

Voegt

**Forged Steel
Valves**



Gate Valve

Gate valves are designed to operate in a fully open or fully closed position. When open, the media will flow with minimal turbulence and pressure drop through the valve.

Vogt gate valves are available with a variety of bonnet types, body and trim materials, and stem packings, in addition to a broad range of pressure classes and end connections including extended bodies.

The rugged construction of forged gate valves provide an extended life of safe operation. Metal-to-metal seating surfaces accommodate the widest range of pressure-temperature conditions.

Dimensions in the catalog selection pages are in inches and millimeters.

Dimensions are subject to change without notice.

See pages 10-36 for gate valve selections.

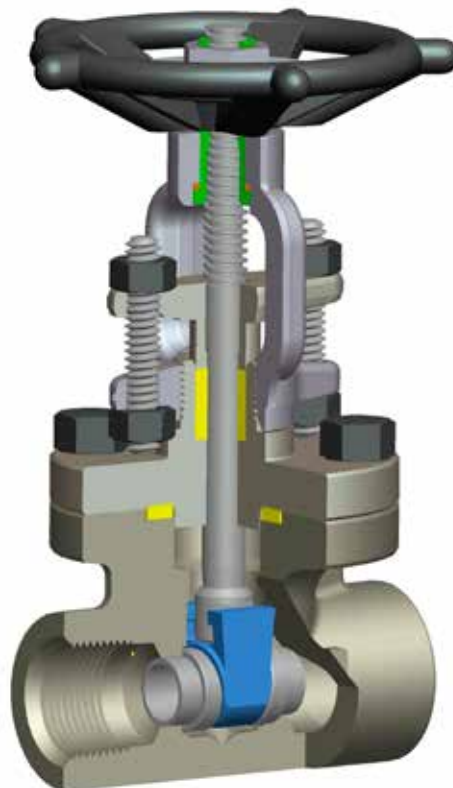
Drawings for currently available gate valve configurations are available at: http://VogtValves.vogtvalves.com/search_drawings.asp



12111 Gate Valve

Class 800 Gate Valve

Conventional Port
Full Port



See pages 12 - 14

The Core of the Pressure Class 150, 300, 600 & 800 Gate Valve

CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld (SW) Threaded/Socket Weld (TSW) Butt Weld (BW)*	12111	13111	A105	13 Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	32111	33111	A350 LF2	13 Cr	1975 PSI @ -50 F	136.2 BAR @ -46 C
	12401	13401	F316/F316L	316	1920 PSI @ 100 F	132.4 BAR @ 38 C
	82401	83401	F316H	316H		
	12321	13321	F11,Cl.2(1-1/4 Cr.)	13 Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C
	12521	13521	F22,Cl.3(2-1/4 Cr.)			
	12421	13421	F5(5 Cr.)			
	12921	13921	F9(9 Cr.)			

(UOP) Universal Oil Products Approved - For HF Alkylation Service

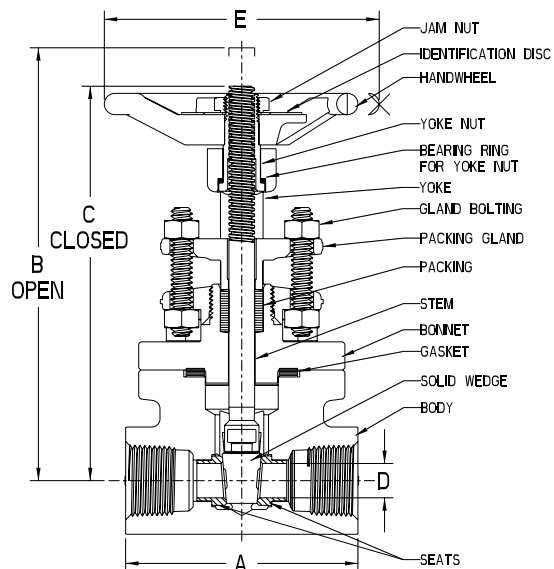
CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld (SW)	12111HF6		A105	13 Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
		13111HF4	A105	Monel	1975 PSI @ 100 F	136.2 BAR @ 38 C
	12111HF7		A105	13 Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
		13111HF5	A105	Monel	1975 PSI @ 100 F	136.2 BAR @ 38 C

*See page 16 for Butt Weld Series Gate Valves

12111 Gate Valve

Class 800 Gate Valve

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	Conventional Port
-04	NPS	½	3.38	6.30	5.74	.50	4.00	5.0	9.6	
	DN	15	86	160	146	12.7	102	2.3		
-05	NPS	¾	3.38	6.30	5.74	.50	4.00	4.8	9.7	
	DN	20	86	160	146	12.7	102	2.2		
-06	NPS	1	4.00	8.37	7.43	.75	4.75	8.4	20.3	
	DN	25	102	213	189	19.1	121	3.8		
-07	NPS	1¼	4.75	10.12	8.71	1.25	5.75	16.7	80.5	
	DN	32	121	257	221	31.8	146	7.6		
-08	NPS	1 ½	4.75	10.12	8.71	1.25	5.75	16.2	91.6	
	DN	40	121	257	221	31.8	146	7.3		
-09	NPS	2	5.25	11.12	9.40	1.50	7.00	21.8	117.6	
	DN	50	133	282	239	38.1	178	9.9		
-10	NPS	2½	7.00	14.09	11.76	2.00	8.00	39.8	174	
	DN	65	178	358	299	50.8	203	18.1		
-11	NPS	3	8.00	17.96	15.01	2.75	9.75	75.0	203.9	
	DN	80	203	456	381	69.9	248	34.0		

-04	NPS	½	3.38	6.30	5.75	.50	4.00	5.0	9.6	Full port
	DN	15	86	160	146	12.7	102	2.3		
-05	NPS	¾	4.0	8.37	7.43	.75	4.75	8.6	28.7	
	DN	20	102	213	189	19.1	121	3.9		
-06	NPS	1	4.38	9.80	8.59	1.0	5.75	12.2	46.5	
	DN	25	111	249	218	25.4	146	5.5		
-07	NPS	1¼	4.75	10.12	8.71	1.25	5.75	16.7	80.5	
	DN	32	121	257	221	31.8	146	7.6		
-08	NPS	1½	5.25	11.12	9.40	1.50	7.0	23.0	109.6	
	DN	40	133	282	239	38.1	178	10.4		
-09	NPS	2	7.00	14.09	11.76	2.00	8.0	41.8	181.0	
	DN	50	178	358	299	50.8	203	19.0		

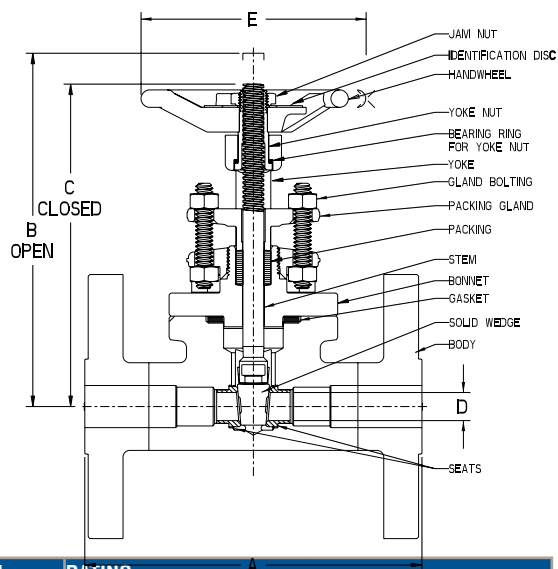
Refer to page 4 for optional trim and service configurations.
Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.
Refer to pages 114-115 for other ratings

Forged Gate Valves

Class 150 Gate Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
1/16 RF Flat Face	353	A105	13% Cr	285 PSI @ 100 F	19.6 BAR @ 38 C
	32353	A350 LF2	13% Cr	285 PSI @ 100 F	19.6 BAR @ 38 C
				285 PSI @ -50 F	19.6 BAR @ -46 C
	358	F316/F316L	316	275 PSI @ 100 F	19.0 BAR @ 38 C
	351	F11*, Cl.2	13% Cr	290 PSI @ 100 F	19.8 BAR @ 38 C
	352	F22*, Cl.3	13% Cr	290 PSI @ 100 F	19.8 BAR @ 38 C

*F11 & F22 not available in all sizes

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	A105 ONLY
-04	NPS	½	4.25	6.30	5.74	.50	4.00	6.4	9.6	
	DN	15	108	160	146	12.7	102	2.9		
-05	NPS	¾	4.62	6.30	5.74	.50	4.00	8.0	9.7	
	DN	20	117	160	146	12.7	102	3.6		
-06	NPS	1	5.00	8.37	7.43	.75	4.75	12.3	20.3	
	DN	25	127	213	189	19.1	121	5.6		
-08	NPS	1½	6.50	10.12	8.71	1.25	5.75	23.0	91.6	
	DN	40	165	257	221	31.8	146	10.4		
-09	NPS	2	7.00	11.12	9.40	1.50	7.00	31.7	117.6	
	DN	50	178	282	239	38.1	178	14.4		
-10	NPS	2½	7.50	14.09	11.76	2.00	8.00	53.7	174	
	DN	65	191	358	299	50.8	203	24.4		
-11	NPS	3	8.00	14.09	11.76	2.00	8.00	57.6	203.9	
	DN	80	203	358	299	50.8	203	26.1		
-13	NPS	4	9.00	17.96	15.01	2.75	9.75	98.0	230.0	
	DN	100	229	456	381	69.9	248	44.5		

Forged Gate Valves

Class 300 Gate Valve

Conventional Port

Full Port

Round Bolted Bonnet

Spiral Wound Gasket

Outside Screw & Yoke

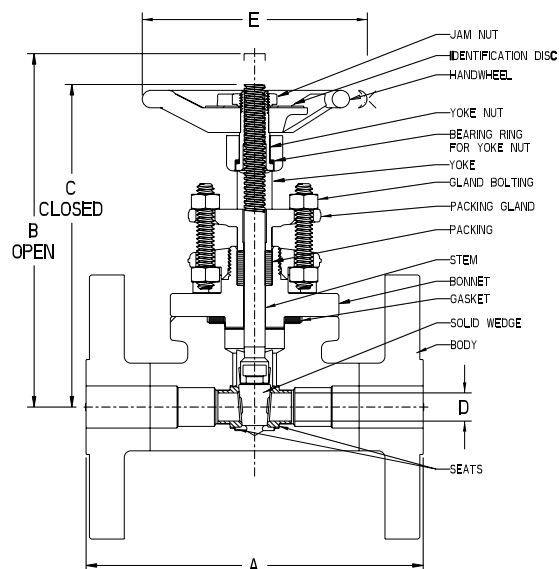
Bolted Gland

Solid Wedge

Hard Faced Seats

API 602

ASME B16.34



CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
1/16 RF Flat Face FF	363	13363	A105	13% Cr	740 PSI @ 100 F	51.1 BAR @ 38 C
	32363	33363	A350 LF2	13% Cr	740 PSI @ 100 F	51.1 BAR @ 38 C
					740 PSI @ -50 F	51.1 BAR @ -46 C
	368	13368	F316/F316L	316	720 PSI @ 100 F	49.6 BAR @ 38 C
	361	13361	F11*,Cl.2	13% Cr	750 PSI @ 100 F	51.7 BAR @ 38 C
	362	13362	F22*,Cl.3	13% Cr	750 PSI @ 100 F	51.7 BAR @ 38 C

*F11 & F22 not available in all sizes

Dimensions

CONVENTIONAL PORT								
SIZE		A	B	C	D	E	WEIGHT	Cv
-04	NPS ½	5.5	6.30	5.74	.50	4.00	8.0	9.6
	DN 15	140	160	146	12.7	102	3.6	
-05	NPS ¾	6.00	6.30	5.74	.50	4.00	10.8	9.7
	DN 20	152	160	146	12.7	102	4.9	
-06	NPS 1	6.50	8.37	7.43	.75	4.75	15.5	20.3
	DN 25	165	213	189	19.1	121	7.0	
-08	NPS 1½	7.50	10.12	8.71	1.25	5.75	29.2	91.6
	DN 40	191	257	221	31.8	146	13.2	
-09	NPS 2	8.50	11.12	9.40	1.50	7.00	37.6	117.6
	DN 50	216	282	239	38.1	178	17.1	
-10	NPS 2½	9.50	14.09	11.76	2.00	8.00	61.6	174
	DN 65	241	358	299	50.8	203	27.9	
-11	NPS 3	11.12	14.09	11.76	2.00	8.00	71.6	203.9
	DN 80	282	358	299	50.8	203	32.5	
-13	NPS 4	12.00	17.96	15.01	2.75	9.75	121.9	230.0
	DN 100	305	456	381	69.9	248	55.3	

FULL PORT								
SIZE		A	B	C	D	E	WEIGHT	Cv
-04	NPS ½	5.50	6.30	5.74	.50	4.00	8.6	9.6
	DN 15	140	160	146	12.7	102	3.9	
-05	NPS ¾	6.00	8.37	7.44	.75	4.75	13.9	28.7
	DN 20	152	213	189	19.1	121	6.3	
-06	NPS 1	6.50	9.80	8.59	1.00	5.75	18.5	46.5
	DN 25	165	249	218	25.4	146	8.4	
-08	NPS 1½	7.50	11.12	9.40	1.50	7.00	33.2	109.6
	DN 40	191	282	239	38.1	178	15.1	
-09	NPS 2	8.50	14.09	11.76	2.00	8.00	53.1	181.0
	DN 50	216	358	299	50.8	203	24.1	

SEE PAGE 112 FOR BUTT WELD ENDS

Forged Gate Valves

Class 600 Gate Valve

Conventional Port

Full Port

Round Bolted Bonnet

Spiral Wound Gasket

Outside Screw & Yoke

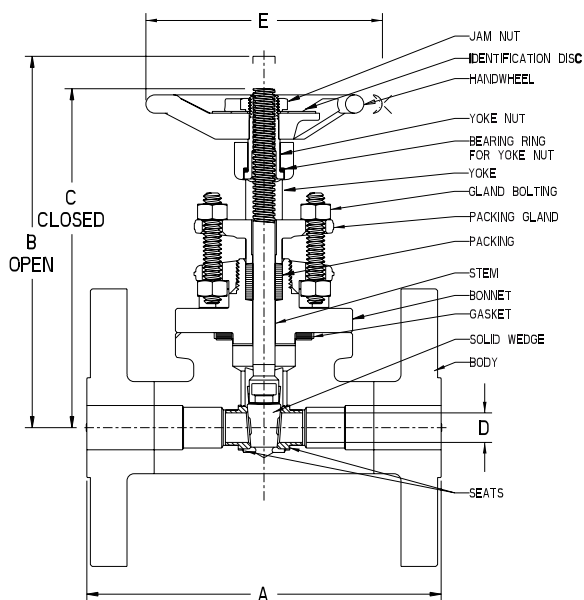
Bolted Gland

Solid Wedge

Hard Faced Seats

API 602

ASME B16.34



CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
1/4 RF Ring Joint RJ	373	13373	A105	13% Cr	1480 PSI @ 100 F	102.1 BAR @ 38 C
	32373	33373	A350 LF2	13% Cr	1480 PSI @ 100 F	102.1 BAR @ 38 C
					1480 PSI @ -50 F	102.1 BAR @ -46 C
	378	13378	F316/F316L	316	1440 PSI @ 100 F	99.3 BAR @ 38 C
	371	13371	F11*, Cl.2	13% Cr	1500 PSI @ 100 F	103.4 BAR @ 38 C
	372	13372	F22*, Cl.3	13% Cr	1500 PSI @ 100 F	103.4 BAR @ 38 C

*F11 & F22 not available in all sizes

Dimensions

CONVENTIONAL PORT									
SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	6.50	6.30	5.74	.50	4.00	8.6	9.6
	DN	15	165	160	146	12.7	102	3.9	
-05	NPS	¾	7.50	6.30	5.74	.50	4.00	11.8	9.7
	DN	20	191	160	146	12.7	102	5.4	
-06	NPS	1	8.50	8.37	7.43	.75	4.75	17.6	20.3
	DN	25	216	213	189	19.1	121	8.0	
-08	NPS	1½	9.50	10.12	8.71	1.25	5.75	32.0	91.6
	DN	40	241	257	221	31.8	146	14.5	
-09	NPS	2	11.50	11.12	9.40	1.50	7.00	43.2	117.6
	DN	50	292	282	239	38.1	178	19.6	
-10	NPS	2½	13.00	14.09	11.76	2.00	8.00	70.5	174
	DN	65	330	358	299	50.8	203	32.0	
-11	NPS	3	14.00	14.09	11.76	2.00	8.00	80.7	203.9
	DN	80	356	358	299	50.8	203	36.6	
-13	NPS	4	17.00	17.96	15.01	2.75	9.75	152.1	230.0
	DN	100	432	456	381	69.9	248	69.0	

A105 ONLY

FULL PORT									
SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	6.50	6.30	5.74	.50	4.00	8.6	9.6
	DN	15	165	160	146	12.7	102	3.9	
-05	NPS	¾	7.50	8.37	7.44	.75	4.75	14.7	28.7
	DN	20	191	213	189	19.1	121	6.7	
-06	NPS	1	8.50	9.80	8.59	1.00	5.75	20.4	46.5
	DN	25	216	249	218	25.4	146	9.3	
-08	NPS	1½	9.50	11.12	9.40	1.50	7.00	37.0	109.6
	DN	40	241	282	239	38.1	178	16.8	
-09	NPS	2	11.50	14.09	11.76	2.00	8.00	58.8	181.0
	DN	50	292	358	299	50.8	203	26.7	

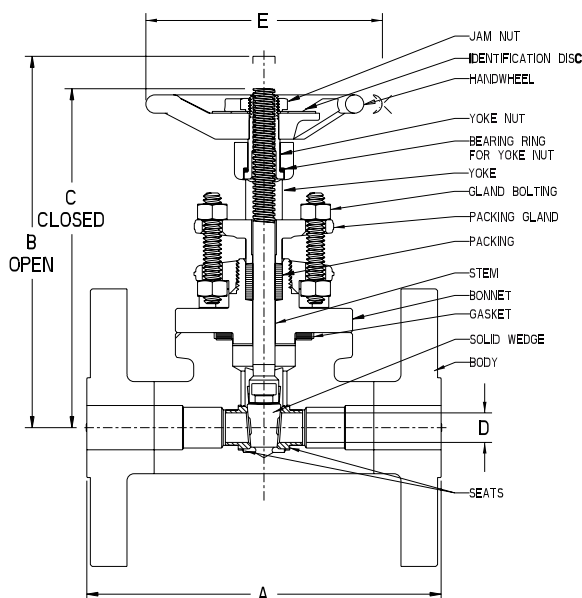
SEE PAGE 112 FOR BUTT WELD ENDS

Forged Gate Valves

Class 1500 Flanged Gate Valve

Conventional Port
Full Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
1/4 RF Ring Joint RJ	15373	16373	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
	35373	36373	A350 LF2	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
					3705 PSI @ -50 F	255.3 BAR @ -46 C
	15378	16378	F316/F316L	316	3600 PSI @ 100 F	248.2 BAR @ 38 C

Dimensions

CONVENTIONAL PORT								
SIZE			A	B	C	D	E	WEIGHT
-04	NPS	½	8.50	7.51	6.90	.50	4.75	17.5
	DN	15	216	191	175	12.7	121	7.9
-05	NPS	¾	9.00	7.51	6.90	.50	4.75	20.9
	DN	20	229	191	175	12.7	121	9.5
-06	NPS	1	10.00	9.69	8.77	.75	7.00	34.7
	DN	25	254	246	223	19.1	178	15.7
-08	NPS	1½	12.00	11.40	9.98	1.25	8.00	55.8
	DN	40	305	290	253	31.8	203	25.3
-09	NPS	2	14.50	13.84	12.15	1.50	9.75	94.9
	DN	50	368	352	309	38.1	248	43.0

FULL PORT								
SIZE			A	B	C	D	E	WEIGHT
-04	NPS	½	8.50	7.51	6.90	.50	4.75	17.5
	DN	15	216	191	175	12.7	121	7.9
-05	NPS	¾	9.00	9.69	8.78	.75	7.00	29.3
	DN	20	229	246	223	19.1	178	13.3
-06	NPS	1	10.00	11.31	9.96	1.00	8.00	46.2
	DN	25	254	287	253	25.4	203	21.0
-08	NPS	1½	12.00	13.84	12.15	1.50	9.75	75.0
	DN	40	305	352	309	38.1	248	34.0
-09	NPS	2	14.50	17.15	14.82	2.00	9.75	129.4
	DN	50	368	436	376	50.8	248	58.7

Forged Gate Valves-Butt Weld Ends

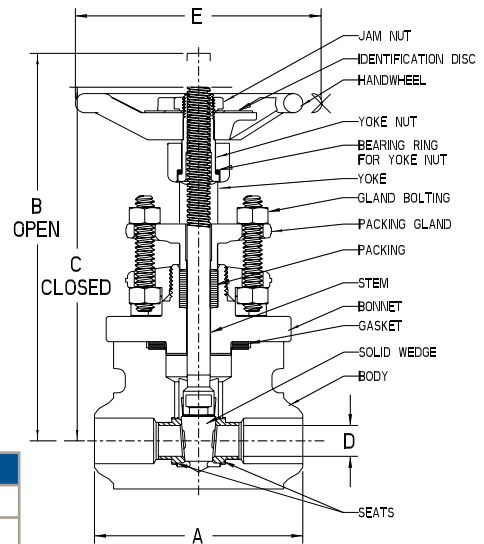
Butt Weld Class 150, 300, 600, 800 Conventional Port Gate Valve

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34

BUTT-WELDING ENDS PER ASME B16.25 – Refer to page 112

BW end-to-end dimensions for Class 800 valves are Vogt standard. ASME B16.10 has no requirements for Class 800 valves.

