

Triac 77 Series Ball Valves feature a high quality 316L investment casting. They are available with sanitary clamp or tube OD ends. Select the cavity filled or non-cavity filled design.

Superior leak protection is accomplished by using a live-loaded packing system featuring Belleville washers and double "V" ring packing. An ISO 5211 mounting pad is provided for easy automation.

VALVE SIZE	VALVE Cv	Excellent for:										
1/2"	10	Pharmaceutical										
3/4"	30	 Food and Beverage 										
1"	65	 Paint and Solvents 										
1-1/2"	200	Viscous Fluids										
2"	410											
2-1/2"	600	 Confectionaries 										
3"	1050											
4"	1900	, Stem Nut										
Lock Sad												
Belleville Was	her	Bushing										
Gla												
Chevron Pack	ting	Anti-Static Device										
Pyramidal (4 Stem & Stem		Germany Patent No. 299 02 532.2 United States Patent No. 5,954,088										
	Ţ	China Patent No. ZL 98 2 09161.3										

Easy to Automate!

See automated data sheets for pre-sized assemblies



Pneumatic



Electric



Series 77 Sanitary End 3-Piece Design

Sizes 1/2"– 4" Cavity Filled and Non-Cavity Filled ISO 5211 Mounting Pad 800/1000 PSI WOG (by size) 316L Body Ball and Stem Full Port

Sanitary Clamp Ends or Tube OD Ends

 STANDARDS

 ASME
 BPE-1997

 ISO
 5211/1, 5209, 5752, 7/1, 261

 MSS
 SP25

 BS
 5351



HOW TO ORDER MANUAL VALVES SAMPLE PART

77-SA-0050-PXX

Valve Series Sanitary Ends Non-Cavity Filled Valve Size Seat Material Special Designation

Additional Special Designation

See part number matrix for itemized options

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Series 77

1100

1000

900

800

300

200

100

0

-4

1/2"-2"

2-1/2"-4"

100

200

Pressure vs. Temperature Chart For PTFE Seats

PIFE

300

3-Piece "Sanitary End" Ball Valve 240 Grit Internal Polish **Full Port**

With or without cavity filler Standard (15-20 RA)

Breakaway Torques for PTFE										
Size	Non-Cavity Filled	Cavity Filled								
1/2"	80	95								
3/4"	90	100								
1"	142	160								
1-1/2"	319	410								
2"	390	490								
2-1/2"	806	1010								
3"	921	1075								
4"	1317	1400								

CONSULT FACTORY FOR OTHER SEAT MATERIALS

MATERIALS LIST

NO.	PART NAME	QTY.	MATERIAL				
1	Body	1	CF3M				
2	End Cap	2	CF3M				
3	Ball	1	316SS				
4	Seat	2	PTFE				
5	Joint Gasket	2	PTFE				
6	Stem Seal	1	PTFE				
7	Stem	1	316SS				
8	Gland Packing	1 Set	PTFE				
9	Gland Packing	1	PTFE				
10	Gland Bushing	1	304SS				
11	Belleville Washer	2	301SS				
12	Stop Washer	1	304SS				
13	Stem Nut	2	304SS				
14	Stem Washer	1	304SS				
15	Handle	1	304SS				
16	Locking Device	1	304SS				
17	Handle Sleeve	1	Vinyl				
18	Bolt	#	304SS				
19	Nut	&	304SS				
20	Washer	&	304SS				
21	Stop Pin	1	304SS				
22	Pin Nut	1	304SS				

* For 1/2" to 2" – 2 pcs., For 2-1/2" to 4" – 3 pcs. # For 1/2" to 3" – 4 pcs.; For 4" – 6 pcs. & For 1/2" to 2" – 4 pcs.; For 2-1/2 to 3" – 8 pcs., For 4" – 12 pcs.

1/2" to 2" single end, external thread 2-1/2" to 4" double ends, external thread

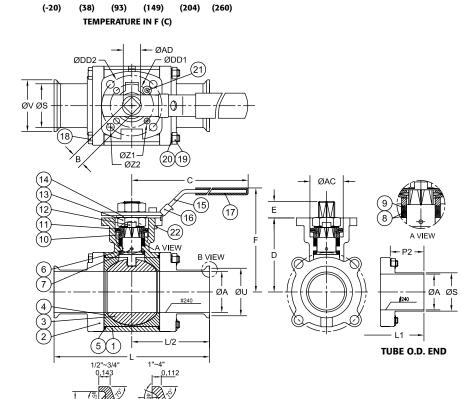
DIMENSIONS (IN)

Ø0.858

ØU

0.084 **B VIEW** <u>10.06</u>3

DIMENSIONS (IN) Tube O.D. According to ASME BPE 1997/2000															1997/2000					
Size	A	В	С	D	DD1	DD2	E	F	L	L1	P2	S	U	V	Z1	Z 2	AC	AD	LBS	ISO5211
1/2"	0.37	0.354	5.47	1.66	1.417	1.654	0.25	3.03	3.51	5.50	1.92	0.50	-	0.99	0.24	0.24	0.92	0.430	1.5	F03/F04
3/4"	0.62	0.354	5.47	1.89	1.417	1.654	0.27	3.27	4.00	5.75	1.96	0.75	-	0.99	0.24	0.24	0.92	0.430	1.8	F03/F04
1"	0.87	0.433	6.50	2.23	1.654	1.969	0.44	3.74	4.51	6.25	2.00	1.00	1.71	1.99	0.24	0.28	1.14	0.563	2.7	F04/F05
1-1/2"	1.37	0.551	8.47	3.05	1.969	2.756	0.56	5.00	5.52	7.50	2.23	1.50	1.71	1.99	0.28	0.34	1.54	0.744	7.0	F05/F07
2"	1.87	0.551	8.47	3.35	1.969	2.756	0.56	5.28	6.26	8.50	2.46	2.00	2.20	2.52	0.28	0.34	1.54	0.744	9.8	F05/F07
2-1/2"	2.37	0.669	11.81	4.28	2.756	4.016	0.67	6.54	6.85	9.75	2.55	2.50	2.78	3.05	0.34	0.47	2.07	0.885	19.6	F07/F10
3"	2.87	0.669	14.57	4.63	2.756	4.016	0.71	6.93	7.61	10.50	2.69	3.00	3.28	3.58	0.34	0.47	2.07	0.885	25.9	F07/F10
4"	3.83	0.748	14.57	5.22	2.756	4.016	0.67	7.48	8.90	12.50	3.14	4.00	4.34	4.68	0.34	0.47	2.07	0.885	47.4	F07/F10



75.8

68.9

62.1

55.2

48.3 ESSURE IN 41.4 34.5

20.7

13.8

6.9

500

400

(BAR) 27.6

A-T Controls reserves the right to change product designs and technical/dimensional specifications without notice.



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