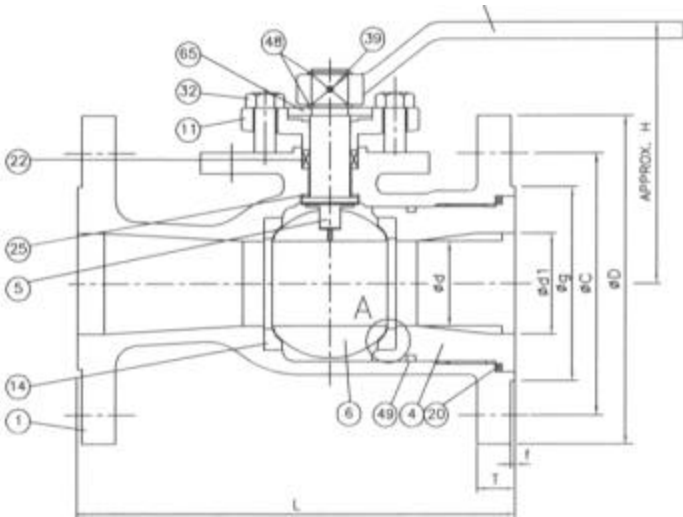


SVF FLOW CONTROLS
INCORPORATED

Performance Engineered

Series 41 150# Flanged Standard Port Fire Safe / API-607 – 4th Edition

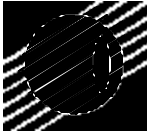


1 PIECE REDUCED PORT BALL VALVE UNITS = INCHES

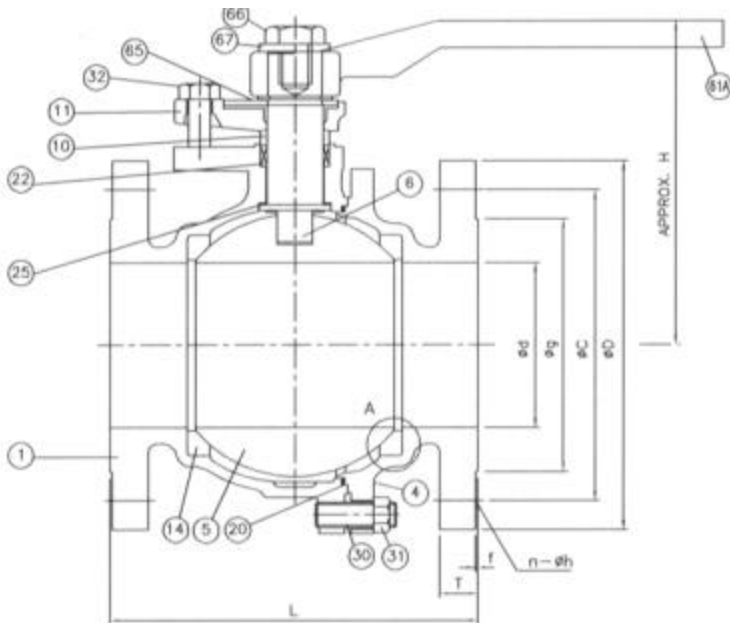
SIZE	CLASS 150			
	WEIGHTS	L	H	W
1 1/2	11	6.50	3.86	9.06
2	21	7.01	4.65	9.06
3	40	7.99	5.98	13.78
4	60	9.02	7.01	17.72
6	104	15.51	8.50	23.62
8	150	17.99	12.60	31.50

No.	Parts Name	Qty	Materials	
1	Body	1	A216 WCB	A351 CF8M
4	Cap / Insert	1	A216 WCB	A351 CF8M
5	Stem	1	A276 304SS	A276 304SS
6	Ball	1	A216 WCB	A351 CF8M
10	Gland	1	A276 304SS	A276 304SS
11	Gland Flange	1	A351 CF8	
14	Seat	2	RTFE	
16	Bottom Cover	1	A216 WCB	A351 CF8M
17	Lower Stem	1	A276 304SS	
18	Seat Retainer	2	A351 CF8	
20	Gasket	1 Set	PTFE / GRAPHOIL	
22	Gland Packing	1 Set	PTFE / GRAPHOIL	
24	Stem Bearing	1 Set	PTFE	
25	Thrust Washer	1 Set	PTFE	
30	Cap Bolt	1 Set	A193 B7	A193 B8
31	Cap Bolt Nut	1 Set	A194 2H	A194 B8
32	Gland Bolt	2	A193 B8	
35	Handwheel Nut	1	A276 304SS	
43	Connecting Piece	1	A105	A276 304SS
46	Yoke Bolt	1 Set	A193 B8	
48	Snap Ring	1 Set	A686 W1	
49	O - Ring	1	PTFE	
51	Spring	1 Set	INCONEL / A276 316SS	
61	Handle	1	A536 / A167 304	
65	Stop	1	A167 304	
82	Thrust Bearing	1	RTFE	
83	Bottom bolt	1 Set	A193 B7	A193 B8
84	Bottom Nut	1 Set	A194 2H	A194 B8





