

Series F83

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

API 607 - 6th Edition
CERTIFIED

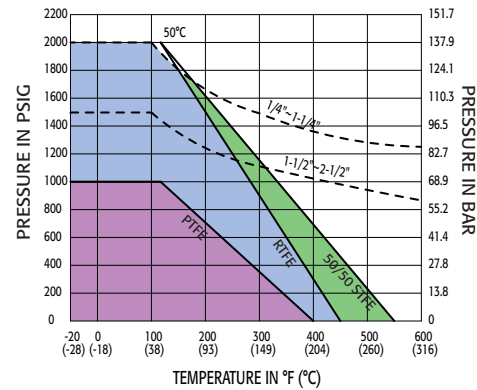
1500 & 2000 psi WOG by size
1/4" to 2"

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

NOTE: For other seat material,
consult factory

Pressure vs. Temperature Chart

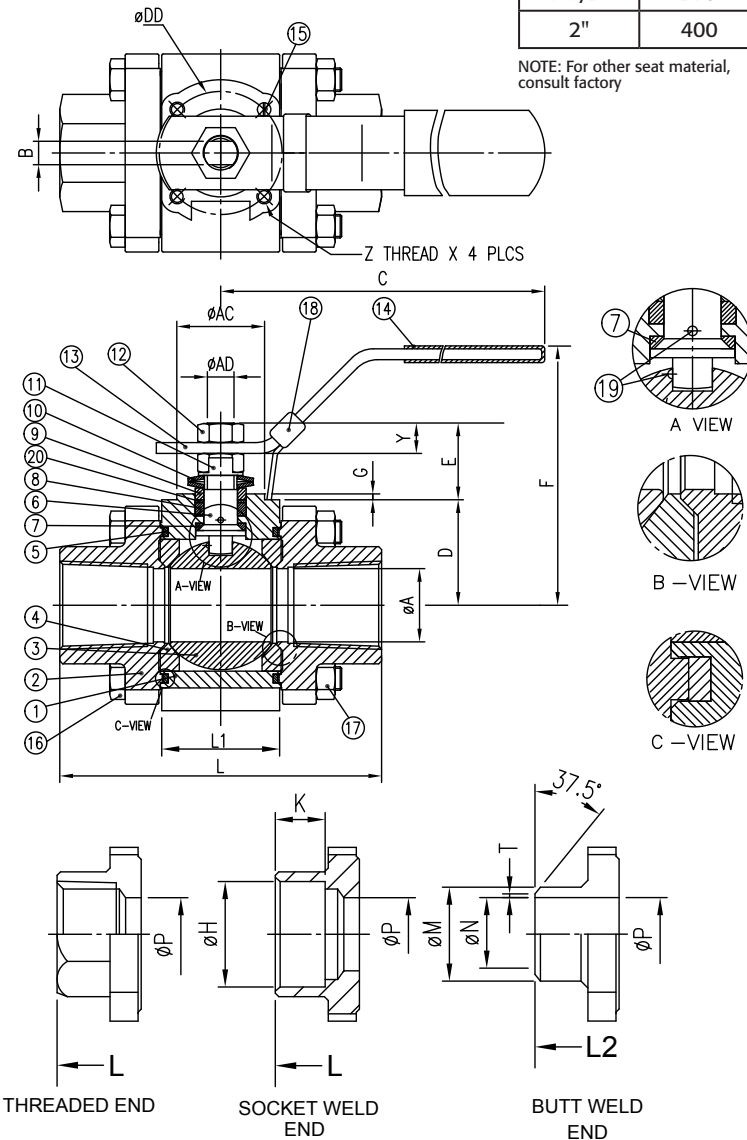


NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be considered when determining the limitation of the valve for specific application. Consult factory for other seat materials.

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" ASTM A351 GRADE CF8M	1/2" THRU 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"	0.59	0.98	0.37	0.256	5.28	1.14	1.417	0.63	2.81	0.08	0.86	0.39	2.85	0.81	2.95	0.85	0.59	0.59	0.06	0.29	M5	F03	1.5
3/4"	0.79	0.98	0.37	0.256	5.28	1.30	1.417	0.71	2.99	0.08	1.07	0.51	3.36	0.96	3.54	1.07	0.79	0.79	0.06	0.35	M5	F03	1.9
1"	0.98	1.18	0.44	0.315	6.69	1.42	1.654	0.97	3.24	0.08	1.33	0.51	4.15	1.24	4.33	1.34	0.98	0.98	0.06	0.43	M5	F04	3.2
1-1/4"	1.26	1.18	0.44	0.315	6.69	1.57	1.654	0.96	3.44	0.08	1.69	0.51	4.37	1.63	4.53	1.68	1.26	1.26	0.06	0.38	M5	F04	4.0
1-1/2"	1.50	1.38	0.56	0.382	8.15	1.86	1.969	1.19	4.08	0.09	1.93	0.51	5.01	1.91	5.12	1.91	1.50	1.50	0.06	0.48	M6	F05	5.7
2"	1.97	1.38	0.56	0.382	8.15	2.74	1.969	1.02	4.79	0.06	2.41	0.63	5.62	2.22	5.12	2.38	1.97	1.97	0.06	0.5	M6	F05	8.1



