



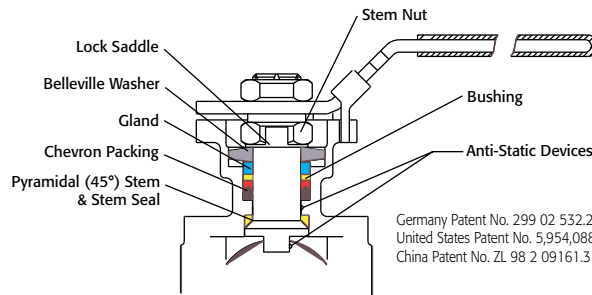
Triac 77 Series Ball Valves feature a high quality 316L investment casting. They are available with sanitary clamp or tube OD ends. Select the cavity filled or non-cavity filled design.

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
1/2"	10
3/4"	30
1"	65
1-1/2"	200
2"	410
2-1/2"	600
3"	1,050
4"	1,900

Excellent for:

- Pharmaceutical
- Food and Beverage
- Paint and Solvents
- Viscous Fluids
- Confectionaries



Easy to Automate!

See automated data sheets for pre-sized assemblies



Pneumatic



Electric



Series 77 Sanitary End 3-Piece Design

Sizes 1/2"-4"
393 to 1000 psi (by size)
Available in 316L
Cavity Filled and Non-Cavity Filled
Sanitary Clamp Ends or
Tube OD Ends

Tube Pipe Design
Superior Live Loaded Packing
System

ISO 5211 Actuator Mounting Pad
Blowout Proof Stem w/ Dual
Anti-Static Device

Pyramidal Stem Seal Design
Lockable Manual Handle

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME BPE-2019
Pressure Testing	API 598
Mounting	ISO 5211
Marking System for Valves	MSS SP-25, ISO 5209
CE Approval	PED 97/23/EC Module H
Safety Integrity	IEC 61508:2010; SIL 3
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015

HOW TO ORDER MANUAL VALVES

SAMPLE PART #
77-SA-0050-PXX



See part number matrix for itemized options

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- Page 7 - How to Order - Automated
- Page 8 - Valve Options/Other Products



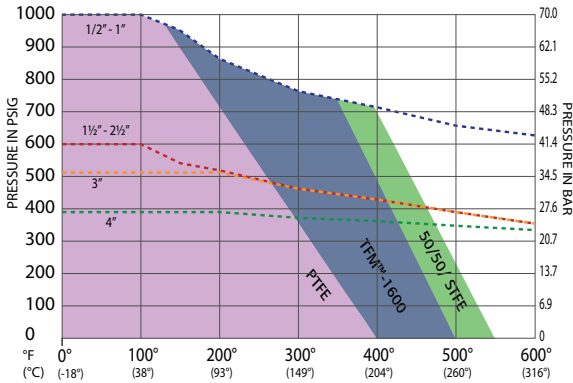
9955 International Blvd.
 Cincinnati, Ohio 45246
 www.atcontrols.com

PHONE (513) 247-5465
 FAX (513) 247-5462
 sales@atcontrols.com

Series 77

3-Piece Sanitary End Ball Valve Tube Pipe Design

Standard (15-20 RA) 240 Grit Internal Polish Cavity-Filled or Non-Cavity Filled

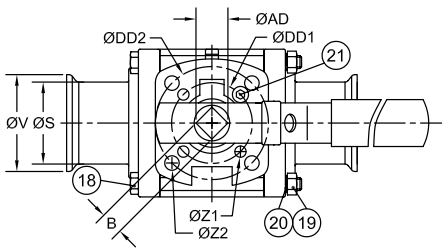


Pressure vs. Temperature | Series 77
Body/End Cap/Seat Pressure Ratings

Temp	Pressure			
	1/2" - 1"	1 1/2" - 2 1/2"	3"	4"
-20°	1000	600	507	393
100°	1000	600	507	393
150°	946	539	507	393
200°	861	516	507	393
300°	778	467	467	382
400°	713	429	429	378
500°	665	396	396	352
600°	625	366	366	334

Component Temperature Ratings		
Component	Material	Temp.
Stem Packing	PTFE	-50°F to 400°F
Stem Seal	PTFE	-50°F to 400°F
Gaskets	PTFE	-50°F to 400°F
Seats (Other Materials Available)	PTFE	-50°F to 400°F
	TFM™-1600	-75°F to 500°F
	50/50 STFE	-50°F to 550°F

NOTE: At temperature, valves are limited by either the valve body/end cap pressure ratings, seat pressure ratings, or packing/stem seal/gaskets; whichever is lower.