**Series B41 150# Flanged Full Port
Fire Safe / API-607 – 4th Edition**

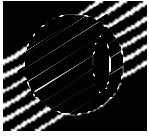


No.	Parts Name	Qty	Materials	
1	Body	1	A216 WCB	A351 CF8M
4	Cap / Insert	1	A216 WCB	A351 CF8M
5	Stem	1	A276 304SS	A276 304SS
6	Ball	1	A216 W CB	A351 CF8M
10	Gland	1	A276 304SS	A276 304SS
11	Gland Flange	1	A351 CF8	
14	Seat	2	RTFE	
16	Bottom Cover	1	A216 WCB	A351 CF8M
17	Lower Stem	1	A276 304SS	
18	Seat Retainer	2	A351 CF8	
20	Gasket	1 Set	PTFE / GRAPHOIL	
22	Gland Packing	1 Set	PTFE / GRAPHOIL	
24	Stem Bearing	1 Set	PTFE	
25	Thrust Washer	1 Set	PTFE	
30	Cap Bolt	1 Set	A193 B7	A193 B8
31	Cap Bolt Nut	1 Set	A194 2H	A194 B8
32	Gland Bolt	2	A193 B8	
35	Handwheel Nut	1	A276 304SS	
43	Connecting Piece	1	A105	A276 304SS
46	Yoke Bolt	1 Set	A193 B8	
48	Snap Ring	1 Set	A686 W1	
49	O - Ring	1	PTFE	
51	Spring	1 Set	INCONEL / A276 316SS	
61	Handle	1	A536 / A167 304	
65	Stop	1	A167 304	
82	Thrust Bearing	1	RTFE	
83	Bottom bolt	1 Set	A193 B7	A193 B8
84	Bottom Nut	1 Set	A194 2H	A194 B8

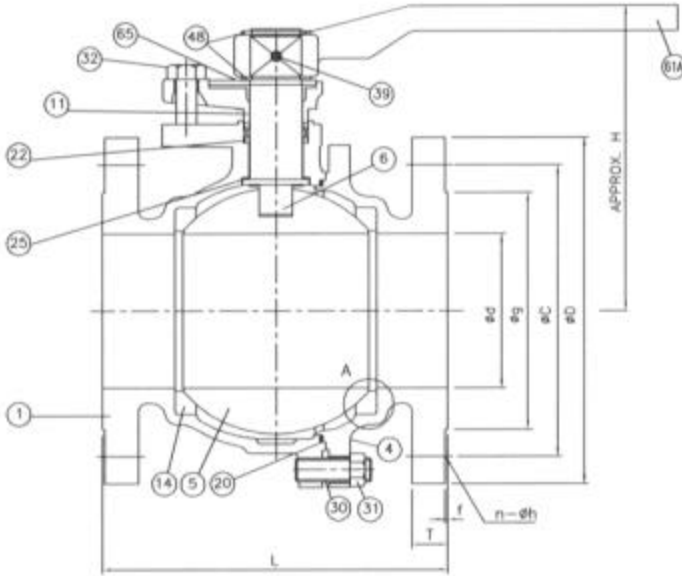
2 PIECE FULL PORT BALL VALVES UNITS = INCHES

SIZE	CLASS 150				
	WEIGHT	L	L1	H	W
1/2	5	4.25	4.25	2.36	5.12
3/4	6	4.61	4.61	2.52	5.12
1	7	5.00	5.00	3.03	6.10
1 1/2	14	6.50	6.50	3.86	9.06
2	22	7.01	7.01	4.65	9.06
2 1/2	35	7.52	7.52	5.59	13.78
3	45	7.99	7.99	5.98	13.78
4	77	9.02	9.02	7.01	17.72
6	149	15.51	15.51	8.50	23.62
8	260	17.99	17.99	12.60	31.50
10	383	20.98	22.01	14.57	31.50





