



Series FSB 23 Standard 2-Piece

Full Port Ball Valves

1/4" – 2" (DN8 – DN50)
3000 psi (Class 1500)



FIRE-SAFE



ANTI-STATIC



GUARANTEE SAFETY

3000psi & Fire-Safe Ball Valve

DIE ERSTE Series FSB 23 is 2-piece screw in structure, and full port. It has been tested and approved for Fire-Safe Certification of API 607 4th Edition. To meet tough requirements of API 607 4th Edition, Series FSB 23 ball valve is able to sustain high pressure of 3000psi and still provide smooth operation. The blowout-proof stem is standard equipment for FSB 23. The stem is inserted from inside the bore and will not shoot out under high pressure, and thus, provides safer working conditions.

The fire-safe design package is consisted of three parts: fire-safe lip, anti-static device, and sealing parts. The fire-safe lip is precisely machined to match the ball. In the case of fire and the soft ball seat has been decomposed, the fire-safe lip act as a secondary seal with the floating ball. Anti-static device grounded charges built up by valve operation, and prevent explosion, especially with flammable fluid. Valve sealing parts can be selected from various materials: graphite, PEEK, DELRIN, and Nylon. Please specify the seat material before making any inquiries or purchases. For fire-safe purposes, graphite body seal and stem packings are used.

Series FSB 23 ball valve is equipped with thrust washer and gland nuts to achieve non-leak quality. The thrust washer not only prevents galling between stem and body, it is also considered as a secondary stem seal and reduces torque. The gland nut is tightly sealed to prevent leakage and act as the last guard. Series FSB 23 ball valve is accompanied with different choices of seat materials to choose from. FSB 23 can also be used in normal condition with a change of ball seat; it can be used like other conventional 2-pc ball valve.

API 607 Fire-Safe Test Approved

Series FSB 23 fire-safe ball valves have been fire tested according to API 607 4th Edition, conforming to standards of limiting leakages in high temperature situations

Anti-Static Design

Anti-static device are standard equipments for Series FSB 23 fire safe ball valve. The device discharges static electricity build-up from the friction between the body, ball, and stem of the valve.

Certifications of FSB 23

API 607 4th Edition
Certified

API 607 Fire Test for Soft seated
Quarter Turn Valves

CRN
REGISTERED



Canadian Registration Number



ATEX Directive 94/9/EC
Explosive Prevention

CE marking



The whole series of ball valves are approved according to European Directive 97/23/EC.

Temperature Rating

- -20°F to 176°F (-28°C to 80°C) with DELRIN® seat
- -20°F to 500°F (-28°C to 260°C) with PEEK™ seat

End Connection

Female pipe thread to NPT, DIN259/2999, and BS standards

Body Material

ASTM CF8M, CF8, WCB

(DIN 1.4408, 1.4308, and 1.0619)

Size Range

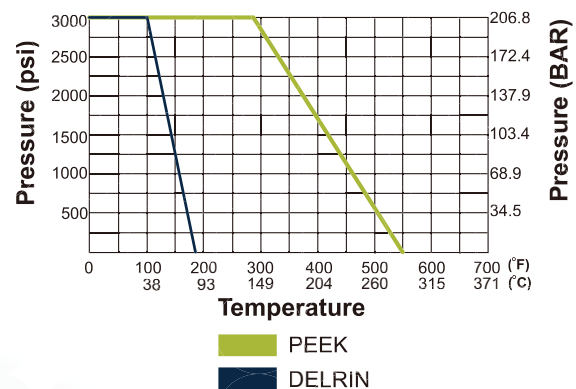
1/4" – 2" (DN8 ~ DN50)

Standards and Specifications

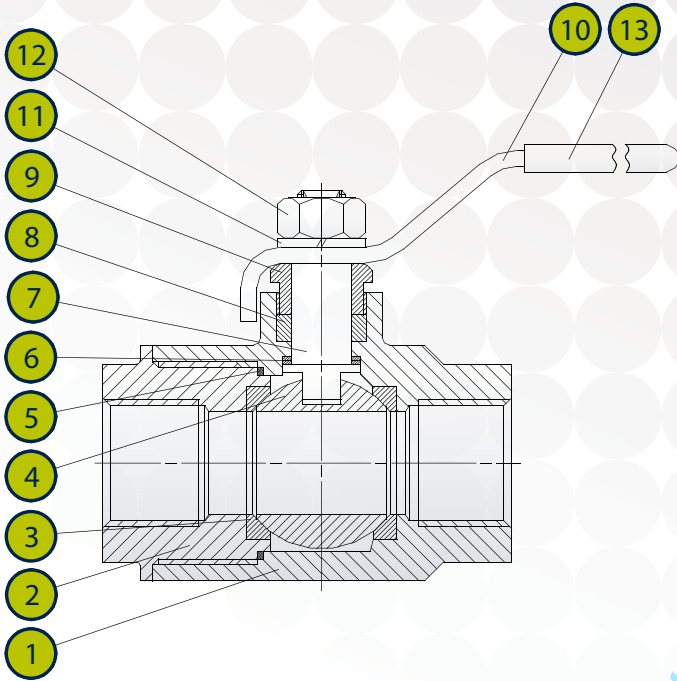
Threaded end-to-end length meets to
NPT, DIN 259/2999

Valve body and end cap connections are high quality investment cast, and designed to meet ASME regulations. Heat treatment can be provided as well upon request: stainless steel material can be solution annealed, and carbon steel can be normalized. Valve stems are designed to follow ASME/ANSI specifications. All valves are factory tested to meet API 598 and MSS SP-72. Series FSB 23 are approved by API 607 4th Edition Fire-Safe Test

Valve Body Rating with Seat Material Plot:



FSB 23 Fire-Safe Ball Valve



NO	PART NAME	MATERIAL
1	BODY	CF8M / WCB
2	END CAP	CF8M / WCB
3	BALL SEAT	Delrin® PEEK™ (optional)
4	SOLID BALL	CF8M
5	BODY SEAL	GRAPHITE
6	THRUST WASHER	GRAPHITE
7	STEM	SS 316
8	STEM PACKING	GRAPHITE
9	BELLEVILLE SPRING	SS 301
10	HANDLE	SS 304
11	SPRING WASHER	SS 304
12	NUT	SS 304
13	HANDLE SLEEVE	VINYL

Dimensions inch/mm

Size Inch DN	d	L	W	H	Weight (approx)
1/4"	0.45	2.72	4.80	2.64	0.7
8	11.4	69	122	67	0.7
3/8"	0.5	2.72	4.80	2.64	0.7
10	12.7	69	122	67	0.7
1/2"	0.5	2.72	4.80	2.64	0.7
15	12.7	69	122	67	0.7
3/4"	0.75	3.48	5.83	2.91	1.1
20	19	88.5	148	74	1.1
1"	1.00	4.02	6.61	3.15	1.7
25	25.4	102	168	80	1.7
1 1/4"	1.26	4.55	6.61	3.39	2.4
32	32	115.5	168	86	2.4
1 1/2"	1.50	4.88	10.23	4.76	3.8
40	38	124	260	121	3.8
2"	1.75	5.87	10.23	4.96	5.9
50	44.5	149	260	126	5.9