S40 Suffix for Schedule 40
S80 Suffix for Schedule 80
S160 Suffix for Schedule 160
Example: BW12111S40



CLASS	SERIES	BODY/BONNET	TRIM	RATING	
150	BW353	A105	13 Cr	285 PSI @ 100 F	19.6 BAR @ 38 C
300	BW363	A105	13 Cr	740 PSI @ 100 F	51.1 BAR @ 38 C
600	BW373	A105	13 Cr	1480 PSI @ 100 F	102.1 BAR @ 38 C
800	BW12111	A105	13 Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	BW32111	A350 LF2	13 Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
				1975 PSI @ -50 F	136.2 BAR @ -46 C
	BW12401	F316/F316L	316	1920 PSI @ 100 F	132.4 BAR @ 38 C
	BW82401	F316H	316H	1920 PSI @ 100 F	132.4 BAR @ 38 C
	BW12321	F11, Cl.2(1-1/4 Cr.)	13 Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C
	BW12521	F22, Cl.3(2-1/4 Cr.)	13 Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C
	BW12421	F5(5 Cr.)	13 Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C
	BW12921	F9(9 Cr.)	13 Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C

Dimensions

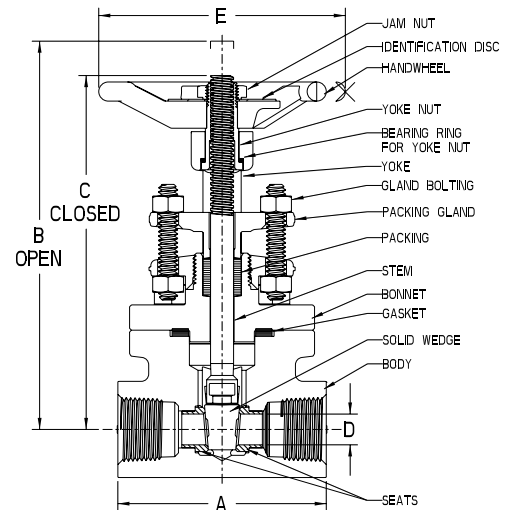
Dimensions			SCH 40	SCH 80	SCH 160									Cv			
														SCH 40	SCH 80	SCH 160	
SIZE						A 150	A 300	A 600	A 800	B	C	D	E	WEIGHT			
-04	NPS	½	X	X					3.38	6.30	5.74	.41	4.00	5.0	9.6	9.2	
	DN	15	X	X				85.9	160	146	10.4	102	2.3				
-05	NPS	¾	X	X	X				3.38	6.30	5.74	.50	4.00	4.8	9.7	9.6	8.8
	DN	20	X	X	X			85.9	160	146	12.7	102	2.2				
-06	NPS	1	X	X	X			8.50	4.00	8.37	7.43	.75	4.75	8.4	20.3	20.1	18.2
	DN	25	X	X	X			215.9	101.6	213	189	19.1	121	3.8			
-07	NPS	1¼	X						4.75	10.12	8.71	1.25	5.75	16.7	80.5		
	DN	32	X					120.7	257	221	31.8	146	7.6				
-08	NPS	1 ½	X	X			7.50	9.50	4.75	10.12	8.71	1.25	5.75	16.2	91.6	89.4	
	DN	40	X	X			190.5	241.3	120.7	257	221	31.8	146	7.3			
-09	NPS	2	X	X	X	8.50	8.50	11.50	5.25	11.12	9.40	1.50	7.00	21.8	117.6	116.1	102.3
	DN	50	X	X	X	215.9	215.9	292.1	133.4	282	239	38.1	178	9.9			
-10	NPS	2½	X	X		9.50	9.50	13.00	7.00	14.09	11.76	2.00	8.00	40.2	174	171.9	
	DN	65	X	X		241.3	241.3	330.2	177.8	358	299	50.8	203	18.2			
-11	NPS	3	X	X	X	11.12	11.12	14.00		14.09	11.76	2.00	8.00	48.9	203.9	202.6	193.7
	DN	80	X	X	X	282.4	282.4	355.6		358	299	50.8	203	22.2			
-11	NPS	3	X	X					8.00	17.96	15.01	2.75	9.75	74.7	203.9	202.6	
	DN	80	X	X				203.2	456	381	69.9	248	33.9				
-13	NPS	4	X	X	X	12.00	12.00	17.00	8.00	17.96	15.01	2.75	9.75	72.2	230	229	
	DN	100	X	X	X	304.8	304.8	431.8	203.2	456	381	69.9	248	32.7			

A105 ONLY

Forged Gate Valves

Class 1500 Gate Valve

Conventional Port
Full Port
Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld Threaded x Socket Weld Butt Weld**	15111	16111	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
	35111	36111	A350 LF2	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
	15401	16401	F316/F316L	316	3705 PSI @ -50 F	255.3 BAR @ -46 C
	85401	86401	F316H	316H	3600 PSI @ 100 F	284.2 BAR @ 38 C
	15321	16321	F11,Cl.2	*13% Cr	3750 PSI @ 100 F	258.6 BAR @ 38 C
	15521	16521	F22,Cl.3			
	15421	16421	F5			
	15921	16921	F9			

*Hardfaced Wedge/Seats ** BW end-to-end is Vogt standard and does not meet B16.10

Dimensions

SIZE		SCH			A	B	C	D	E	WEIGHT	Cv		
		40	80	160							SCH 40	SCH 80	SCH 160
CONVENTIONAL PORT	-04	NPS ½	X	X	4.00	7.51	6.90	.50	4.75	8.9	9.6	9.2	
		DN 15	X	X	101.6	191	175	12.7	121	4.0			
	-05	NPS ¾	X	X	4.00	7.51	6.90	.50	4.75	9.7	9.7	9.6	8.8
		DN 20	X	X	101.6	191	175	12.7	121	4.4			
	-06	NPS 1	X	X	4.75	9.69	8.77	.75	7.00	17.5	20.3	20.1	18.2
		DN 25	X	X	120.7	246	223	19.1	178	7.9			
	-07	NPS 1¼	X		5.25	11.40	9.98	1.25	8.00	27.3	80.5		
		DN 32	X		133.4	290	253	31.8	203	12.4			
	-08	NPS 1½	X	X	5.25	11.40	9.98	1.25	8.00	26.8	91.6	89.4	76.8
		DN 40	X	X	133.4	290	253	31.8	203	12.1			
	-09	NPS 2	X	X	7.00	13.84	12.15	1.50	9.75	45.1	117.6	116.1	102.3
		DN 50	X	X	177.8	352	309	38.1	248	20.5			
FULL PORT	-04	NPS ½	X	X	4.00	7.51	6.90	.50	4.75	17.5	9.6	9.2	
		DN 15	X	X	101.6	191	175	12.7	121	7.9			
	-05	NPS ¾	X		4.75	9.69	8.77	.75	7.00	17.9	28.7		
		DN 20	X		120.7	246	223	19.1	178	8.1			
	-06	NPS 1			5.25	11.31	9.96	1.00	8.00	28.3	46.5		
		DN 25			133.4	287	253	25.4	203	12.8			
	-07	NPS 1¼	X		5.25	11.40	9.98	1.25	8.00	27.3	80.5		
		DxAzN 32	X		133.4	290	253	31.8	203	12.4			
	-08	NPS 1½			7.00	13.84	12.15	1.50	9.75	47.1	109.6		
		DN 40			177.8	352	309	38.1	248	21.4			
	-09	NPS 5			8.00	17.5	14.82	2.00	9.75	81.8	181.0		
		DN 50			203.2	436	377	50.8	248	37.12			

S40 Suffix for Schedule 40
S80 Suffix for Schedule 80
S160 Suffix for Schedule 160
Example: BW15111S80

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

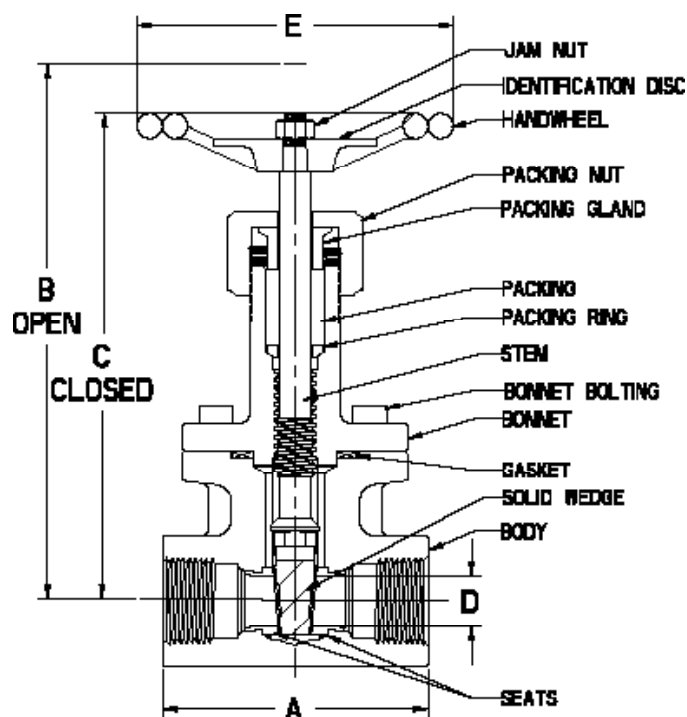
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Gate Valves

Class 800 Conventional Port Gate Valve

Round Bolted Bonnet
Spiral Wound Gasket
Inside Screw Stem
Screw Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



CONNECTION		SERIES	BODY/BONNET	TRIM	RATING	
Threaded	SW TSW	12161	A105	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
Socket Weld						
Threaded/ Socket Weld						

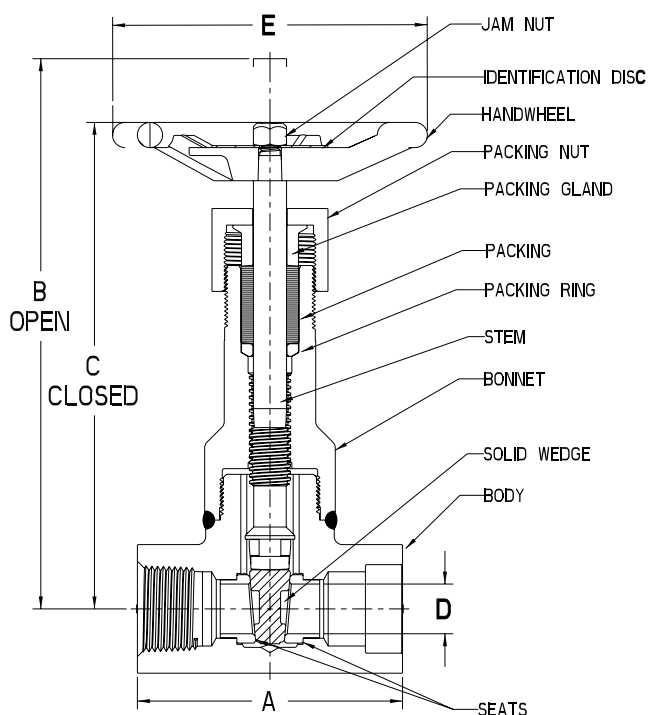
Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	3.38	6.44	5.88	.50	4.00	4.8	9.6
	DN	15	86	164	149	12.7	102	2.2	
-05	NPS	¾	3.38	6.44	5.88	.50	4.00	4.7	9.7
	DN	20	86	164	149	12.7	102	2.1	
-06	NPS	1	4.00	8.31	7.38	.75	4.75	7.9	20.3
	DN	25	102	211	187	19.1	121	3.6	
-07	NPS	1¼	4.75	10.75	9.38	1.25	5.75	16.4	80.5
	DN	32	121	273	238	31.8	146	7.4	
-08	NPS	1½	4.75	10.75	9.38	1.25	5.75	16.1	91.6
	DN	40	121	273	238	31.8	146	7.3	
-09	NPS	2	5.25	12.25	10.56	1.50	7.00	23.6	117.6
	DN	50	133	311	268	38.1	178	10.7	

Forged Gate Valves

Class 800 Conventional Port Gate Valve

Welded Bonnet
Inside Screw Stem
Screw Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING
Threaded Socket Weld Threaded/ Socket Weld	SW TSW	2811	A105	13% Cr
				1975 PSI @ 100 F
				136.2 BAR @ 38 C

Dimensions

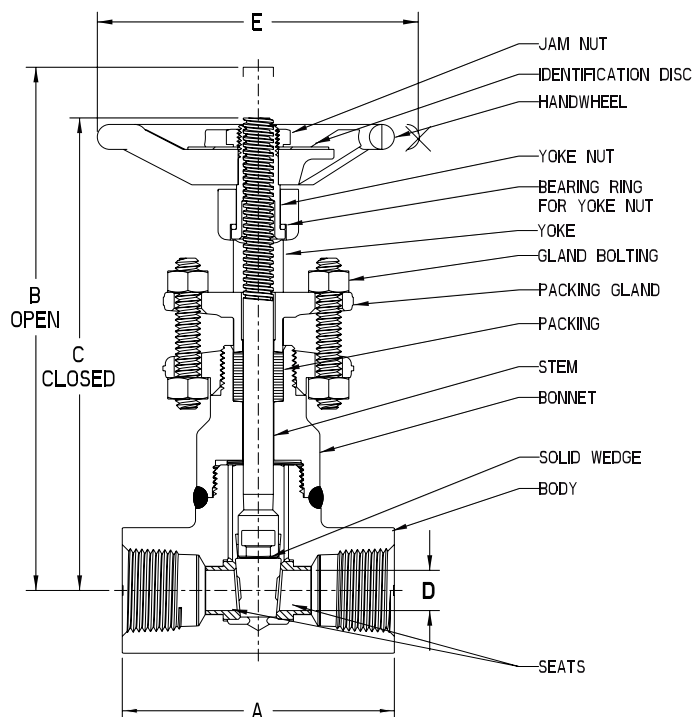
SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	3.38	6.62	6.00	.50	4.00	3.2	9.6
	DN	15	86	168	152	12.7	102	1.5	
-05	NPS	¾	3.38	6.62	6.00	.50	4.00	3.1	9.7
	DN	20	86	168	152	12.7	102	1.4	
-06	NPS	1	4.00	8.38	7.44	.75	4.75	6.1	20.3
	DN	25	102	213	189	19.1	121	2.8	
-07	NPS	1¼	4.75	10.81	9.38	1.25	5.75	11.6	80.5
	DN	32	121	275	238	31.8	146	5.3	
-08	NPS	1½	4.75	10.81	9.38	1.25	5.75	11.0	91.6
	DN	40	121	275	238	31.8	146	5.0	
-09	NPS	2	5.25	12.12	10.56	1.50	7.00	18.5	117.6
	DN	50	133	308	268	38.1	178	8.4	

Forged Gate Valves

Class 800 Gate Valve

Conventional Port
Full Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld Threaded/Socket Weld	2801	3801	A105	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	32801	33801	A350 LF2	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	2831	3831	F316/F316L	316	1920 PSI @ 100 F	132.4 BAR @ 38 C
	82831		F316H	316H	1920 PSI @ 100 F	132.4 BAR @ 38 C
	2851		F11,Cl.2	13% Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C
	2861		F22,Cl.3			

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
CONVENTIONAL PORT	-04	NPS 1/2	3.38	6.50	5.87	.50	4.00	3.6	9.6
		DN 15	86	165	149	12.7	102	1.6	
	-05	NPS 3/4	3.38	6.50	5.87	.50	4.00	3.4	9.7
		DN 20	86	165	149	12.7	102	1.5	
	-06	NPS 1	4.00	8.38	7.43	.75	4.75	6.6	20.3
		DN 25	102	213	189	19.1	121	3.0	
	-07	NPS 1 1/4	4.75	10.14	8.71	1.25	5.75	11.5	80.5
		DN 32	121	258	221	31.8	146	5.2	
	-08	NPS 1 1/2	4.75	10.14	8.71	1.25	5.75	11.1	91.6
		DN 40	121	258	221	31.8	146	5.0	
	-09	NPS 2	5.25	11.12	9.40	1.50	7.00	16.1	117.6
		DN 50	133	282	239	38.1	178	7.3	

SIZE			A	B	C	D	E	WEIGHT	Cv
FULL PORT	-04	NPS 1/2	3.38	6.50	5.87	.50	4.00	3.6	9.6
		DN 15	86	165	149	12.7	102	1.6	
	-05	NPS 3/4	4.0	8.38	7.43	.75	4.75	6.8	28.7
		DN 20	102	213	189	19.1	121	3.1	
	-06	NPS 1	4.75	10.13	8.59	1.00	5.75	12.4	46.5
		DN 25	121	257	218	25.4	146	5.6	
	-07	NPS 1 1/4	4.75	10.14	8.71	1.25	5.75	11.5	80.5
		DN 32	121	258	221	31.8	146	5.2	
	-08	NPS 1 1/2	5.25	11.09	9.40	1.50	7.00	17.4	109.6
		DN 40	133	282	239	38.1	178	7.9	
	-09	NPS 2	7.00	14.09	11.76	2.00	9.75	32.4	181.0
		DN 50	178	358	299	50.8	248	14.7	

Forged Gate Valves

Class 1500 Gate Valve

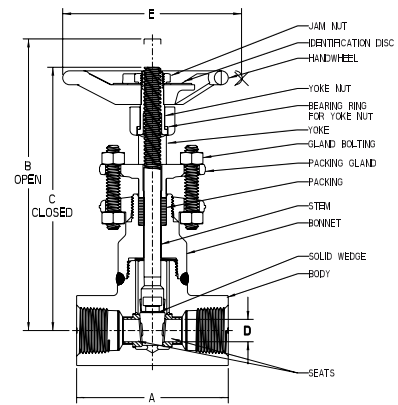
1 Conventional Port

2 Full Port

Class 1500 LTD

1 Conventional Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34



CLASS	CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING		
Standard	Threaded Socket Weld Threaded/Socket Weld Butt Weld**	SW	15801	16801	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
			TSW	35801	36801	A350 LF2	13% Cr	3705 PSI @ 100 F
		3705 PSI @ -50 F						255.3 BAR @ -46 C
		BW	15831	16831	F316/F316L	316	3600 PSI @	248.2 BAR @
			85831	86831	F316H	316H	100 F	38 C
			15851	16851	F11, Cl.2	*13% Cr	3750 PSI @	258.6 BAR @
			15861	16861	F22, Cl.3		100 F	38 C
		LTD	Threaded Socket Weld Threaded/Socket Weld	SW TSW	65703		A105	*13% Cr
65713					F11, Cl.2			
65773					F22, Cl.3			

*Hardfaced Wedge/Seats **BW end-to-end is Vogt standard and does not meet B16.10

Dimensions

SIZE				A	B	C	D	E	WEIGHT	Cv
CONVENTIONAL PORT	-04	NPS	½	4.00	7.54	6.90	.50	4.75	6.7	9.6
		DN	15	102	192	175	12.7	121	3.0	
	-05	NPS	¾	4.00	7.54	6.90	.50	4.75	6.5	9.7
		DN	20	102	192	175	12.7	121	2.9	
	-06	NPS	1	4.75	9.69	8.77	.75	7.00	13.2	20.3
		DN	25	121	246	223	19.1	178	6.0	
	-07	NPS	1¼	5.25	11.40	9.98	1.25	8.00	20.5	80.5
		DN	32	133	290	253	31.8	203	9.3	
	-08	NPS	1½	5.25	11.40	9.98	1.25	8.00	20.0	91.6
		DN	40	133	290	253	31.8	203	9.1	
	-09	NPS	2	7.00	13.84	12.15	1.50	9.75	34.8	117.6
		DN	50	178	352	309	38.1	248	15.8	

SIZE				A	B	C	D	E	WEIGHT	Cv
FULL PORT	-04	NPS	½	4.00	7.54	6.90	.50	4.75	6.7	9.6
		DN	15	102	192	175	12.7	121	3.0	
	-05	NPS	¾	4.75	9.69	8.77	.75	7.00	13.5	28.7
		DN	20	121	246	223	19.1	178	6.1	
	-06	NPS	1	5.25	11.21	9.86	1.00	8.00	21.6	46.5
		DN	25	133	285	250	25.4	203	9.8	
	-07	NPS	1¼	5.25	11.40	9.98	1.25	8.00	20.5	80.5
		DN	32	133	290	253	31.8	203	9.3	
	-08	NPS	1½	7.00	13.84	12.15	1.50	9.75	35.1	109.6
		DN	40	178	352	309	38.1	248	15.9	

S40 Suffix for Schedule 40
S80 Suffix for Schedule 80
S160 Suffix for Schedule 160
Example: BW2801S40
See page 25 for allowable schedules.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Gate Valves – Extended Body Valves

Class 800 Conventional Port Gate Valve

CONNECTION			
Extended Male End	Female End		
Butt Weld	Threaded	BT	(B)
Butt Weld	Socket Weld	BS	
Couplet	Threaded	CT	(C)
Couplet	Socket Weld	CS	
Socket Weld	Threaded	ST*	(S)
Socket Weld	Socket Weld	SS	
Threaded	Threaded	TT	(T)
Threaded	Socket Weld	TS	

	SERIES	BODY/BONNET	TRIM	RATING	
1	2801*	A105	13%Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	2831	F316/F316L	316	1920 PSI @ 100 F	132.4 BAR @ 38 C
2	2901	A105	13%Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	2931	F316/F316L	316	1920 PSI @ 100 F	132.4 BAR @ 38 C
	2951	F11, Cl.2(1-1/4 Cr.)	13%Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C
	2961	F22, Cl.3(2-1/4 Cr.)			
3	12111	A105	13%Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	32111	A350 LF2		1975 PSI @ -50 F	136.2 BAR @ -46 C
	12401	F316/F316L	316	1920 PSI @ 100 F	132.4 BAR @ 38 C
	12321	F11, Cl.2(1-1/4 Cr.)	13%Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C
	12521	F22, Cl.3(2-1/4 Cr.)			
	12421	F5(5 Cr.)			
	12921	F9(9 Cr.)			

Dimensions

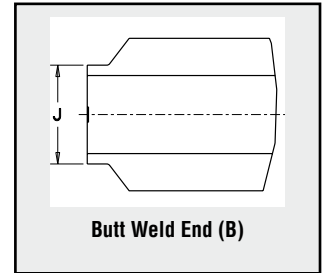
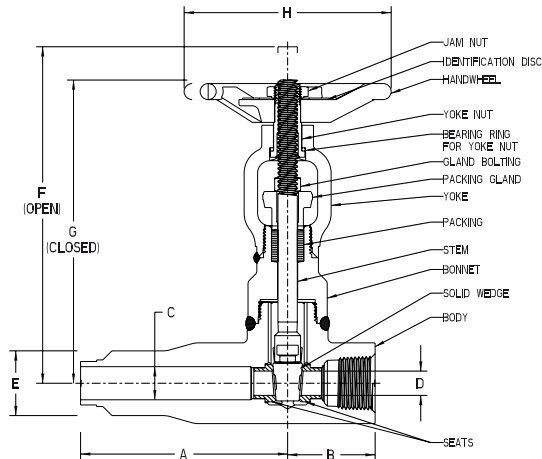
*Example Series Designation: ST2801, CT2901, BT12111, etc.

