

FLOW-TEK

SERIES S70 & S90

2 Piece Threaded Standard Port Ball Valves

Flow-Tek's Series S70 and Series S90 ball valves offer an economical solution for high pressure applications in the process industries. Standard 2-piece valve bodies are available in stainless steel or carbon steel. Stainless steel bodies are investment cast and solution annealed for the highest quality and added strength. Cast carbon steel bodies are normalized and black phosphate coated for added corrosion resistance. All body castings are marked with a foundry heat number for full traceability. These quarter turn valves feature an adjustable packing gland for secure sealing.

Other features include low operating torque, internal bottom entry blowout proof stems, and stainless steel safety latch handles.



Size	Pressure Rating	Steam Rating	Temperature Range	End Connections	Body Material
1/4" to 1"	2000 psi WOG 137.9 bar	150 psi WSP 10.3 bar	S70 -50°F to +450°F -46°C to +232°C	Threaded - NPT	S70 316 Stainless Steel
1-1/4" to 2"	1500 psi WOG 103.4 bar		S90 -20°F to +450°F -29°C to +232°C		S90 WCB Carbon Steel
2-1/2" to 3"	1000 psi WOG 68.9 bar				



Dimensions (inch)

Size in	A	øB Port	C	C1	D	E	K	L	M	øP	V	U UNC	Cv	Trq. lb-in	Wt. lb
1/4	2.17	0.44	2.17	0.93	4.0	1.65	0.39	0.59	0.25	0.37	1.65	#10-24	15	60	0.55
3/8	2.17	0.49	2.17	0.93	4.0	1.65	0.39	0.59	0.25	0.37	1.65	#10-24	15	60	0.55
1/2	2.56	0.59	2.17	0.93	4.0	1.65	0.39	0.59	0.25	0.37	1.65	#10-24	15	65	0.65
3/4	2.80	0.59	2.36	1.1	4.0	1.65	0.39	0.59	0.25	0.37	1.65	#10-24	40	65	1.10
1	3.23	0.79	2.68	1.38	5.0	1.65	0.47	0.71	0.26	0.44	1.65	#10-24	70	130	2.00
1-1/4	3.62	0.98	2.87	1.54	5.0	1.65	0.47	0.77	0.26	0.44	1.65	#10-24	120	210	3.00
1-1/2	4.06	1.26	3.35	1.87	6.5	1.97	0.57	0.94	0.37	0.62	1.97	1/4"-20	200	260	4.25
2	4.65	1.50	3.64	2.17	7.5	2.56	0.57	0.94	0.37	0.62	2.76	5/16"-18	340	315	6.75
2-1/2	5.39	2.00	3.94	2.46	7.5	2.56	0.57	0.94	0.37	0.62	2.76	5/16"-18	400	425	9.50
3	6.20	2.56	4.65	3.07	10.25	2.56	0.85	1.28	0.47	0.75	2.76	5/16"-18	675	530	16.5

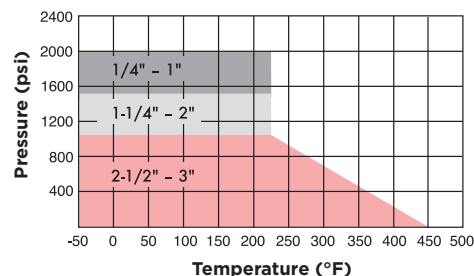
Dimensions (mm)

Size mm	A	øB Port	C	C1	D	E	K	L	M	øP	V	U UNC	Cv	Trq. N m	Wt. Kg
6	55.1	11.2	55.1	23.6	102	42	10	15	6.4	9.4	42	#10-24	-	6.8	0.25
10	55.1	12.4	55.1	23.6	102	42	10	15	6.4	9.4	42	#10-24	-	6.8	0.25
15	65	15	55.1	23.6	102	42	10	15	6.4	9.4	42	#10-24	-	7.3	0.3
20	71.1	15	59.9	28	102	42	10	15	6.4	9.4	42	#10-24	-	7.3	0.5
25	82	20.1	68.1	35	127	42	12	18	6.5	11.2	42	#10-24	-	14.7	0.9
32.5	91.9	24.9	72.9	39	127	42	12	19.6	6.5	11.2	42	#10-24	-	23.7	1.4
40	103.1	32	85.1	47.5	165	50	14.5	23.9	9.5	15.7	50	1/4"-20	-	29.4	1.9
50	118.1	38.1	92.5	55	190	65	14.5	23.9	9.5	15.7	70	5/16"-18	-	35.6	3.1
65	136.9	50.8	101.1	62.5	190	65	14.5	23.9	9.5	15.7	70	5/16"-18	-	48	4.3
80	157.5	65	118.1	78	260	65	21.6	32.5	12	19	70	5/16"-18	-	59.9	7.5