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

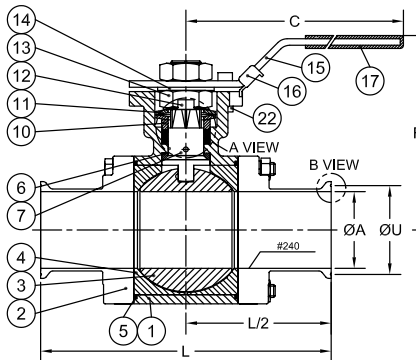
NO.	PART NAME	QTY.	MATERIAL	REPAIR KIT
1	BODY	1	ASTM A351 GRADE CF3M	
2	END CAP	2	ASTM A351 GRADE CF3M	
3	BALL	1	ASTM A276 GRADE CF3M	
4	SEAT	2	PTFE	✓
5	JOINT GASKET	2	PTFE	✓
6	STEM SEAL	1	PTFE	✓
7	STEM	1	ASTM A276 SS 316L	
8	GLAND PACKING	1	PTFE	✓
9	GLAND WASHER	1	RTFE	✓
10	GLAND BUSHING	1	AISI 304	
11	BELLEVILLE WASHER	2	AISI 301	
12	LOCK SADDLE	1	AISI 304	
13	STEM NUT	2	AISI 304	
14	STEM WASHER	1	AISI 304	
15	HANDLE	1	AISI 304	
16	HANDLE LOCK	1	AISI 304	
17	HANDLE SLEEVE	1	VINYL	
18	BODY BOLT	#	**	
19	BODY BOLT NUT	&	##	
20	WASHER	&	AISI 304	
21	STOP BOLT	1	AISI 304	
22	BOLT NUT	1	AISI 304	
23	ANTI-STATIC DEVICE	2	AISI 316	

FOR 1/2"-3" - 4 PCS ; FOR 4" - 6 PCS

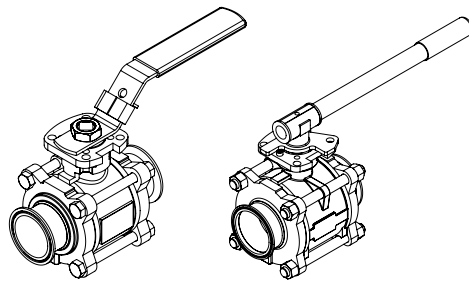
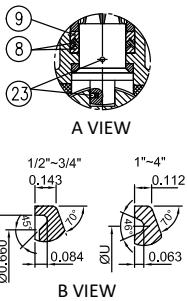
& FOR 1/2"-2" - 4 PCS ; FOR 2-1/2"-3" - 8 PCS; FOR 4" - 12 PCS

**FOR 1/2"-2" - ASTM A193 GRADE B8; FOR 2-1/2"-4" - ISO 3506-1 A2-70

FOR 1/2"-2" - ASTM A194 GRADE 8; FOR 2-1/2"-4" - ISO 3506-2 A2-70



TUBE O.D. END



BENT HANDLE SIZES 1/2" - 2"

PIPE HANDLE SIZES 2-1/2" - 4"

DIMENSIONS (IN)

SIZE	A	B	C	D	DD1	DD2	E	F	L	L1	P2	S	U	V	Z1	Z2	AC	AD	(LBS)	ISO 5211
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

Tube O.D. according to ASME BPE 2019

Pneumatic Double Acting Automated Ball Valve Package

Series 77
Sanitary End
3-Piece Ball Valve

Sizes 1/2"-4"

393 to 1000 psi (by size)

Available in 316L

Cavity Filled and Non-Cavity Filled

Sanitary Clamp Ends or
Tube OD Ends

Tube Pipe Design

Superior Live Loaded Packing
System

Blowout Proof Stem w/
Dual Anti-Static Devices

PTFE Seats standard

Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME BPE-2019
Pressure Testing	API 598
Mounting	ISO 5211
Marking System for Valves	MSS SP-25, ISO 5209
CE Approval	PED 97/23/EC Module H
Safety Integrity	IEC 61508:2010; SIL 3
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



DIMENSIONS (IN)

