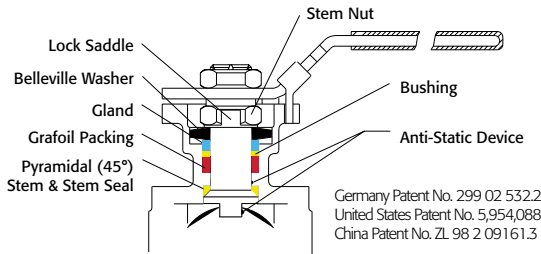


**API 607 - 6th Edition
CERTIFIED**



Triac F8R Series Firesafe 3-piece ball valves are the finest quality 3-piece valves on the market. The high quality investment castings feature a fully machined bore. The superior live-loaded packing system is accomplished with Belleville washers, Grafoil packing and a unique primary pyramidal stem seal. This advanced sealing system provides protection against stem leaks experienced by ordinary ball valves.



VALVE SIZE	VALVE Cv
1/4"	7
3/8"	8
1/2"	9
3/4"	15
1"	42
1-1/4"	45
1-1/2"	125
2"	165
2-1/2"	245

RTFE seats are standard, but various options are available for seat materials. The 50/50 STFE seat option is excellent for services that call for higher temperatures and more difficult applications including steam. Call us for details.

Easy to Automate!

See automated data sheets for pre-sized assemblies



Pneumatic



Electric

TRIA®
CONTROLS

Series F8R

FIRESAFE

3-Piece Design

Sizes 1/4" - 2-1/2"

Regular Port Design

1500/2000 psi WOG (by size)

316SST or WCB

Threaded, Socket Weld, or Butt Weld Ends

Superior Live Loaded Packing System

ISO 5211 Actuator Mounting Pad

Blowout Proof Stem w/ Dual Anti-Static Devices

RTFE Seats Standard

Pyramidal Stem Seal Design

Lockable Manual Handle

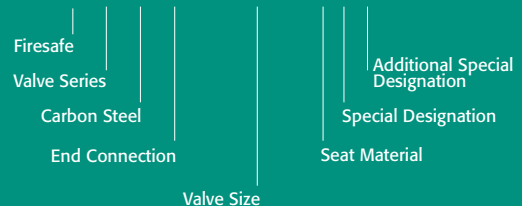
STANDARDS

DESIGN	ANSI/ASME B16.34
END CONNECTIONS	ASME B16.25, B1.20.1, B16.11
PRESSURE TESTING	API 598
SULFIDE STRESS PROTECTION	NACE MR01 75
FIRE TESTING	API 607-6th Edition
MOUNTING	ISO 5211
MARKING SYSTEM FOR VALVES	MSS SP-25, ISO 5209
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2008

HOW TO ORDER MANUAL VALVES

SAMPLE PART #

F8RC-TH-0200-XXX



See part number matrix for itemized options

SERIES F8R 3-Piece

Firesafe

A-T Controls, Inc.

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

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

Series F8R

High Performance, Regular Port 3-Piece Ball Valve ISO 5211 Mounting Pad

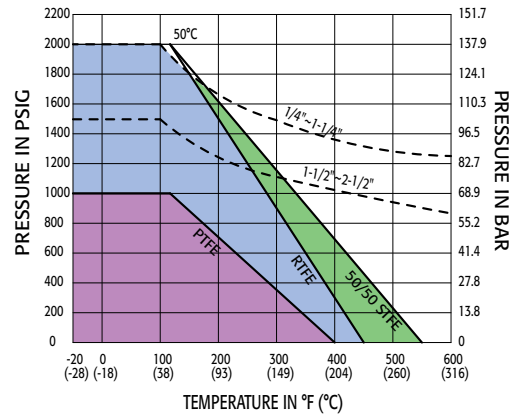
1500 & 2000 psi WOG by size
1/4" to 2-1/2"

API 607 - 6th Edition
CERTIFIED

Break Away Torque for RTFE Seats	
1/4"	60
3/8"	60
1/2"	70
3/4"	90
1"	130
1-1/4"	210
1-1/2"	275
2"	400
2-1/2"	550