SIZE			A(B)	A(C)	A(S)	A(T)	B	C(B)	C(C)	C(S)	C(T)	D	D(T)	E	F	G	H	J	K	WEIGHT	Cv
-04	NPS	1/2	4.00	4.38	4.00	4.00	1.69	.64	.64	.64	.52	.50	.41	1.25	6.50	5.86	4.00	.81	.84	4.3	6.5
	DN	15	102	111	102	102	43	16.3	16.3	16.3	13.2	12.7	10.4	31.8	165	149	102	20.6	21.3	2.0	
-05	NPS	3/4	4.00	4.38	4.00	4.00	1.69	.64	.64	.64	.64	.50	.47	1.25	6.50	5.86	4.00	.81	1.05	4.2	9.0
	DN	20	102	111	102	102	43	16.3	16.3	16.3	16.3	12.7	11.9	31.8	165	149	102	20.6	26.7	1.9	
-06	NPS	1	4.38	4.75	4.38	4.38	2.00	.89	.89	.89	.89	.75	.69	1.56	8.38	7.43	4.75	1.06	1.32	7.6	27.7
	DN	25	111	121	111	111	51	22.6	22.6	22.6	22.6	19.1	17.5	39.6	213	189	121	26.9	33.5	3.4	
-08	NPS	1 1/2	5.00	5.00	5.00	5.00	2.38	1.47	1.47	1.47	1.47	1.25	1.25	2.25	10.14	8.71	5.75	1.69	1.90	13.2	78.0
	DN	40	127	127	127	127	60	37.3	37.3	37.3	37.3	31.8	31.8	57.2	258	221	146	42.9	48.3	6.0	
-04	NPS	1/2	7.00	7.00	7.00	7.00	1.69	.75	.75	.64	.52	.50	.41	1.56	6.50	5.86	4.00	.97	.84	5.4	9.6
	DN	15	178	178	178	178	43	19.1	19.1	16.3	13.2	12.7	10.4	39.6	165	149	102	24.6	21.3	2.4	
-05	NPS	3/4	7.00	7.00	7.00	7.00	1.69	.75	.75	.75	.64	.50	.47	1.56	6.50	5.86	4.00	.97	1.05	5.4	9.7
	DN	20	178	178	178	178	43	19.1	19.1	19.1	16.3	12.7	11.9	39.6	165	149	102	24.6	26.7	2.4	
-06	NPS	1	7.50	7.50	7.50	7.50	2.00	1.00	1.00	1.00	.89	.75	.69	1.94	8.38	7.43	4.75	1.22	1.32	9.3	20.3
	DN	25	191	191	191	191	51	25.4	25.4	25.4	22.6	19.1	17.5	49.3	213	189	121	31.0	33.5	4.2	
-08	NPS	1 1/2	8.00	8.00	8.00	8.00	2.38	1.50	1.50	1.50	1.47	1.25	1.25	2.56	10.14	8.71	5.75	1.72	1.90	16.5	78.0
	DN	40	203	203	203	203	60	38.1	38.1	38.1	37.3	31.8	31.8	65.0	258	221	146	43.7	48.3	7.5	
-09	NPS	2	10.00	10.00	10.00	10.00	2.63	1.94	1.94	1.94	1.81	1.50	1.50	3.12	11.09	9.40	7.00	2.16	2.38	24.0	117.6
	DN	50	254	254	254	254	67	49.3	49.3	49.3	46.0	38.1	38.1	79.2	282	239	178	54.9	60.5	10.9	
-04	NPS	1/2	7.00	7.00	4.50	4.50	1.69	.75	.75	.64	.52	.50	.41	1.56	6.29	5.73	4.00	.97	.84	6.8	9.6
	DN	15	178	178	114	114	43	19.1	19.1	16.3	13.2	12.7	10.4	39.6	160	146	102	24.6	21.3	3.1	
-05	NPS	3/4	7.00	7.00	4.50	4.50	1.69	.75	.75	.75	.65	.50	.47	1.56	6.29	5.73	4.00	.97	1.05	6.8	9.7
	DN	20	178	178	114	114	43	19.1	19.1	19.1	16.5	12.7	11.9	39.6	160	146	102	24.6	26.7	3.1	
-06	NPS	1	7.50	7.50	5.25	5.25	2.10	1.00	1.00	1.00	.89	.75	.69	1.94	8.37	7.43	4.75	1.22	1.32	11.2	20.3
	DN	25	191	191	133	133	53	25.4	25.4	25.4	22.6	19.1	17.5	49.3	213	189	121	31.0	33.5	5.1	
-08	NPS	1 1/2	8.00	8.00	6.38	6.38	2.38	1.50	1.50	1.50	1.47	1.25	1.25	2.56	10.12	8.71	5.75	1.72	1.90	20.4	78.0
	DN	40	203	203	162	162	60	38.1	38.1	38.1	37.3	31.8	31.8	65.0	257	221	146	43.7	48.3	9.3	
-09	NPS	2	10.00	10.00	6.00	6.00	2.92	1.94	1.94	1.81	1.81	1.50	1.50	3.12	11.12	9.42	7.00	2.16	2.38	27.0	117.6
	DN	50	254	254	152	152	74	49.3	49.3	46.0	46.0	38.1	38.1	79.2	282	239	178	54.9	60.5	12.2	

GATE Class 800

1

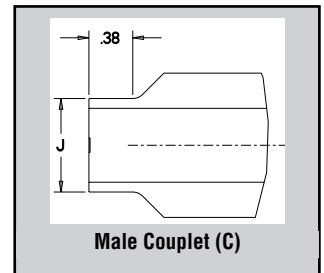
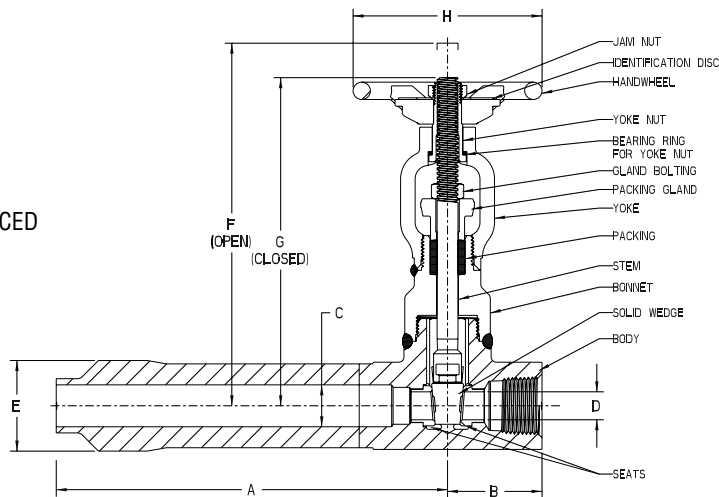
Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34
INTEGRAL FORGED BODY



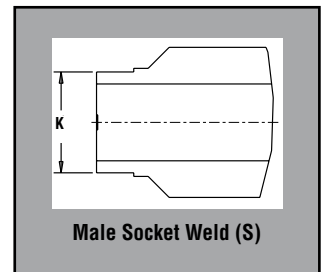
(B)

2

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34
INTEGRALLY REINFORCED
WELD END



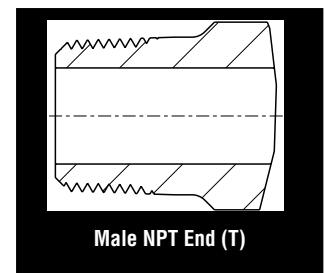
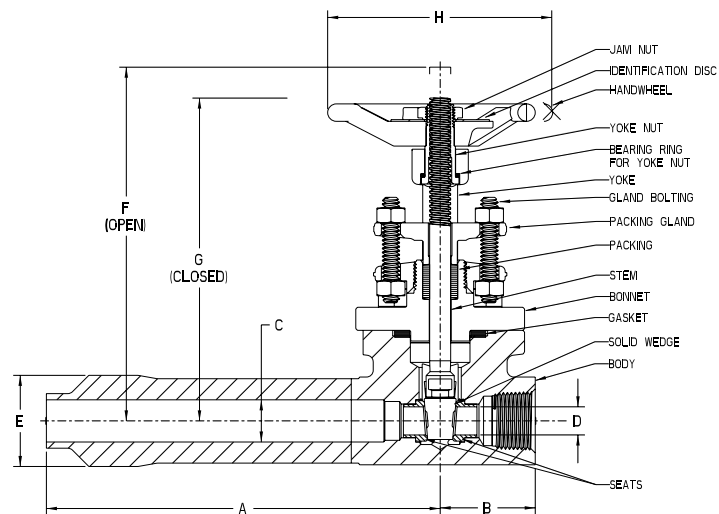
(C)



(S)

3

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34
INTEGRALLY
REINFORCED
WELD END



(T)

Forged Gate Valves – Extended Body Valves

Extended Body/Class 1500 Conventional Port Gate Valve

	SERIES	BODY/BONNET	TRIM	RATING	
1	15801*	A105	13%Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
	15831	F316/F316L	316	3600 PSI @ 100 F	248.2 BAR @ 38 C

2	15901	A105	13%Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
	15931	F316/F316L	316	3600 PSI @ 100 F	248.2 BAR @ 38 C
	15951	F11, Cl.2(1-1/4 Cr.)	13%Cr	3750 PSI @ 100 F	258.6 BAR @ 38 C
	15961	F22, Cl.3(2-1/4 Cr.)			

3	15111	A105	13%Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
	35111	A350 LF2		3705 PSI @ -50 F	255.3 BAR @ -46 C
	15401	F316/F316L	316	3600 PSI @ 100 F	248.2 BAR @ 38 C
	15321	F11, Cl.2(1-1/4 Cr.)	13%Cr	3750 PSI @ 100 F	258.6 BAR @ 38 C
	15521	F22, Cl.3(2-1/4 Cr.)			
	15421	F5(5 Cr.)			
	15921	F9(9 Cr.)			

*Example Series Designation: ST15801, CT15901, BT15111, etc.

CONNECTION			
Extended Male End	Female End		
Butt Weld	Threaded	BT	(B)
Butt Weld	Socket Weld	BS	
Couplet	Threaded	CT	(C)
Couplet	Socket Weld	CS	
Socket Weld	Threaded	ST*	(S)
Socket Weld	Socket Weld	SS	

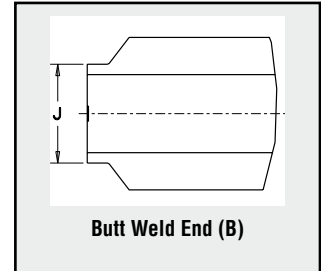
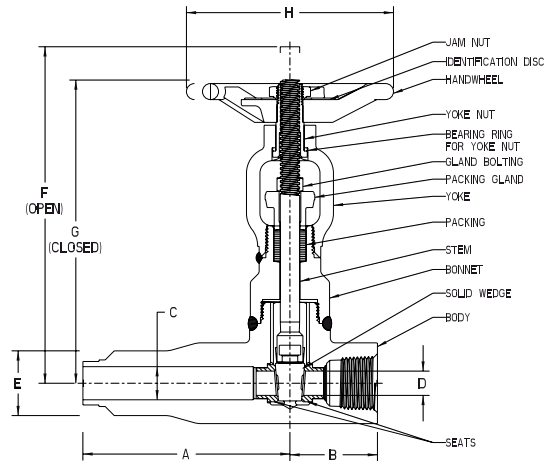
Dimensions

SIZE			A	B	C(B)	C(C)	C(S)	D	D(T)	E	F	G	H	J	K	WEIGHT	Cv	1
-04	NPS	½	4.69	2.00	.75	.75	.69	.50	.41	1.56	7.54	6.90	4.75	.81	.84	7.8	9.6	
	DN	15	119	51	19.1	19.1	17.5	12.7	10.4	39.6	192	175	121	20.6	21.3	3.5		
-05	NPS	¾	4.69	2.00	.75	.75	.75	.50	.47	1.56	7.54	6.90	4.75	.81	1.05	7.7	9.7	
	DN	20	119	51	19.1	19.1	19.1	12.7	11.9	39.6	192	175	121	20.6	26.7	3.5		
-06	NPS	1	5.37	2.38	1.00	1.00	1.12	.75	.69	2.25	9.69	8.77	7.00	1.22	1.32	15.5	20.3	
	DN	25	136	60	25.4	25.4	28.4	19.1	17.5	57.2	246	223	178	26.9	33.5	7.0		
-04	NPS	½	6.50	2.00	.75	.75	.69	.50	.41	1.56	7.54	6.90	4.75	.97	.84	9.7	9.6	2
	DN	15	165	51	19.1	19.1	17.5	12.7	10.4	39.6	192	175	121	24.6	21.3	4.4		
-05	NPS	¾	7.50	2.00	.75	.75	.75	.50	.47	1.94	7.54	6.90	4.75	.97	1.05	9.6	9.7	
	DN	20	191	51	19.1	19.1	19.1	12.7	11.9	49.3	192	175	121	24.6	26.7	4.4		
-06	NPS	1	7.50	2.38	1.00	1.00	1.12	.75	.69	1.94	9.69	8.77	7.00	1.22	1.32	17.2	20.3	
	DN	25	191	60	25.4	25.4	28.4	19.1	17.5	49.3	246	223	178	31.0	33.5	7.8		
-08	NPS	1½	10.00	2.63	1.50	1.50	1.50	1.25	1.25	3.12	11.40	9.98	8.00	1.72	1.90	30.1	91.6	
	DN	40	254	67	38.1	38.1	38.1	31.8	31.8	79.2	290	253	203	43.7	48.3	13.7		
-04	NPS	½	6.50	2.00	.75	.75	.69	.50	.41	1.56	7.51	6.90	4.75	.97	.84	10.6	9.6	3
	DN	15	165	51	19.1	19.1	17.5	12.7	10.4	39.6	191	175	121	24.6	21.3	4.8		
-05	NPS	¾	6.50	2.00	.75	.75	.75	.50	.47	1.56	7.51	6.90	4.75	.97	1.05	10.5	9.7	
	DN	20	165	51	19.1	19.1	19.1	12.7	11.9	39.6	191	175	121	24.6	26.7	4.8		
-06	NPS	1	7.50	2.38	1.00	1.00	1.12	.75	.69	2.25	9.69	8.78	7.00	1.22	1.32	20.9	20.3	
	DN	25	191	60	25.4	25.4	28.4	19.1	17.5	57.2	246	223	178	31.0	33.5	9.5		
-08	NPS	1½	10.00	2.63	1.50	1.50	1.50	1.25	1.25	3.12	11.40	9.98	8.00	1.72	1.90	36.9	91.6	
	DN	40	254	67	38.1	38.1	38.1	31.8	31.8	79.2	290	253	203	43.7	48.3	16.7		

GATE Class 1500

1

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34
INTEGRAL FORGED BODY

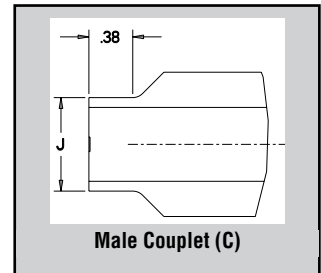
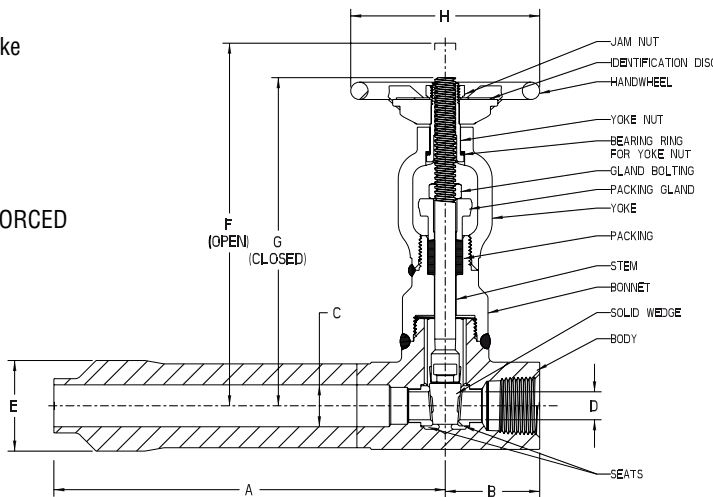


Butt Weld End (B)

(B)

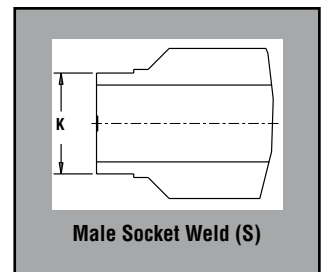
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Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34
INTEGRALLY REINFORCED
WELD END



Male Coulet (C)

(C)

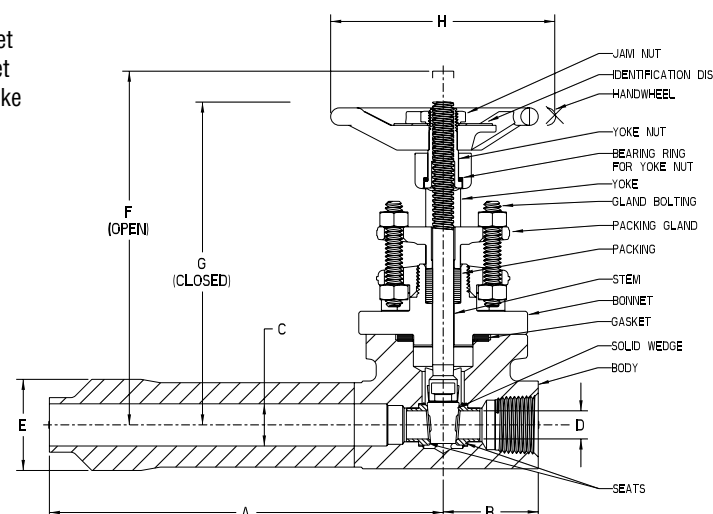


Male Socket Weld (S)

(S)

3

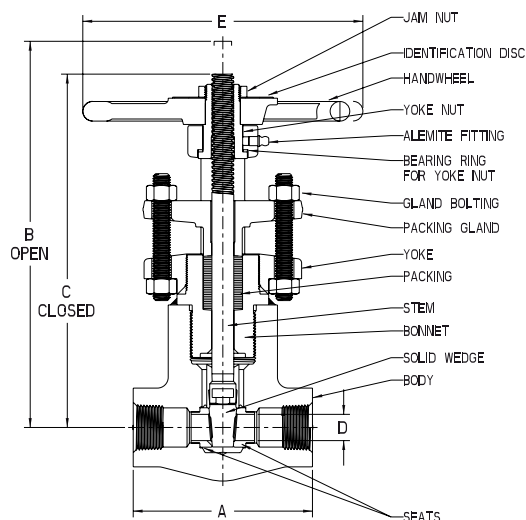
Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
API 602
ASME B16.34
INTEGRALLY
REINFORCED
WELD END



Forged Gate Valves

Class 2500/2680 Gate Valve Full Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Hard Faced Wedge
Hard Faced Seats
ASME B16.34 LTD. Pressure Class



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING		CLASS
Threaded Threaded X Socket Weld TSW	66703	A105	13% Cr.	6250 PSI @ 100 F	430.9 BAR @ 38 C	2500 LTD
	66743	A350 LF2		6250 PSI @ -50 F	430.9 BAR @ -46 C	
	66713	F11, Cl.2(1-1/4 Cr.)		6250 PSI @ 100 F	430.9 BAR @ 38 C	
	66773	F22, Cl.3(2-1/4 Cr.)				
	66791	F91		6250 PSI @ 100 F	430.9 BAR @ 38 C	
Socket Weld	SW66703	A105	13% Cr.	6700 PSI @ 100 F	461.9 BAR @ 38 C	2680 LTD
	SW66743	A350 LF2		6700 PSI @ -50 F	461.9 BAR @ -46 C	
	SW66713	F11, Cl.2(1-1/4 Cr.)		6700 PSI @ 100 F	461.9 BAR @ 38 C	
	SW66773	F22, Cl.3(2-1/4 Cr.)				
	SW66791	F91		6700 PSI @ 100 F	461.9 BAR @ 38 C	

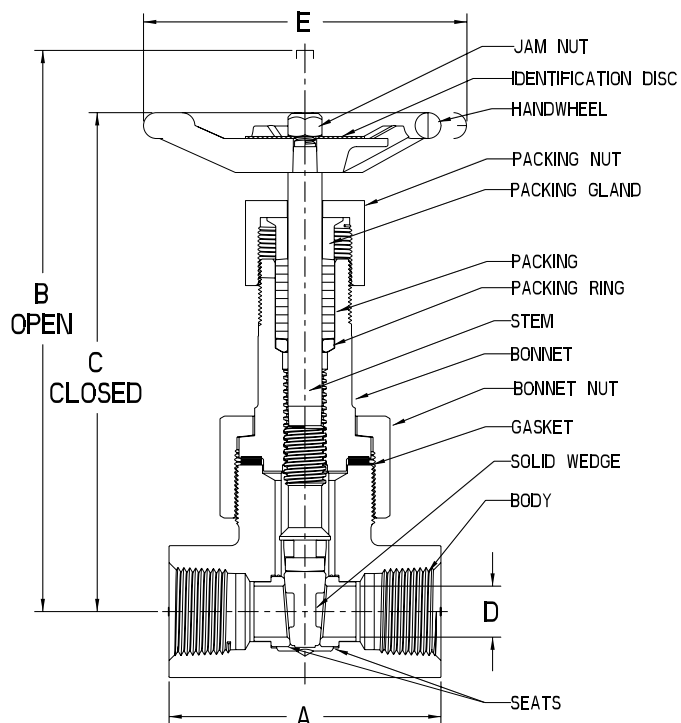
Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	4.00	8.84	8.28	.41	5.75	10.0	5.0
	DN	15	102	225	210	10.4	146	4.5	
-05	NPS	¾	5.12	11.03	10.09	.75	8.00	20.7	17.5
	DN	20	130	280	256	19.1	203	9.4	
-06	NPS	1	5.12	11.03	10.09	.75	8.00	20.3	16.1
	DN	25	130	280	256	19.1	203	9.2	
-08	NPS	1½	8.50	15.86	14.12	1.50	12.00	90.8	109.6
	DN	40	216	403	359	38.1	305	41.2	
-09	NPS	2	8.50	15.86	14.12	1.50	12.00	88.3	100.2
	DN	50	216	403	359	38.1	305	40.1	

Forged Gate Valves

Class 800 Conventional Port Gate Valve

Union Bonnet
 Spiral Wound Gasket
 Inside Screw Stem
 Screw Gland
 Solid Wedge
 Hard Faced Seats
 API 602
 ASME B16.34



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING
Threaded	59851	A105	13% Cr	1975 PSI @ 100 F
Socket Weld	59951*	F316/F316L	316	1920 PSI @ 200 F
Threaded/Socket Weld				

* Not for dry service

Dimensions

SIZE	A	B	C	D	E	WEIGHT	Cv
-04	3.38	6.44	5.88	.50	4.00	4.8	9.6
-05	3.38	6.44	5.88	.50	4.00	4.7	9.7
-06	4.00	8.31	7.38	.75	4.75	7.9	20.3
-07	4.75	10.75	9.38	1.25	5.75	16.4	80.5
-08	4.75	10.75	9.38	1.25	5.75	16.1	91.6
-09	5.25	12.25	10.56	1.50	7.00	23.6	117.6

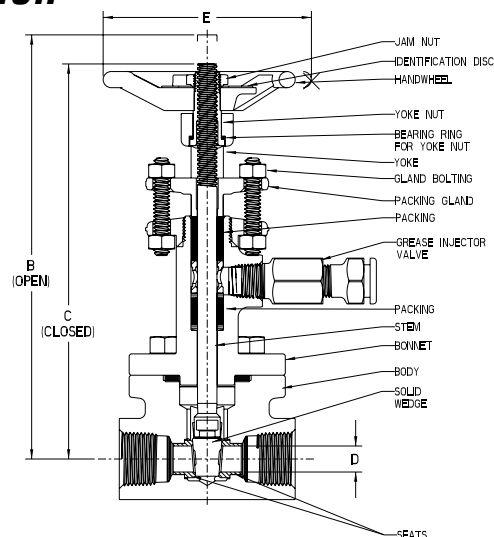
Forged Gate Valves – For HF Alkylation Service

Forged Gate Valves – For Emission Reduction

Class 800 Gate Valve

Conventional Port
Full Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Double Packing
Lantern Ring
Grease Injector
Solid Wedge
API 602 (12111ER & 13111ER)
ASME B16.34



Vogt Alkylation valve – 42211MTG

(UOP) Universal Oil Products Approved – SW43211HF2

contains TEFLON - max temperature 500°F

CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	SEATS	RATING	
Socket Weld Threaded Socket Weld SW	42211MTG	SW43211HF2	A105	Monel	Monel	1975 PSI @ 100 F	136.2 BAR @ 38 C

Emission Reduction

CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	SEATS	RATING	
Threaded Socket Weld (SW) Threaded/Socket Weld (TSW)	12111ER	13111ER	A105	13% Cr	13% Cr Hardfaced	1975 PSI @ 100 F	136.2 BAR @ 38 C

Dimensions

SIZE	A	B	C	D	E	WEIGHT	Cv	CONVENTIONAL PORT
-04	NPS ½	3.38	8.15	7.59	.50	4.00	5.9	
	DN 15	86	207	193	12.7	102	2.7	
-05	NPS ¾	3.38	8.15	7.59	.50	4.00	5.8	
	DN 20	86	207	193	12.7	102	2.6	
-06	NPS 1	4.00	10.27	9.34	.75	4.75	9.8	
	DN 25	102	261	237	19.1	121	4.4	
-07	NPS 1¼	4.75	12.12	10.72	1.25	5.75	17.7	
	DN 40	121	308	272	31.8	146	17.6	
-08	NPS 1½	4.75	12.12	10.72	1.25	5.75	8.4	
	DN 40	121	308	272	31.8	146	3.8	
-09	NPS 2	5.25	13.38	11.69	1.50	7.00	23.0	
	DN 50	133	340	297	38.1	178	10.4	

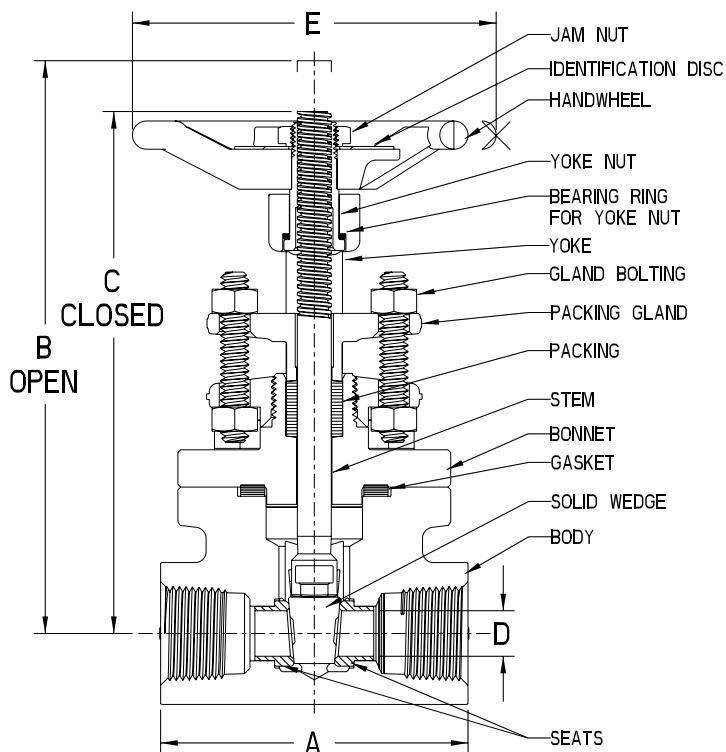
SIZE	A	B	C	D	E	WEIGHT	Cv	FULL PORT
-04	NPS ½	3.38	8.15	7.59	.50	4.00	5.9	
	DN 15	86	207	193	12.7	102	2.7	
-05	NPS ¾	4.00	10.27	9.34	.75	4.75	9.9	
	DN 20	102	261	237	19.1	121	4.5	
-06	NPS 1	4.38	11.36	10.15	1.00	5.75	13.4	
	DN 25	111	289	258	0.0	146	6.1	

Forged Gate Valves – For HF Alkylation Service

Class 600 Full Port Gate Valve

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
API 602
ASME B16.34

See page 20 for Class 800
UOP Approved Alkylation
Service valves.



