

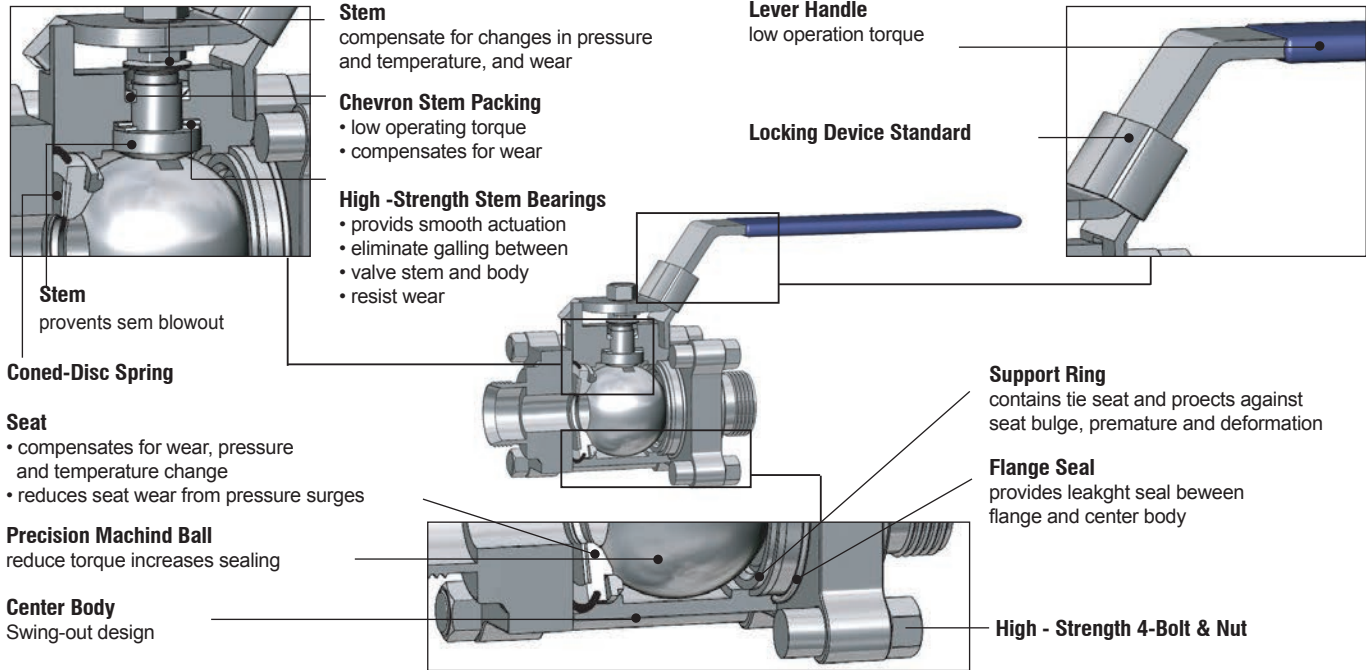
SWB 320 Series

Specification

Pressure Rating up to 3000 psig (206 bar) at 100°F (37°C) / Temperature Range from -20°F (-28°C) to 450°F (232°C)

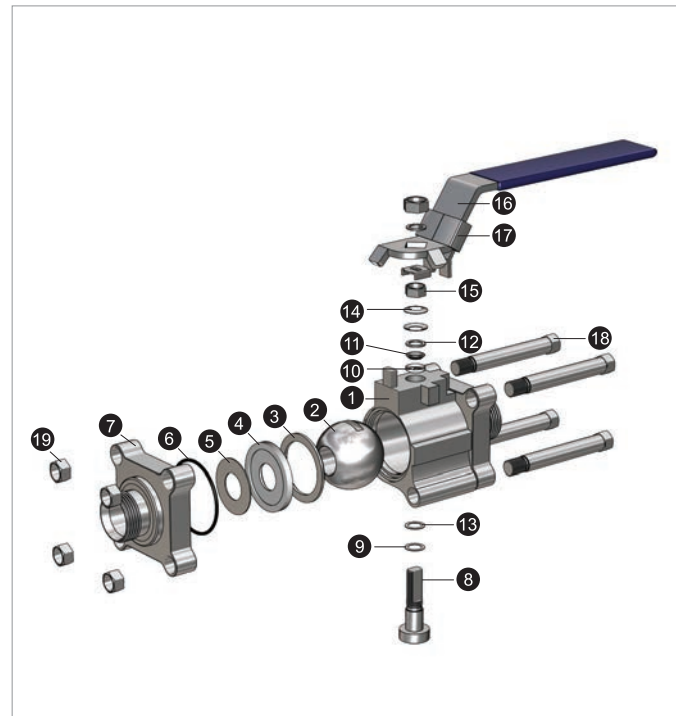
Testing

Each valve is tested with nitrogen at 1000 psig (69 bar) to maximum allowable leak rate of 0.1 SCCM. Hydrostatic shell test is performed at 1.5 times the working pressure.



