



SERIES 9000 FULL PORT FLANGED FIRESAFE BALL VALVE

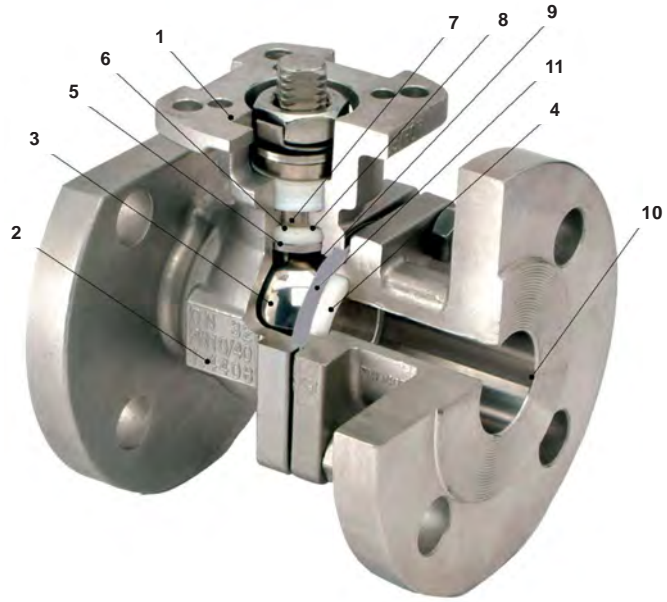
# Series 9000



**SIL3**  
Safety Integrity Level

## Design Features

- 1. Dual Pattern ISO 5211 Mounting Pad with Square Shaft**  
Brackets are not required for actuation.
- 2. Body Construction**  
Sizes 1/2" to 4" and 6" Investment Cast Size 5" Sand Cast.
- 3. Ball**  
Precisely machined, mirror polished solid ball for bubble tight shutoff with less operating torque.
- 4. Seats**  
Relief slots are designed to relieve pressure in upstream piping reducing seat wear and valve torque.
- 5. Pyramidal Stem Design**  
Provides optimum stem seal and extremely long cycle life.
- 6. Super Smooth Stem Surface**  
To prolong service life, the smooth stem surface reduces seal friction and operating torque.
- 7. Blow-Out Proof Stem**  
For maximum safety.
- 8. O-Ring Stem Seal**  
Extends service life by enhancing the stem wear and maintains stem alignment.
- 9. Anti-Static Device**  
Spring loaded stem to ball and stem to body anti-static device.
- 10. All wetted parts and flange surface fully machined.**
- 11. Fully Encapsulated Body Seals**  
Maintains sealing integrity from high vacuum to high pressure and temperature applications.



### V Ball Options

The Triad V Ball provides unlimited control options for all process applications. For more information please request the Triad V Ball Control Valves data sheet.

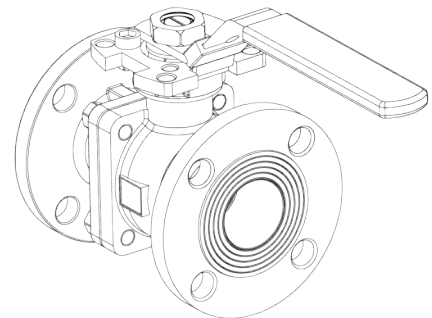


### Metal Seated Option

The Triad metal seat option is available for elevated temperatures and abrasive conditions. For more information please request the Triad Metal Seated Valves data sheet.



<b>Construction:</b>	Split-Body Flanged Ball Valves, Full Port
<b>Size Range:</b>	1/2" to 12"
<b>Pressure Rating:</b>	9150 ANSI 150# 9300 ANSI 300#
<b>Valve Material:</b>	Standard: ASTM A351 Gr. CF8M / DIN 1.4408 Options: WCB, 316L S/S, Titanium, Duplex, Hastelloy C, Alloy 20
<b>Seat Material:</b>	Standard: RPTFE Options: TFM 1600, PEEK, Carbon filled PTFE, Delrin, UHM-WPE, Flex Metal™, Metal Seats, etc.
<b>Inspection and Test:</b>	API 598, BS6755 Part 1
<b>Compliance:</b>	ANSI B16.34, ANSI B16.5, ANSI B16.10, API 6D, API 509, API 607 4th Edition
<b>Standards:</b>	BS5351, BS6755, ISO 5211, DIN 3337, DIN 3202, DIN 2501, MSS SP25, MSS SP55, EN 10204 - 3.1
<b>Material Certificate:</b>	ISO 9001
<b>Quality System:</b>	NACE MR - 0175 (option)