COMPONENTS AND MATERIALS

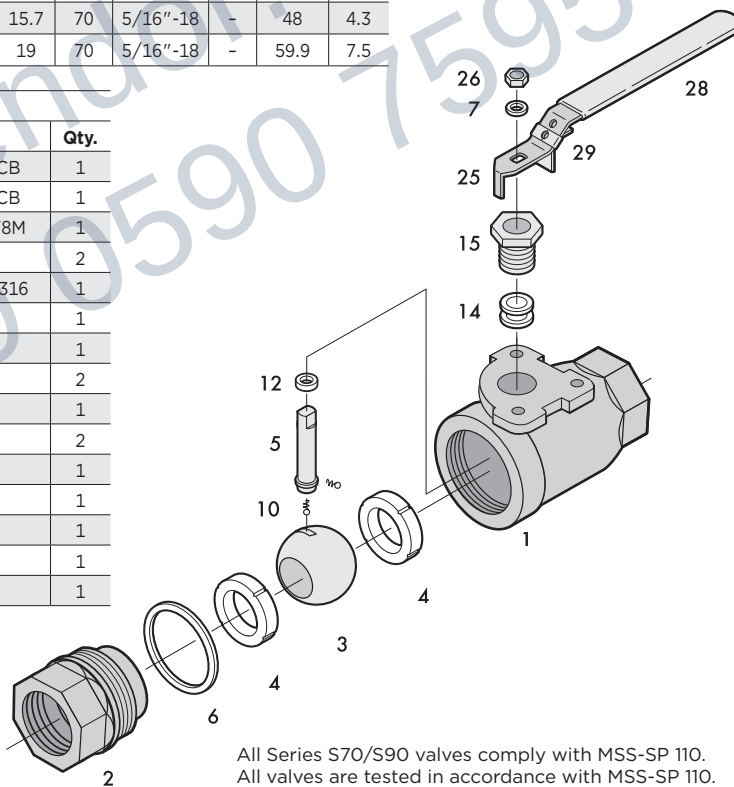
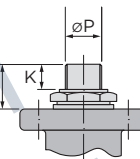
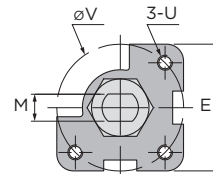
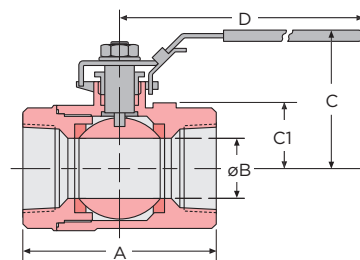
Item	Name	S70 Stainless Steel	S90 Carbon Steel	Qty.
1	Body	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
2	End Cap	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
3	Ball	ASTM A351 Gr CF8M	ASTM A351 Gr CF8M	1
4	Seat	RTFE	RTFE	2
5	Stem	ASTM A479 Type 316	ASTM A351 Type 316	1
6	Body Seal	RTFE	RTFE	1
7	Spring Washer	SS304	SS304	1
10	Anti-Static Device	SS304	SS304	2
12	Thrust Washer	RTFE	RTFE	1
14	Stem Packing	RTFE	RTFE	2
15	Packing Gland	SS304	SS304	1
25	Handle	SS304	SS304	1
26	Nut	SS304	SS304	1
28	Handle Sleeve	Vinyl	Vinyl	1
29	Locking Device	SS304	SS304	1

PRESSURE/TEMPERATURE



NOTE: S90 Carbon steel temperature range limited to -20°F to +450°F

STEAM RATING: 150 psi WSP



All Series S70/S90 valves comply with MSS-SP 110. All valves are tested in accordance with MSS-SP 110. Vacuum Service to 29 inches Hg. gauge.



US 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.

© 2023 Bray International All rights reserved EN_F_2202_SeriesS70_S90_20230510