NOTE: For other seat material, consult factory

Pressure vs. Temperature Chart

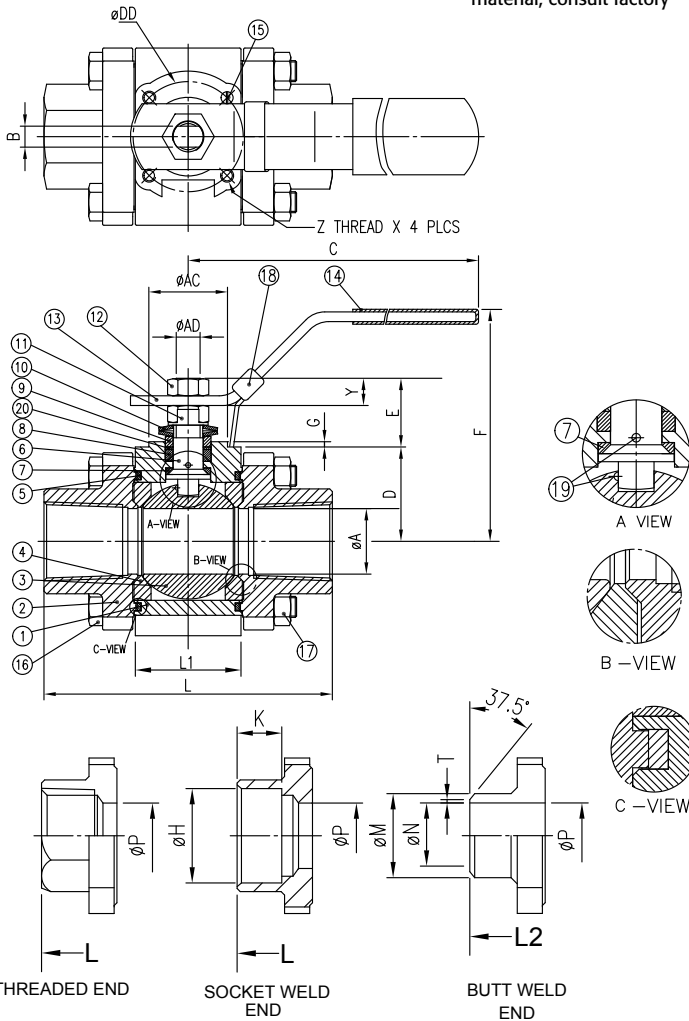


NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be considered when determining the limitation of the valve for specific application. Consult factory for other seat materials.

MATERIALS LIST

NO.	PART NAME	QTY	STAINLESS STEEL	CARBON STEEL
1	BODY	1	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB
2	TH END CAP	2	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB
2	SW/BW END CAP	2	ASTM A351 GRADE CF3M	ASTM A216 GRADE WCB
3	BALL	1	1/4" THRU 3/8" ASTM A276 SS 316	1/4" THRU 3/8" ASTM A276 SS 316
3	BALL	1	1/2" THRU 2-1/2" ASTM A351 GRADE CF8M	1/2" THRU 2-1/2" ASTM A351 GRADE CF8M
4	SEAT	2	RTFE	RTFE
5	JOINT GASKET	2	GRAFOIL	GRAFOIL
6	STEM	1	ASTM A276 SS 316	ASTM A276 SS 316
7	STEM SEAL	1	RTFE	RTFE
8	STEM PACKING	1	GRAFOIL	GRAFOIL
9	GLAND BUSHING	1	AISI 304	AISI 304
10	BELLEVILLE WASHER	2	AISI 301	AISI 301
11	LOCK SADDLE	1	AISI 304	AISI 304
12	STEM NUT	2	AISI 304	AISI 304
13	HANDLE	1	AISI 304	AISI 304
14	HANDLE SLEEVE	1	VINYL	VINYL
15	STOP BOLT	1	AISI 304	AISI 304
16	BODY BOLT	*	ASTM A193 GRADE B8M	ASTM A193 GRADE B7M
17	BOLT NUT	*	ASTM A194 GRADE 8M	ASTM A194 GRADE 2HM
18	HANDLE LOCK	1	AISI 304	AISI 304
19	ANTI-STATIC DEVICE	2	AISI 316	AISI 316
20	GLAND WASHER	1	RTFE	RTFE

*1/4" THRU 2" - 4 PCS.
* 2-1/2" - 6 PCS.