Pneumatic Double Acting Automated Ball Valve Package Series F83 3-Piece Ball Valve

Firesafe

Sizes 1/4" - 2"

Full 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

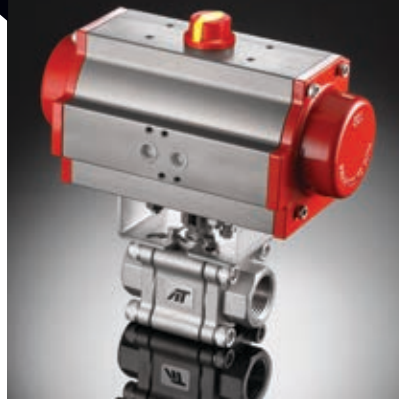
RTFE Seats Standard

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**

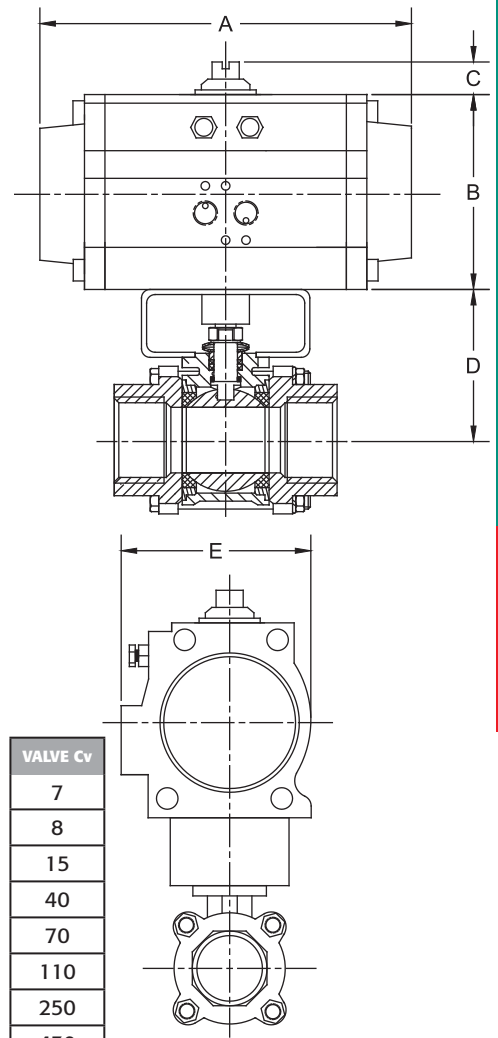


Firesafe tested to API-607
(valve only)

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	15
3/4"	7.95	3.43	0.79	2.65	3.29	40
1"	7.95	3.43	0.79	2.78	3.29	70
1-1/4"	7.95	3.43	0.79	2.90	3.29	110
1-1/2"	9.29	4.49	0.79	3.13	4.41	250
2"	9.29	4.49	0.79	3.42	4.41	430

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



**SERIES F83
3-Piece**

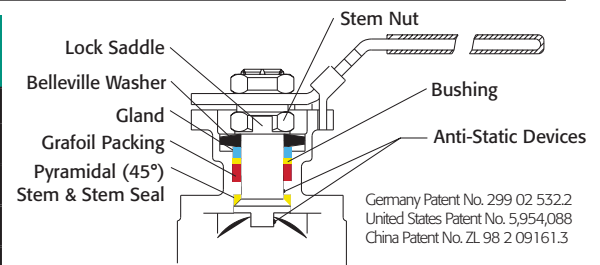
Firesafe

SIZED FOR 80 psi AIR SUPPLY

SIZE	MODEL
1/4"	F83-TX-025/TR1D-XX
3/8"	F83-TX-038/TR1D-XX
1/2"	F83-TX-050/TR1D-XX
3/4"	F83-TX-075/2R2D-XX
1"	F83-TX-100/2R2D-XX
1-1/4"	F83-TX-125/2R2D-XX
1-1/2"	F83-TX-150/2R3D-XX
2"	F83-TX-200/2R3D-XX

SIZED FOR 60 psi AIR SUPPLY

SIZE	MODEL
1/4"	F83-TX-025/TR1D-XX
3/8"	F83-TX-038/TR1D-XX
1/2"	F83-TX-050/TR1D-XX
3/4"	F83-TX-075/2R2D-XX
1"	F83-TX-100/2R2D-XX
1-1/4"	F83-TX-125/2R2D-XX
1-1/2"	F83-TX-150/2R3D-XX
2"	F83-TX-200/2R4D-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 # F83C-TX-100/2R2D-XX

Firesafe
Valve Series
Carbon Steel
End Connection
Seat Material
Valve Size
TRIAC Actuator Series
Actuator Size
Double Acting
Solenoid
Limit Switch

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.