Listed in Phillips Petroleum Company's HF Alkylation Process Design Spec. Manual

CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded	43111MMP	A105	Monel	1480 PSI @ 100 F	102.1 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	3.38	6.30	5.75	.50	4.00	5.0	9.6
	DN	15	86	160	146	12.7	102	2.3	
-05	NPS	¾	4.0	8.37	7.43	.75	4.75	8.6	28.7
	DN	20	102	213	189	19.1	121	3.9	
-06	NPS	1	4.38	9.80	8.59	1.0	5.75	12.5	46.5
	DN	25	111	249	218	25.4	146	5.7	

Forged Gate Valves – Bellowseal

Class 800 Gate Valve

Conventional Port

Full Port

Welded Bonnet

Outside Screw & Yoke

Bolted Gland

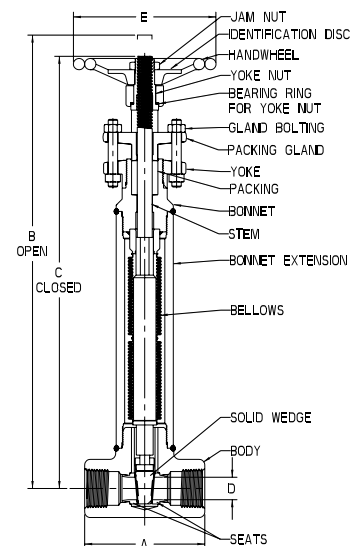
Solid Wedge

ASME B16.34

Seamless Multi-Ply Bellows 321 SS

Stem - 316 SS

Hard Faced Seats/Wedge



Bellowseal gate valves are suitable for applications requiring total containment of the flowing media frequently necessary to protect the environment and to eliminate the loss of hazardous and/or costly fluids.

The valve packing is totally isolated by the bellows from the flowing media and pressure. The packing is incorporated in the valve to serve in a "back-up" role only.

CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld Threaded/Socket Weld	SW	2801B	3801B	A105	13% Cr	1975 PSI @ 100 F
		32801B	33801B	A350 LF2	13% Cr	1975 PSI @ 100 F
	TSW	2831B	3831B	F316/F316L	13% Cr	1975 PSI @ -50 F
						132.4 BAR @ -46 C
				316		1920 PSI @ 100 F
						132.4 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	
CONVENTIONAL PORT	-04	NPS	½	3.38	10.56	10.06	.50	4.00	8.2	9.6
		DN	15	86	268	256	12.7	102	3.7	
	-05	NPS	3/4	3.38	10.56	10.06	.50	4.00	8.1	9.7
		DN	20	86	268	256	12.7	102	3.7	
	-06	NPS	1	4.00	15.38	14.38	.75	4.75	11.0	20.3
		DN	25	102	384	365	19.1	121	5.0	
	-08	NPS	1½	5.25	20.25	18.81	1.50	7.00	28.3	109.6
		DN	40	133	514	478	38.1	178	12.8	
	-09	NPS	2	5.25	20.25	18.81	1.50	7.00	27.8	117.6
		DN	50	133	514	478	38.1	178	12.6	

FULL PORT	-04	NPS	½	3.38	10.56	10.06	.50	4.00	4.2	9.6
		DN	15	86	268	256	12.7	102	1.9	
	-05	NPS	¾	4.00	15.38	14.38	.75	4.75	11.0	28.7
		DN	20	102	384	365	19.1	121	5.0	
	-08	NPS	1½	5.25	20.25	18.81	1.50	7.00	28.3	109.6
		DN	40	133	514	478	38.1	178	12.8	

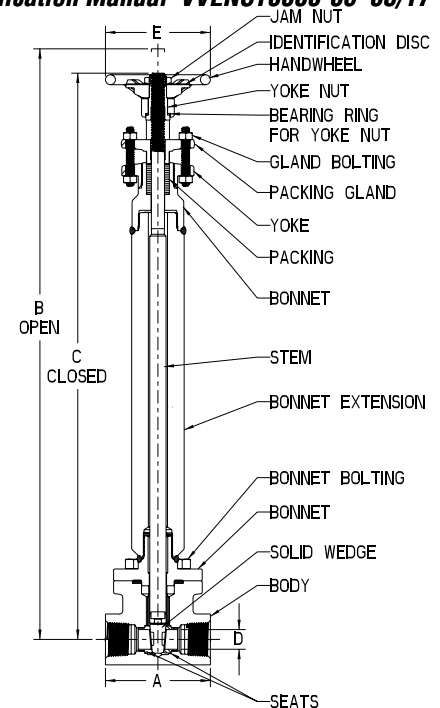
Forged Gate Valves – Cryogenic Service to -325°F(-198°C) Class 800 & 1500 Gate Valve

Conventional Port

Full Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
Extended Bonnet
ASME B16.34
MSS SP-134

Valve contains TEFLON – Max temp of 500° F



CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING		
Threaded Socket Weld Threaded/Socket Weld	12401C	13401C	F316/F316L	316	1920 PSI @ 100 F	132.4 BAR @ 38 C	Class 800
					1920 PSI @ -325 F	132.4 BAR @ -198 C	
	15401C	16401C	F316/F34L	316	3600 PSI @ 100 F	248.2 BAR @ 38 C	Class 1500
					3600 PSI @ -325 F	248.2 BAR @ -198 C	

Dimensions

Size										Size										Class 800
CONVENTIONAL PORT	-04		A	B	C	D	E	WEIGHT	Cv	FULL PORT	-04		A	B	C	D	E	WEIGHT	Cv	
	NPS	½	3.38	20.52	19.96	.50	4.00	10.0	9.6		NPS	½	3.38	20.52	19.96	.50	4.00	10.0	9.6	
	DN	15	86	521	507	12.7	102	4.6			DN	15	86	521	507	12.7	102	4.6		
	-05		A	B	C	D	E	WEIGHT	Cv		-05		A	B	C	D	E	WEIGHT	Cv	
	NPS	¾	3.38	20.52	19.96	.50	4.00	9.8	9.7		NPS	¾	4.00	22.52	21.59	.75	4.75	20.5	28.7	
	DN	20	86	521	507	12.7	102	4.7			DN	20	102	572	548	19.1	121	9.3		
	-06		A	B	C	D	E	WEIGHT	Cv		-06		A	B	C	D	E	WEIGHT	Cv	
	NPS	1	4.00	22.52	21.59	.75	4.75	20.4	20.3		NPS	1	4.38	26.37	25.21	1.00	5.75	37.3	46.5	
	DN	25	102	572	548	19.1	121	9.3			DN	25	111	670	640	25.4	146	16.9		
	-07		A	B	C	D	E	WEIGHT	Cv		-07		A	B	C	D	E	WEIGHT	Cv	
	NPS	1¼	4.75	27.99	26.58	1.25	5.75	32.2	80.5		NPS	1¼	4.75	27.99	26.58	1.25	5.75	32.2	80.5	
	DN	32	121	711	675	31.8	146	14.6			DN	32	121	711	675	31.8	146	14.6		
	-08		A	B	C	D	E	WEIGHT	Cv		-08		A	B	C	D	E	WEIGHT	Cv	
	NPS	1½	4.75	27.99	26.58	1.25	5.75	32.2	91.6		NPS	1½	5.25	26.79	25.10	1.50	7.0	35.0	109.6	
	DN	40	121	711	675	31.8	146	14.6			DN	40	133	680	638	38.1	178	15.9		
	-09		A	B	C	D	E	WEIGHT	Cv		-09		A	B	C	D	E	WEIGHT	Cv	
	NPS	2	5.25	26.29	25.10	1.50	7.00	34.7	117.6		NPS	2	5.25	26.29	25.10	1.50	7.00	34.7	117.6	
	DN	50	133	680	638	38.1	178	15.7			DN	50	133	680	638	38.1	178	15.7		

Size										Size										Class 1500
CONVENTIONAL PORT	-04		A	B	C	D	E	WEIGHT	Cv	FULL PORT	-04		A	B	C	D	E	WEIGHT	Cv	
	NPS	½	4.00	20.79	20.18	.50	4.75	19.5	9.6		NPS	½	4.00	20.79	20.18	.50	4.75	19.5	9.6	
	DN	15	102	528	513	12.7	121	8.9			DN	15	102	528	513	12.7	121	8.9		
	-05		A	B	C	D	E	WEIGHT	Cv		-05		A	B	C	D	E	WEIGHT	Cv	
	NPS	¾	4.00	20.79	20.18	.50	4.75	19.3	9.7		NPS	¾	4.75	21.51	20.59	.75	7.0	25.5	28.7	
	DN	20	102	528	513	12.7	121	8.8			DN	20	121	546	523	19.1	178	11.6		
	-06		A	B	C	D	E	WEIGHT	Cv		-06		A	B	C	D	E	WEIGHT	Cv	
	NPS	1	4.75	21.51	20.59	.75	7.0	25.0	20.3		NPS	1	4.38	22.52	21.59	1.00	5.75	37.3	46.5	
	DN	25	121	546	523	19.1	178	11.3			DN	25	111	572	548	25.4	146	16.9		
	-07		A	B	C	D	E	WEIGHT	Cv		-07		A	B	C	D	E	WEIGHT	Cv	
	NPS	1¼	5.25	26.53	25.11	1.25	8.0	39.6	80.5		NPS	1¼	5.25	26.53	25.11	1.25	8.0	39.6	80.5	
	DN	32	133	674	638	31.8	203	18.0			DN	32	133	674	638	31.8	203	18.0		
	-08		A	B	C	D	E	WEIGHT	Cv		-08		A	B	C	D	E	WEIGHT	Cv	
	NPS	1½	5.25	26.53	25.11	1.25	8.0	39.0	91.6		NPS	1½	7.00	27.53	25.84	1.50	9.75	65.0	109.6	
	DN	40	133	674	638	31.8	203	17.7			DN	40	178	699	656	38.1	248	29.5		
	-09		A	B	C	D	E	WEIGHT	Cv		-09		A	B	C	D	E	WEIGHT	Cv	
	NPS	2	7.00	27.53	25.84	1.50	9.75	64.1	117.6		NPS	2	7.00	27.53	25.84	1.50	9.75	64.1	117.6	
	DN	50	178	699	656	38.1	248	29.1			DN	50	178	699	656	38.1	248	29.1		

Refer to page 4 for optional trim and service configurations.
Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.
Refer to pages 114-115 for other ratings

Forged Gate Valves – Meets API-600 Required Wall Thickness

Class 800 Gate Valve

Conventional Port

Full Port

Round Bolted Bonnet

Spiral Wound Gasket

Outside Screw & Yoke

Bolted Gland

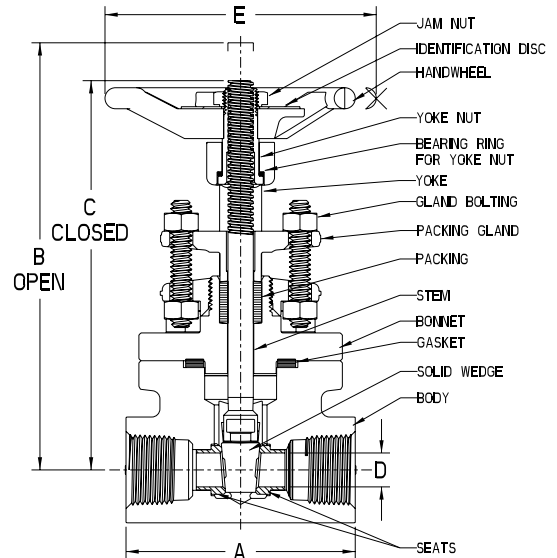
Solid Wedge

Hard Faced Seats

Meets API-600 Required Wall Thickness

API 602

ASME B16.34



CONNECTION	CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld Threaded x Socket Weld	12601	13601	A105	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	12602	13602	A350 LF2	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
	12603	13603	F316/F316L	316	1975 PSI @ -50 F	136.2 BAR @ -46 C
	12604	13604	F11, Cl.2	*13% Cr	1920 PSI @ 100 F	132.4 BAR @ 38 C
	12605	13605	F22, Cl.3	*13% Cr	2000 PSI @ 100 F	137.9 BAR @ 38 C

**Hardfaced Wedge/Seats*

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
CONVENTIONAL PORT	-04	NPS ½	4.00	7.51	6.90	.50	4.75	8.9	9.6
		DN 15	101.6	191	175	12.7	121	4.0	
	-05	NPS ¾	4.00	7.51	6.90	.50	4.75	9.7	9.7
		DN 20	101.6	191	175	12.7	121	4.4	
	-06	NPS 1	4.75	9.69	8.77	.75	7.00	17.5	20.3
		DN 25	120.7	246	223	19.1	178	7.9	
	-07	NPS 1¼	5.25	11.40	9.98	1.25	8.00	27.3	80.5
		DN 32	133.4	290	253	31.8	203	12.4	
	-08	NPS 1½	5.25	11.40	9.98	1.25	8.00	26.7	91.6
		DN 40	133.4	290	253	31.8	203	12.1	
	-09	NPS 2	7.00	13.84	12.15	1.50	9.75	46.1	117.6
		DN 50	177.8	352	309	38.1	248	20.9	

FULL PORT	-04	NPS ½	4.00	7.51	6.90	.50	4.75	17.5	9.6
		DN 15	101.6	191	175	12.7	121	7.9	
	-05	NPS ¾	4.75	9.69	8.77	.75	7.00	17.9	28.7
		DN 20	120.7	246	223	19.1	178	8.1	
	-06	NPS 1	5.25	11.31	9.96	1.00	8.00	28.3	46.5
		DN 25	133.4	287	253	25.4	203	12.8	
	-07	NPS 1¼	5.25	11.40	9.98	1.25	8.00	27.3	80.5
		DN 32	133.4	290	253	31.8	203	12.4	
	-08	NPS 1½	7.00	13.84	12.15	1.50	9.75	46.1	109.6
		DN 40	177.8	352	309	38.1	248	20.9	

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

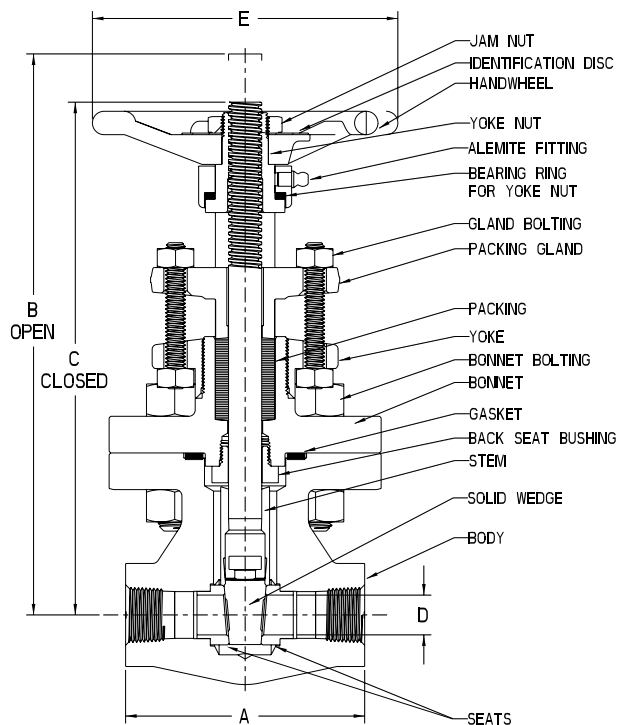
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings.

Forged Gate Valves – Meets API-600 Required Wall Thickness

Class 800 Full Port Gate Valve

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
Meets API 600 required wall thickness
ASME B16.34



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld SW	11103	A105	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	3.62	9.52	8.78	.56	4.75	12.4	9.6
	DN	15	92	242	223	14.2	121	5.6	
-05	NPS	¾	4.50	10.56	9.65	.75	5.75	19.9	28.7
	DN	20	114	268	245	19.1	146	9.0	
-06	NPS	1	5.00	11.75	10.56	1.0	7.00	29.4	46.5
	DN	25	127	298	268	25.4	178	13.3	
-07	NPS	1¼	6.50	14.12	12.62	1.25	8.00	41.2	80.5
	DN	32	165	359	321	31.8	203	18.7	
-08	NPS	1½	7.25	16.37	14.68	1.50	9.75	63.0	109.6
	DN	40	184	416	373	38.1	248	28.6	
-09	NPS	2	9.00	19.00	16.81	2.00	9.75	90.8	181.0
	DN	50	229	483	427	50.8	248	41.2	

Refer to page 4 for optional trim and service configurations.

Refer to page 111-113 for end connections.

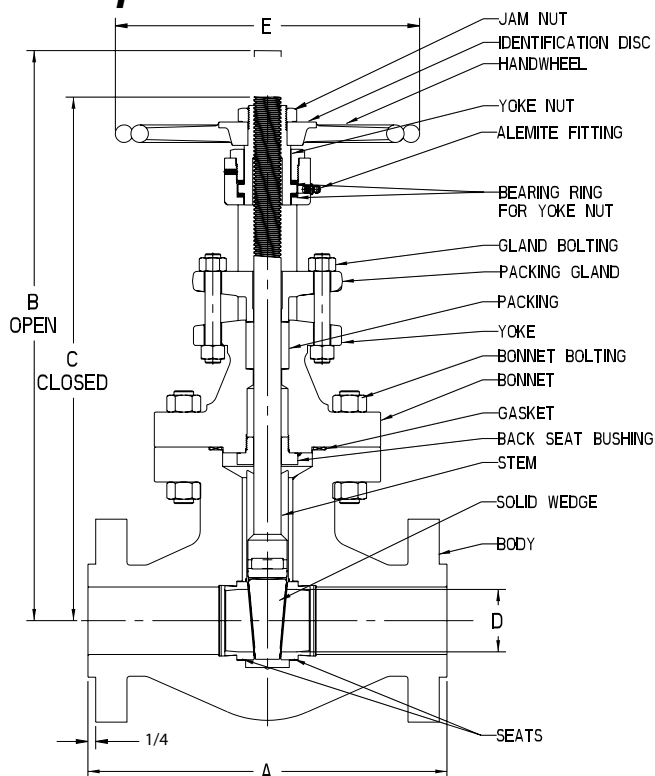
Refer to pages 126 & 127 for full materials description.

Refer to pages 114-115 for other ratings.

Forged Gate Valves – Meets API-600 Required Wall Thicknesses

Class 600 gate Valve Full Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
Meets API 600 required wall thickness
ASME B16.34



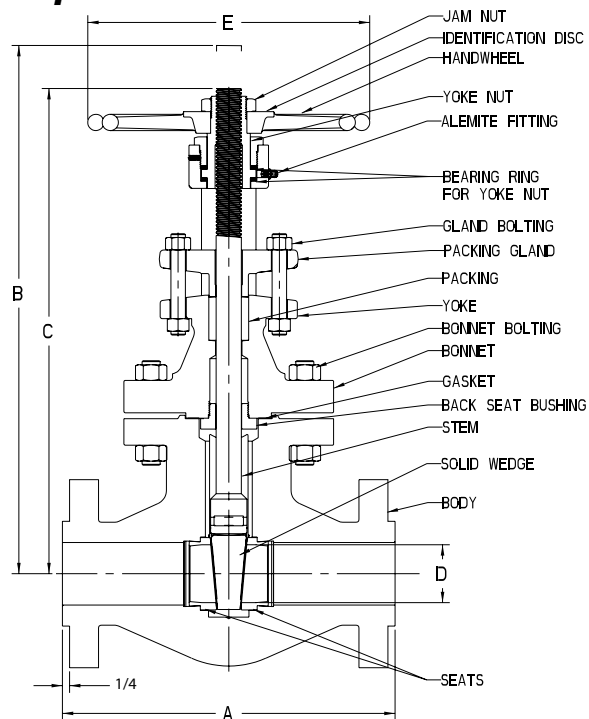
CONNECTION	SERIES	BODY/BONNET	TRIM	RATING
1/4 RF	11403	A105	13% Cr	1480 PSI @ 100 F 102.1 BAR @ 38 C

Dimensions

SIZE	A	B	C	D	E	WEIGHT	Cv
-04	NPS 1/2	6.50	10.44	9.69	.56	4.75	19.5
	DN 15	165	265	246	14.2	121	8.8
-05	NPS 3/4	7.50	11.31	10.38	.75	5.75	31.2
	DN 20	191	287	264	19.1	146	14.2
-06	NPS 1	8.50	12.56	11.44	1.00	7.00	45.0
	DN 25	216	319	291	25.4	178	20.4
-07	NPS 1 1/4	9.00	14.12	12.62	1.25	8.00	57.4
	DN 32	229	359	321	31.8	203	26.0
-08	NPS 1 1/2	9.50	16.38	14.69	1.50	9.75	76.2
	DN 40	241	416	373	38.1	248	34.6
-09	NPS 2	11.50	19.00	16.81	2.00	9.75	105.0
	DN 50	292	483	427	50.8	248	47.6

Forged Gate Valves – Meets API-600 Required Wall Thicknesses

Class 1500 Full Port Flanged Gate Valve



BONNET GASKET	CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Flat Gasket Joint	1/4 RF	11603	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
Ring Joint Gasket (Not illustrated)	Ring Joint (Not illustrated)	11683	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C

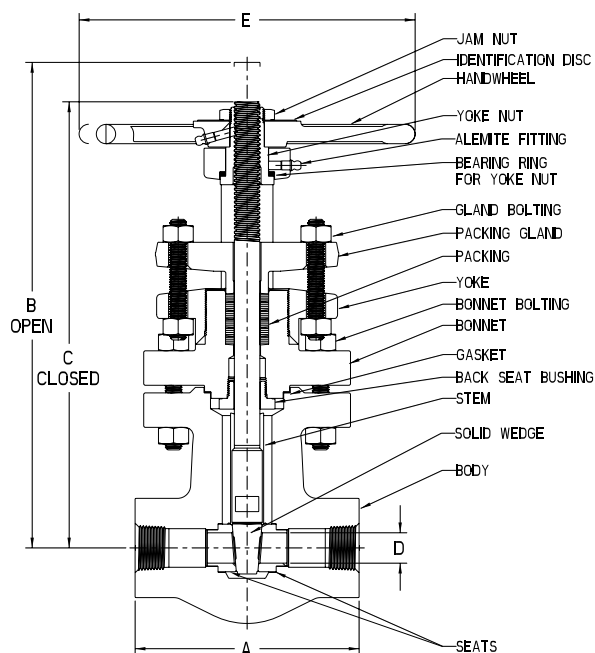
Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	8.50	12.12	11.38	.56	7.00	43.3	11.8
	DN	15	216	308	289	14.2	178	19.6	
-05	NPS	¾	9.00	14.00	12.94	.75	7.00	55.0	28.7
	DN	20	229	356	329	19.1	178	24.9	
-06	NPS	1	10.00	15.62	14.50	.88	8.00	76.0	32.0
	DN	25	254	397	368	22.4	203	34.5	
-07	NPS	1¼	11.00	17.75	16.44	1.12	9.75	92.0	83.2
	DN	32	279	451	418	28.4	248	41.7	
-08	NPS	1½	12.00	20.12	18.38	1.38	12.00	117.8	109.6
	DN	40	305	511	467	35.1	305	53.4	
-09	NPS	2	14.50	23.56	21.25	2.00	13.75	230.0	181.0
	DN	50	368	598	540	50.8	349	104.3	

Forged Gate Valves

Class 1500 Full Port Gate Valve

Round Bolted Bonnet
Outside Screw & Yoke
Bolted Gland
Solid Wedge
Hard Faced Seats
Meets API 600 required wall thickness
ASME B16.34



BONNET GASKET	CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Flat Gasket Joint	Threaded Socket Weld SW	1033	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
Ring Joint Gasket (Not illustrated)	Threaded Socket Weld SW	1043	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv
-04	NPS	½	4.50	10.75	10.00	.56	5.75	21.9	11.8
	DN	15	114	273	254	14.2	146	9.9	
-05	NPS	¾	5.00	11.81	10.90	.75	7.00	29.9	28.7
	DN	20	127	300	277	19.1	178	13.6	
-06	NPS	1	6.50	14.06	12.94	.88	8.00	44.4	32.0
	DN	25	165	357	329	22.4	203	20.1	
-07	NPS	1¼	7.25	13.38	14.88	1.25	9.75	63.0	83.2
	DN	32	184	340	378	31.8	248	28.6	
-08	NPS	1½	9.00	18.75	17.12	1.38	9.75	100.0	109.6
	DN	40	229	476	435	35.1	248	45.4	
-09	NPS	2	9.50	21.00	18.69	2.00	12.00	116.3	181.0
	DN	50	241	533	475	50.8	305	52.8	

Globe Valve

Globe and angle valves are suitable for throttling as well as shut-off. They are customarily installed so that the media pressure and preferred flow direction are under the disc (as illustrated). Flow above the disc is also acceptable.