DIMENSIONS (IN)

SIZE	A	AC	AD	B	C	D	DD	E	F	G	H	K	L	L1	L2	M	N	P	T	Y	Z	ISO 5211	LBS
1/4"	0.39	0.98	0.37	0.256	5.28	1.17	1.417	0.29	2.53	0.02	0.56	0.39	2.55	0.81	2.55	0.54	0.36	0.39	0.06	0.24	M5	F03	1.5
3/8"	0.39	0.98	0.37	0.256	5.28	1.17	1.417	0.29	2.53	0.02	0.69	0.39	2.55	0.81	2.55	0.69	0.49	0.39	0.06	0.24	M5	F03	1.5
1/2"	0.39	0.98	0.37	0.256	5.28	1.17	1.417	0.29	2.53	0.02	0.86	0.39	2.55	0.81	2.55	0.85	0.62	0.39	0.06	0.24	M5	F03	1.5
3/4"	0.59	0.98	0.37	0.256	5.28	1.14	1.417	0.63	2.81	0.08	1.07	0.51	2.85	0.96	2.94	1.07	0.83	0.59	0.06	0.29	M5	F03	1.9
1"	0.79	0.98	0.37	0.256	5.28	1.30	1.417	0.71	2.99	0.08	1.33	0.51	3.36	1.24	3.54	1.34	1.05	0.79	0.06	0.35	M5	F03	3.2
1-1/4"	0.98	1.18	0.44	0.315	6.69	1.42	1.654	0.97	3.24	0.08	1.69	0.51	4.15	1.63	4.31	1.68	1.38	0.98	0.06	0.43	M5	F04	4.0
1-1/2"	1.26	1.18	0.44	0.315	6.69	1.57	1.654	0.96	3.44	0.08	1.93	0.51	4.37	1.91	4.5	1.91	1.61	1.26	0.06	0.38	M5	F04	5.7
2"	1.50	1.38	0.56	0.382	8.15	1.86	1.969	1.19	4.08	0.09	2.41	0.63	5.01	2.22	5.12	2.38	2.07	1.50	0.06	0.48	M6	F05	8.1
2-1/2"	1.97	1.38	0.56	0.382	8.15	2.74	1.969	1.02	4.79	0.06	2.91	0.63	5.71	2.81	5.71	3.00	2.59	1.97	0.08	0.50	M6	F05	12.0



Pneumatic Double Acting Automated Ball Valve Package Series F8R 3-Piece Ball Valve

Firesafe

Sizes 1/4" - 2-1/2"

Regular Port Design

1500/2000 psi WOG (by size)

316SST or WCB

TH, SW, or BW Ends

Superior Live Loaded Packing System

Blowout Proof Stem w/ Dual Anti-Static Devices

RTFE Seats Standard

Pyramidal Stem Seal Design

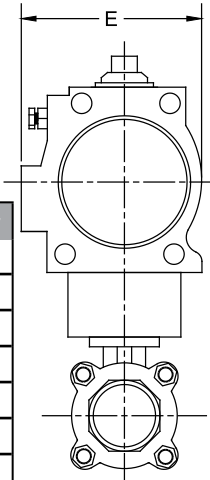
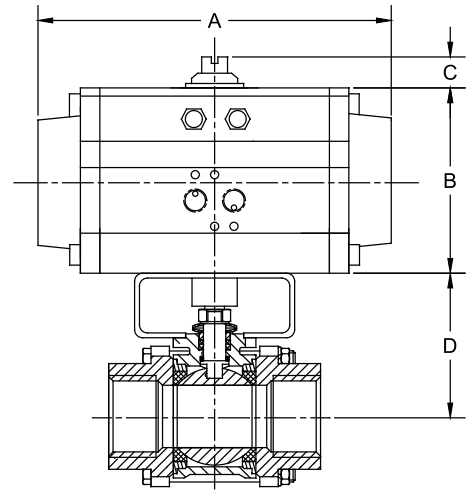
STANDARDS

DESIGN	ANSI/ASME B16.34
END CONNECTIONS	ASME B16.25, B1.20.1, B16.11
PRESSURE TESTING	API 598
SULFIDE STRESS PROTECTION	NACE MR0175
FIRE TESTING	API 607-6th Edition
MOUNTING	ISO 5211
MARKING SYSTEM FOR VALVES	MSS SP-25, ISO 5209
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2008

API 607 - 6th Edition CERTIFIED



Firesafe tested to API-607 (valve only)



DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E	VALVE Cv
1/4"	5.98	2.76	0.79	2.65	2.58	7
3/8"	5.98	2.76	0.79	2.65	2.58	8
1/2"	5.98	2.76	0.79	2.65	2.58	9
3/4"	7.95	3.43	0.79	2.65	3.29	15
1"	7.95	3.43	0.79	2.78	3.29	42
1-1/4"	7.95	3.43	0.79	2.90	3.29	45
1-1/2"	9.29	4.49	0.79	3.13	4.41	125
2"	9.29	4.49	0.79	3.42	4.41	165
2-1/2"	10.87	4.88	0.79	4.30	4.82	245