A-T Controls, Inc.

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

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



Pneumatic Spring Return Automated Ball Valve Package Series F83 3-Piece Ball Valve

Firesafe

Sizes 1/4" - 2"

Full 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

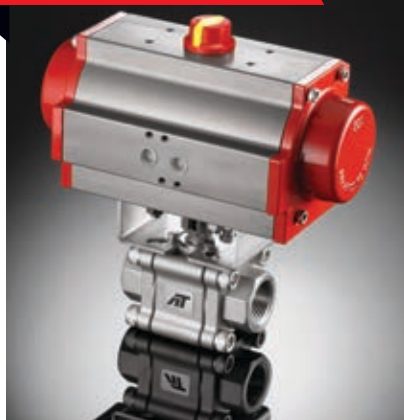
RTFE Seats Standard

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

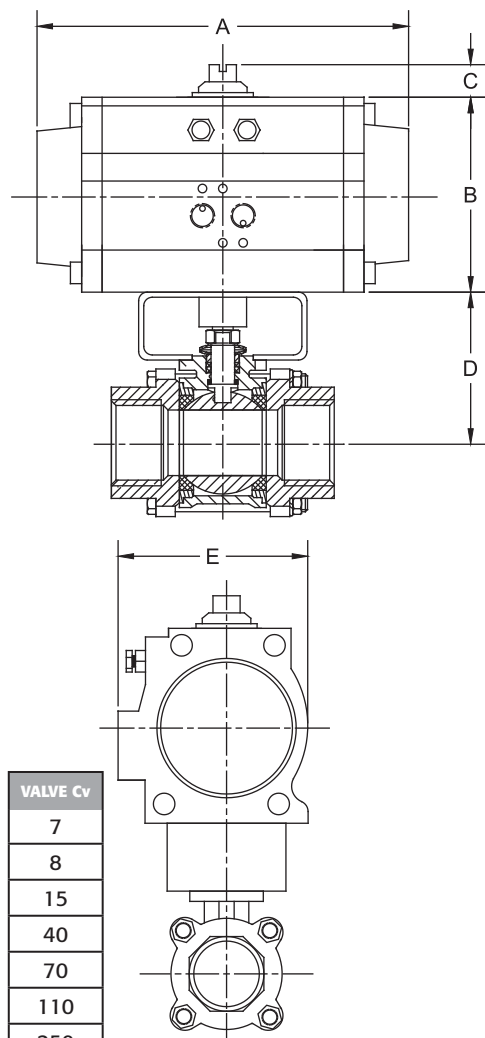


Firesafe tested to API-607
(valve only)

DIMENSIONS (IN)

VALVE SIZE	A	B	C	D	E	VALVE Cv
1/4"	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	15
3/4"	7.95	3.43	0.79	2.62	3.29	40
1"	9.29	4.49	0.79	2.78	4.41	70
1-1/4"	9.29	4.49	0.79	2.90	4.41	110
1-1/2"	9.29	4.49	0.79	3.13	4.41	250
2"	10.87	4.88	0.79	3.42	4.82	430

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

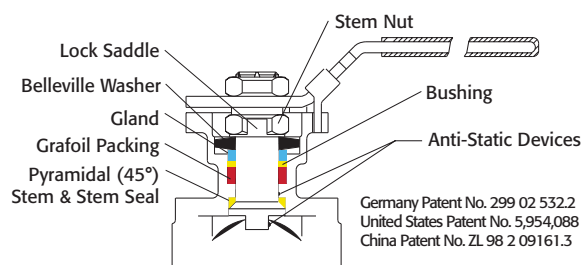


SERIES F83 3-Piece

Firesafe

SIZED FOR 80 psi AIR SUPPLY	
SIZE	MODEL
1/4"	F83-TX-025/2R2S-XX
3/8"	F83-TX-038/2R2S-XX
1/2"	F83-TX-050/2R2S-XX
3/4"	F83-TX-075/2R3S-XX
1"	F83-TX-100/2R3S-XX
1-1/4"	F83-TX-125/2R3S-XX
1-1/2"	F83-TX-150/2R3S-XX
2"	F83-TX-200/2R4S-XX

SIZED FOR 60 psi AIR SUPPLY	
SIZE	MODEL
1/4"	F83-TX-025/2R2S-XX
3/8"	F83-TX-038/2R2S-XX
1/2"	F83-TX-050/2R2S-XX
3/4"	F83-TX-075/2R3S-XX
1"	F83-TX-100/2R3S-XX
1-1/4"	F83-TX-125/2R3S-XX
1-1/2"	F83-TX-150/2R4S-XX
2"	F83-TX-200/2R4S-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 #
F83C-TX-050/2R2S-XX

Firesafe
Valve Series
Carbon Steel
End Connection
Seat Material
Valve Size
TRIAC Actuator Series
Actuator Size
Spring Return
Solenoid
Limit Switch

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.