**SIL3**  
Safety Integrity Level



3 GD  
ATEX 94/9/EC

**CE**

0035  
PED/97/23/EC  
Category III  
Module H

TA-Luft 2002, Sec.5.3.6.4  
VDI 2440 Nov.2000, Sec.3.3.1.3

# Dimensions

## PYRAMIDAL MACHINED STEM WITH STEM SEAL

All valves come standard with direct mount actuator capabilities and our patented live loaded high cycle pyramidal stem seal design. The wedging action of the stem is far superior to flat stem design when it comes to effective wear compensation. For more information on this design please request Triad's Pyramidal Stem Design data sheet.

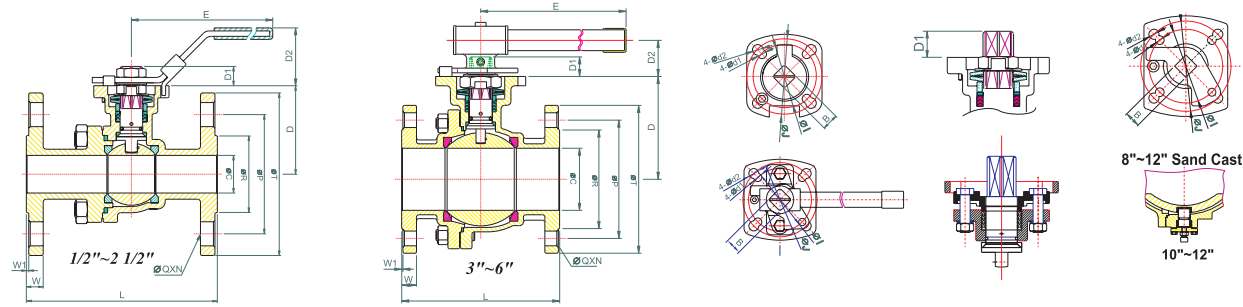
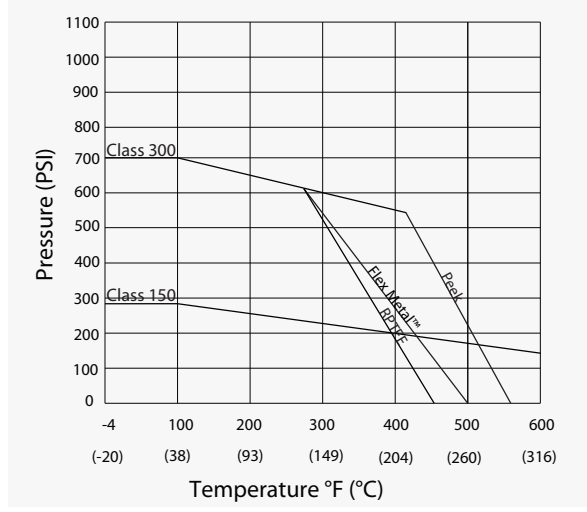
Standard Design