Materials of Construction

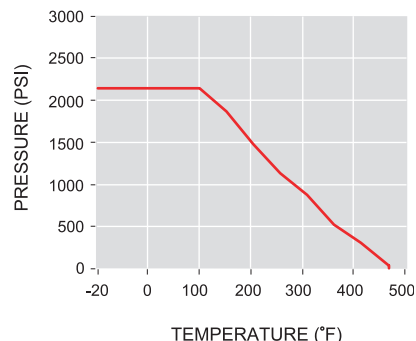
Component	Valve Body Materials		Q'TY
	Material / ASTM Specification		
1	Body	CF8M / A351	1
2	Ball	CF8M / A351	1
3	Support Ring	SS316 / A276	2
4	Seats	Reinforced PTFE	2
5	Seat Spring	Strain Hardened 316 SS / A240	2
6	Flange Seal	PTFE	2
7	Flange	CF8M / A351	2
8	Stem	SS316 / A276	1
9	Stem Bearing	PEEK	1
10	Lower Packing	Reinforced PTFE	1
11	Upper Packing	Reinforced PTFE	1
12	Packing Support	SS316 / A276	1
13	Packing Gland	SS316 / A276	1
14	Stem Spring	Stainless Steel	3
15	Packing Nut	Stainless Steel	2
16	Handle	Stainless Steel	1
17	Locking Device	Stainless Steel	1
18	Flange Bolt	A193/B8M	4
19	Flange Nut	A194/8M	4



Pressure/Temperature Rating

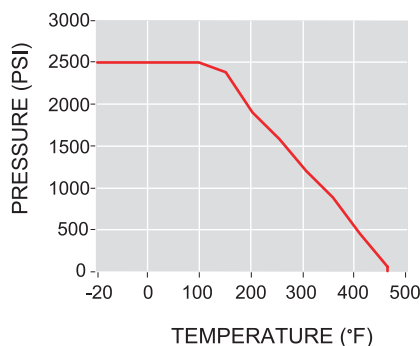
Reinforced PTFE Seats (R-PTFE) : Standard

Series	Pressure - Temperature Rating	
	Temperature °C (°F)	Working Pressure psig (bar)
SWB 320	-20 to 100 (-28 to 37)	2200 (151)
	150 (65)	1850 (127)
	200 (93)	1500 (103)
	250 (121)	1150 (79.2)
	300 (148)	800 (55.1)
	350 (176)	560 (38.5)
	400 (204)	330 (22.7)
	450 (232)	100 (6.8)



Carbon / Glass PTFE Seats : option

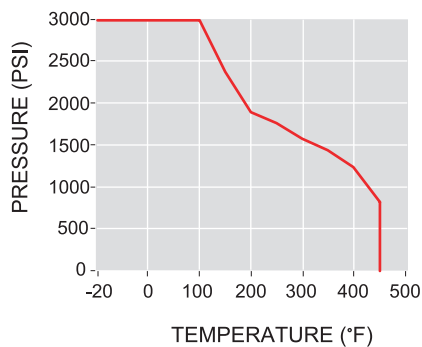
Series	Pressure - Temperature Rating	
	Temperature °C (°F)	Working Pressure psig (bar)
SWB 320	-20 to 100 (-28 to 37)	2500 (172)
	150 (65)	2430 (167)
	200 (93)	1870 (128)
	250 (121)	1620 (111)
	300 (148)	1240 (85.4)
	350 (176)	860 (59.2)
	400 (204)	480 (33.0)
	450 (232)	100 (6.8)



To order option item, add C to the end of ordering number.

PEEK Seats : option

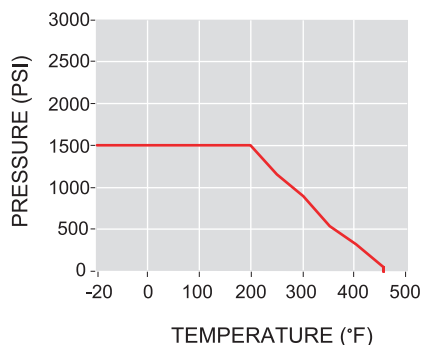
Series	Pressure - Temperature Rating	
	Temperature °C (°F)	Working Pressure psig (bar)
SWB 320	-20 to 100 (-28 to 37)	3000 (206)
	150 (65)	2420 (166)
	200 (93)	1870 (128)
	250 (121)	1770 (121)
	300 (148)	1600 (110)
	350 (176)	1430 (98.5)
	400 (204)	1260 (86.8)
	450 (232)	800 (55.1)



To order option item, add P to the end of ordering number.