NON-CAVITY FILLED

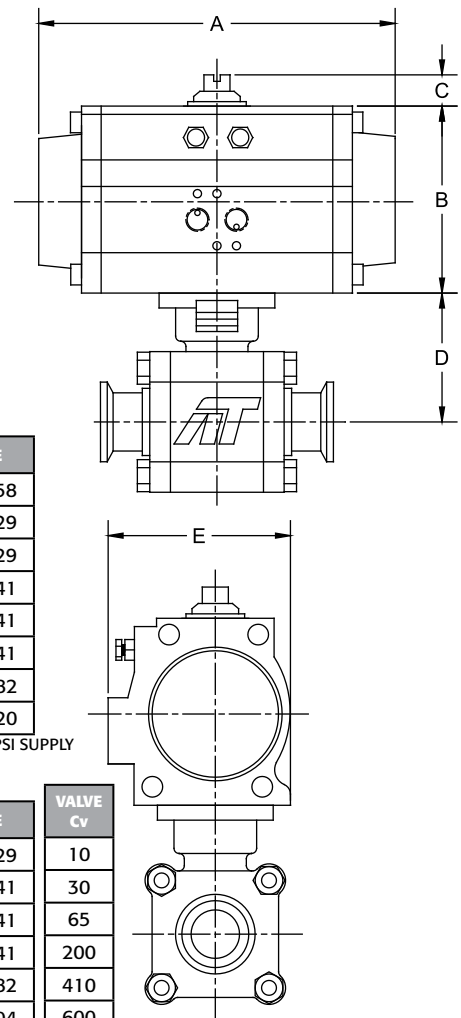
VALVE SIZE	A	B	C	D	E
1/2"	5.98	2.76	0.79	1.66	2.58
3/4"	7.95	3.43	0.79	1.89	3.29
1"	7.95	3.43	0.79	2.23	3.29
1-1/2"	9.29	4.49	0.79	3.05	4.41
2"	9.29	4.49	0.79	3.35	4.41
2-1/2"	9.29	4.49	0.79	4.28	4.41
3"	10.87	4.88	0.79	4.63	4.82
4"	11.46	5.28	0.79	5.22	5.20

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

CAVITY FILLED

VALVE SIZE	A	B	C	D	E	VALVE Cv
1/2"	7.95	3.43	0.79	1.66	3.29	10
3/4"	9.29	4.49	0.79	1.89	4.41	30
1"	9.29	4.49	0.79	2.23	4.41	65
1-1/2"	9.29	4.49	0.79	3.05	4.41	200
2"	10.87	4.88	0.79	3.35	4.82	410
2-1/2"	13.90	6.18	0.79	4.28	6.04	600
3"	13.90	6.18	0.79	4.63	6.04	1,050
4"	15.16	6.93	1.18	5.22	6.69	1,900

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SERIES 77 Sanitary Ends

NON-CAVITY FILLED

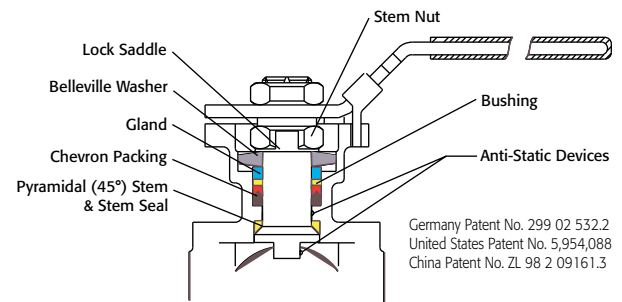
SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-C1-050/TR1D-XX
3/4"	77-C1-075/2R2D-XX
1"	77-C1-100/2R2D-XX
1-1/2"	77-C1-150/2R3D-XX
2"	77-C1-200/2R3D-XX
2-1/2"	77-C1-250/2R3D-XX
3"	77-C1-300/2R4D-XX
4"	77-C1-400/2R5D-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-C1-050/TR1D-XX
3/4"	77-C1-075/2R2D-XX
1"	77-C1-100/2R2D-XX
1-1/2"	77-C1-150/2R3D-XX
2"	77-C1-200/2R3D-XX
2-1/2"	77-C1-250/2R3D-XX
3"	77-C1-300/2R4D-XX
4"	77-C1-400/2R5D-XX

CAVITY FILLED

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-CF-050/2R2D-XX
3/4"	77-CF-075/2R3D-XX
1"	77-CF-100/2R3D-XX
1-1/2"	77-CF-150/2R3D-XX
2"	77-CF-200/2R4D-XX
2-1/2"	77-CF-250/2R6D-XX
3"	77-CF-300/2R6D-XX
4"	77-CF-400/2R7D-XX

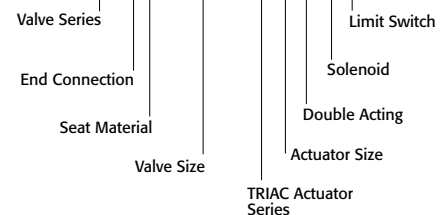
SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-CF-050/2R2D-XX
3/4"	77-CF-075/2R3D-XX
1"	77-CF-100/2R3D-XX
1-1/2"	77-CF-150/2R3D-XX
2"	77-CF-200/2R4D-XX
2-1/2"	77-CF-250/2R6D-XX
3"	77-CF-300/2R6D-XX
4"	77-CF-400/2R7D-XX



Germany Patent No. 299 02 532.2
United States Patent No. 5,954,088
China Patent No. ZL 98 2 09161.3

SAMPLE PART #

77-CF-150/2R3D-XX



See valve part number matrix for complete part number and options.