High Temp Design



TA-Luft 2002, Sec.5.3.6.4  
VDI 2440 Nov.2000, Sec.3.3.1.3



### 9150 (ANSI CLASS 150) Dimension B: Standard .67 - Optional .75

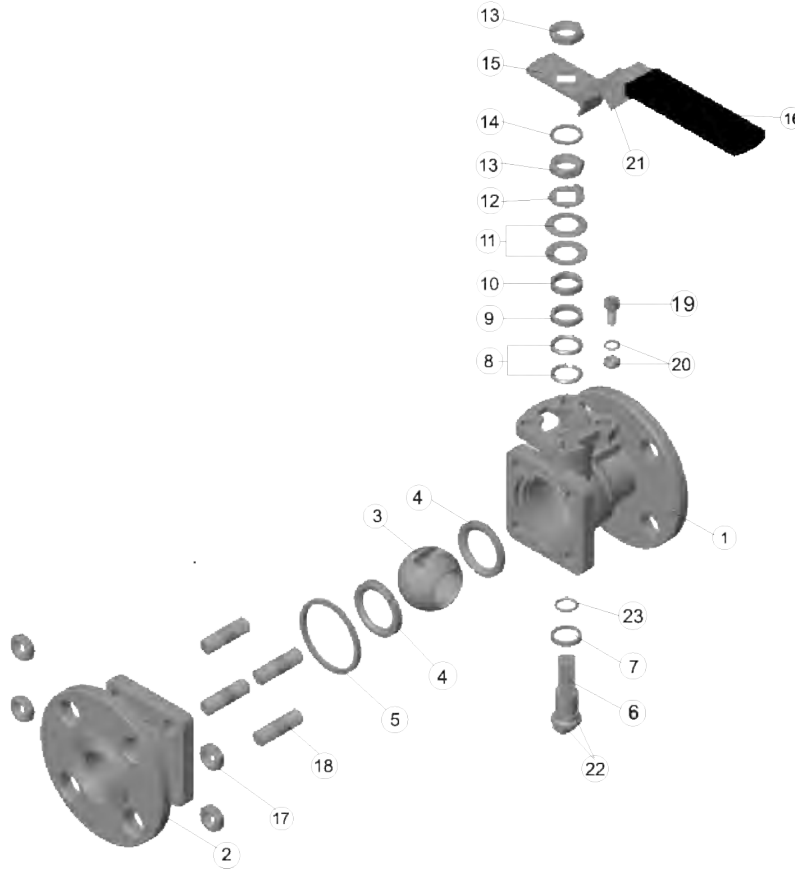
SIZE	ØC	B	E	D	D1	D2	ØI	ØJ	L	N	ØP	ØQ	ØR	ØT	W	W1	Ød1	Ød2	WT (lb)	ISO5211
1/2"	0.59	0.43	6.50	1.84	0.39	1.42	1.65	1.97	4.26	0.16	2.38	0.63	1.38	3.50	0.44	0.06	0.26	0.28	3.99	F04/F05
3/4"	0.79	0.43	6.50	2.02	0.39	1.42	1.65	1.97	4.62	0.16	2.75	0.63	1.69	3.88	0.44	0.06	0.26	0.28	4.83	F04/F05
1"	0.98	0.43	6.50	2.31	0.41	1.42	1.65	1.97	5.00	0.16	3.12	0.63	2.00	4.25	0.44	0.06	0.26	0.28	6.42	F04/F05
1-1/4"	1.26	0.55	8.46	2.86	0.51	1.93	1.97	2.76	5.50	0.16	3.50	0.63	2.50	4.62	0.50	0.06	0.30	0.35	9.57	F05/F07
1-1/2"	1.50	0.67	10.31	3.51	0.75	2.28	2.76	4.02	6.50	0.16	3.88	0.63	2.88	5.00	0.56	0.06	0.39	0.47	14.11	F07/F10
2"	1.97	0.67	10.31	3.80	0.75	2.28	2.76	4.02	7.02	0.16	4.75	0.75	3.62	6.00	0.63	0.06	0.39	0.47	20.26	F07/F10
2-1/2"	2.56	0.67	10.31	4.57	0.75	2.28	2.76	4.02	7.48	0.16	5.50	0.75	4.12	7.00	0.69	0.06	0.39	0.47	31.53	F07/F10
3"	3.15	0.87	14.37	5.22	0.91	1.82	4.02	4.92	8.01	0.16	6.00	0.75	5.00	7.50	0.75	0.06	0.47	0.55	42.99	F10/F12
4"	3.94	0.87	14.37	6.18	0.91	1.82	4.02	4.92	9.00	0.31	7.50	0.75	6.19	9.00	0.94	0.06	0.47	0.55	68.34	F10/F12
5"	4.92	1.06	29.53	7.59	1.12	2.62	4.92	5.51	14.00	0.31	8.50	0.87	7.31	10.00	0.94	0.06	0.55	0.71	122.80	F12/F14
6"	5.91	1.06	29.53	8.28	1.12	2.62	4.92	5.51	15.50	0.31	9.50	0.87	8.50	11.00	1.00	0.06	0.55	0.71	165.35	F12/F14
8"	7.91	1.42	37.60	10.43	1.57	2.40	5.51	6.50	18.00	0.31	11.75	0.87	10.62	13.50	1.12	0.06	0.71	0.87	223.55	F14/F16
10"	9.92	1.42		11.81	1.57			6.50	21.00	0.47	14.25	1.00	12.76	16.00	1.19	0.06		0.87	315.26	F16
12"	11.93	1.81		13.39	1.77			6.50	24.00	0.47	17.00	1.00	15.00	19.00	1.25	0.06		0.87	526.90	F16