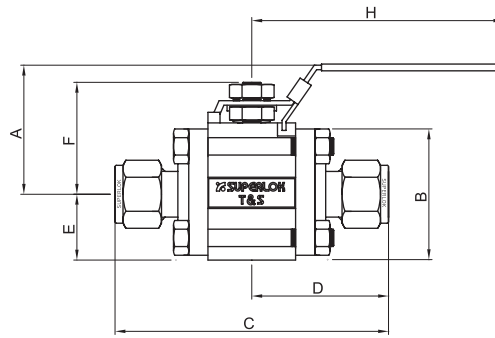
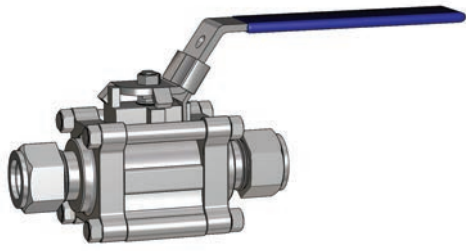
Virgin PTFE Seats : option

Series	Pressure - Temperature Rating	
	Temperature °C (°F)	Working Pressure psig (bar)
SWB 320	-20 to 100 (-28 to 37)	1500 (103)
	150 (65)	1500 (103)
	200 (93)	1500 (103)
	250 (121)	1150 (79.2)
	300 (148)	800 (55.1)
	350 (176)	560 (38.5)
	400 (204)	330 (22.7)
	450 (232)	100 (6.8)



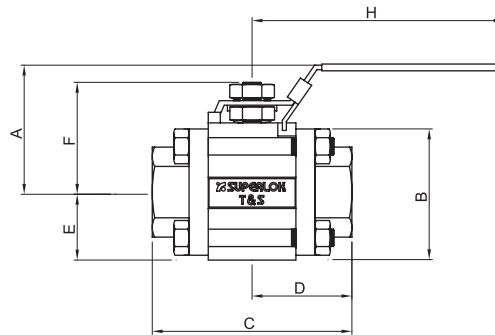
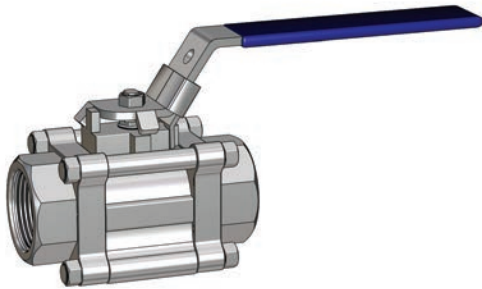
To order option item, add V to the end of ordering number.

Table of Dimensions



SUPERLOK Tube End Connection

Part Number	Orifice in.(mm)	Cv	End Connection	Dimension							
				A	B	C	D	E	F	H	
SWB3201	S4	0.188 (4.8)	1.2	1/4 " Superlok	47.7	33.0	80.8	40.40	16.75	31.8	57.2
	S6	0.281 (7.1)	3.8	3/8 " Superlok							
	S6M	0.188 (4.8)	1.2	6mm Superlok							
	S8M	0.250 (6.4)	2.5	8mm Superlok							
	S10M	0.281 (7.1)	3.8	10mm Superlok							
SWB3202	S8	0.411 (10.4)	7.5	1/2 " Superlok	64.8	44.5	103.8	51.90	22.25	44.2	111.0
	S12	0.516 (13.1)	13.6	3/4 " Superlok							
	S12M	0.411 (10.4)	7.5	12mm Superlok							
SWB3203	S16	0.875 (22.2)	40.0	1 " Superlok	79.0	62.0	136.7	68.35	31.0	61.9	149.4
	S25M			25mm Superlok							
SWB3204	S24	1.250 (31.8)	100	1-1/2 " Superlok	102.0	77.7	192.6	96.3	38.9	79.8	232.0
SWB3205	S32	1.500 (38.1)	130	2 " Superlok	106.0	88.1	252.0	126.0	44.2	85.3	232.0