The Vogt globe and angle valve lines provide a variety of design variations to fulfill your requirements. Flow characteristics can be determined from the Cv Factors listed.

Dimensions in the catalog selection pages are in inches and millimeters.

Dimensions are subject to change without notice.

See pages 38 – 80 for globe valve selections.

Drawings for currently available globe valve configurations are available at:
[http://Vogt Valves.vogtvalves.com/search_drawings.asp](http://Vogt%20Valves.vogtvalves.com/search_drawings.asp)



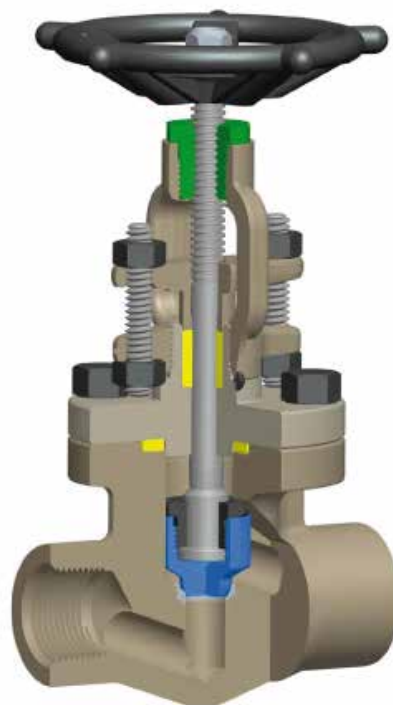
12141 Globe Valve

Class 800 Globe Valve

Conventional Port
Full Port



See page 40 - 42



The core of the pressure class 150, 300, 600, & 800 globe valve

CONNECTION		CONV PORT	FULL PORT	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld Threaded/Socket Weld Butt Weld (Sch 40)**	SW TSW BW	12141	13141	A105	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C
		32141	33141	A350 LF2	13% Cr	HF	1975 PSI @ -50 F	136.2 BAR @ -46 C
		12501	13501	F316/F316L	316		1920 PSI @ 100 F	132.4 BAR @ 38 C
		82501	83501	F316H	316H			
		12351	13351	F11,Cl.2(1-1/4 Cr.)	13% Cr	HF	2000 PSI @ 100 F	137.9 BAR @ 38 C
		12551	13551	F22,Cl.3(1-1/4 Cr.)				

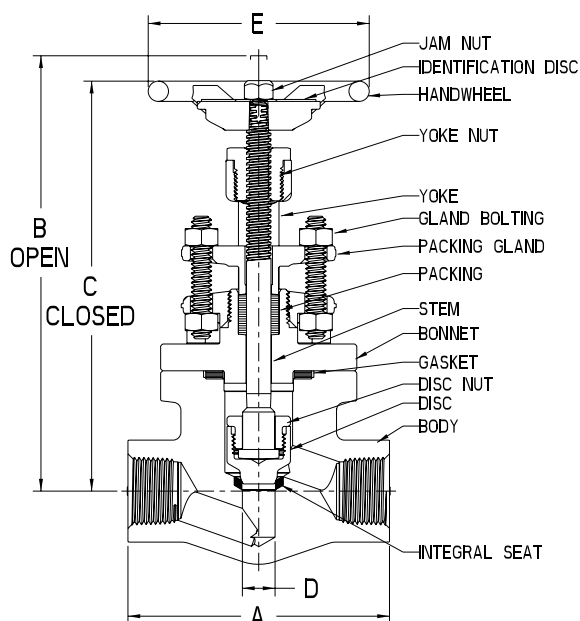
****BW end-to-end is a Vogt standard and does not meet B16.10**

Class 800 Globe Valve

Conventional Port

Full Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P	CONVENTIONAL PORT
-04	NPS	½	3.75	6.63	6.24	.50	4.00	5.1	2.4	4.7	12	
	DN	15	95	169	158	12.7	102	2.3				
-05	NPS	¾	4.00	6.66	6.24	.50	4.00	5.5	4.3	5.0	12	
	DN	20	102	169	158	12.7	102	2.5				
-06	NPS	1	4.62	8.52	7.91	.75	4.75	9.5	7.3	6.1	10	
	DN	25	117	216	201	19.1	121	4.3				
-07	NPS	1 ¼	6.25	10.42	9.62	1.28	5.75	21.0	14.2	8.0	10	
	DN	32	159	265	244	32.5	146	9.5				
-08	NPS	1½	6.25	10.42	9.62	1.28	5.75	20.1	20.4	8.0	10	
	DN	40	159	265	244	32.5	146	9.1				
-09	NPS	2	7.75	11.09	10.17	1.53	8.00	30.8	23.1	7.4	8	
	DN	50	197	282	258	38.9	203	14.0				
-10	NPS	2½	9.00	13.09	12.39	2.00	8.00	50.2	35.6	5.6	8	
	DN	65	229	338	315	50.8	203	22.8				

-04	NPS	½	4.00	6.63	6.24	.50	4.00	5.7	3.0	4.7	12	FULL PORT
	DN	15	102	169	158	12.7	102	2.6				
-05	NPS	¾	4.62	8.52	7.91	.75	4.75	9.8	6.8	6.1	10	
	DN	20	117	216	201	19.1	121	4.4				
-06	NPS	1	6.25	10.42	9.62	1.28	5.75	21.5	14.5	8.0	10	
	DN	25	159	265	244	32.5	146	9.8				
-07	NPS	1¼	6.25	10.42	9.62	1.28	5.75	20.6	17.2	8.0	10	
	DN	32	159	265	244	32.5	146	9.3				
-08	NPS	1½	7.75	11.09	10.17	1.53	8.00	31.8	24.4	7.4	8	
	DN	40	197	282	258	38.9	203	14.4				
-09	NPS	2	9.00	13.09	12.39	2.00	8.00	51.8	37.6	5.6	8	
	DN	50	229	338	315	50.8	203	23.5				

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

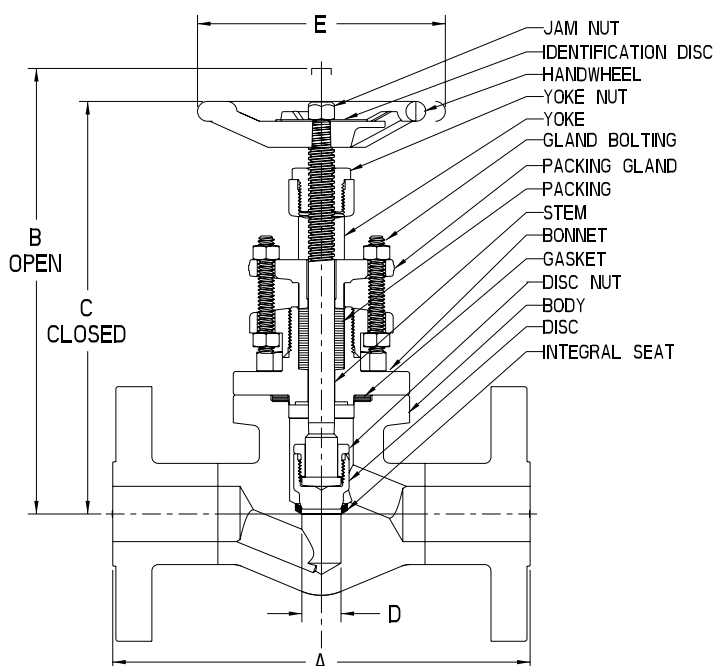
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 150 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
1/16 RF Flat Face FF	473	A105	13% Cr	HF	285 PSI @ 100 F	19.6 BAR @ 38 C
	32473	A350 LF2	13% Cr	HF	285 PSI @ 100 F	19.6 BAR @ 38 C
					285 PSI @ -50 F	19.6 BAR @ -46 C
	478	F316/F316L	316		275 PSI @ 100 F	19.0 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.25	6.63	6.24	.50	4.00	7.0	2.4	4.7	12
	DN	15	108	168	158	12.7	102	3.2			
-05	NPS	¾	4.62	6.63	6.24	.50	4.00	8.4	4.3	4.7	12
	DN	20	117	168	158	12.7	102	3.8			
-06	NPS	1	5.00	8.54	7.91	.75	4.75	13.1	7.3	6.3	10
	DN	25	127	217	201	19.1	121	5.9			
-08	NPS	1½	6.50	10.42	9.62	1.28	5.75	26.2	20.4	8.0	10
	DN	40	165	265	244	32.5	146	11.9			
-09	NPS	2	8.00	11.09	10.17	1.50	8.00	40.0	23.1	7.4	8
	DN	50	203	282	258	38.1	203	18.1			
-11	NPS	3	9.50	13.09	12.39	2.00	8.00	66.7	33.4	5.6	8
	DN	80	241	338	315	50.8	203	30.3			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

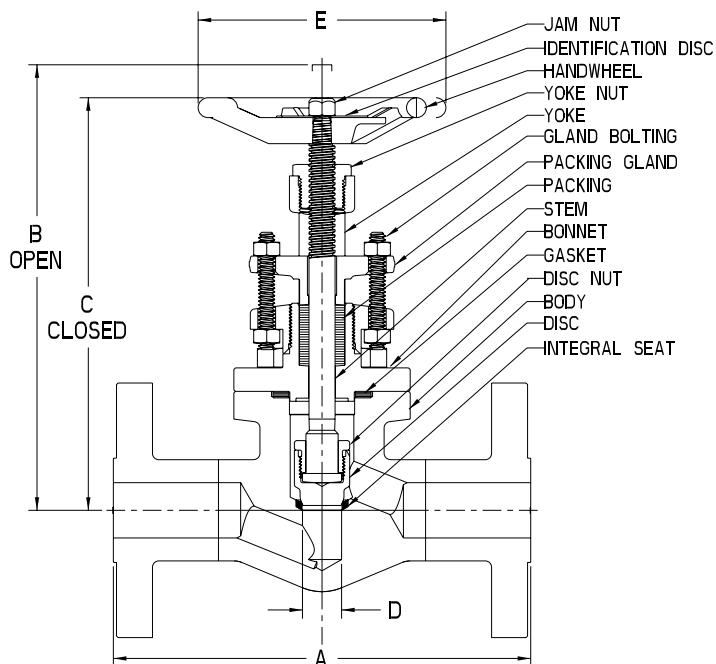
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 300 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
1/16 RF Flat Face FF	483	A105	13% Cr	HF	740 PSI @ 100 F	51.1 BAR @ 38 C
	32483	A350 LF2	13% Cr	HF	740 PSI @ 100 F	51.1 BAR @ 38 C
					740 PSI @ -50 F	51.1 BAR @ -46 C
	488	F316/F316L	316		720 PSI @ 100 F	49.6 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	6.00	6.63	6.24	.50	4.00	8.5	2.4	4.7	12
	DN	15	152	168	158	12.7	102	3.9			
-05	NPS	¾	7.00	6.63	6.24	.50	4.00	11.3	4.3	4.7	12
	DN	20	178	168	158	12.7	102	5.1			
-06	NPS	1	8.00	8.54	7.91	.75	4.75	17.6	7.3	6.3	10
	DN	25	203	217	201	19.1	121	8.0			
-08	NPS	1½	9.00	10.42	9.62	1.28	5.75	33.3	20.4	8.0	10
	DN	40	229	265	244	32.5	146	15.1			
-09	NPS	2	10.50	11.09	10.17	1.53	8.00	46.2	23.1	7.4	8
	DN	50	267	282	258	38.9	203	21.0			
-11	NPS	3	12.50	13.09	12.39	2.00	8.00	80.3	33.4	5.6	8
	DN	80	318	338	315	50.8	203	36.4			

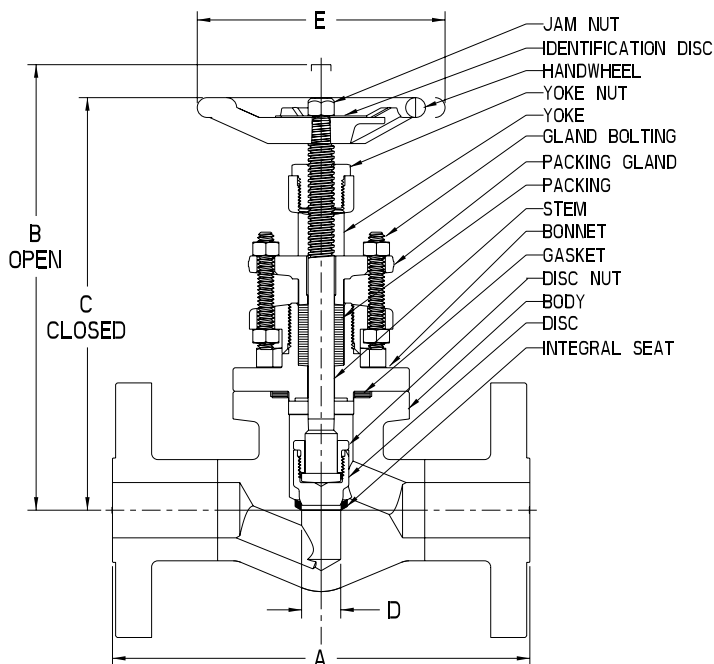
T – Approximate number of turns from open to close.
P – Pitch of stem thread.
Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
Refer to page 111-113 for end connections.
Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 600 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
1/4 RF Ring Joint RJ	493	A105	13% Cr	HF	1480 PSI @ 100 F	102.1 BAR @ 38 C
	32493	A350 LF2	13% Cr	HF	1480 PSI @ 100 F	102.1 BAR @ 38 C
					1480 PSI @ -50 F	102.1 BAR @ -46 C
	498	F316/F316L	316		1440 PSI @ 100 F	99.3 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	6.50	6.63	6.24	.50	4.00	9.0	2.4	4.7	12
	DN	15	165	168	158	12.7	102	4.1			
-05	NPS	¾	7.50	6.63	6.24	.50	4.00	12.2	4.3	4.7	12
	DN	20	191	168	158	12.7	102	5.5			
-06	NPS	1	8.50	8.54	7.91	.75	4.75	18.4	7.3	6.3	10
	DN	25	216	217	201	19.1	121	8.3			
-08	NPS	1½	9.50	10.42	9.62	1.28	5.75	35.5	20.4	8.0	10
	DN	40	241	265	244	32.5	146	16.1			
-09	NPS	2	11.50	11.09	10.17	1.53	8.00	50.0	23.1	7.4	8
	DN	50	292	282	258	38.9	203	22.7			
-11	NPS	3	14.00	13.09	12.39	2.00	8.00	87.7	33.4	5.6	8
	DN	80	356	338	315	50.8	203	39.8			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

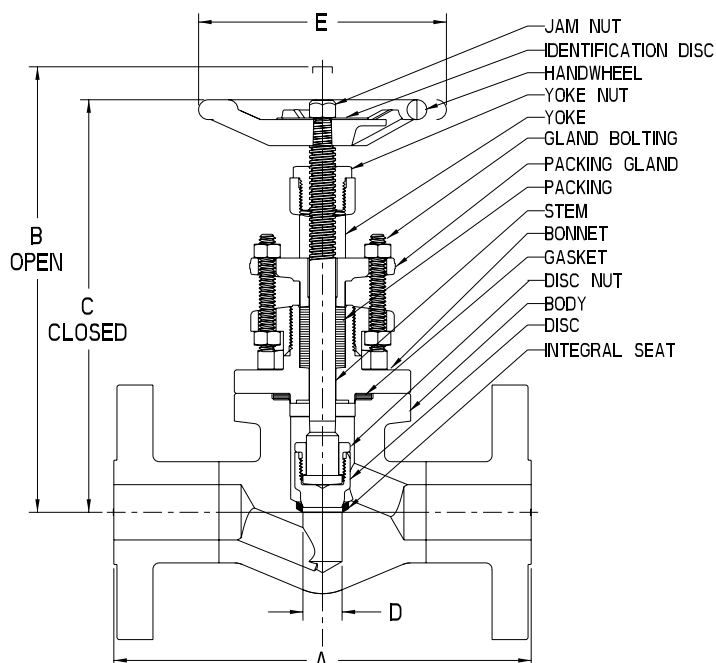
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 1500 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
1/4 RF Ring Joint RJ	15493	A105	13% Cr	HF	3705 PSI @ 100 F	255.3 BAR @ 38 C
	35493	A350 LF2	13% Cr	HF	3705 PSI @ 100 F	255.3 BAR @ 38 C
					3705 PSI @ -50 F	255.3 BAR @ -46 C
	15498	A182/F316L	316		3600 PSI @ 100 F	248.2 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	8.50	7.88	7.41	0.50	4.75	18.2	3.1	4.7	10
	DN	15	216	200	188	12.7	121	8.3			
-05	NPS	¾	9.00	7.88	7.41	0.50	4.75	21.6	3.3	4.7	10
	DN	20	229	200	188	12.7	121	9.8			
-06	NPS	1	10.00	10.12	9.50	0.75	7.00	38.1	5.9	6.2	10
	DN	25	254	257	241	19.1	178	17.3			
-08	NPS	1½	12.00	10.97	10.41	1.12	8.00	60.6	13.8	4.5	8
	DN	40	305	279	264	28.4	203	27.5			
-09	NPS	2	14.50	13.31	12.50	1.38	9.75	106.5	21.4	6.5	8
	DN	50	368	338	318	35.1	248	48.3			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

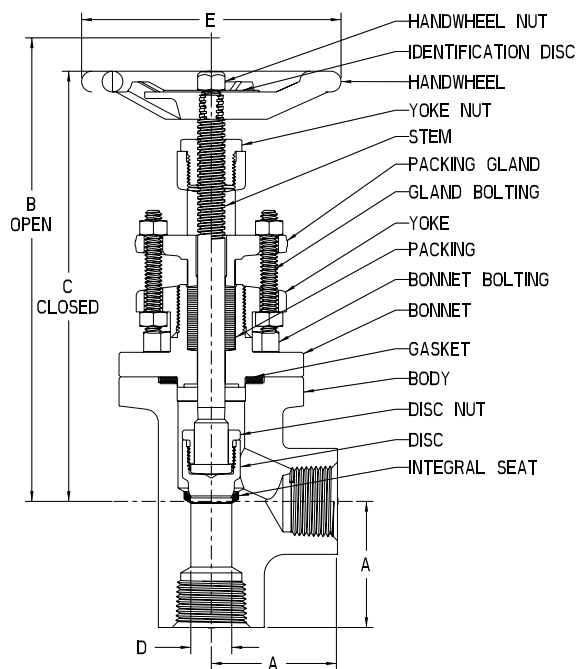
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Angle Valves

Class 800 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Hard Faced Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld	1971	A105	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C
SW						

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	1.62	6.66	6.26	0.50	4.00	4.8	2.6	4.8	12
	DN	15	41	169	159	12.7	102	2.2			
-05	NPS	¾	1.75	6.66	6.26	0.50	4.00	5.1	4.5	4.8	12
	DN	20	44	169	159	12.7	102	2.3			
-06	NPS	1	2.31	8.49	7.88	0.75	4.75	9.0	11.9	6.1	10
	DN	25	59	216	200	19.1	121	4.1			
-07	NPS	1¼	2.44	9.91	9.11	1.28	5.75	16.60	21.0	8.0	10
	DN	32	62	252	231	32.5	146	7.5			
-08	NPS	1½	2.44	9.91	9.11	1.28	5.75	16.1	31.4	8.0	10
	DN	40	62	252	231	32.5	146	7.3			
-09	NPS	2	3.56	13.35	12.37	1.53	8.00	37.4	52.0	7.8	8
	DN	50	90	339	314	38.9	203	17.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

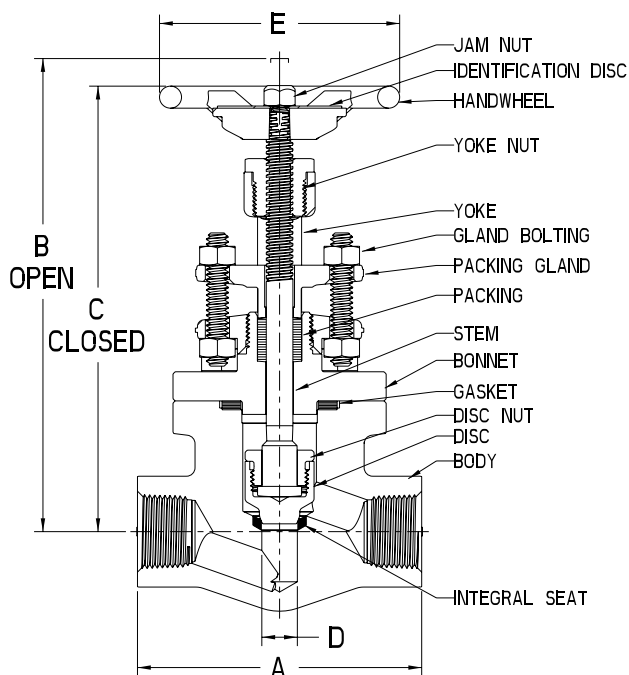
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 1500 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld SW	15141	A105	13% Cr	HF	3705 PSI @ 100 F	255.3 BAR @ 38 C
	35141	A350 LF2	13% Cr	HF	3705 PSI @ 100 F	255.3 BAR @ 38 C
					3705 PSI @ -50 F	255.3 BAR @ -46 C
	15501	F316/F316L	316		3600 PSI @ 100 F	248.2 BAR @ 38 C
	15351	F11 Cl.2	13% Cr	HF	3750 PSI @ 100 F	258.6 BAR @ 38 C
	15551	F22 Cl.3	13% Cr	HF	3750 PSI @ 100 F	258.6 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.50	7.90	7.49	0.50	4.75	10.0	3.1	4.1	10
	DN	15	114	201	190	12.7	121	4.5			
-05	NPS	¾	4.50	7.90	7.49	0.50	4.75	9.8	3.3	4.1	10
	DN	20	114	201	190	12.7	121	4.4			
-06	NPS	1	6.25	10.16	9.62	0.75	7.00	22.4	5.9	5.4	10
	DN	25	159	258	244	19.1	178	10.2			
-07	NPS	1¼	7.75	11.02	10.54	1.12	8.00	36.0	13.8	3.8	8
	DN	32	197	280	268	28.4	203	16.3			
-08	NPS	1½	7.75	11.02	10.54	1.12	8.00	35.3	13.8	3.8	8
	DN	40	197	280	268	28.4	203	16.0			
-09	NPS	2	9.00	13.30	12.56	1.38	9.75	61.4	21.4	5.9	8
	DN	50	229	338	319	35.1	248	27.9			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