OPTIONS

DESCRIPTION	SUFFIX	DESCRIPTION	SUFFIX
Type 4 Solenoid	(A)	Type 4 Limit Switch (2) spdt	(A)
Type 7 Solenoid	(B)	Type 7 Limit Switch (2) spdt	(B)
Intrinsically Safe Solenoid	(C)	Intrinsically Safe Limit Switch	(C)

Other options available - call for details
Actuators are sized based on clean/clear fluid.

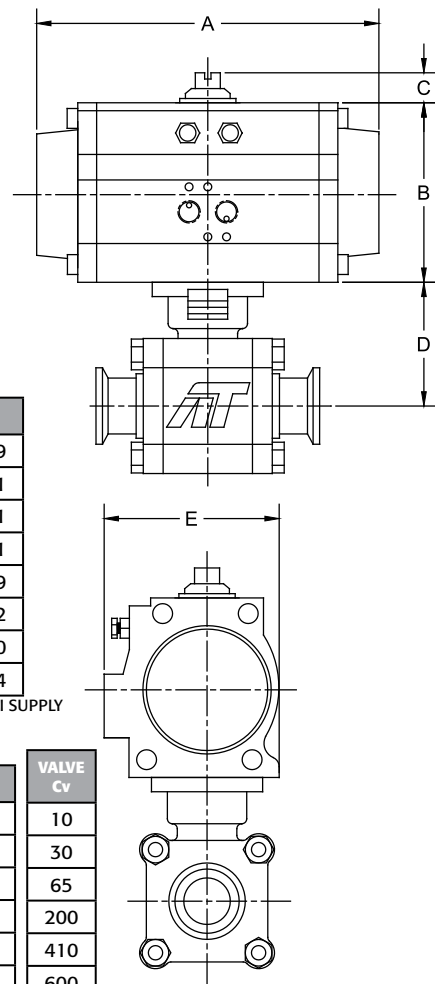
Pneumatic Spring Return Automated Ball Valve Package

Series 77
Sanitary End
3-Piece Ball Valve

- Sizes 1/2"-4"
- 393 to 1000 psi (by size)
- Available in 316L
- Cavity Filled and Non-Cavity Filled
- Sanitary Clamp Ends or Tube OD Ends
- Tube Pipe Design
- Superior Live Loaded Packing System
- Blowout Proof Stem w/ Dual Anti-Static Devices
- PTFE Seats standard
- Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME BPE-2019
Pressure Testing	API 598
Mounting	ISO 5211
Marking System for Valves	MSS SP-25, ISO 5209
CE Approval	PED 97/23/EC Module H
Safety Integrity	IEC 61508:2010; SIL 3
Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



SERIES 77 Sanitary Ends

DIMENSIONS (IN) NON-CAVITY FILLED

VALVE SIZE	A	B	C	D	E
1/2"	7.95	3.43	0.79	1.66	3.29
3/4"	9.29	4.49	0.79	1.89	4.41
1"	9.29	4.49	0.79	2.23	4.41
1-1/2"	9.29	4.49	0.79	3.05	4.41
2"	10.87	4.88	0.79	3.35	4.69
2-1/2"	11.46	5.28	0.79	4.28	4.82
3"	13.90	6.18	0.79	4.63	5.20
4"	13.90	6.18	0.79	5.22	6.04

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

CAVITY FILLED

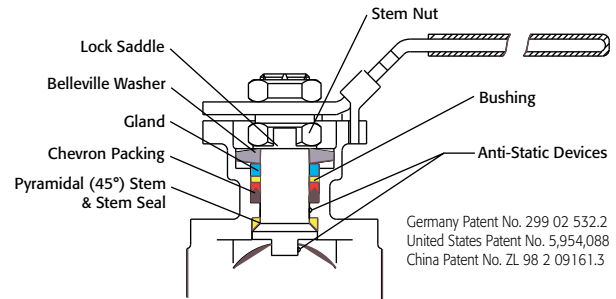
VALVE SIZE	A	B	C	D	E	VALVE Cv
1/2"	9.29	4.49	0.79	1.66	4.41	10
3/4"	9.29	4.49	0.79	1.89	4.41	30
1"	9.29	4.49	0.79	2.23	4.41	65
1-1/2"	10.87	4.88	0.79	3.05	4.82	200
2"	11.46	5.28	0.79	3.35	5.20	410
2-1/2"	15.16	6.93	1.18	4.28	6.69	600
3"	15.16	6.93	1.18	4.63	6.69	1,050
4"	22.68	9.17	1.18	5.22	8.43	1,900