**Series B42 300# Flanged Full Port
Fire Safe / API-607 – 4th Edition**

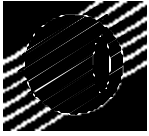


No.	Parts Name	Qty	Materials	
1	Body	1	A216 WCB	A351 CF8M
4	Cap / Insert	1	A216 WCB	A351 CF8M
5	Stem	1	A276 304SS	A276 304SS
6	Ball	1	A216 WCB	A351 CF8M
10	Gland	1	A276 304SS	A276 304SS
11	Gland Flange	1	A351 CF8	
14	Seat	2	RTFE	
16	Bottom Cover	1	A216 WCB	A351 CF8M
17	Lower Stem	1	A276 304SS	
18	Seat Retainer	2	A351 CF8	
20	Gasket	1 Set	PTFE / GRAPHOIL	
22	Gland Packing	1 Set	PTFE / GRAPHOIL	
24	Stem Bearing	1 Set	PTFE	
25	Thrust Washer	1 Set	PTFE	
30	Cap Bolt	1 Set	A193 B7	A193 B8
31	Cap Bolt Nut	1 Set	A194 2H	A194 B8
32	Gland Bolt	2	A193 B8	
35	Handwheel Nut	1	A276 304SS	
43	Connecting Piece	1	A105	A276 304SS
46	Yoke Bolt	1 Set	A193 B8	
48	Snap Ring	1 Set	A686 W1	
49	O - Ring	1	PTFE	
51	Spring	1 Set	INCONEL / A276 316SS	
61	Handle	1	A536 / A167 304	
65	Stop	1	A167 304	
82	Thrust Bearing	1	RTFE	
83	Bottom bolt	1 Set	A193 B7	A193 B8
84	Bottom Nut	1 Set	A194 2H	A194 B8

2 PIECE FULL PORT BALL VALVES UNITS = INCHES

SIZE	CLASS 300				
	WEIGHT	L	L1	H	W
1/2	5	4.25	4.25	2.36	5.12
3/4	8	4.61	4.61	2.52	5.12
1	11	5.00	5.00	3.03	6.10
1 1/2	24	6.50	6.50	3.86	9.06
2	32	7.01	7.01	4.65	9.06
2 1/2	48	7.52	7.52	5.59	13.78
3	67	7.99	7.99	5.98	13.78
4	110	9.02	9.02	7.01	17.72
6	213	15.51	15.51	8.50	23.62
8	383	17.99	17.99	12.60	31.50
10	785	20.98	22.01	14.57	31.50





High Flow Capacity

- * Standard-port design offers high flow capacity for control of clean or dirty fluids and gases, including steam.
- * Full-port valves provide highest capacity per line size and allow pipeline pigging.

Cv Tables

**41 Series Class 150
 Reduced Port Flanged
 Ball Valves**

Size	CV
1 1/2	113
2	270
2 1/2	500
3	670
4	1,200
6	2,200
8	4,800

**B41 Series Class 150 Full
 Port & B42 Class 300, Full
 Port Flanged Ball Valves**

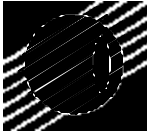
Size	CV
1/2	26
3/4	61
1	113
1 1/2	270
2	500
2 1/2	800
3	1,200
4	2,200
6	5,300
8	9,700
10	16,000

The Cv values represent the flow of water at +60°F through the valve in U.S. gallons per minute at a pressure drop of 1 psi.

SPECIFICATIONS

41, B41, & B42 SERIES

Document Number	Description
B16.5	Pipe Flanges & Flanged Fittings
B16.10	Face-to-Face and End-to-End Dimensions of Ferrous Valves
B16.34	Valves - Flanged & Buttwelding End
B31.1	General Design for Power Piping
B31.3	General Design for Process Piping
API-6D	Specification for Pipeline Valves Gate, Plug, Ball, and Check Valves (B41 & B42 FULL PORT VALVES ONLY)
API-598	Valve Inspection and Test. 6th ed.
API-607	Fire Test for Soft-Seated Ball Valves. 4th ed.
API-608	Metal Ball Valves-Flanged and Butt-Weld. 1st ed. Ends
SP-55	Quality Standard for Steel Castings for Valves, Flanges and Fittings and Other Piping Components - Visual Method
BS 6755	Part 1 & 2. Testing of valves – Specification for Fire type Testing Requirements.
ISO 5211	Dimensions For Attachment Of Actuators / Gear Boxes To Valves (ISO Mounting) (1/2" - 8" 150# & 300# 41, B41, & B42 Series Valves)



TORQUE TABLES

41, Nominal Operating Torque for RG (15% Glass Filled PTFE Teflon)