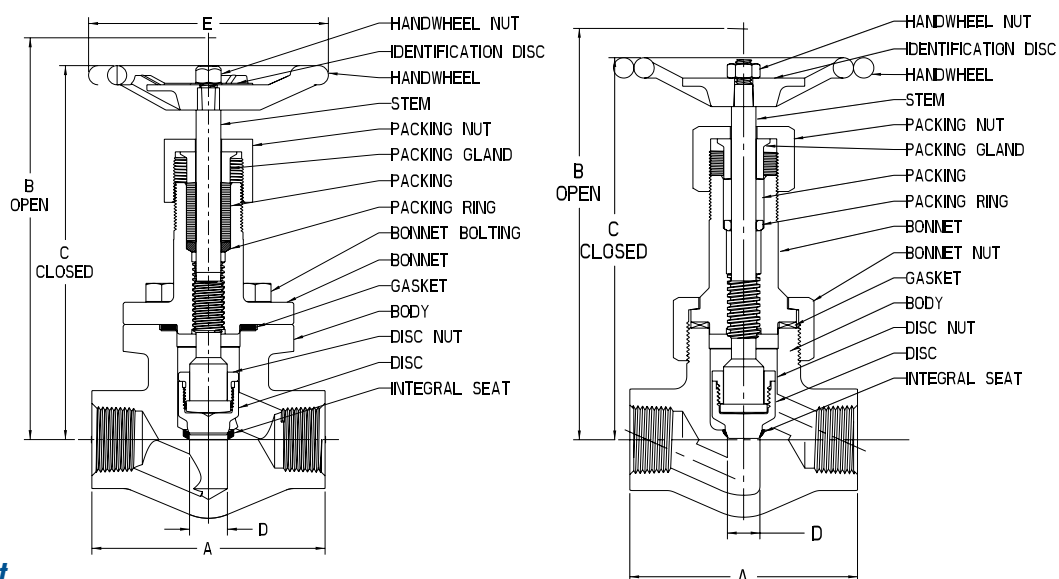
Forged Globe Valves

Class 800

Globe Valve

Conventional Port

Round Bolted Bonnet
or Union Bonnet
Spiral Wound Gasket
Inside Screw Stem
Screw Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



Round Bolted Bonnet

CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld	SW	12181	A105	13% Cr	HF	1975 PSI @ 100 F
		12188	A182 F316	13% Cr		1920 PSI @ 100 F
						136.2 BAR @ 38 C
						132.4 BAR @ 38 C

Union Bonnet

CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld	SW	851	A105	13% Cr	HF	1975 PSI @ 100 F
						136.2 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.75	6.36	5.96	0.50	4.00	5.0	2.4	4.8	12
	DN	15	95	162	151	12.7	102	2.3			
-05	NPS	¾	4.00	6.36	5.96	0.50	4.00	5.3	4.3	4.8	12
	DN	20	102	162	151	12.7	102	2.4			
-06	NPS	1	4.62	7.96	7.41	0.75	4.75	9.4	7.3	5.5	10
	DN	25	117	202	188	19.1	121	4.3			
-07	NPS	1¼	6.25	10.25	9.50	1.28	5.75	20.7	14.2	10.5	10
	DN	32	159	260	241	32.5	146	9.4			
-08	NPS	1½	6.25	10.25	9.50	1.28	5.75	19.6	20.4	10.5	10
	DN	40	159	260	241	32.5	146	8.9			
-09	NPS	2	7.75	11.60	10.73	1.53	8.00	32.3	23.1	7.0	8
	DN	50	197	295	273	39	203	14.7			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

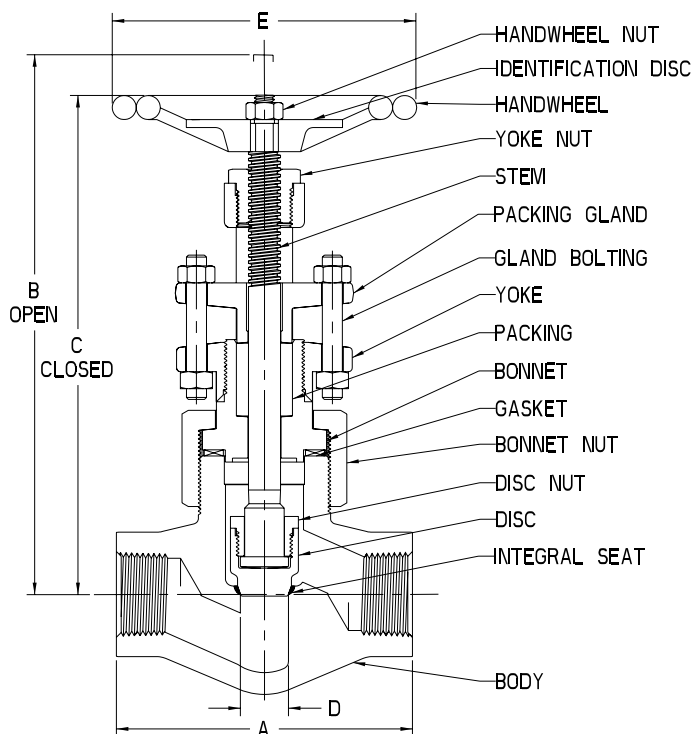
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 800 Globe Valve Conventional Port

Union Bonnet
 Spiral Wound Gasket
 Outside Screw & Yoke
 Bolted Gland
 Loose Disc
 Integral Hard Faced Seat
 ASME B16.34
 API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld	SW	801	A105	13% Cr	HF	1975 PSI @ 100 F
						136.2 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.25	6.62	6.19	0.50	4.00	4.1	2.4	5.2	12
	DN	15	83	168	157	12.7	102	1.9			
-05	NPS	¾	3.50	6.62	6.19	0.50	4.00	4.3	4.3	5.2	12
	DN	20	89	168	157	12.7	102	2.0			
-06	NPS	1	4.62	8.50	7.78	0.75	4.75	8.4	7.3	7.2	10
	DN	25	117	216	198	19.1	121	3.8			
-07	NPS	1¼	6.25	10.44	9.56	1.28	5.75	18.3	14.2	8.8	10
	DN	32	159	265	243	32.5	146	8.3			
-08	NPS	1½	6.25	10.44	9.56	1.28	5.75	17.7	20.4	8.8	10
	DN	40	159	265	243	32.5	146	8.0			
-09	NPS	2	7.75	11.06	10.06	1.53	8.00	28.3	23.1	8.0	8
	DN	50	197	281	256	39	203	12.8			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

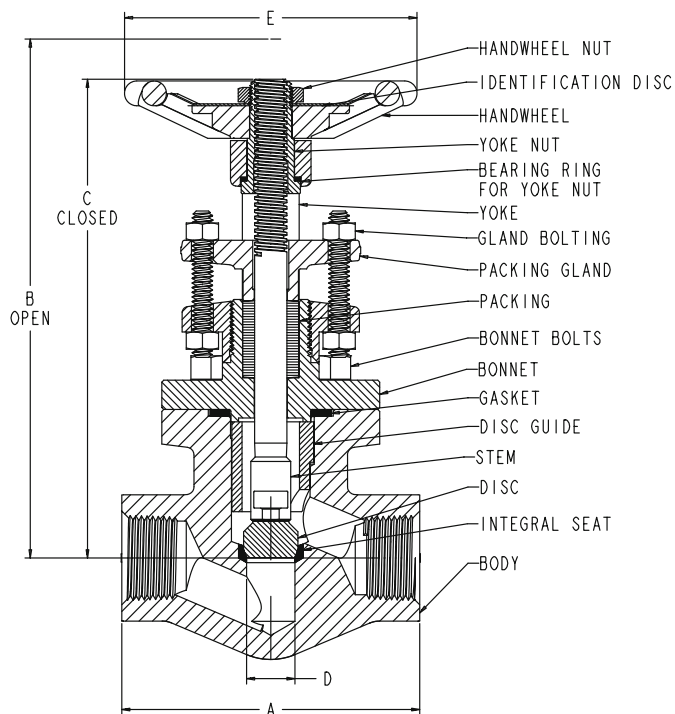
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 800 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Gate Valve Operating Mechanism
Bolted Gland
Body Guided - Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld SW	12041	A105	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C
	12301	A182 F316	13% Cr		1920 PSI @ 100 F	132.4 BAR @ 38 C

Dimensions

NPS- Black numerals are inches and pounds
DN- Blue numerals are in millimeters and kilograms.

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.75	6.53	6.13	0.50	4.00	5.0	2.4	4.8	12
	DN	15	95	166	156	12.7	102	2.3			
-05	NPS	¾	4.00	6.53	6.13	0.50	4.00	5.3	4.3	4.8	12
	DN	20	102	166	156	12.7	102	2.4			
-06	NPS	1	4.62	7.97	7.35	0.75	4.75	9.5	7.3	6.2	10
	DN	25	117	202	187	19.1	121	4.3			
-07	NPS	1¼	6.25	9.61	8.72	1.28	5.75	21.1	14.2	8.7	10
	DN	32	159	244	221	32.5	146	9.6			
-08	NPS	1½	6.25	9.61	8.72	1.28	5.75	20.4	20.4	8.7	10
	DN	40	159	244	221	32.5	146	9.3			
-09	NPS	2	7.75	11.12	9.72	1.53	8.00	30.4	23.1	11.2	8
	DN	50	197	282	247	39	203	13.8			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

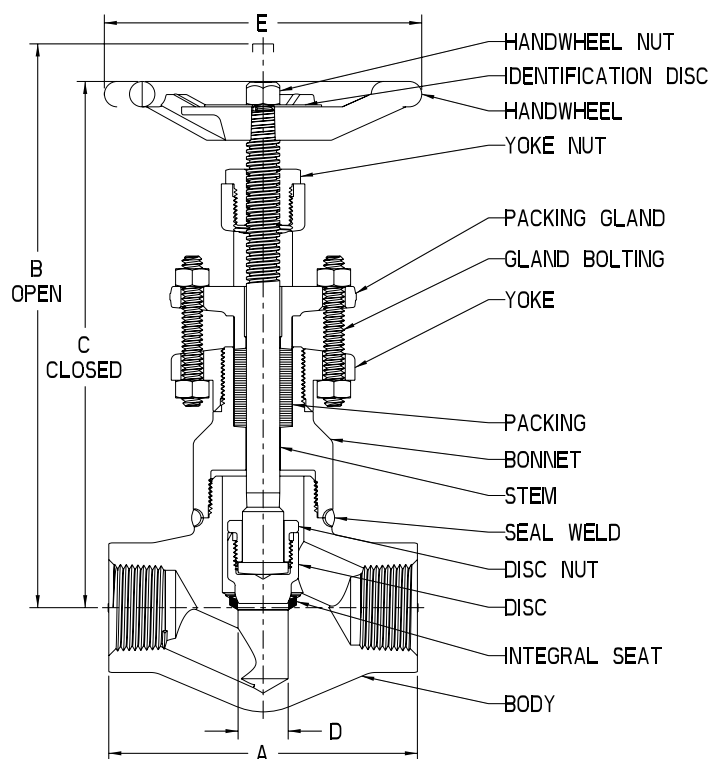
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 800 Globe Valve Conventional Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld SW	2821	A105	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C
	32821	A350 LF2	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C
					1975 PSI @ -50 F	136.2 BAR @ -46 C
	2841	A182 F316	316		1920 PSI @ 100 F	132.4 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.25	6.66	6.21	0.50	4.00	3.7	2.4	5.4	12
	DN	15	83	169	158	12.7	102	1.7			
-05	NPS	¾	3.50	6.66	6.21	0.50	4.00	4.0	4.3	5.4	12
	DN	20	89	169	158	12.7	102	1.8			
-06	NPS	1	4.62	8.44	7.88	0.75	4.75	7.8	7.3	5.6	10
	DN	25	117	214	200	19.1	121	3.5			
-07	NPS	1¼	6.25	10.39	9.62	1.28	5.75	16.4	14.2	7.7	10
	DN	32	159	264	244	32.5	146	7.4			
-08	NPS	1½	6.25	10.39	9.62	1.28	5.75	15.5	20.4	7.7	10
	DN	40	159	264	244	32.5	146	7.0			
-09	NPS	2	7.75	11.06	10.22	1.53	8.00	25.3	23.1	6.7	8
	DN	50	197	281	260	39	203	11.5			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

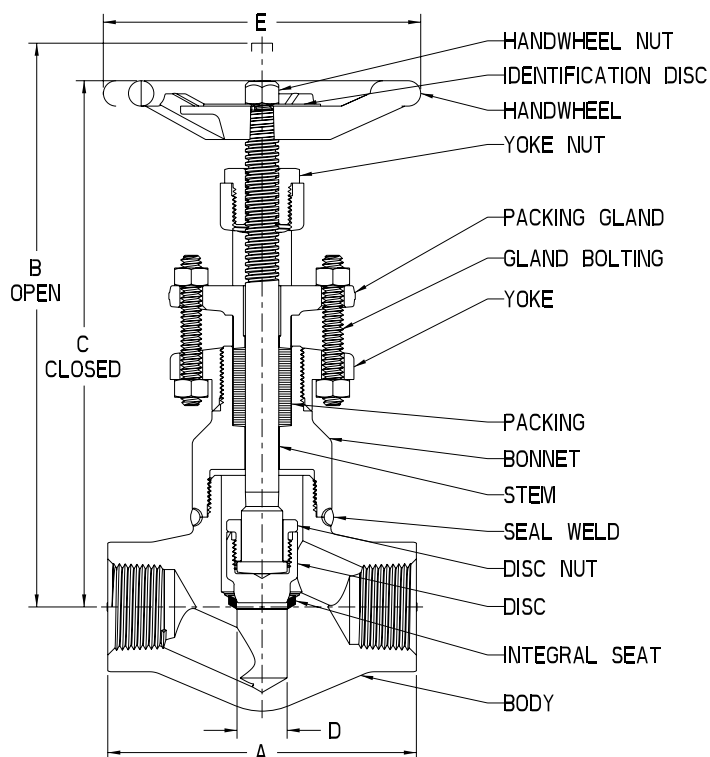
Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 1500 and Class 1500 LTD Globe Valve

Conventional Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Seat
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING		CLASS
Threaded Socket Weld	15821	A105	13% Cr	HF	3705 PSI @ 100 F	255.3 BAR @ 38 C	1500
	35821	A350 LF2	13% Cr	HF	3705 PSI @ 100 F	255.3 BAR @ 38 C	
					3705 PSI @ -50 F	255.3 BAR @ -46 C	
	15841	A182 F316	316		3600 PSI @ 100 F	248.2 BAR @ 38 C	

Socket Weld	SW65733	A182F316	316	HF	3750 PSI @ 100 F	258.6 BAR @ -46 C	1500 LTD
	SW 65723	A 105	13% Cr	HF	3750 PSI @ 100 F	258.6 BAR @ -46 C	

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.50	7.90	7.46	0.50	4.75	10.5	3.1	4.4	10
	DN	15	114	201	189	12.7	121	4.8			
-05	NPS	¾	4.50	7.90	7.46	0.50	4.75	10.3	3.3	4.4	10
	DN	20	114	201	189	12.7	121	4.7			
-06	NPS	1	6.25	10.14	9.59	0.75	7.00	23.2	5.9	5.5	10
	DN	25	159	258	244	19.1	178	10.5			
-07	NPS	1¼	7.75	11.11	10.51	1.12	8.00	23.2	13.8	4.8	8
	DN	32	197	282	267	28.4	203	10.5			
-08	NPS	1½	7.75	11.11	10.51	1.12	8.00	36.1	13.8	4.8	8
	DN	40	197	282	267	28.4	203	16.4			
-09	NPS	2	9.00	13.27	12.53	1.38	9.75	62.4	21.4	5.9	8
	DN	50	229	337	318	35.1	248	28.3			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

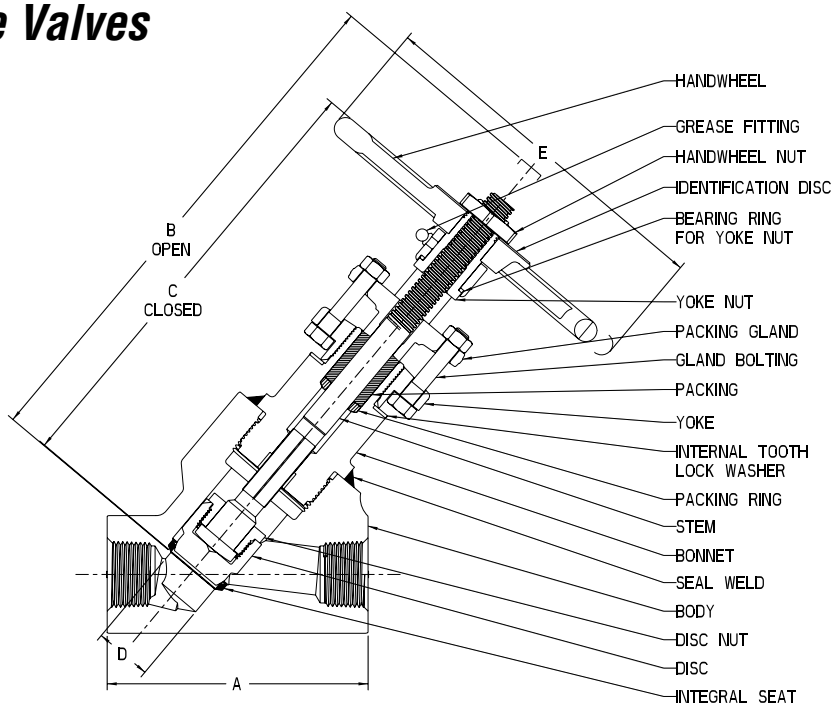
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged “Y” Pattern Globe Valves

Class 800 Globe Valve Full Port

Seal Welded Bonnet
 Outside Screw & Yoke
 Bolted Gland
 Removable Yoke/Operating Mechanism
 Gate Valve Operating Mechanism
 Repackable with Endless Packing Rings
 Loose Hard Faced Disc
 Integral Hard Faced Seat
 ASME B16.34 LTD Pressure Class



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld SW	810	A105	13% Cr	HF	2000 PSI @ 100 F	137.9 BAR @ 38 C
	811	F11 Cl.2				
	822	F22 Cl.3				
	891	F91				

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.00	9.12	8.50	0.75	5.75	8.4	4.5	6.2	10
	DN	15	102	232	216	19.1	146	3.8			
-05	NPS	¾	4.00	9.12	8.50	0.75	5.75	8.2	9.1	6.2	10
	DN	20	102	232	216	19.1	146	3.7			
-06	NPS	1	5.12	10.43	9.58	1.12	7.00	13.5	21.3	8.5	10
	DN	25	130	265	243	28.4	178	6.1			
-08	NPS	1½	7.50	14.55	13.13	2.00	11.75	35.2	70	11.4	8
	DN	40	191	370	334	50.8	298	16.0			
-09	NPS	2	7.50	14.55	13.13	2.00	11.75	33.6	79.1	11.4	8
	DN	50	191	370	334	50.8	298	15.2			

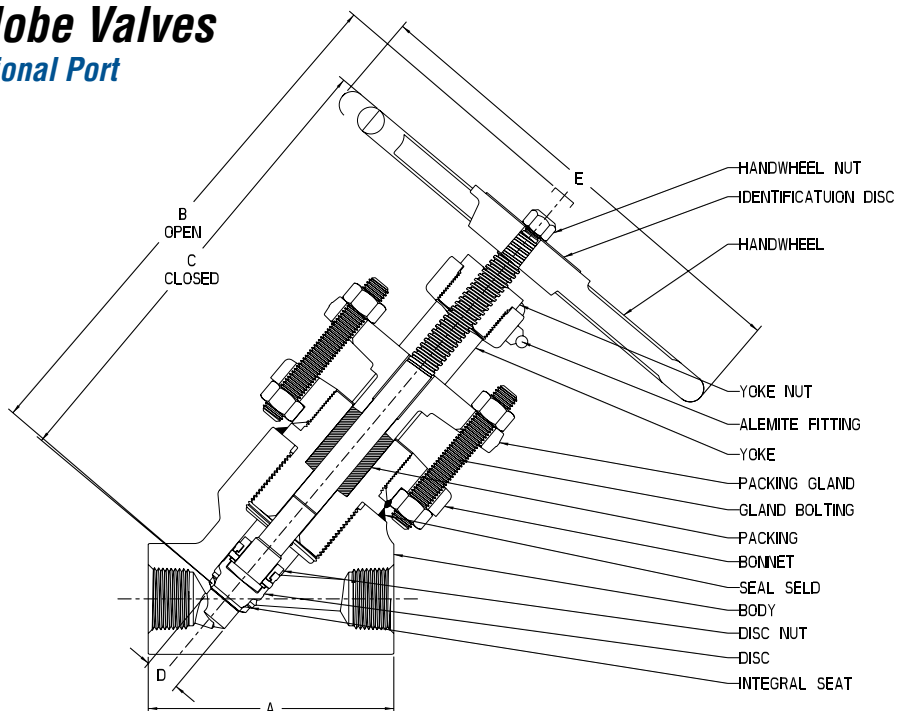
T – Approximate number of turns from open to close.
 P – Pitch of stem thread.
 Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
 Refer to page 111-113 for end connections.
 Refer to pages 114-115 for other ratings

Forged “Y” Pattern Globe Valves

Class 1690 Globe Valve Conventional Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Loose Solid Satellite Disc
Integral Hard Faced Seat
ASME B16.34 LTD Pressure Class



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld SW	1510	A105	13% Cr	HF	4225 PSI @ 100 F	291.3 BAR @ 38 C
	1511	F11 Cl.2				
	1522	F22 Cl.3				
	1591	F91				
	31510	A350 LF2				

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.00	9.07	8.63	0.50	7.00	9.5	6.00	4.4	10
	DN	15	102	230	219	12.7	178	4.3			
-05	NPS	¾	4.00	9.07	8.63	0.50	7.00	9.4	4.0	4.4	10
	DN	20	102	230	219	12.7	178	4.3			
-06	NPS	1	5.12	10.98	10.39	0.75	9.75	19.2	9.3	4.7	8
	DN	25	130	279	264	19.1	248	8.7			
-08	NPS	1½	7.50	16.90	15.50	1.53	12.00	47.7	57.8	11.2	8
	DN	40	191	429	394	38.9	305	21.6			
-09	NPS	2	7.50	16.90	15.50	1.53	12.00	46.3	48.9	11.2	8
	DN	50	191	429	394	38.9	305	21.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

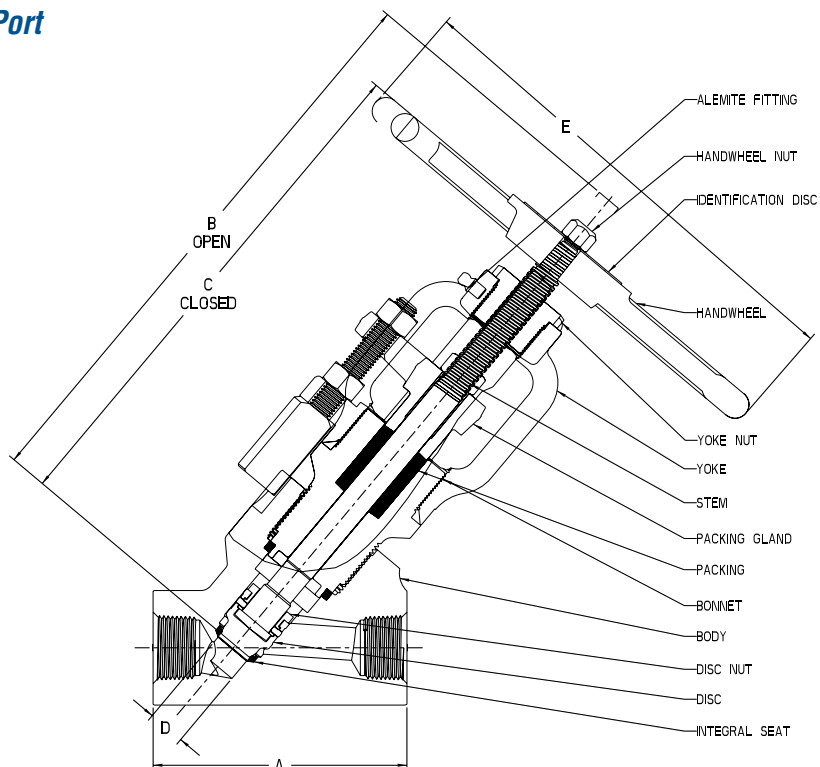
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged “Y” Pattern Repairable Globe Valves