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

NON-CAVITY FILLED

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-C1-050/2R2S-XX
3/4"	77-C1-075/2R3S-XX
1"	77-C1-100/2R3S-XX
1-1/2"	77-C1-150/2R3S-XX
2"	77-C1-200/2R4S-XX
2-1/2"	77-C1-250/2R6S-XX
3"	77-C1-300/2R6S-XX
4"	77-C1-400/2R7S-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-C1-050/2R2S-XX
3/4"	77-C1-075/2R3S-XX
1"	77-C1-100/2R3S-XX
1-1/2"	77-C1-150/2R3S-XX
2"	77-C1-200/2R4S-XX
2-1/2"	77-C1-250/2R6S-XX
3"	77-C1-300/2R6S-XX
4"	77-C1-400/2R7S-XX



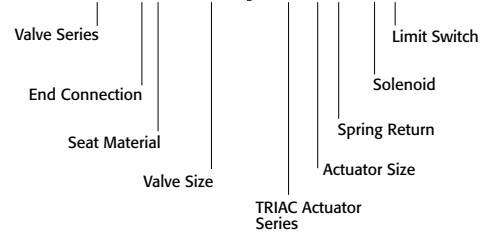
Germany Patent No. 299 02 532.2
United States Patent No. 5,954,088
China Patent No. ZL 98 2 09161.3

CAVITY FILLED

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-CF-050/2R3S-XX
3/4"	77-CF-075/2R3S-XX
1"	77-CF-100/2R3S-XX
1-1/2"	77-CF-150/2R4S-XX
2"	77-CF-200/2R5S-XX
2-1/2"	77-CF-250/2R7S-XX
3"	77-CF-300/2R7S-XX
4"	77-CF-400/2R9S-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/2"	77-CF-050/2R3S-XX
3/4"	77-CF-075/2R3S-XX
1"	77-CF-100/2R3S-XX
1-1/2"	77-CF-150/2R4S-XX
2"	77-CF-200/2R5S-XX
2-1/2"	77-CF-250/2R7S-XX
3"	77-CF-300/2R7S-XX
4"	77-CF-400/2R9S-XX

SAMPLE PART # 77-C1-050/2R2S-XX



See valve part number matrix for complete part number and options.

OPTIONS

DESCRIPTION	SUFFIX	DESCRIPTION	SUFFIX
Type 4 Solenoid	(A)	Type 4 Limit Switch (2) spdt	(A)
Type 7 Solenoid	(B)	Type 7 Limit Switch (2) spdt	(B)
Intrinsically Safe Solenoid	(C)	Intrinsically Safe Limit Switch	(C)

Other options available - call for details

Actuators are sized based on clean/clear fluid.

Electric Automated Ball Valve Package

Series 77
Sanitary End
3-Piece Ball Valve

- Sizes 1/2"-4"
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- Sanitary Clamp Ends or Tube OD Ends
- Tube Pipe Design
- Superior Live Loaded Packing System
- Blowout Proof Stem w/ Dual Anti-Static Devices
- PTFE Seats standard
- Pyramidal Stem Seal Design

STANDARDS

Design	ASME B16.34 (fully conforms)
End Connections	ASME BPE-2019
Pressure Testing	API 598
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Material Certification	EN 10204-3.1 MTR
Quality Assurance	ISO 9001:2015



DIMENSIONS (IN) NON-CAVITY FILLED

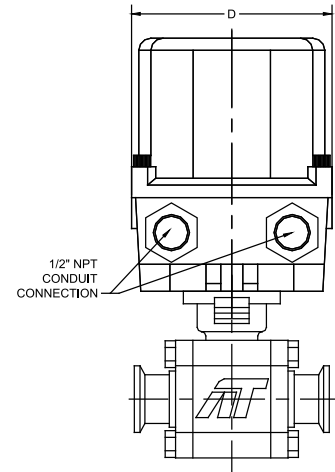
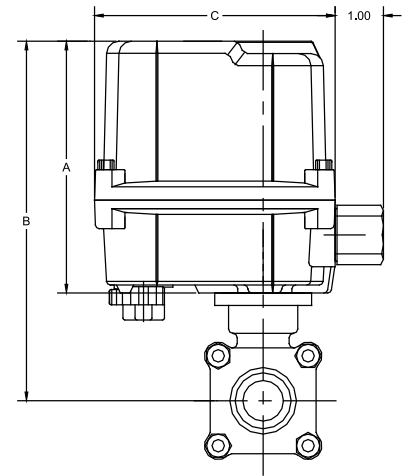
VALVE SIZE	A	B	C	D
1/2"	5.24	6.90	4.94	4.08
3/4"	5.24	7.13	4.94	4.08
1"	5.24	7.47	4.94	4.08
1-1/2"	5.24	8.29	4.94	4.08
2"	9.25	12.60	10.16	6.69
2-1/2"	10.55	14.83	13.31	9.02
3"	10.55	15.18	13.31	9.02
4"	10.55	15.77	13.31	9.02

