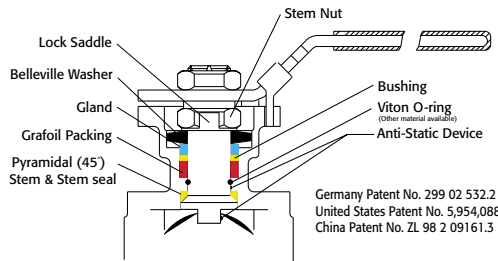


**API 607 - 4th Edition  
CERTIFIED**



Triac Series F91 unibody flanged ball valves feature a high quality investment cast body and end. They are available in 1/2" through 6" and are regular port. Superior leak protection is accomplished by using our patented "pyramidal" stem seal system shown in the graphic below. This advanced system protects against wear and leakage experienced by ordinary ball valves.



## Easy to Automate!

See automated data sheets for pre-sized assemblies



Pneumatic



Electric

**TRIAQ**  
CONTROLS

# Series F91

**FIRESAFE**

## Unibody Flanged Ball Valve

Sizes 1/2" – 6"

Regular Port

ANSI Class 150#

Direct Actuator Mount

Available in 316SS or WCB

Anti-static Device

316SS Body, Ball and Stem

Compliant to NACE MRO175

Pyramidal Stem Packing System

Blowout-proof Stem

ISO5211 Mounting

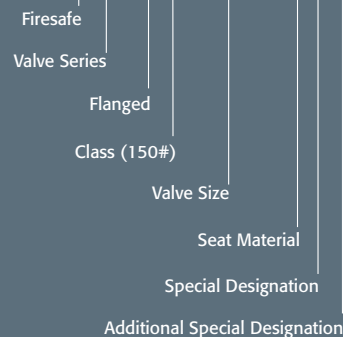
Locking Handle Standard

Each Valve is Traceable\*\*

### HOW TO ORDER MANUAL VALVES

SAMPLE PART #

**F91-F1-0300-XXX**



See part number matrix for itemized options

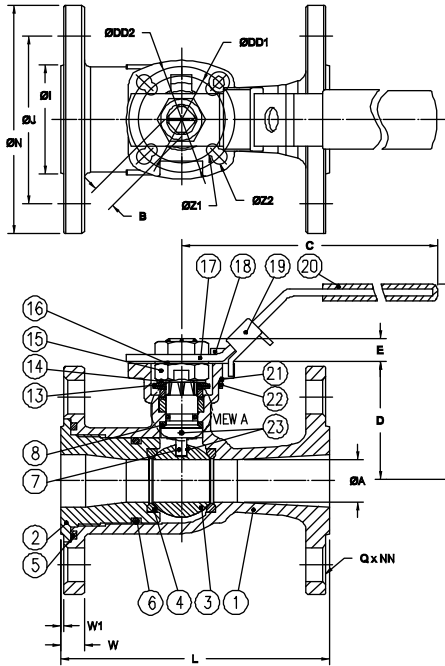
\*\*MTRs available - call for details

# Series F91

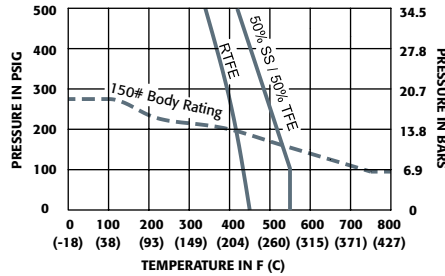
## High Performance, Regular Unibody Flanged Ball Valve Series F91 (ANSI Class 150#)

BREAKAWAY TORQUE RTFE SEATS		VALVE SIZE	VALVE Cv
1/2"	110	1/2"	9
3/4"	115	3/4"	15
1"	145	1"	42
1-1/2"	320	1-1/2"	125
2"	415	2"	165
2-1/2"	450	2-1/2"	245
3"	600	3"	350
4"	1043	4"	680
6"	2130	6"	1020

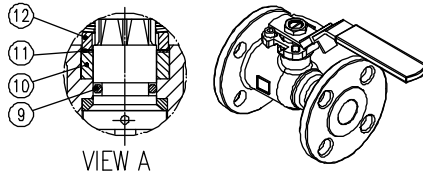
1/2" - 2"



Pressure vs. Temperature Chart  
for valves 1/2" to 6"



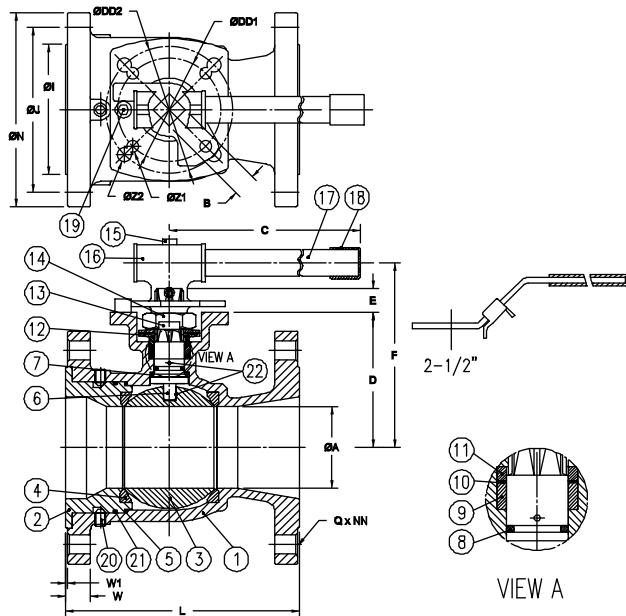
NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be consulted when determining the limitation of the valve for specific application. Consult factory for other seat material.