### 9300 (ANSI CLASS 300)

SIZE	ØC	B	E	D	D1	D2	ØI	ØJ	L	N	ØP	ØQ	ØR	ØT	W	W1	Ød1	Ød2	WT (lb)	ISO5211
1/2"	0.59	0.43	6.50	1.92	0.39	1.42	1.65	1.97	5.50	0.16	2.62	0.63	1.38	3.75	0.56	0.06	0.26	0.28	5.07	F04/F05
3/4"	0.79	0.43	6.50	2.50	0.41	1.42	1.65	1.97	6.00	0.16	3.25	0.75	1.69	4.62	0.62	0.06	0.26	0.28	8.60	F04/F05
1"	0.98	0.43	6.50	2.50	0.41	1.42	1.65	1.97	6.50	0.16	3.50	0.75	2.00	4.88	0.69	0.06	0.26	0.28	11.02	F04/F05
1-1/2"	1.50	0.67	10.31	3.51	0.75	2.28	2.76	4.02	7.50	0.16	4.50	0.87	2.88	6.12	0.81	0.06	0.39	0.47	22.16	F07/F10
2"	1.97	0.67	10.31	3.80	0.75	2.28	2.76	4.02	8.50	0.31	5.00	0.75	3.62	6.50	0.88	0.06	0.39	0.47	27.69	F07/F10
2-1/2"	2.56	0.67	10.31	4.57	0.75	2.28	2.76	4.02	9.50	0.31	5.88	0.87	4.12	7.50	1.00	0.06	0.39	0.47	43.48	F07/F10
3"	3.15	0.87	14.37	5.22	0.91	1.82	4.02	4.92	11.12	0.31	6.62	0.87	5.00	8.25	1.12	0.06	0.47	0.55	60.63	F10/F12
4"	3.94	0.87	14.37	6.18	0.91	1.82	4.02	4.92	12.00	0.31	7.88	0.87	6.19	10.00	1.25	0.06	0.47	0.55	97.44	F10/F12
6"	5.91	1.06	29.53	8.28	1.12	2.62	4.92	5.51	15.87	0.47	10.62	0.87	8.50	12.50	1.44	0.06	0.55	0.71	219.14	F12/F14

## Materials

### SERIES 9000 FLANGED FULL PORT FIRESAFE BALL VALVE



NO.	PART NAME	MATERIAL	Q'TY
1	Body	CF8M / WCB	1
2	Cap	CF8M / WCB	1
3	Ball	SUS 316	1
4	Seat	RPTFE	2
5	Joint Gasket	Graphite	1
6	Stem	SUS 316	1
7	Stem Seal	RPTFE	1
8	Stem Packing	Graphite	1
9	Stem Packing	25% Glass Fiber filled + PTFE	1
10	Gland	SUS 304	1
11	Belleville Washer	SUS 301	2
12	Lock Saddle	SUS 304	1

NO.	PART NAME	MATERIAL	Q'TY
13	Stem Nut	SUS 304	2
14	Stem Washer	SUS 304	1
15	Handle	SUS 304	1
16	Handle Sleeve	Vinyl	1
17	Bolt Nut	SUS 304	4
18	Bolt	SUS 304	4
19	Stop Pin	SUS 304	1
20	Pin Nut & Washer	SUS 304	1
21	Locking Device	SUS 304	1
22	Anti-Static	SUS 316	2
23	O-Ring	VITON	1

\*Material list applies to sizes 1/2" ~ 2-1/2". For additional sizes please refer to separate bulletins.