Class 1690 Globe Valve Conventional Port

Inline Repairable
 Screw Bonnet
 Outside Screw & Yoke
 Bolted Gland
 Loose Solid Stellite Disc
 Integral Hard Faced Seat
 ASME B16.34 LTD Pressure Class



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld SW	R 1510	A105	13% Cr	HF	4225 PSI @ 100 F	291.3 BAR @ 38 C
	R 1511	F11 Cl.2				
	R 1522	F22 Cl.3				
	R 1591	F91				
	R 3150	A350 LF2				

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	5.12	11.78	11.07	0.75	9.75	20.7	1.5	5.7	8
	DN	15	130	299	281	19.1	248	9.4			
-05	NPS	¾	5.12	11.78	11.07	0.75	9.75	20.4	3.9	5.7	8
	DN	20	130	299	281	19.1	248	9.3			
-06	NPS	1	5.12	11.78	11.07	0.75	9.75	20.1	7.9	5.7	8
	DN	25	130	299	281	19.1	248	9.1			
-08	NPS	1½	7.50	17.47	16.32	1.53	12.00	49.3	29.3	9.2	8
	DN	40	191	444	415	38.9	305	22.4			
-09	NPS	2	7.50	17.47	16.32	1.53	12.00	47.8	39.8	9.2	8
	DN	50	191	444	415	38.9	305	21.7			

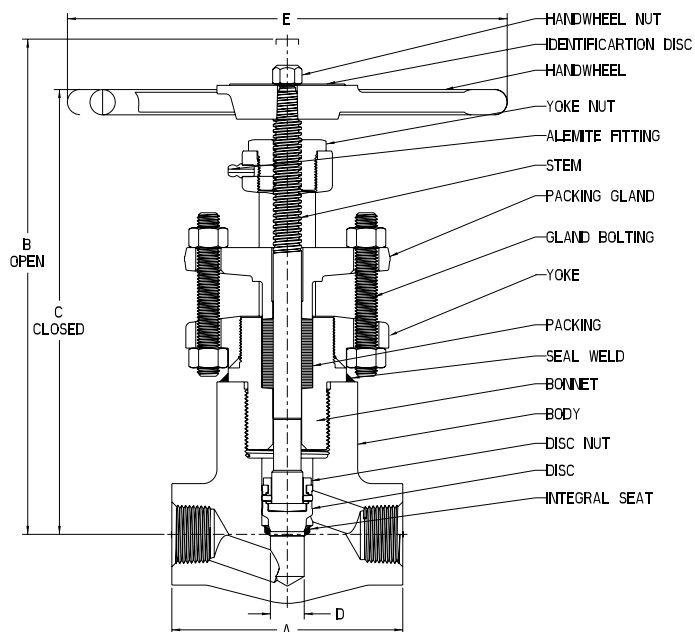
T – Approximate number of turns from open to close.
 P – Pitch of stem thread.
 Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
 Refer to page 111-113 for end connections.
 Refer to pages 114-115 for other ratings

Forged Globe Valves

Class 2500/2680 Globe Valve Full Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Loose Solid Stellite Disc
Integral Hard Faced Seat
ASME B16.34 LTD Pressure Class



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING		CLASS
Threaded	66723	A105	13% Cr	HF	6250 PSI @ 100 F	430.9 BAR @ 38 C	2500 LTD
	66733	F11 Cl.2					
	66793	F22 Cl.3					
	66783	F91					
	66753	A350 LF2					

Socket Weld	SW 66723	A105	13% Cr	HF	6700 PSI @ 100 F	461.9 BAR @ 38 C	2680 LTD
	SW 66733	F11 Cl.2					
	SW 66793	F22 Cl.3					
	SW 66783	F91					
	SW 66753	A350 LF2					

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.00	9.07	8.63	0.52	7.00	10.5	1.2	4.4	10
	DN	15	102	230	219	13.2	178	4.8			
-05	NPS	¾	5.12	10.98	10.39	0.75	9.75	21.6	4.3	5.9	10
	DN	20	130	279	264	19.1	248	9.8			
-06	NPS	1	5.12	10.98	10.39	0.75	9.75	21.2	5.8	4.7	8
	DN	25	130	279	264	19.1	248	9.6			
-08	NPS	1½	8.50	16.36	15.43	1.53	12.00	74.8	17.6	7.4	8
	DN	40	216	416	392	38.9	305	33.9			
-09	NPS	2	8.50	16.36	15.43	1.53	12.00	72.8	19.3	7.4	8
	DN	50	216	416	392	38.9	305	33.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

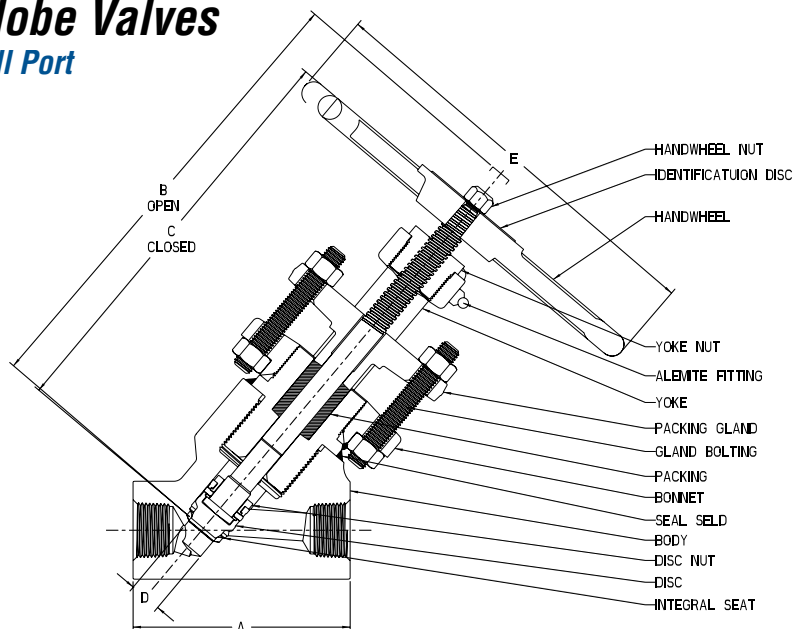
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged "Y" Pattern Globe Valves

Class 2500/2680 Globe Valve Full Port

Welded Bonnet
Outside Screw & Yoke
Bolted Gland
Loose Solid Stellite Disc
Integral Hard Faced Seat
ASME B16.34 LTD Pressure Class



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING		CLASS
Threaded	2510	A105	13% Cr	HF	6250 PSI @ 100 F	430.9 BAR @ 38 C	2500 LTD
	2511	F11 Cl.2					
	2522	F22 Cl.3					
	2591	F91					
	32510	A350 LF2					

Socket Weld	SW 2510	A105	13% Cr	HF	6700 PSI @ 100 F	461.9 BAR @ 38 C	2680 LTD
	SW 2511	F11 Cl.2					
	SW 2522	F22 Cl.3					
	SW 2591	F91					
	SW 32510	A350 LF2					

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.00	9.07	8.63	0.50	7.00	9.5	6.0	4.4	10
	DN	15	102	230	219	12.7	178	4.3			
-05	NPS	¾	5.12	10.98	10.39	0.75	9.75	19.5	8.4	4.7	8
	DN	20	130	279	264	19.1	248	8.8			
-06	NPS	1	5.12	10.98	10.39	0.75	9.75	19.2	9.3	4.7	8
	DN	25	130	279	264	19.1	248	8.7			
-08	NPS	1½	8.25	16.62	15.38	1.53	12.00	65.6	32.9	9.9	8
	DN	40	210	422	391	38.9	305	29.8			
-09	NPS	2	8.25	16.62	15.38	1.53	12.00	63.5	49.4	9.9	8
	DN	50	210	422	391	38.9	305	28.8			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

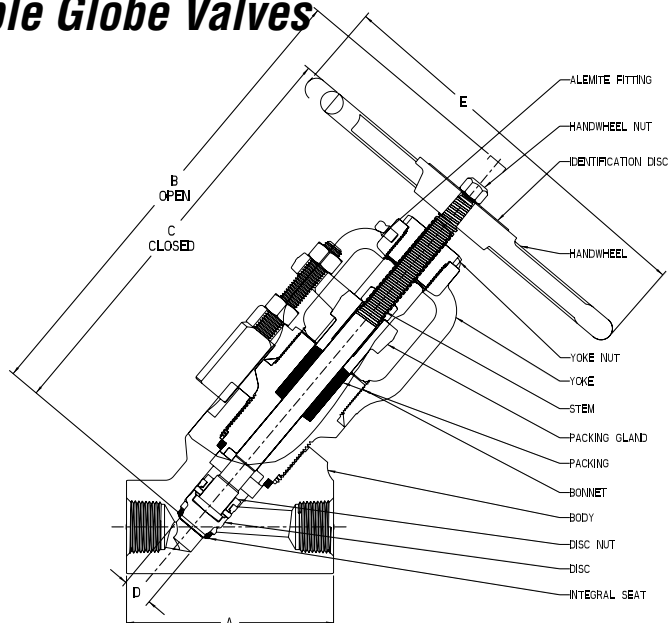
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged “Y” Pattern Repairable Globe Valves

Class 2500/2680 Globe Valve Full Port

Inline Repairable
 Screw Bonnet
 Outside Screw & Yoke
 Bolted Gland
 Loose Solid Stellite Disc
 Integral Hard Faced Seat
 ASME B16.34 LTD Pressure Class



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING		CLASS
Threaded	R 2510	A105	13% Cr	HF	6250 PSI @ 100 F	430.9 BAR @ 38 C	2500 LTD
	R 2511	F11 Cl.2					
	R 2522	F22 Cl.3					
	R 2591	F91					
	R 32510	A350 LF2					

Socket Weld	SWR 2510	A105	13% Cr	HF	6700 PSI @ 100 F	461.9 BAR @ 38 C	2680 LTD
	SWR 2511	F11 Cl.2					
	SWR 2522	F22 Cl.3					
	SWR 2591	F91					
	SWR 32510	A350 LF2					

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	5.12	11.78	11.07	0.75	9.75	20.7	6.0	5.7	8
	DN	15	130	299	281	19.1	248	9.4			
-05	NPS	¾	5.12	11.78	11.07	0.75	9.75	20.4	8.4	5.7	8
	DN	20	130	299	281	19.1	248	9.3			
-06	NPS	1	5.12	11.78	11.07	0.75	9.75	20.1	9.3	5.7	8
	DN	25	130	299	281	19.1	248	9.1			
-08	NPS	1½	8.25	17.50	16.32	1.53	12.00	68.3	32.9	9.4	8
	DN	40	210	445	415	38.9	305	31.0			
-09	NPS	2	8.25	17.50	16.32	1.53	12.00	66.3	49.4	9.4	8
	DN	50	210	445	415	38.9	305	30.1			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

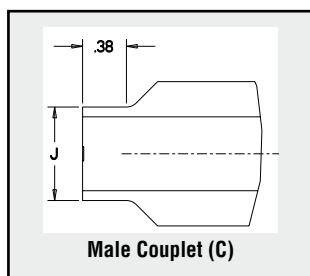
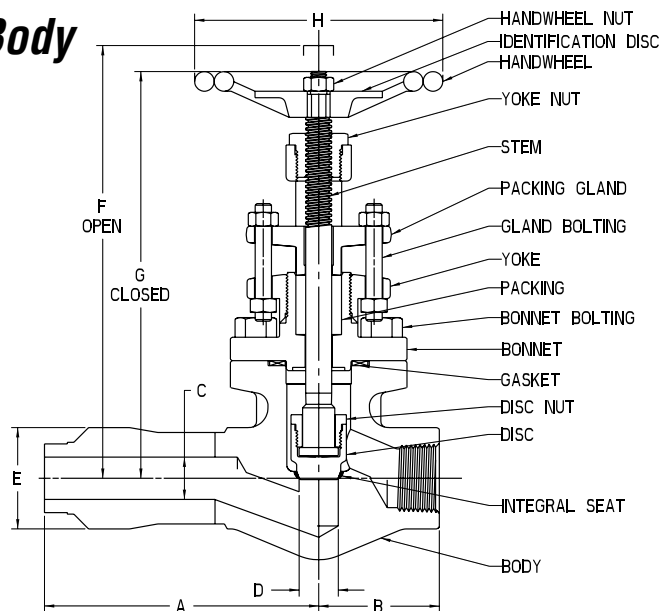
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

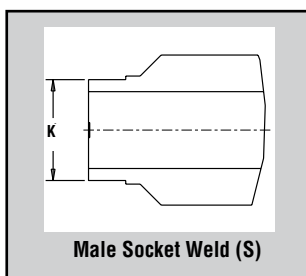
Forged Globe Valves – Extended Body

Class 800 Globe Valve

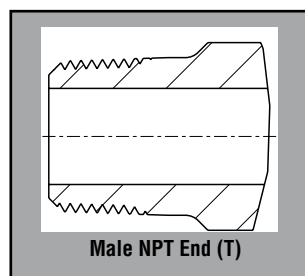
Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Integral Hard Faced Seat
ASME B16.34
API 602



(C)



(S)



(T)

EXTENDED END CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Male Couplet	CT12141	A105	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C
Male Socket Weld	ST12141	A105	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C
Male Threaded	TT12141	A105	13% Cr	HF	1920 PSI @ 100 F	132.4 BAR @ 38 C

Dimensions

SIZE			A (C)	A (S)	A (T)	B	C (C)	C (S)	C (T)	D	E	F	G	H	J	K	Cv	T	P
-04	NPS	½	7.00	4.50	4.50	2.00	0.75	0.52	0.52	0.50	1.56	6.62	6.19	4.00	0.97	0.84	2.4	5.2	12
	DN	15	178	114	114	51	19	13	13	12.7	40	168	157	102	25	21			
-05	NPS	¾	7.00	4.50	4.50	2.00	0.75	0.65	0.65	0.50	1.56	6.62	6.19	4.00	0.97	1.05	4.3	5.2	12
	DN	20	178	114	114	51	19	17	17	12.7	40	168	157	102	25	27			
-06	NPS	1	5.75	5.25	5.25	2.31	1.00	0.81	0.81	0.75	1.94	8.44	7.81	4.75	1.22	1.32	7.3	6.3	10
	DN	25	146	133	133	59	25	21	21	19.1	49	214	198	121	31	34			
-08	NPS	1½	6.50	6.00	6.00	3.12	1.47	1.47	1.47	1.28	2.56	10.38	9.47	5.75	1.72	1.90	20.4	9.1	10
	DN	40	165	152	152	79	37	37	37	32.5	65	264	241	146	44	48			
-09	NPS	2	6.50	6.00	6.00	3.88	2.00	1.81	1.81	1.53	3.12	11.06	10.00	8.00	2.22	2.38	23.1	8.5	8
	DN	50	165	152	152	99	51	46	46	38.9	79	281	254	203	56	60			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

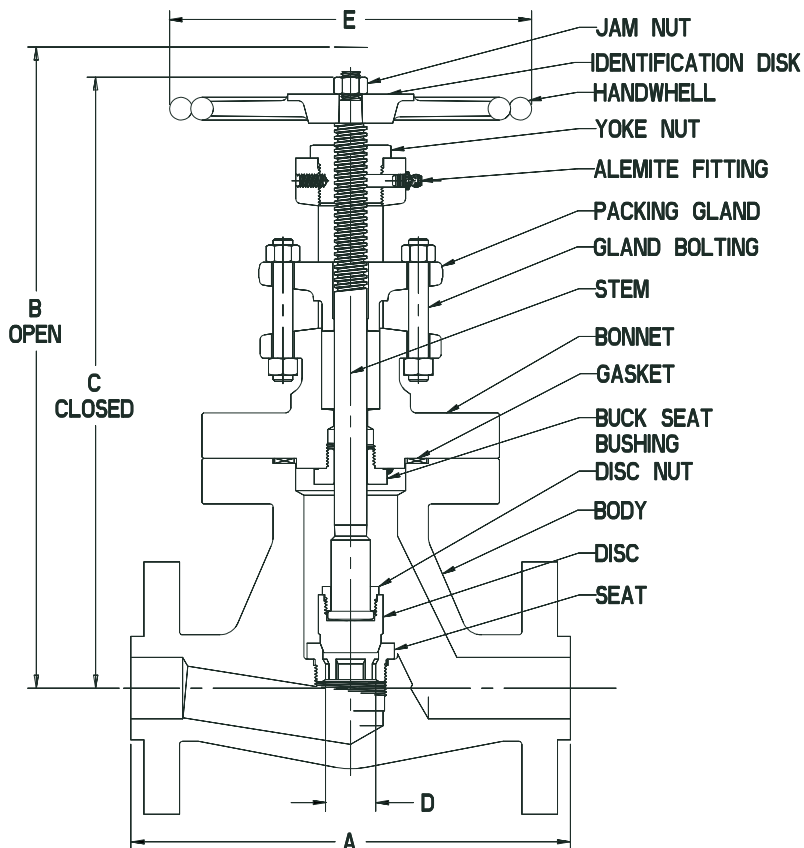
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – Meets API-600 Required Wall Thicknesses

Class 600 Globe Valve Full Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Renewable Seat
ASME B16.34
Meets API-600 required wall thickness



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
1/4 RF	10403	A105	13% Cr	1480 PSI @ 100 F	102.1 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	6.50	10.62	10.19	0.50	4.75	19.5	3.4	4.3	10
	DN	15	165	270	259	12.7	121	8.8			
-05	NPS	¾	7.50	11.69	11.06	0.72	5.75	31.2	7.3	5.0	8
	DN	20	191	297	281	18.3	146	14.2			
-06	NPS	1	8.50	12.94	11.91	0.97	7.00	53.1	11.9	8.2	8
	DN	25	216	329	303	24.6	178	24.1			
-07	NPS	1¼	9.00	14.56	13.88	1.16	8.00	57.1	15.6	5.4	8
	DN	32	229	370	353	29.5	203	25.9			
-08	NPS	1½	9.50	15.97	15.09	1.50	9.75	76.2	28.2	7.0	8
	DN	40	241	406	383	38.1	248	34.6			
-09	NPS	2	11.50	18.09	17.12	1.88	9.75	97.7	46.9	7.8	8
	DN	50	292	459	435	47.8	248	44.3			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

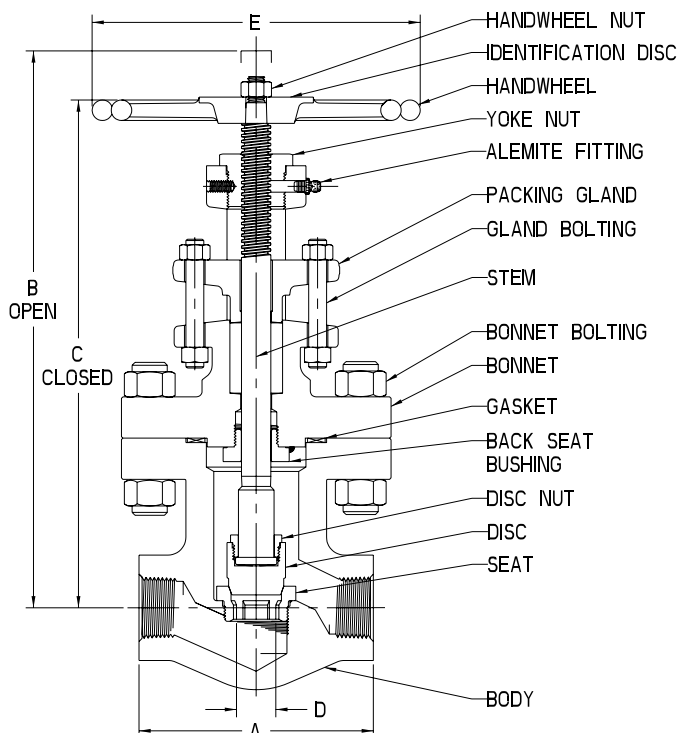
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – Meets API-600 Required Wall Thicknesses

Class 800 Globe Valve Full Port

Round Bolted Bonnet
 Spiral Wound Gasket
 Outside Screw & Yoke
 Bolted Gland
 Loose Disc
 Renewable Seat
 ASME B16.34
 Meets API-600 required wall thickness



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld	SW	10103	A105	13% Cr	1975 PSI @ 100 F 136.2 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.62	9.62	9.25	0.50	4.75	12.6	3.4	4.4	12
	DN	15	92	244	235	12.7	121	5.7			
-05	NPS	¾	4.50	10.81	10.31	0.75	5.75	19.3	7.3	6.0	12
	DN	20	114	275	262	19.1	146	8.8			
-06	NPS	1	5.00	11.88	11.31	1.00	7.00	28.8	11.9	5.7	10
	DN	25	127	302	287	25.4	178	13.1			
-07	NPS	1¼	6.50	14.06	13.50	1.22	8.00	40.0	15.6	5.6	10
	DN	32	165	357	343	31.0	203	18.1			
-08	NPS	1½	7.25	16	15.06	1.50	9.75	56.4	28.2	9.4	10
	DN	40	184	406	383	38.1	248	25.6			
-09	NPS	2	9.00	18.09	17.12	1.88	9.75	85.9	46.9	7.8	8
	DN	50	229	459	435	47.8	248	39.0			

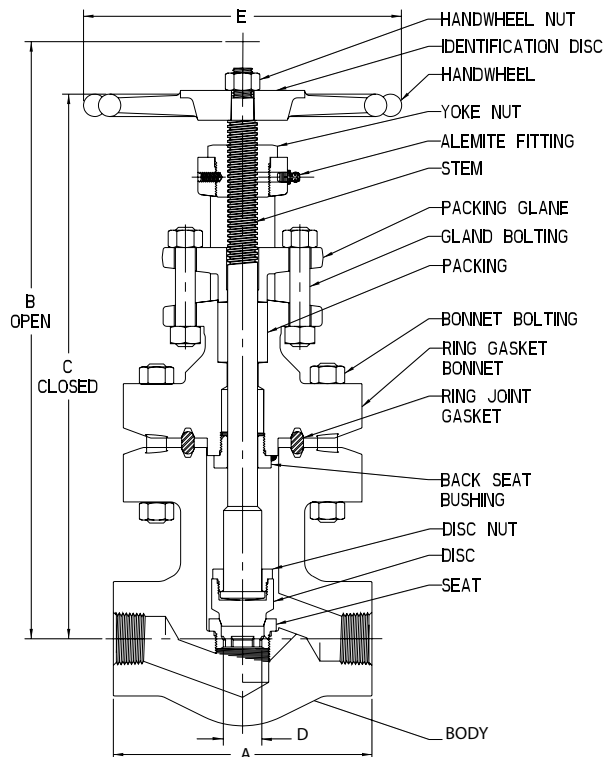
T – Approximate number of turns from open to close.
 P – Pitch of stem thread.
 Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
 Refer to page 111-113 for end connections.
 Refer to pages 114-115 for other ratings

Forged Globe Valves – Meets API-600 Required Wall Thicknesses

Class 1500 Globe Valve Full Port

Round Bolted Bonnet
 Flat Gasket Joint & Ring Gasket Joint
 Outside Screw & Yoke
 Bolted Gland
 Loose Disc
 Renewable Seat
 ASME B16.34
 Meets API-600 required wall thickness