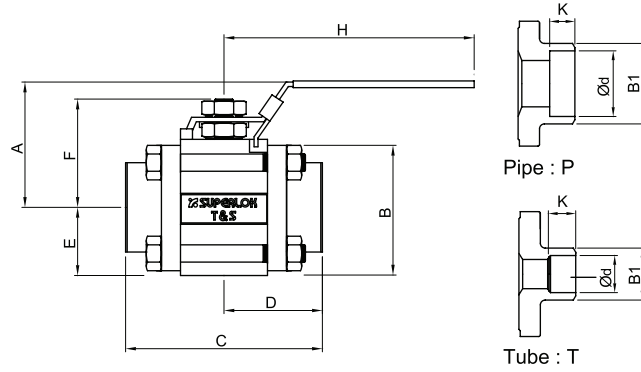
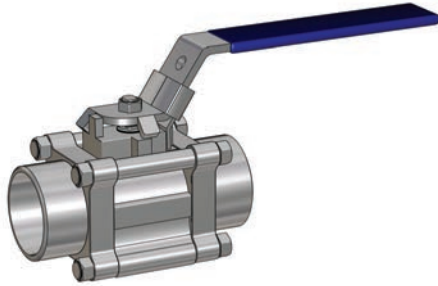


Female Pipe Thread End Connections

Part Number	Orifice in.(mm)	Cv	End Connection	Dimension							
				A	B	C	D	E	F	H	
SWB3201	F2N	0.281 (7.1)	3.8	1/8 " Female NPT	47.7	33.0	55.4	27.70	16.75	31.8	57.2
	F4N			1/4 " Female NPT							
	F4R			1/4 " Female PT							
SWB3202	F6N	0.516 (13.1)	12.0	3/8 " Female NPT	64.8	44.5	68.9	34.45	22.25	44.2	111.0
	F8N			1/2 " Female NPT							
	F8R			1/2 " Female PT							
SWB3203	F12N	0.875 (22.2)	40.0	3/4 " Female NPT	79.0	62.0	92.0	46.0	31.0	61.9	149.4
	F16N			1 " Female NPT							
	F12R			3/4 " Female PT							
	F16R			1 " Female PT							
SWB3204	F20N	1.250 (31.8)	90	1-1/4 " Female NPT	102.0	77.7	112.2	55.6	38.9	79.8	232.0
	F24N		100	1-1/2 " Female NPT							
	F24R		1-1/2 " Female PT								
SWB3205	F32N	1.500 (38.1)	130	2 " Female NPT	106.0	88.1	125.4	62.7	44.2	85.3	232.0
	F32R			2 " Female PT							

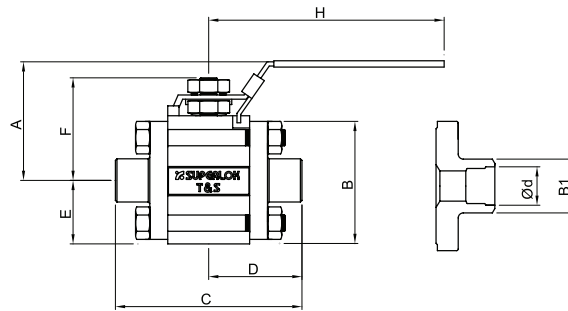
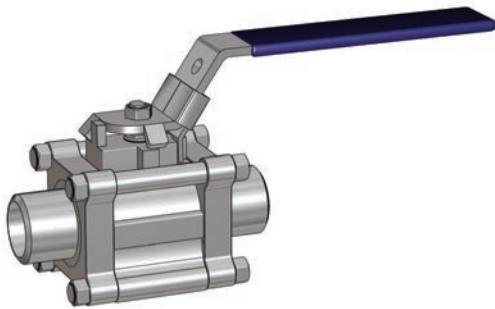
• All dimensions in millimeters unless specified as "inch". Dimension are for reference only, subject to change.