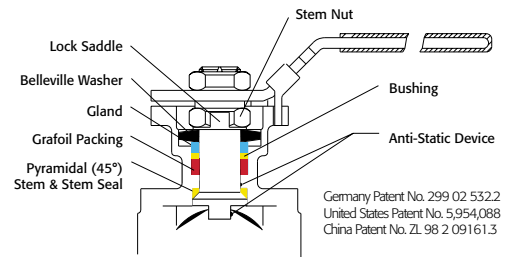
DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

SERIES F8R 3-Piece

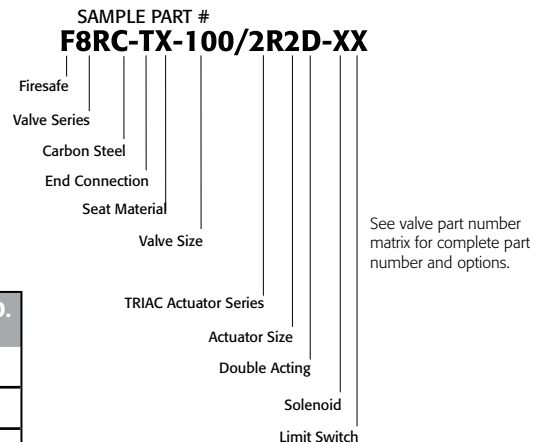
Firesafe

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	F8R-TX-025/TR1D-XX
3/8"	F8R-TX-038/TR1D-XX
1/2"	F8R-TX-050/TR1D-XX
3/4"	F8R-TX-075/2R2D-XX
1"	F8R-TX-100/2R2D-XX
1-1/4"	F8R-TX-125/2R2D-XX
1-1/2"	F8R-TX-150/2R3D-XX
2"	F8R-TX-200/2R3D-XX
2-1/2"	F8R-TX-250/2R4D-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	F8R-TX-025/TR1D-XX
3/8"	F8R-TX-038/TR1D-XX
1/2"	F8R-TX-050/TR1D-XX
3/4"	F8R-TX-075/2R2D-XX
1"	F8R-TX-100/2R2D-XX
1-1/4"	F8R-TX-125/2R2D-XX
1-1/2"	F8R-TX-150/2R3D-XX
2"	F8R-TX-200/2R4D-XX
2-1/2"	F8R-TX-250/2R4D-XX



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



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

OPTIONS

DESCRIPTION	PART NO. SUFFIX	DESCRIPTION	PART NO. SUFFIX
NEMA 4 Solenoid	(A)	NEMA 4 Limit Switch (2) spdt	(A)
NEMA 7 Solenoid	(B)	NEMA 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.



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FAX (513) 247-5462
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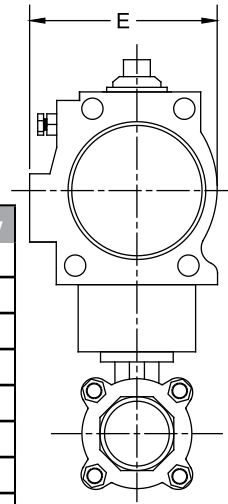
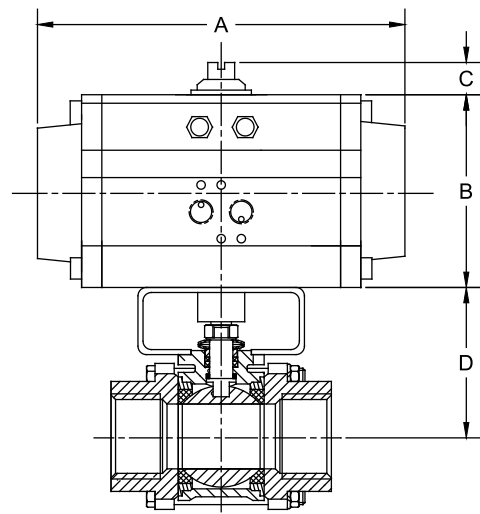
Pneumatic Spring Return Automated Ball Valve Package Series F8R 3-Piece Ball Valve

- Firesafe
- Sizes 1/4" - 2-1/2"
- Regular Port Design
- 1500/2000 psi WOG (by size)
- 316SST or WCB
- TH, SW, or BW Ends
- Superior Live Loaded Packing System
- Blowout Proof Stem w/ Dual Anti-Static Devices
- RTFE Seats Standard
- Pyramidal Stem Seal Design

