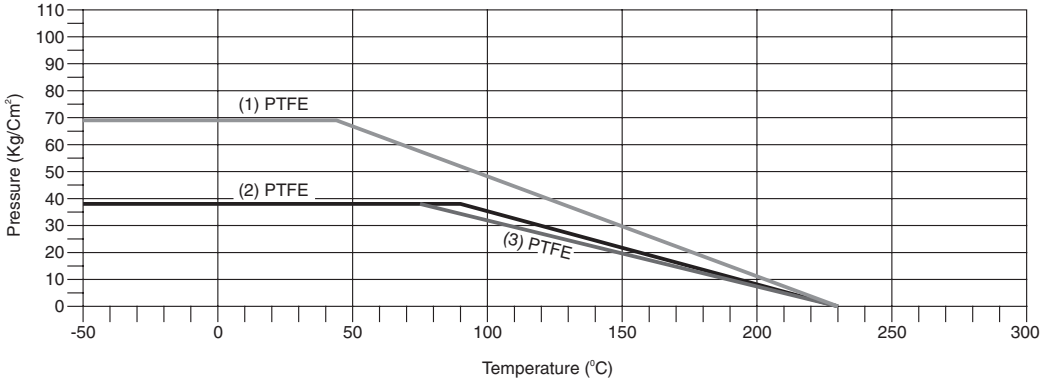
During operation, constant rubbings of the ball and PTFE seats may generate static electricity which can lead to fire hazard especially when the service medium is of inflammable nature. A spring and a small ball fitted between ball and stem ensures electrical continuity. For smaller size valves below 50 mm, 35% carbon filled PTFE stem seals provides/meets this continuity.



Pressure Temperature Graphs

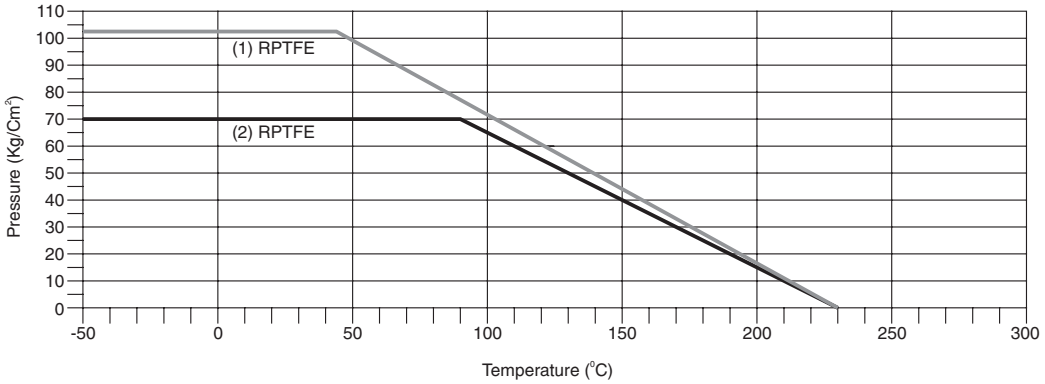
Pressure Temperature Rating : PTFE Seat

(1) For 15 to 100 FP / 10 to 125 RP
(2) For 125 to 150 FP / 150 to 200 RP
(3) For 200 FP



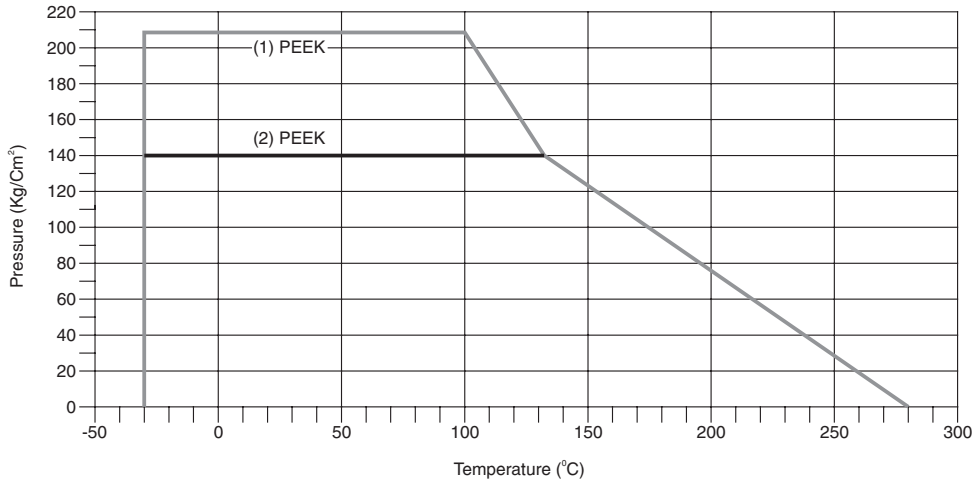
Pressure Temperature Rating : RPTFE Seat

(1) For 15 to 100 FP / 10 to 125 RP
(2) For 125 to 200 FP / 150 to 200 RP



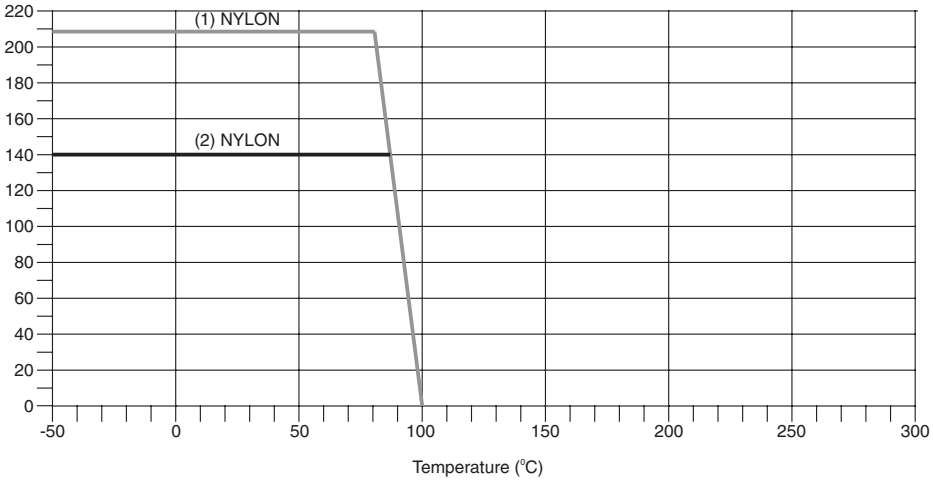
Pressure Temperature Rating : PEEK Seat
Note :- For sizes > 50mm, FP, contact KSB - P&A Coimbatore

(1) For 15 to 25 FP / 15 to 40 RP
(2) For 40 to 50 FP / 50 to 65 RP



Pressure Temperature Rating : Nylon / Delrin Seat
Note :- For sizes > 50mm, FP, contact KSB - P&A Coimbatore

(1) For 15 to 25 FP / 15 to 40 RP
(2) For 40 to 50 FP / 50 to 65 RP



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Mktg. Serv./12-12/2000