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

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



Electric Automated Ball Valve Package

Series F83 3-Piece Ball Valve

Firesafe



Sizes 1/4" - 2"

Full 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

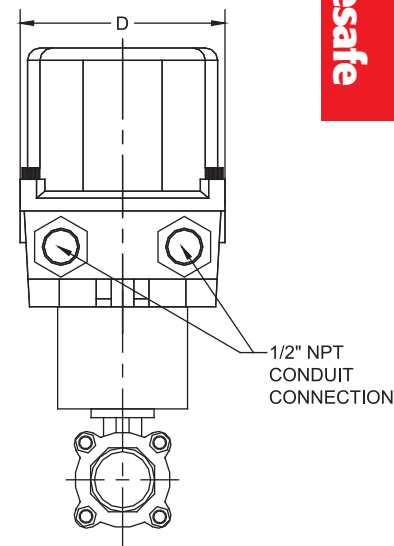
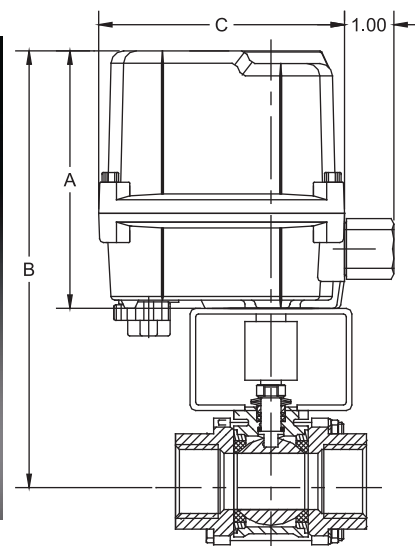
**API 607 - 6th Edition
CERTIFIED**



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	15
3/4"	5.24	7.89	4.94	4.08	40
1"	5.24	8.02	4.94	4.08	70
1-1/4"	5.24	8.14	4.94	4.08	110
1-1/2"	5.24	8.29	4.94	4.08	250
2"	5.24	8.66	4.94	4.08	430



SERIES F83 3-Piece

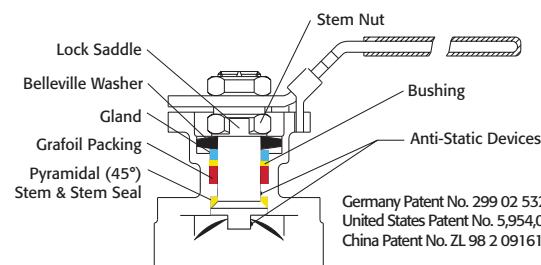
Firesafe

ON-OFF

SIZE	MODEL
1/4"	F83-TX-025/WEA1-XX
3/8"	F83-TX-038/WEA1-XX
1/2"	F83-TX-050/WEA1-XX
3/4"	F83-TX-075/WEA1-XX
1"	F83-TX-100/WEA1-XX
1-1/4"	F83-TX-125/WEA1-XX
1-1/2"	F83-TX-150/WEA1-XX
2"	F83-TX-200/WEA1-XX

MODULATING

SIZE	MODEL
1/4"	F83-TX-025/WEA2-XX
3/8"	F83-TX-038/WEA2-XX
1/2"	F83-TX-050/WEA2-XX
3/4"	F83-TX-075/WEA2-XX
1"	F83-TX-100/WEA2-XX
1-1/4"	F83-TX-125/WEA2-XX
1-1/2"	F83-TX-150/WEA2-XX
2"	F83-TX-200/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 #

F83C-TX-050/WEA1-XX

Firesafe
Valve Series
Carbon Steel
End Connection
Seat Material
Valve Size
TRIAC Actuator Series
Actuator Size
On-Off
Voltage
Options

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.

F83EL-20151024

Copyright 2013 A-T Controls, Inc.

A-T Controls, Inc.

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

PHONE (513) 247-5465
FAX (513) 247-5462
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



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

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

Other Products

Special Seats Balls and Seal Designs



Floor Mounted Damper Drives



Fusible Link Assemblies



Lockout Mounting Kits



Special Multi-Port Valves



Steam Jacketed Valves



Limit Switches Mounted on Manual Valves



180° Actuators



Stem Extensions



Dual Valve Assemblies