### MATERIALS LIST

NO.	PART NAME	QTY.	MATERIAL	
			Stainless Steel	Carbon Steel
1	Body	1	CF8M	WCB
2	End Cap	1	CF8M	WCB
3	Ball	1	SS316	SS316
4	Seat	2	RTFE	RTFE
5	Joint Gasket	1	Graphite	Graphite
6	O-Ring	1	Viton®	Viton®
7	Stem	1	SS316	SS316
8	Stem Seal	1	RTFE	RTFE
9	O-Ring	1	Viton®	Viton®
10	Gland Packing	1	Graphite	Graphite
11	Bushing	1	RTFE	RTFE
12	Gland Bush	1	SS304	SS304
13	Belleville Washer	2	SS301	SS301
14	Stop Washer	1	SS304	SS304
15	Stem Nut	2	SS304	SS304
16	Stem Washer	1	SS304	SS304
17	Handle	1	SS304	SS304
18	Stop Pin	1	SS304	SS304
19	Locking Device	1	SS304	SS304
20	Handle Sleeve	1	Vinyl	Vinyl
21	Washer	1	SS304	SS304
22	Pin Nut	1	SS304	SS304
23	Anti-Static Device	2	SS304	SS304

2-1/2" - 6"



### MATERIALS LIST

NO.	PART NAME	QTY.	MATERIAL	
			Stainless Steel	Carbon Steel
1	Body	1	CF8M	WCB
2	End Cap	1	CF8M	WCB
3	Ball	1	SS316	SS316
4	Seat	2	RTFE	RTFE
5	Joint Gasket	1	Graphit	Graphite
6	Stem	1	SS316	SS316
7	Thrust Washer	1	RTFE	RTFE
8	O-Ring	1	Viton®	Viton®
9	Gland Packing	1	Graphite	Graphite
10	Bushing	1	RTFE	RTFE
11	Gland Bush	1	SS304	SS304
12	Belleville Washer	2	SS301	SS301
13	Stop Washer	1	SS304	SS304
14	Stem Nut	1	SS304	SS304
15	Handle Screw	2	SS304	SS304
16	Handle A	1	SS304	SS304
17	Handle B	1	SS304	SS304
18	Handle Sleeve	1	SS304	SS304
19	Stop Pin	1	Vinyl	Vinyl
20	Screw	*	SS304	SS304
21	O-Ring	1	SS304	SS304
22	Anti-Static Device	2	SS304	SS304

\* QTY = 4 for 2-1/2" thru 4", and QTY = 6 for 6"

### DIMENSIONS (IN)

SIZE	A	B	C	D	E	F	I	J	L	N	Q	W	W1	Z1	Z2	DD1	DD2	NN	LBS	ISO5211
1/2"	0.50	0.433	6.50	1.80	0.37	3.22	1.38	2.38	4.26	3.50	0.63	0.44	0.06	0.26	0.28	1.654	1.969	4	4	F04/F05
3/4"	0.59	0.433	6.50	2.02	0.39	3.44	1.69	2.75	4.62	3.88	0.63	0.44	0.06	0.26	0.28	1.654	1.969	4	4.5	F04/F05
1"	0.79	0.433	6.50	2.19	0.39	3.61	2.00	3.12	5.00	4.25	0.63	0.44	0.06	0.26	0.28	1.654	1.969	4	6	F04/F05
1-1/2"	1.26	0.551	8.46	2.86	0.51	4.71	2.88	3.88	6.50	5.00	0.63	0.56	0.06	0.30	0.35	1.969	2.756	4	11	F05/F07
2"	1.50	0.748	10.35	3.51	0.75	5.68	3.62	4.75	7.02	6.00	0.75	0.63	0.06	0.39	0.47	2.756	4.016	4	18.5	F07/F10
2-1/2"	1.97	0.748	10.35	3.80	0.75	5.97	4.12	5.50	7.50	7.00	0.75	0.69	0.06	0.39	0.47	2.756	4.016	4	26	F07/F10
3"	2.56	0.748	14.37	4.57	0.75	6.31	5.00	6.00	8.00	7.50	0.75	0.75	0.06	0.39	0.47	2.756	4.016	4	35	F07/F10
4"	3.15	0.866	14.37	5.22	0.91	7.13	6.19	7.50	9.00	9.00	0.75	0.94	0.06	0.47	0.55	4.016	4.921	8	56	F10/F12
6"	4.37	1.063	29.53	7.07	1.12	9.63	8.50	9.50	10.50	11.00	0.87	1.00	0.06	0.55	0.71	4.921	5.512	8	103	F12/F14

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

**A-T Controls, Inc.**

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