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CAVITY FILLED

VALVE SIZE	A	B	C	D	VALVE Cv
1/2"	5.24	6.90	4.94	4.08	10
3/4"	5.24	7.13	4.94	4.08	30
1"	5.24	7.47	4.94	4.08	65
1-1/2"	5.24	8.29	4.94	4.08	200
2"	9.25	12.60	10.16	6.69	410
2-1/2"	10.55	14.83	13.31	9.02	600
3"	10.55	15.18	13.31	9.02	1,050
4"	10.55	15.77	13.31	9.02	1,900

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

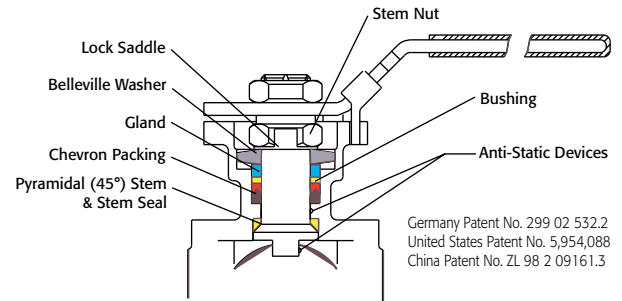


SERIES 77 Sanitary Ends

NON-CAVITY FILLED

ON-OFF	
SIZE	MODEL
1/2"	77-C1-050/WEA1-XX
3/4"	77-C1-075/WEA1-XX
1"	77-C1-100/WEA1-XX
1-1/2"	77-C1-150/WEA1-XX
2"	77-C1-200/WEB1-XX
2-1/2"	77-C1-250/WEC1-XX
3"	77-C1-300/WEC1-XX
4"	77-C1-400/WED1-XX

MODULATING	
SIZE	MODEL
1/2"	77-C1-050/WEA2-XX
3/4"	77-C1-075/WEA2-XX
1"	77-C1-100/WEA2-XX
1-1/2"	77-C1-150/WEA2-XX
2"	77-C1-200/WEB2-XX
2-1/2"	77-C1-250/WEC2-XX
3"	77-C1-300/WEC2-XX
4"	77-C1-400/WED2-XX



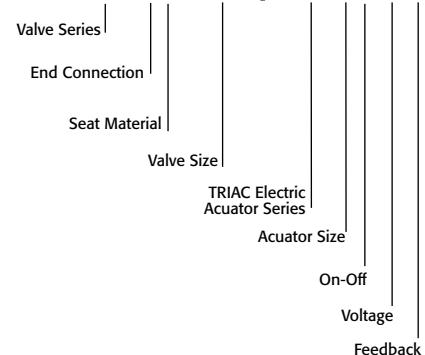
Germany Patent No. 299 02 532.2
United States Patent No. 5,954,088
China Patent No. ZL 98 2 09161.3

CAVITY FILLED

ON-OFF	
SIZE	MODEL
1/2"	77-CF-050/WEA1-XX
3/4"	77-CF-075/WEA1-XX
1"	77-CF-100/WEA1-XX
1-1/2"	77-CF-150/WEB1-XX
2"	77-CF-200/WEC1-XX
2-1/2"	77-CF-250/WED1-XX
3"	77-CF-300/WEE1-XX
4"	77-CF-400/WEE1-XX

MODULATING	
SIZE	MODEL
1/2"	77-CF-050/WEA2-XX
3/4"	77-CF-075/WEA2-XX
1"	77-CF-100/WEA2-XX
1-1/2"	77-CF-150/WEB2-XX
2"	77-CF-200/WEC2-XX
2-1/2"	77-CF-250/WED2-XX
3"	77-CF-300/WEE2-XX
4"	77-CF-400/WEE2-XX

SAMPLE PART # 77-C1-050/WEA1-XX



OPTIONS	
DESCRIPTION	
24 VAC/24 VDC/220VAC	
Feedback potentiometer	

NOTE: Heater and thermostat standard (2) auxiliary switches standard
Other options available - call for details
Actuators are sized based on clean/clear fluid.