**API 607 - 6th Edition
CERTIFIED**



**Firesafe tested to API-607
(valve only)**



DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E	VALVE Cv
1/4"	7.95	3.43	0.79	2.65	3.29	7
3/8"	7.95	3.43	0.79	2.65	3.29	8
1/2"	7.95	3.43	0.79	2.65	3.29	9
3/4"	7.95	3.43	0.79	2.62	3.29	15
1"	9.29	4.49	0.79	2.78	4.41	42
1-1/4"	9.29	4.49	0.79	2.90	4.41	45
1-1/2"	9.29	4.49	0.79	3.13	4.41	125
2"	10.87	4.88	0.79	3.42	4.82	165
2-1/2"	11.46	5.28	0.79	4.30	5.20	245

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

**SERIES F8R
3-Piece**

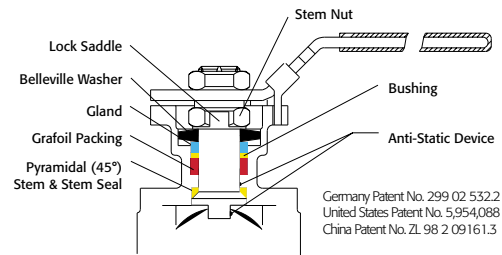
Firesafe

STANDARDS

DESIGN	ANSI/ASME B16.34
END CONNECTIONS	ASME B16.25, B1.20.1, B16.11
PRESSURE TESTING	API 598
SULFIDE STRESS PROTECTION	NACE MR0175
FIRE TESTING	API 607-6th Edition
MOUNTING	ISO 5211
MARKING SYSTEM FOR VALVES	MSS SP-25, ISO 5209
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2008

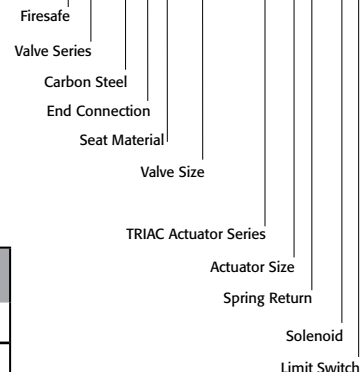
SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	F8R-TX-025/2R2S-XX
3/8"	F8R-TX-038/2R2S-XX
1/2"	F8R-TX-050/2R2S-XX
3/4"	F8R-TX-075/2R3S-XX
1"	F8R-TX-100/2R3S-XX
1-1/4"	F8R-TX-125/2R3S-XX
1-1/2"	F8R-TX-150/2R3S-XX
2"	F8R-TX-200/2R4S-XX
2-1/2"	F8R-TX-250/2R5S-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	F8R-TX-025/2R2S-XX
3/8"	F8R-TX-038/2R2S-XX
1/2"	F8R-TX-050/2R2S-XX
3/4"	F8R-TX-075/2R3S-XX
1"	F8R-TX-100/2R3S-XX
1-1/4"	F8R-TX-125/2R3S-XX
1-1/2"	F8R-TX-150/2R4S-XX
2"	F8R-TX-200/2R4S-XX
2-1/2"	F8R-TX-250/2R6S-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 #
F8RC-TX-050/2R2S-XX**



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

OPTIONS

DESCRIPTION	PART NO. SUFFIX	DESCRIPTION	PART NO. SUFFIX
NEMA 4 Solenoid	(A)	NEMA 4 Limit Switch (2) spdt	(A)
NEMA 7 Solenoid	(B)	NEMA 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 F8R
3-Piece Ball Valve**

- Firesafe
- Sizes 1/4" - 2-1/2"
- Regular Port Design
- 1500/2000 psi WOG (by size)
- 316SST or WCB
- TH, SW, or BW Ends
- Superior Live Loaded Packing System
- Blowout Proof Stem w/ Dual Anti-Static Devices
- RTFE Seats Standard
- Pyramidal Stem Seal Design

