

# FLOW-TEK SERIES 85 2 PIECE THREADED FULL PORT BALL VALVES

Flow-Tek's S85 ball valves have been designed for ease of automation. Standard 2-piece valve bodies are investment cast stainless steel, solution annealed for the highest quality and added strength. All body castings are marked with a foundry heat number for full traceability.

These valves offer quarter turn operation and low operating torque. The S85 features live-loaded, self-adjusting stem seals that automatically adjust packing to compensate for changes in wear and temperature. Other features include replaceable seats and seals, anti-

static devices, blowout proof stems, and stainless steel safety latch handles.

**Secure Mount:** The S85 features Flow-Tek's Secure Mount integrally cast actuator mounting pad. The Secure Mount fully complies with ISO 5211, ensuring positive alignment and interchangeability of the actuator.

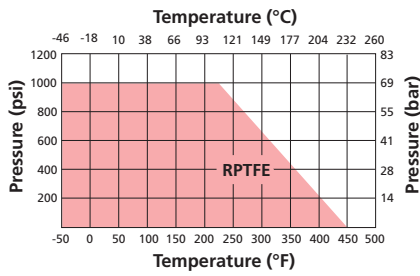
**S85 ball valves are NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372 certified.**



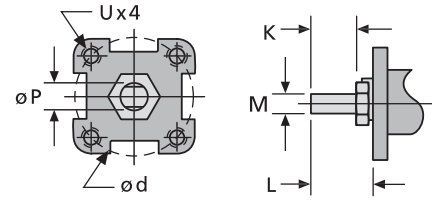
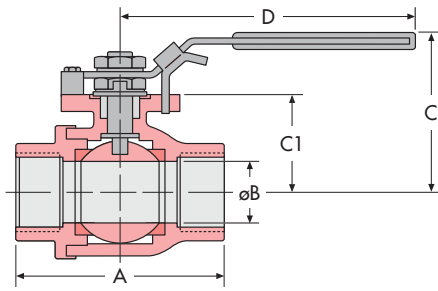
Size	Pressure Rating	Steam Rating	Temperature Range	End Connections	Body Material
½" to 3" 15mm to 80 mm	1000 psi WOG 69 bar	150 psi WSP 10.3 bar	-50°F to +450°F -46°C to +232°C	Threaded - NPT	Stainless Steel



### Pressure / Temperature



Steam Rating: 150 psi WSP



Verify mounting dimensions before manufacturing mounting hardware.

### Dimensions

Size ins mm	A	ØB Port	C	C1	D	Ød	K	L	M	ØP	U UNC	Cv	Torque lbs-in* mm	Weight lbs. kg
1/2 15	2.56 65	0.59 15	2.52 64	1.13 28.7	6.50 165.1	1.65 42	0.35 9	0.65 16.5	0.25 6.4	0.37 9.4	#10-24	38	60 7	0.65 0.3
3/4 20	2.99 76	0.79 20.1	2.80 71	1.40 35.5	6.50 165.1	1.65 42	0.35 9	0.65 16.5	0.25 6.4	0.37 6.4	#10-24	66	96 11	1.45 0.7
1 25	3.46 87.9	0.98 25	3.11 79	1.61 41	7.87 200	1.97 50	0.55 14	0.87 22	0.32 8	0.43 10.9	1/4"-20	105	140 16	2.36 1.1
1 1/4 32	3.82 97	1.26 32	3.66 93	2.16 54.95	7.87 200	1.97 50	0.55 14	0.97 20	0.32 8	0.43 10.9	1/4"-20	190	195 22	3.50 1.6
1 1/2 40	4.33 110	1.50 38.1	3.94 100.1	2.28 58	9.84 249.9	2.76 70	0.59 15	1.02 26	0.37 9.5	0.62 15.8	5/16"-18	275	315 36	4.85 2.2
2 50	5.28 134.1	2.00 50.8	4.25 108	2.60 66	9.84 249.9	2.76 70	0.59 15	1.02 26	0.37 9.5	0.62 15.8	5/16"-18	480	510 58	7.30 3.3
2 1/2 65	6.18 157	2.56 65	5.00 127	3.39 86	9.65 245.1	4.02 102	0.75 19	1.14 29	0.47 12	0.75 19.1	5/16"-18	797	800 91	13.5 6.1
3 80	7.52 191	2.99 76	5.71 145	3.94 100	5.98 151.9	4.02 102	0.88 22.4	1.28 32.5	0.47 32.5	0.75 11.9	5/16"-18	1150	1100 125	25.3 11.5

\*Based on RPTFE seats at full rated pressure.

### Design & Manufacturing Standards

#### ASME

Design	B16.34
Pipe Threads	B1.20.1

#### API

Inspection/Testing	598
Design	608

#### MSS

Castings	SP55
Design	SP110
Pressure Testing	SP61
Testing	SP72

#### NACE

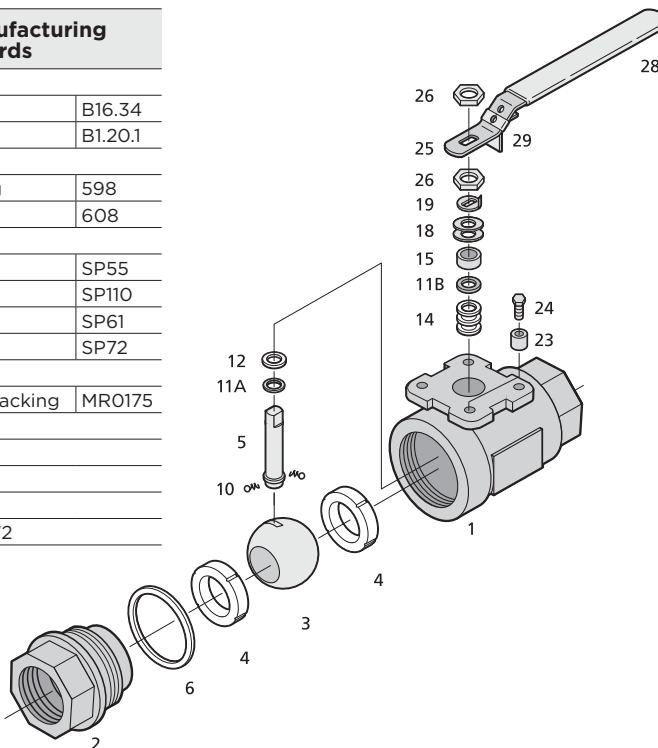
Sulphide Stress Cracking	MR0175
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#### CE PED

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#### CERTIFICATION

NSF/ANSI/CAN 61	
NSF/ANSI/CAN 372	



### Components & Materials

Item	Name	Material	Qty.
1	Body	ASTM A351 Gr CF8M	1
2	End Cap	ASTM A351 Gr CF8M	1
3	Ball	ASTM A351 Gr CF8M	1
4	Seat*	RPTFE	2
5	Stem	ASTM A479 Type 316	1
6	Body Seal*	RPTFE	1
10	Anti-Static Device	SS304	2
11 A/B	Thrust Bearing*	PEEK	1/1
12	Thrust Washer*	50% PTFE + 50% 316	1
14	Stem Packing*	PTFE/RPTFE	4
15	Packing Gland	SS304	1
18	Belleville Washer	SS301	2
19	Tab Lock Washer	SS304	1
23	Stop Set Sleeve	SS304	1
24	Stop Bolt	SS304	1
25	Handle	SS304	1
26	Nut	SS304	2
28	Handle Sleeve	Vinyl	1
29	Locking Device	SS300	1

\*Parts included in the repair kits



**HEADQUARTERS**  
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