HOW TO ORDER: Manual Valves

2	Valve Series
77	3pc. 1000 psi max, Full Port, Sanitary

3	Body/Ball/Stem Material
Blank	Valve Series Standard (316L)
R	316 SST Body/Monel Ball & Stem
T	Hastelloy C-276 Body, Ball, & Stem
E	Electropolished Stainless Steel
D	CE3MN Body/Duplex SST Ball & Stem
G	CE3MN Body/Super Duplex SST Ball & Stem

4	End Connection
SA	Sanitary Clamp Ends
SF	Sanitary Clamp Ends w/ Cavity Filler
DA	Tube O.D. Ends
DF	Tube O.D. Ends w/ Cavity Filler
DS	Sanitary Clamp x Tube O.D. Ends

5	Valve Size	
0050	1/2"	0200 2"
0075	3/4"	0250 2-1/2"
0100	1"	0300 3"
0150	1-1/2"	0400 4"

6	Seat, Lining & Trim Material
P	Virgin TFE (PTFE)
U	UHMWPE Seats
S	50/50 STFE Seats
T	TFM™-1600
A	50% SS Powder /50% TFM™ -1600 (STFM)
F	PTFE Cavity Filler

7	Special Designation
X	No Specials, Series Standard
O	Oval Handle (<i>available on some</i>)
S	Spring Return (<i>Direct Mount Only</i>)
4	4" Lockable Stem Extension

MANUAL VALVE
SAMPLE PART #
77 -SA-0050-PXX

(2) Valve Series

(3) Body/Ball/Stem Material

(4) End Connection

(5) Valve Size

(6) Seat, Lining, & Trim Material

(7) Special Designation

(8) Additional Specials

8	Additional Specials
X	No Specials, Series Standard
O	Oxygen Cleaned
V	Vented Ball
E	Bonnet Extension Lockable Handle
D	Degreased & Bagged
A	Vented Ball, Degreased & Bagged
B	Vented Ball, Oxygen Cleaned

TFM™ is a trademark of Dyneon™, a 3M Company.

HOW TO ORDER: Automated Valves w/ Options

Series 77

2	Valve Series
77	3pc. 1000 psi max, Full Port, Sanitary

3	Body/Ball/Stem Material
Blank	Valve Series Standard (316L)
R	316 SST Body/Monel Ball & Stem
T	Hastelloy C-276 Body, Ball, & Stem
E	Electropolished Stainless Steel
D	CE3MN Body/Duplex SST Ball & Stem
G	CE3MN Body/Super Duplex SST Ball & Stem

4	End Connection
C	Sanitary Clamp Ends
D	Tube O.D. Ends
H	Sanitary Clamp x Tube O.D. Ends

5	Seat, Lining & Trim Material
1	Valve Series Standard (PTFE)
U	UHMWPE Seats
S	50/50 STFE Seats
T	TFM™-1600
A	50% SS Powder /50% TFM™ -1600 (STFM)
F	PTFE Cavity Filler

6	Valve Size
050	1/2" 200 2"
075	3/4" 250 2-1/2"
100	1" 300 3"
150	1-1/2" 400 4"

7	Actuator - Pneumatic (DA)			
TRYD	TR10DA	2R7D	2R500DA	
TR1D	TR20DA	2R8D	2R850DA	
2R2D	2R40DA	2R9D	2R1200DA	
2R3D	2R80DA	2R0D	2R1750DA	
2R4D	2R130DA	2RAD	2R2500DA	
2R5D	2R200DA	2RBD	2R3500DA	
2R6D	2R300DA			

7	Actuator - Pneumatic (SR)			
TR1S	TR20SR	2R7S	2R500SR	
2R2S	2R40SR	2R8S	2R850SR	
2R3S	2R80SR	2R9S	2R1200SR	
2R4S	2R130SR	2R0S	2R1750SR	
2R5S	2R200SR	2RAS	2R2500SR	
2R6S	2R300SR	2RBS	2R3500SR	

7	Actuator - Pneumatic Stainless (DA)			
S21D	S2-052DA	S25D	S2-125DA	
S22D	S2-063DA	S26D	S2-140DA	
S23D	S2-083DA	S27D	S2-160DA	
S24D	S2-105DA	S28D	S2-210DA	

7	Actuator - Pneumatic Stainless (SR)			
S21S	S2-052SR	S25S	S2-125SR	
S22S	S2-063SR	S26S	S2-140SR	
S23S	S2-083SR	S27S	S2-160SR	
S24S	S2-105SR	S28S	S2-210SR	