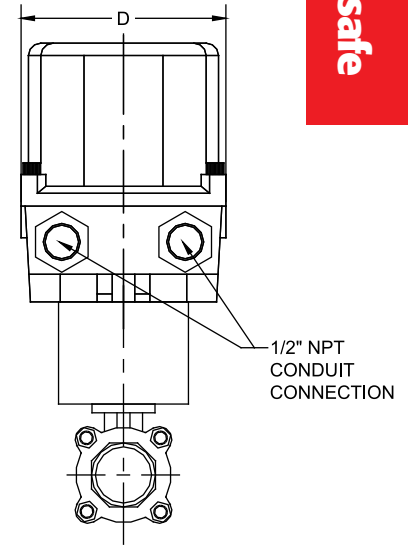
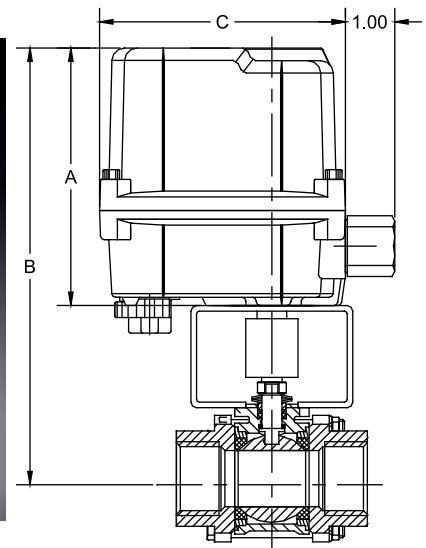
STANDARDS

DESIGN	ANSI/ASME B16.34
END CONNECTIONS	ASME B16.25, B1.20.1, B16.11
PRESSURE TESTING	API 598
SULFIDE STRESS PROTECTION	NACE MR0175
FIRE TESTING	API 607-6th Edition
MOUNTING	ISO 5211
MARKING SYSTEM FOR VALVES	MSS SP-25, ISO 5209
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2008

**API 607 - 6th Edition
CERTIFIED**



**Firesafe tested to API-607
(valve only)**



DIMENSIONS (IN)

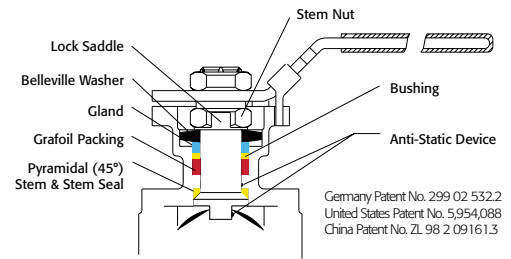
VALVE SIZE	A	B	C	D	VALVE Cv
1/4"	5.24	7.89	4.94	4.08	7
3/8"	5.24	7.89	4.94	4.08	8
1/2"	5.24	7.89	4.94	4.08	9
3/4"	5.24	7.89	4.94	4.08	15
1"	5.24	8.02	4.94	4.08	42
1-1/4"	5.24	8.14	4.94	4.08	45
1-1/2"	5.24	8.29	4.94	4.08	125
2"	5.24	8.66	4.94	4.08	165
2-1/2"	5.24	9.54	4.94	4.08	245

SERIES F8R 3-piece

Firesafe

ON-OFF	
SIZE	MODEL
1/4"	F8R-TX-025/WEA1-XX
3/8"	F8R-TX-038/WEA1-XX
1/2"	F8R-TX-050/WEA1-XX
3/4"	F8R-TX-075/WEA1-XX
1"	F8R-TX-100/WEA1-XX
1-1/4"	F8R-TX-125/WEA1-XX
1-1/2"	F8R-TX-150/WEA1-XX
2"	F8R-TX-200/WEA1-XX
2-1/2"	F8R-TX-250/WEA1-XX

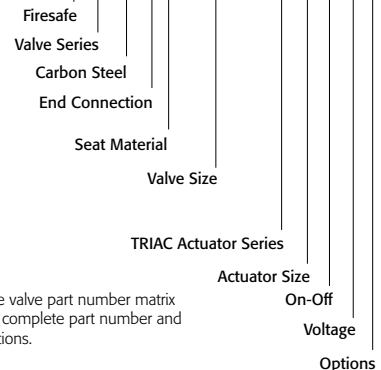
MODULATING	
SIZE	MODEL
1/4"	F8R-TX-025/WEA2-XX
3/8"	F8R-TX-038/WEA2-XX
1/2"	F8R-TX-050/WEA2-XX
3/4"	F8R-TX-075/WEA2-XX
1"	F8R-TX-100/WEA2-XX
1-1/4"	F8R-TX-125/WEA2-XX
1-1/2"	F8R-TX-150/WEA2-XX
2"	F8R-TX-200/WEA2-XX
2-1/2"	F8R-TX-250/WEA2-XX



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

SAMPLE PART #

F8RC-TX-050/WEA1-XX



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

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.

F8REL-20151006
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sales@atcontrols.com

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

