
FLOW-TEK SERIES 85

2 Piece Threaded Full Port Ball Valves



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

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.

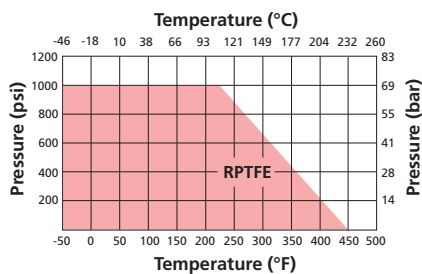
These valves offer quarter turn operation and low operating torque. The S85 features live-loaded, self-adjusting stem seals that automatically adjust packing to compensate for changes in wear and temperature. Other features include replaceable seats and seals, anti-static devices, blowout proof stems,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

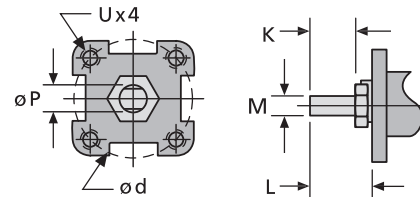
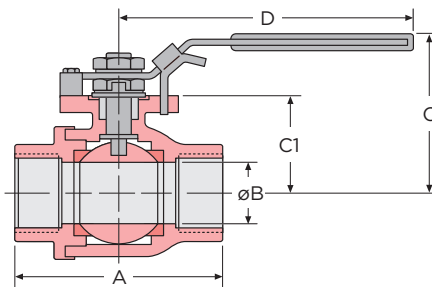
Size	Pressure Rating	Steam Rating	Temperature Range	End Connections	Body Material
1/2" to 3" 15mm to 80 mm	1000 psi WOG 69 bar	150 psi WSP 10.3 bar	-50°F to +450°F -46°C to +232°C	Threaded - NPT	Stainless Steel



PRESSURE/TEMPERATURE



Steam Rating: 150 psi WSP



Verify mounting dimensions before manufacturing mounting hardware.

Dimensions (inch)

Size in	A	ØB Port	C	C1	D	Ød	K	L	M	ØP	U UNC	Cv	Torque lb-in*	Weight lb
1/2	2.56	0.59	2.52	1.13	6.50	1.65	0.35	0.65	0.25	0.37	#10-24	38	60	0.65
3/4	2.99	0.79	2.80	1.40	6.50	1.65	0.35	0.65	0.25	0.37	#10-24	66	96	1.45
1	3.46	0.98	3.11	1.61	7.87	1.97	0.55	0.87	0.32	0.43	1/4"-20	105	140	2.36
1-1/4	3.82	1.26	3.66	2.16	7.87	1.97	0.55	0.97	0.32	0.43	1/4"-20	190	195	3.50
1-1/2	4.33	1.50	3.94	2.28	9.84	2.76	0.59	1.02	0.37	0.62	5/16"-18	275	315	4.85
2	5.28	2.00	4.25	2.60	9.84	2.76	0.59	1.02	0.37	0.62	5/16"-18	480	510	7.30
2-1/2	6.18	2.56	5.00	3.39	9.65	4.02	0.75	1.14	0.47	0.75	5/16"-18	797	800	13.5
3	7.52	2.99	5.71	3.94	5.98	4.02	0.88	1.28	0.47	0.75	5/16"-18	1150	1100	25.3

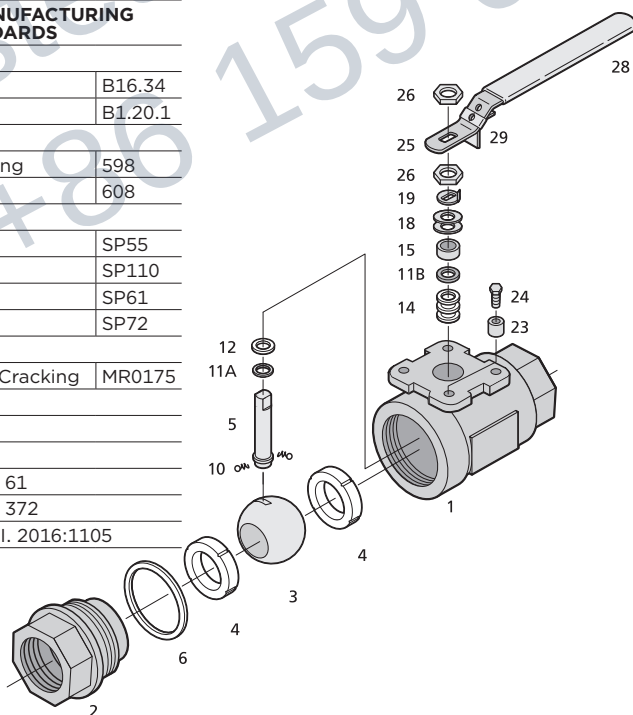
Dimensions (mm)

Size mm	A	ØB Port	C	C1	D	Ød	K	L	M	ØP	U UNC	Cv	Torque mm*	Weight Kg
15	65	15	64	28.7	165.1	42	9	16.5	6.4	9.4	#10-24	38	7	0.3
20	76	20.1	71	35.5	165.1	42	9	16.5	6.4	9.4	#10-24	66	11	0.7
25	87.9	25	79	41	200	50	14	22	8	10.9	1/4"-20	105	16	1.1
32	97	32	93	54.95	200	50	14	20	8	10.9	1/4"-20	190	22	1.6
40	110	38.1	100.1	58	249.9	70	15	26	9.5	15.8	5/16"-18	275	36	2.2
50	134.1	50.8	108	66	249.9	70	15	26	9.5	15.8	5/16"-18	480	58	3.3
65	157	65	127	86	245.1	102	19	29	12	19.1	5/16"-18	797	91	6.1
80	191	76	145	100	151.9	102	22.4	32.5	32.5	11.9	5/16"-18	1150	125	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
CE PED	
CE	
CERTIFICATION	
NSF/ANSI/CAN 61	
NSF/ANSI/CAN 372	
PE(S)R UKCA S.I. 2016:1105	



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
BRAY INTERNATIONAL, INC.
 13333 Westland East Blvd.
 Houston, Texas 77041
 Tel: 281.894.5454

All statements, technical information, and recommendations in this bulletin are for general use only. Consult Flow-Tek representatives or factory for the specific requirements and material selection for your intended application. The right to change or modify product design or product without prior notice is reserved.

Flow-Tek® is a registered trademark of Bray International, Inc.

© 2022 Bray International, Inc. All rights reserved.

F-2200_EN_S85_20221017