Table of Dimensions



Socket weld end connections

Part Number	Orifice in.(mm)	Cv	End Connection	Dimension										
				ød	B1	A	B	C	D	E	F	H	K	
SWB3201	SW4T	0.188 (4.8)	1.2	1/4 " Socket Weld	6.50	13.70	47.7	33.0	55.4	27.70	16.75	31.8	57.2	7.1
	SW6T	0.281 (7.1)	3.8	3/8 " Socket Weld	9.70	17.10								7.9
SWB3202	SW8T	0.411 (10.4)	7.5	1/2 " Socket Weld	12.90	21.30	64.8	44.5	68.9	34.45	22.25	44.2	111.0	9.7
	SW12T	0.516 (13.1)	13.6	3/4 " Socket Weld	19.20	26.70								11.2
	SW8P	0.516 (13.1)	15.0	1/2 " Socket Weld	21.80	31.20								9.7
SWB3203	SW16T	0.875 (22.2)	40.0	1 " Socket Weld	25.65	33.40	79.0	62.0	92.0	46.00	31.00	61.9	149.4	16.0
	SW12P		36.0	3/4 " Socket Weld	27.20	42.16								12.7
	SW16P		42.0	1 " Socket Weld	33.90	45.30								
SWB3204	SW20T	1.125 (28.6)	80.0	1-1/4 " Socket Weld	32.00	42.20	102.0	77.7	112.2	55.6	38.9	79.8	232.0	15.7
	SW24T	100.0	1-1/2 " Socket Weld	38.30		19.1								
	SW20P	1.250 (31.8)	90.0	1-1/4 " Socket Weld	42.70	62.20			114.4	57.2				
	SW24P	100.0	1-1/2 " Socket Weld	48.80		116.4			58.2					12.7
SWB3205	SW32T	1.500 (38.1)	130.0	2 " Sokect Weld	51.10	70.10	106.0	88.1	125.4	62.7	44.2	85.3	232.0	19.1
	SW32P			61.20	75.10	86.8		43.2			16.0			



Butt weld end connections

Part Number	Schedule	Orifice in.(mm)	Cv	End Connection	Dimension									
					ød	B1	A	B	C	D	E	F	H	
SWB3201	BW4P	10	0.188 (4.8)	1.2	1/4 " Butt Weld	10.40	13.70	47.7	33.0	52.4	26.20	16.75	31.8	57.2
SWB3202	BW8P		0.516 (13.1)	15.0	1/2 " Butt Weld	17.10	21.30	64.8	44.5	68.9	34.45	22.25	44.2	111.0
SWB3203	BW12P		0.875 (22.2)	36.0	3/4 " Butt Weld	22.45	26.67	79.0	62.0	92.0	46.00	31.0	61.9	149.4
SWB3203	BW16P		40.0	1 " Butt Weld	27.90	33.40	88.9			44.45				
SWB3201	BW4P	40	0.188 (4.8)	1.2	1/4 " Butt Weld	9.20	13.70	47.7	33.0	52.4	26.20	16.75	31.8	57.2
SWB3202	BW8P		0.516 (13.1)	15.0	1/2 " Butt Weld	15.80	21.30	64.8	44.5	68.9	34.45	22.25	44.2	111.0
SWB3203	BW12P		0.875 (22.2)	36.0	3/4 " Butt Weld	20.93	26.67	47.7	62.0	92.0	46.00	31.0	61.9	149.4
SWB3203	BW16P		40.0	1 " Butt Weld	26.60	33.40	88.9			44.45				
SWB3201	BW4P	80	0.188 (4.8)	1.2	1/4 " Butt Weld	7.70	13.70	79.0	33.0	52.4	26.20	16.75	31.8	57.2
SWB3201	BW6P		0.281 (7.1)	3.8	3/8 " Butt Weld	10.70	17.10							
SWB3202	BW8P		0.411 (10.4)	7.5	1/2 " Butt Weld	13.90	21.30							
SWB3202	BW12P		0.516 (13.1)	13.6	3/4 " Butt Weld	18.80	26.70							
SWB3203	BW16P	0.875 (22.2)	40.0	1 " Butt Weld	23.90	33.40	79.0	62.0	88.9	44.45	31.00	61.9	149.4	
SWB3204	BW24P	10	1.125 (28.6)	100	1-1/2 " Butt Weld	42.70	48.30	102.0	77.7	113.2	56.60	38.90	79.8	232.0
SWB3205	BW32P		1.500 (38.1)	130	2 " Butt Weld	54.80	60.30	106.0	88.1	121.4	60.70	44.20	85.3	
SWB3204	BW24P	40	1.125 (28.6)	100	1-1/2 " Butt Weld	40.90	48.30	102.0	77.7	113.2	56.60	38.90	79.8	232.0
SWB3205	BW32P		1.500 (38.1)	130	2 " Butt Weld	52.50	60.30	106.0	88.1	123.4	61.70	44.20	85.3	
SWB3204	BW24P	80	1.125 (28.6)	100	1-1/2 " Butt Weld	38.10	48.30	102.0	77.7	115.8	57.90	38.90	79.8	232.0
SWB3205	BW32P		1.500 (38.1)	130	2 " Butt Weld	49.30	60.30	106.0	88.1	129.6	64.80	44.20	85.3	

* All dimensions in millimeters unless specified as "inch". Dimension are for reference only, subject to change.