Differential Pressure	Size →	1-1/2"	2"	3"	4"	6"	8"
	285	102	223	545	830	2522	4238
	250	100	218	531	802	2429	4075
	200	100	209	503	746	2243	3750
	150	100	201	475	691	2057	3425
	100	100	192	446	636	1871	3100
	50	100	184	418	580	1686	2775
	0	100	175	390	525	1500	2450
Torque in Pound Inches							

B41 & B42 Nominal Operating Torque for RG (15% Glass Filled PTFE Teflon)

Differential Pressure (psi)	Size -->	1/2"	3/4"	1"	1-1/2"	2"	2 1/2"	3"	4"	6"	8"
	740 (WCB)	81	106	157	312	518	830	1374	2114	7400	20086
	720 (316 SS)	79	103	153	303	504	807	1337	2057	7200	19543
	700	77	100	149	295	490	785	1300	2000	7000	19000
	650	76	98	143	287	472	757	1245	1975	6675	18875
	600	75	97	137	278	453	728	1189	1950	6350	18750
	550	74	95	132	270	435	700	1134	1925	6025	18625
	500	73	93	126	261	417	672	1079	1900	5700	18500
	450	72	91	120	252	399	644	1023	1810	5375	17100
	400	71	89	114	244	381	616	968	1720	5050	15700
	350	70	88	109	235	362	587	913	1630	4725	14300
	300	69	86	103	227	344	559	857	1540	4400	12900
	285 (WCB)	69	85	102	223	335	545	830	1495	4238	12200
	250	68	84	100	218	326	531	802	1450	4075	11500
	200	67	82	100	209	308	503	746	1360	3750	10100
	150	66	80	100	201	290	475	691	1270	3425	8700
	100	65	79	100	192	271	446	636	1180	3100	7300
	50	64	77	100	184	253	418	580	1090	2775	5900
0	63	75	100	175	235	390	525	1000	2450	4500	
Torque in Pound Inches											

Operating Torque may vary depending on service conditions

Application Media Factors:	Multiplier
Oils, Lubricating media	0.80
Liquid, clean (particle free)	1.00
Liquid, dirty (slurry), raw water	1.80
Gas, clean and wet (sat. steam)	1.00
Gas, dry (superheated steam)	1.30
Gas, dirty (natural gas)	1.50
Oxygen, chlorine	1.50



Floating and Trunnion Ball Designs

- * 1/2" through 8" valves are designed with a floating ball.
- * 10" and larger valves incorporate a trunnion design to insure tight sealing without sacrificing pressure or temperature ratings.

FEATURES

- * Reliable BI-Directional Shutoff
- * Bubble-Tight Shut-off: Exceeds ANSI/FCI 70-2 Class VI Level.
- * Fire-Safe Design ANSI Class 150 and 300 pressure-rated valves are Fire-Safe to the requirements of API 607 4th edition and BS 6755 Part 1 & 2.

Polymeric-seated flanged ball valves are available in sizes 1 1/2" through 8" in standard port and 1/2" through 16" full port designs with pressure ratings in accordance with ANSI Class 150 or 300.

A choice of body, trim, and seat materials is available to suit an extensive range of applications. As an option, valves can be prepared for special services, such as chlorine, oxygen, high-vacuum, or NACE MR-01-75.

Options

SVF Ball valves come with a variety of options to meet specific application requirements.

- Electric or pneumatic actuators
- Locking Devices
- Stem Extensions
- Control Accessories
- Special cleaning and preparation



Broad Range of Materials

* Many body, trim, and seat options are available to handle a wide variety of applications and demanding critical services.

HOW TO ORDER

SIZE	STYLE	BODY & ENDS	BALL & STEM	SEAT	SEAL	CONNECTIONS
1/2	Reduced Port 1 1/2" - 8"	4 Carbon Steel	6 Stainless Steel (Standard)	R = RTFE (Standard)	G = Graphoil (Standard)	150 = 150# RF Flanged
3/4	41 - Series 150# RF Flanged	6 Stainless Steel	Optional Ball & Stem Upon Request.	T = TFE C = Carbon Filled TFE	T - TFE ** (None Fire Safe)	300 = 300# RF Flanged
1						
1 1/2	Full Port 1/2" - 10"					
2	B41 - Series 150# RF Flanged					
2 1/2						
3	B42 - Series 300# RF Flanged					
4						
6						
8						
10						

Example: 2" 416666RG-150 = 2" Reduced Port, 316 Stainless Steel Body, Ball & Stem, Re-Inforced TFE Seat, Graphoil Body Seal, PTFE / Graphoil Stem Packing.

** Converts to None Fire Safe without Graphoil Seal