7	Actuator - Electric (On-Off)			
WEX1	WE-350	WEG1	WE-5200	
WEA1	WE-500	WEH1	WE-6900	
WEB1	WE-690	WEJ1	WE-10500	
WEC1	WE-1350	WEK1	WE-17500	
WED1	WE-1700	WEL1	WE-25900	
WEE1	WE-2640	WEM1	WE-53000	
WEF1	WE-4400	WEN1	WE-80000	

7	Actuator - Electric (Modulating)			
WEA2	WEM-500	WEH2	WEM-6900	
WEB2	WEM-690	WEJ2	WEM-10500	
WEC2	WEM-1350	WEK2	WEM-17500	
WED2	WEM-1700	WEL2	WEM-25900	
WEE2	WEM-2640	WEM2	WEM-53000	
WEF2	WEM-4400	WEN2	WEM-80000	
WEG2	WEM-5200			

OPTIONS:

8	Accessories/Options	Model no.
X	No Specials	
A	TYPE 4 Solenoid 120VAC	TVCS-X411-4N-A120
B	TYPE 7 Solenoid 120VAC	TVCS-X411-7N-A120
C	Intrinsically Safe Solenoid	TVIS-X411-4N-D24
D	TYPE 4 Solenoid 24VDC	TVCS-X411-4N-D24
F	TYPE 7 Solenoid 24VDC	TVCS-X411-7N-D24
Q	TYPE 4 SST Solenoid 120VAC	TVSS-X411-4N-A120
M	TYPE 7 SST Solenoid 120VAC	TVSS-X411-7N-A120
L	TYPE 4 SST Solenoid 24VDC	TVSS-X411-4N-D24
N	TYPE 7 SST Solenoid 24VDC	TVSS-X411-7N-D24
P	Pneumatic Positioner	PPR-1200
E	Electro-Pneumatic Positioner	EPR-1000
R	24VDC Electric Actuator	
S	220VAC Electric Actuator	
T	Other Voltage Electric Actuator	
W	12VDC Electric Actuator	
Y	24VAC Electric Actuator	

** No voltage specified on electric assemblies denotes 120VAC*

9	Accessories	Model no.
X	No Specials	
A	TYPE 4 Limit Switch	APL-210N/APL-310N
B	TYPE 7 Limit Switch	APL-510N
C	Intrinsically Safe Limit Switch	APL-218N
Q	TYPE 4 SST Limit Switch	APL-910N
M	TYPE 7 SST Limit Switch	APL-510S
1	HS1 High Speed Electric	
2	HS2 High Speed Electric	

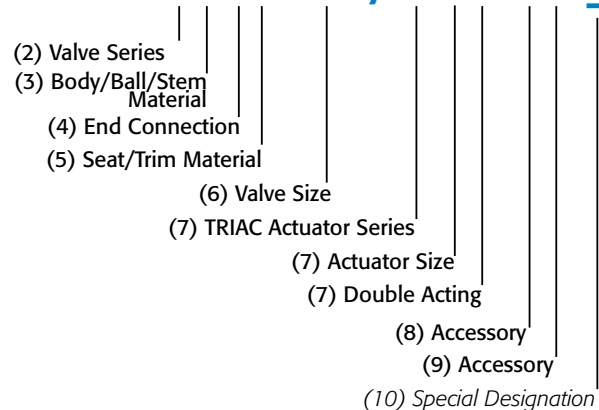
10	Special Designation
Blank	No Designation, SST Stem

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AUTOMATED VALVE

SAMPLE PART #

77-C1-100/2R3D-XX-



Valve Options

Various Seat Materials

PTFE, RTFE, 50/50 STFE, 25% CTFE, Delrin, PEEK, UHMWPE, TFM-1600

Operator Options

Quarter-turn Gear Operators
Spring Return "Deadman" Handles
Oval handles, TEE Handles

Specials and Solutions

Steam Jackets
Stem Extensions
V-ported Control Valves
Multi-port Valve Solutions
Fugitive Emissions Bonnets (TSM's)
Oxygen Cleaning
Lockout Brackets
Vented Balls
"No Play" Mounting Kits

• FM Approved Valves and Assemblies



Manual and automated valve assemblies for gas burner management applications and safety shutoff

Other Products

Special Seats Balls and Seal Designs



Steam Jacketed Valves



Floor Mounted Damper Drives



Limit Switches Mounted on Manual Valves



Fusible Link Assemblies



180° Actuators



Lockout Mounting Kits



Stem Extensions



Special Multi-Port Valves



Dual Valve Assemblies



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