

A
Bray
High
Performance
Company

Flow-Tek®

A Subsidiary of BRAY INTERNATIONAL, Inc.

1 Piece Reduced Port Ball Valves: 1/4" - 2"

Optional Fire Safe, API 607 4th Edition Certified



Series S20
Series FS20

Flow-Tek's Series S20 ball valves offer a compact, one piece body design. The one piece body supplies maximum structural strength while minimizing the number of potential leak paths.

These valves feature quarter turn operation, bottom entry blowout proof stems and low operating torque. Live-loaded, self-adjusting stem seals automatically adjust to compensate for changes in wear and temperature. Series S20 Valves are available in both standard and fire safe versions.

Fire Safe - Certified to API 607 4th Edition
Series S20 valves have been thoroughly fire tested and meet these latest standards. Additionally, the adjustable Graphite stem packing provides reduced torque and a very high cycle life.

Other features include replaceable seats and seals, stainless steel safety latch handles and high quality investment cast bodies. All bodies are marked with a foundry heat number for full traceability.

Pressure Rating 2000 psi WOG
Steam Rating 150 psi WSP

Temperature Range
-50°F to +450°F
-46°C to +232°C

End Connections Threaded - NPT

Body Material Stainless Steel



Technical Data

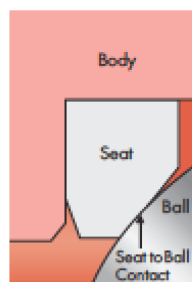
COMPONENTS AND MATERIALS

Item	Description	Stainless Steel	Qty.
1	Body	ASTM A351 Gr CF8M	1
2	Body Insert	ASTM A351 Gr CF8M	1
3	Ball	ASTM A351 Gr CF8M	1
4A	Seat	RPTFE	2
4B	Seat Support	ASTM A351 Gr CF8M	1
5	Stem	ASTM A479 Type 316	1
6	Body Seal	Graphite* / RPTFE	1
10	Anti-Static Device	SS304	2
12	Thrust Washer	RPTFE	1
14	Stem Packing	Graphite* / RPTFE	1
15	Gland Ring	SS304	1
18	Belleville Washer	SS301	2
19	Lock Washer	SS304	1
25	Handle	SS304	1
26	Handle Lock Nut	SS304	2
28	Handle Sleeve	Vinyl	1
29	Locking Device	SS304	1

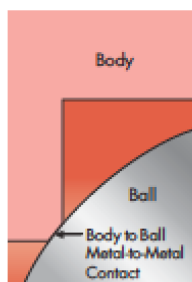
*Fire Safe valves / Non Fire Safe valves.

DIMENSIONS

Size ins mm	A	øB	C	C1	C2	D	G	H	U UNC	C _V	Weight lbs kg
1/4 8	2.32 59	0.36 9.2	1.73 44	0.53 13.5	1.10 28	4.37 111	0.50 12.7	1.12 28.5	10-24	5.5	0.3 .14
3/8 10	2.32 59	0.36 9.2	1.73 44	0.53 13.5	1.10 28	4.37 111	0.50 12.7	1.12 28.5	10-24	5.5	0.3 .14
1/2 15	2.64 67	0.36 9.2	1.73 44	0.53 13.5	1.10 28	4.37 111	0.50 12.7	1.12 28.5	10-24	5.5	0.3 .14
3/4 20	2.80 71	0.49 12.5	1.89 48	0.65 16.5	1.34 34	4.37 111	0.50 12.7	1.12 28.5	10-24	10	0.4 .18
1 25	3.35 85	0.63 16	2.36 60	0.81 20.5	1.59 40.5	5.55 141	0.87 22.1	1.37 34.8	10-24	16.3	0.7 .32
1 1/4 32	3.70 94	0.79 20	2.56 65	0.98 25	1.77 45	5.55 141	0.87 22.1	1.37 34.8	10-24	20	1.02 .46
1 1/2 40	3.94 100	0.98 25	2.80 71	1.12 28.5	2.11 53.5	6.34 161	0.93 23.6	1.50 38.1	1 1/4 - 20	37	1.3 .59
2 50	4.65 118	1.26 32	3.03 77	1.36 34.5	2.32 59	6.34 161	0.93 23.6	1.50 38.1	1 1/4 - 20	60	2.05 .93



Pre-Burn



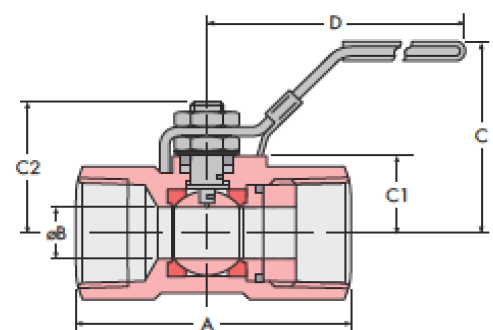
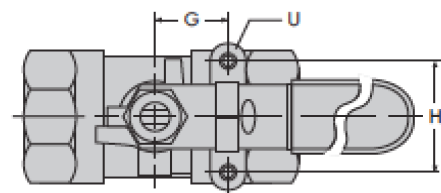
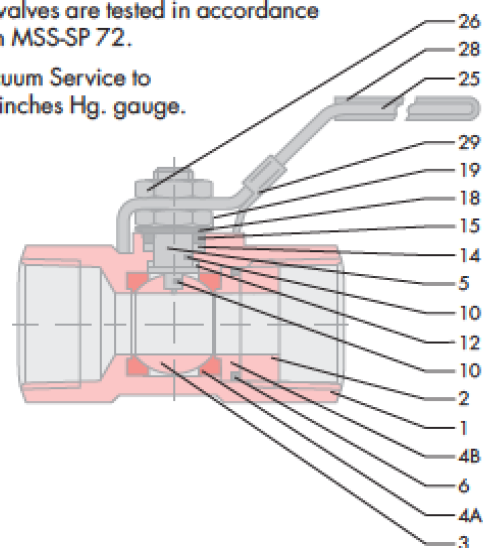
Post-Burn

Fire Safe Flow-Tek's Model S20 valves with graphite stem packing and body seal are certified fire safe. In the event of a fire, after heat destroys the primary resilient seat, the ball makes contact with the secondary metal seat, forming a secure seal. The graphite body seal prevents external leakage. The graphite live-loaded stem packing prevents stem leakage. All valves have anti-static devices as standard, grounding ball and stem to body.

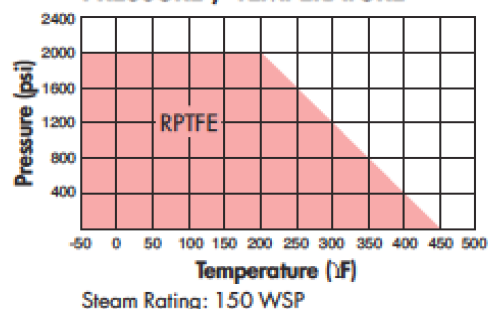
All Series S20 valves comply with: MSS-SP 72 and NACE MR0175.

All valves are tested in accordance with MSS-SP 72.

Vacuum Service to 29 inches Hg. gauge.



PRESSURE / TEMPERATURE



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