BONNET GASKET	CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Flat Gasket Joint (Not illustrated)	Threaded Socket Weld SW	1023	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
Ring Joint Gasket	Threaded Socket Weld SW	1003	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.50	11.97	11.34	0.50	5.75	21.6	3.6	5.0	8
	DN	15	114	304	288	12.7	146	9.8			
-05	NPS	¾	5.00	13.09	12.06	0.75	7.00	29.6	6.0	8.2	8
	DN	20	127	332	306	19.1	178	13.4			
-06	NPS	1	6.50	15.34	14.34	1.00	8.00	44.6	10.2	8.0	8
	DN	25	165	390	364	25.4	203	20.2			
-07	NPS	1¼	7.25	16.75	16.22	1.22	9.75	62.8	15.1	4.2	8
	DN	32	184	425	412	31.0	248	28.5			
-08	NPS	1½	9.00	18.81	18.00	1.50	9.75	98.3	24.2	6.5	8
	DN	40	229	478	457	38.1	248	44.6			
-09	NPS	2	9.50	20.72	19.65	1.88	12.00	114.7	39.8	6.4	6
	DN	50	241	526	499	47.8	305	52.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

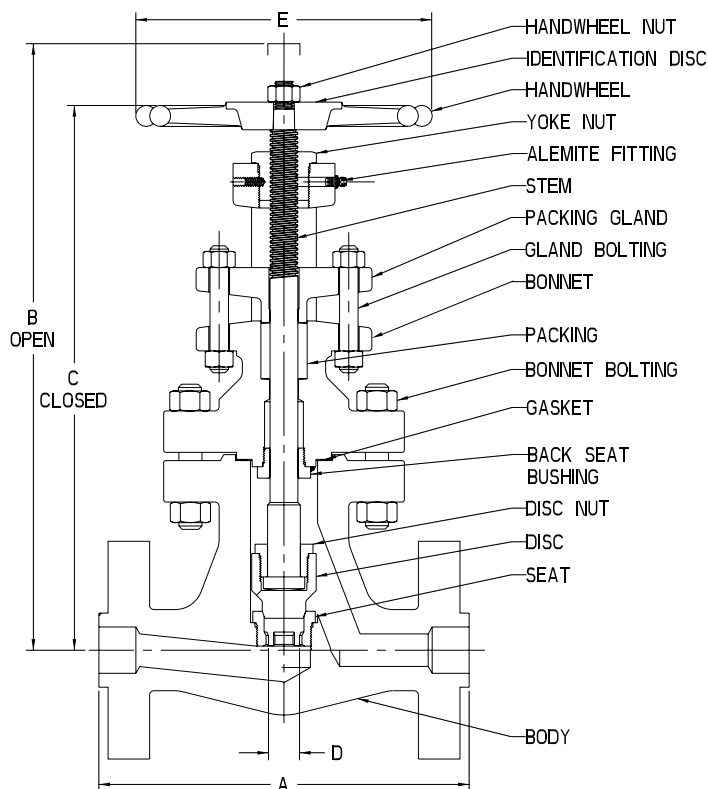
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – Meets API-600 Required Wall Thicknesses

Class 1500 Globe Valve Full Port

Round Bolted Bonnet
 Flat Gasket Joint & Ring Gasket Joint
 Outside Screw & Yoke
 Bolted Gland
 Loose Disc
 Renewable Seat
 ASME B16.34
 Meets API-600 required wall thickness



BONNET GASKET	CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Flat Gasket Joint	1/4 RF	10603	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
Ring Joint Gasket (Not illustrated)	Ring Joint RJ (Not illustrated)	10683	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	1/2	8.50	13.12	12.50	0.50	7.00	48.2	3.6	5.0	8
	DN	15	216	333	318	12.7	178	21.9			
-05	NPS	3/4	9.00	15.00	14.38	0.72	7.00	60.2	6.0	5.0	8
	DN	20	229	381	365	18.3	178	27.3			
-06	NPS	1	10.00	16.12	15.31	0.97	8.00	78.0	10.2	6.5	8
	DN	25	254	409	389	24.6	203	35.4			
-07	NPS	1 1/4	11.00	17.31	16.75	1.19	9.75	93.5	15.1	4.5	8
	DN	32	279	440	425	30.2	248	42.4			
-08	NPS	1 1/2	12.00	19.75	18.75	1.50	12.00	119.3	24.2	6.0	6
	DN	40	305	502	476	38.1	305	54.1			
-09	NPS	2	14.50	22.94	22.00	1.88	13.75	230.0	39.8	5.6	6
	DN	50	368	583	559	47.8	349	104.3			

T – Approximate number of turns from open to close.
 P – Pitch of stem thread.
 Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
 Refer to page 111-113 for end connections.
 Refer to pages 114-115 for other ratings

Forged Globe Valves – For Emission Reduction **Class 800 Globe Valve**

Conventional Port

Full Port

Round Bolted Bonnet

Spiral Wound Gasket

Outside Screw & Yoke

Bolted Gland

Double Packing

Lantern Ring

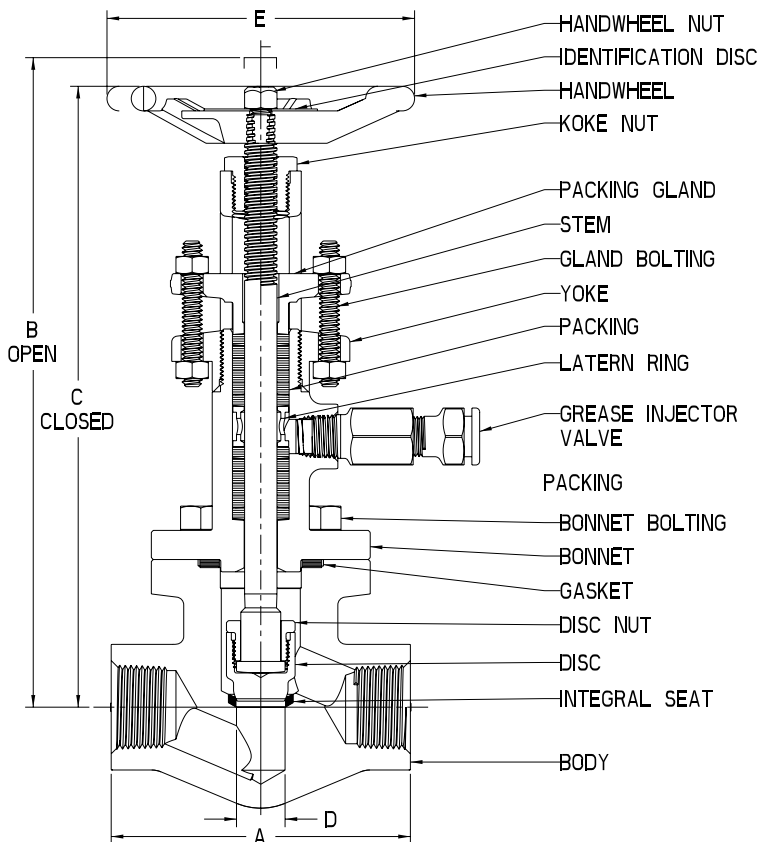
Grease Injector

Loose Disc

Integral Hard Faced Seat

ASME B16.34

API 602



CONNECTION		CONV PORT	FULL PORT	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld	SW	12141ER	13141ER	A105	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C

Dimensions

	SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
CONVENTIONAL PORT	-04	NPS	½	3.75	8.28	7.86	0.50	4.00	5.9	2.4	5.0	12
		DN	15	95	210	200	12.7	102	2.7			
	-05	NPS	¾	4.00	8.28	7.86	0.50	4.00	6.6	4.3	5.0	12
		DN	20	102	210	200	12.7	102	3.0			
	-06	NPS	1	4.62	10.20	9.59	0.75	4.75	10.2	7.3	6.1	10
		DN	25	117	259	244	19.1	121	4.6			
	-08	NPS	1½	6.25	11.94	11.14	1.28	5.75	21.7	20.4	8.0	10
		DN	40	159	303	283	32.5	146	9.8			
	-09	NPS	2	7.75	13.40	12.48	1.53	8.00	32.7	23.1	7.4	8
		DN	50	197	340	317	38.9	203	14.8			

	SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
FULL PORT	-04	NPS	½	3.75	8.28	7.86	.50	4.00	5.9	2.4	5.0	12
		DN	15	95	210	200	12.7	102	2.7			
	-05	NPS	¾	4.62	10.20	9.59	0.75	4.75	10.4	6.8	6.1	10
		DN	20	117	259	244	19.1	121	4.7			
	-06	NPS	1	6.25	11.94	11.14	1.28	5.75	23.0	14.5	8.0	10
		DN	25	159	303	283	32.5	146	10.4			
	-08	NPS	1½	7.75	13.4	12.48	1.53	8.00	33.7	24.4	7.4	8
		DN	40	197	340	317	38.9	203	15.3			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – Bellowseal

Class 150, 300, 600, 800 Globe Valve

1 Conventional Port

2 Full Port

Round Bolted Bonnet

Spiral Wound Gasket

Outside Screw & Yoke

Bolted Gland

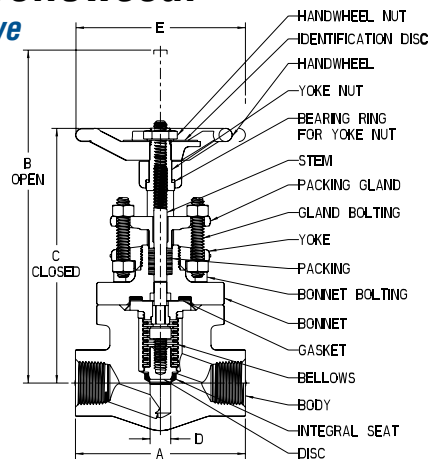
Multi-Ply Bellows: 316L

Disc: Hard Faced 316

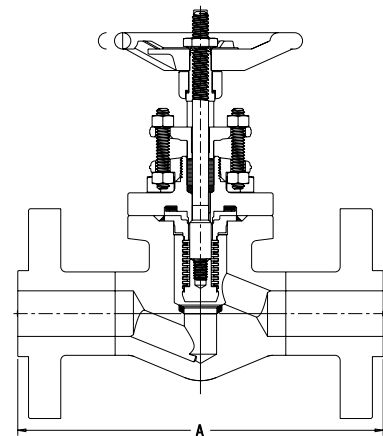
Seat: Integral Hard Faced

ASME B16.34

API 602



CLASS 800



CLASS 150, 300, 600

Bellowseal globe valves are suitable for applications requiring total containment of the flowing media frequently necessary to protect the environment and to eliminate the loss of hazardous and/or costly fluids. The valve packing and bonnet gasket are totally isolated by the bellows from the flowing media and pressure. The packing and gasket are incorporated in the valve to serve in a “backup” role only.

CONNECTION		CONV PORT	FULL PORT	BODY/BONNET	STEM	SEAT	RATING		CLASS
1/16 RF		473B	13473B	A105	13% Cr	HF	285 PSI @ 100 F	19.6 BAR @ 38 C	150
		478B	13478B	A182 F316			275 PSI @ 100 F	19.0 BAR @ 38 C	
1/16 RF		483B	13483B	A105	13% Cr	HF	740 PSI @ 100 F	51.1 BAR @ 38 C	300
		478B	13488B	A182 F316			720 PSI @ 100 F	49.6 BAR @ 38 C	
1/4 RF		493B	13493B	A105	13% Cr	HF	1480 PSI @ 100 F	102.1 BAR @ 38 C	600
		498B	13498B	A182 F316			1440 PSI @ 100 F	99.3 BAR @ 38 C	
Threaded Socket Weld Butt Weld	SW BW	12141B	13141B	A105	13% Cr	HF	1975 PSI @ 100 F	136.2 BAR @ 38 C	800
		12501B	13501B	A182 F316			1920 PSI @ 100 F	132.4 BAR @ 38 C	

Dimensions

				A								Weight				Cv	T	P
SIZE				150	300	600	800	B	C	D	E	150	300	600	800			
CONVENTIONAL PORT	-04	NPS	½	4.25	6.00	6.50	3.75	6.32	6.13	.50	4.00	7.0	8.7	8.8	5.2	2.2	2.3	12
		DN	15	108	152	165	95	161	156	12.7	102	3.2	3.9	4.0	2.4			
	-05	NPS	¾	4.62	7.00	7.50	4.00	6.32	6.13	.50	4.00	8.4	11.5	12.0	5.6	3.9	2.3	12
		DN	20	117	178	191	102	161	156	12.7	102	3.8	5.2	5.4	2.5			
	-06	NPS	1	5.00	8.00	8.50	4.62	7.03	6.75	.75	4.75	12.5	15.5	17.7	8.5	5.2	2.6	10
		DN	25	127	203	216	117	179	171	19.1	121	5.7	7.0	8.0	3.9			
FULL PORT	-09	NPS	2	8.00	10.50	11.50	7.75	10.04	9.52	1.53	8.00	38.2	43.8	49.3	29.0	20.5	4.0	8
		DN	50	203	267	292	197	255	242	38.9	203	17.3	19.9	22.4	13.2			
	-05	NPS	¾		7.00	7.50	4.00	7.03	6.75	0.75	4.75		15.1	14.5	8.7	5.7	3.1	12
		DN	20		178	191	102	179	171	19.1	121		6.8	6.6	3.9			
FULL PORT	-08	NPS	1½		9.00	9.50	7.75	10.04	9.52	1.53	7.00		43.8	49.3	29.0	21.2	6.1	10
		DN	40		229	241	197	255	242	38.9	178		19.9	22.4	13.2			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

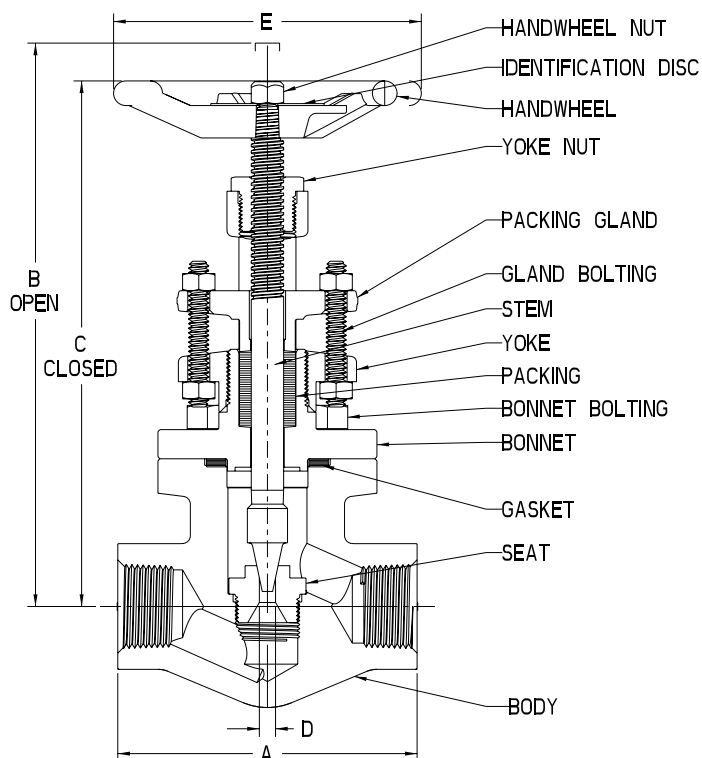
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – For Flow Control Service

Class 800 Globe Valve Needle Point Stem/Seat

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Needle Point Flow Control
Renewable Seat
Dial & indicator option*
ASME B16.34



CONNECTION	SERIES	BODY/BONNET	TRIM	*DIAL	RATING	
Threaded Socket Weld	22461	A105	13% Cr		1975 PSI @ 100 F	136.2 BAR @ 38 C
	D22461	A105	13% Cr	Dial	1975 PSI @ 100 F	136.2 BAR @ 38 C
	32461	A350 LF2	13% Cr		1975 PSI @ 100 F	136.2 BAR @ 38 C
					1975 PSI @ -50 F	136.2 BAR @ -46 C
	22561	A182 F316	316		1920 PSI @ 100 F	132.4BAR @ 38 C

*See page 63 for Dial and Indicator

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.75	6.68	6.37	0.19	4.00	5.0	0.7	3.7	12
	DN	15	95	170	162	4.8	102	2.3			
-05	NPS	¾	4.00	6.76	6.40	0.19	4.00	5.4	1.0	4.3	12
	DN	20	102	172	163	4.8	102	2.4			
-06	NPS	1	4.62	8.70	8.11	0.25	4.75	9.3	1.5	5.9	10
	DN	25	117	221	206	6.4	121	4.2			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

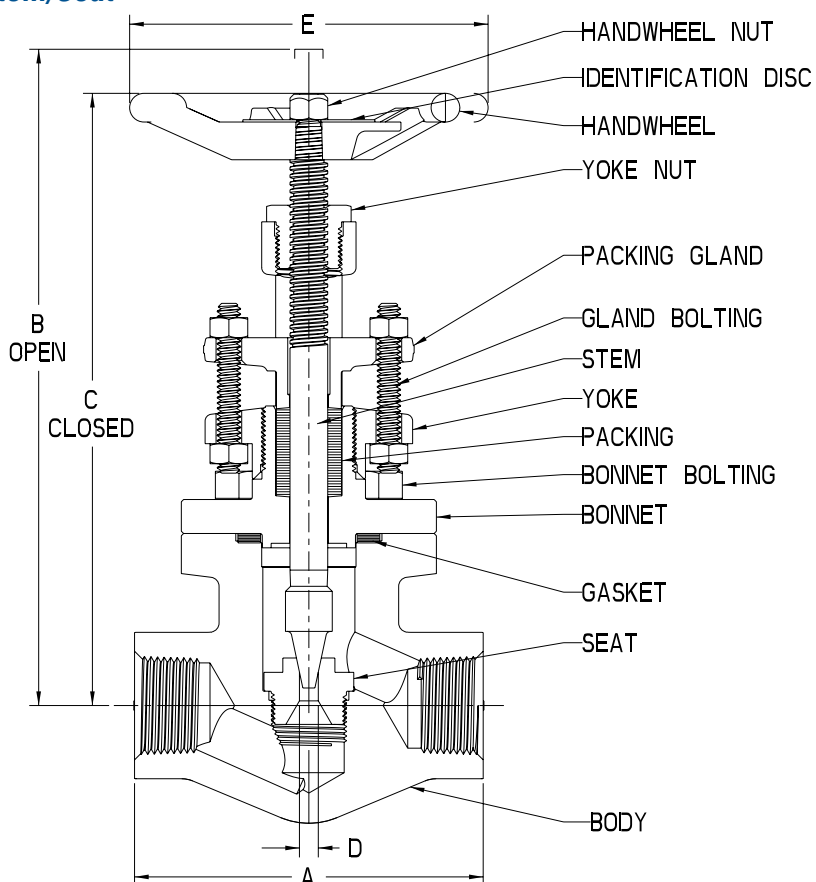
Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – For Flow Control Service **Class 1500 Globe Valve Needle Point Stem/Seat**

Round Bolted Bonnet
 Spiral Wound Gasket
 Outside Screw & Yoke
 Bolted Gland
 Needle Point Flow Control
 Renewable Seat
 Dial & Indicator option*
 ASME B16.34



CONNECTION	SERIES	BODY/BONNET	TRIM	*DIAL	RATING	
Threaded Socket Weld SW	52461	A105	13% Cr		3705 PSI @ 100 F	255.3 BAR @ 38 C
	D52461	A105	13% Cr	Dial		

*See page 63 for Dial and Indicator

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.62	7.55	7.19	0.19	4.75	10.0	0.7	3.6	10
	DN	15	117	192	183	4.8	121	4.5			
-05	NPS	¾	4.62	7.55	7.19	0.19	4.75	9.8	1.0	3.6	10
	DN	20	117	192	183	4.8	121	4.4			
-06	NPS	1	6.25	10.20	9.62	0.25	7.00	22.4	1.5	5.8	10
	DN	25	159	259	244	6.4	178	10.2			

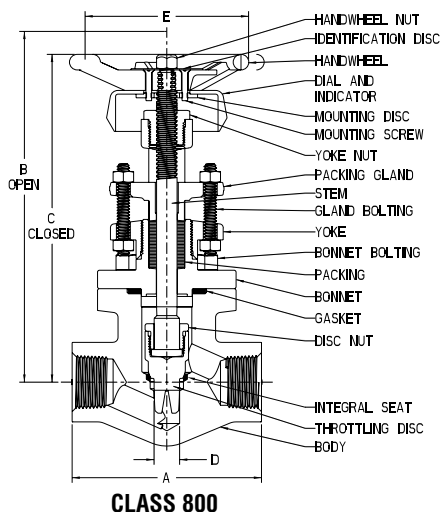
T – Approximate number of turns from open to close.
 P – Pitch of stem thread.
 Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
 Refer to page 111-113 for end connections.
 Refer to pages 114-115 for other ratings

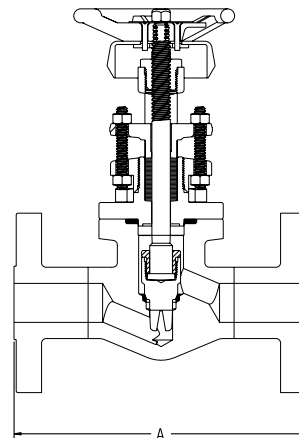
Forged Globe Valves – For Flow Control Service

Class 150, 300, 600, 800 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose V-Port Disc
Integral Hard Faced Seat
Dial & Indicator
ASME B16.34
API 602



CLASS 800



CLASS 150, 300, 600

CONNECTION	SERIES	BODY/BONNET	TRIM	RATING		CLASS
1/16 RF	473VP	A105	13% Cr	285 PSI @ 100 F	19.6 BAR @ 38 C	150
1/16 RF	483VP	A105	13% Cr	740 PSI @ 100 F	51.1 BAR @ 38 C	300
1/4 RF	493VP	A105	13% Cr	1480 PSI @ 100 F	102.1 BAR @ 38 C	600
1/16 RF	478VP	A182 F316	316	275 PSI @ 100 F	19.0 BAR @ 38 C	150
1/16 RF	488VP	A182 F316	316	720 PSI @ 100 F	49.6 BAR @ 38 C	300
1/4 RF	498VP	A182 F316	316	1440 PSI @ 100 F	99.3 BAR @ 38 C	600
Threaded Socket Weld	SW	12443	A105	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
		32443	A350 LF2	13% Cr	1975 PSI @ 100 F	136.2 BAR @ 38 C
					1975 PSI @ -50 F	136.2 BAR @ -46 C
		12543	A182 F316	316	1920 PSI @ 100 F	132.4 BAR @ 38 C

Dimensions

			A								WEIGHT				Cv	T	P
SIZE			150	300	600	800	B	C	D	E	150	300	600	800			
-04	NPS	½	4.25	6.00	6.50	3.75	6.82	6.51	0.38	4.00	7.4	8.9	9.3	5.5	1.5	3.7	12
	DN	15	108	152	165	95	173	165	9.7	102	3.4	4.0	4.2	2.5			
-05	NPS	¾	4.62	7.00	7.50	4.00	6.82	6.39	0.44	4.00	8.7	11.9	12.5	5.9	2.4	5.2	12
	DN	20	117	178	191	102	173	162	11.2	102	3.9	5.4	5.7	2.7			
-06	NPS	1	5.00	8.00	8.50	4.62	8.56	8.00	0.63	4.75	13.8	18.2	19.0	10.1	4.5	5.6	10
	DN	25	127	203	216	117	217	203	16.0	121	6.3	8.3	8.6	4.6			
-08	NPS	1½	6.50	9.00	9.50	6.25	10.42	9.76	0.94	5.75	27.5	34.6	36.8	21.4	9.7	6.6	10
	DN	40	165	229	241	159	265	248	23.9	146	12.5	15.7	16.7	9.7			
-09	NPS	2	8.00	10.50	11.50	7.75	11.00	10.10	1.19	8.00	41.9	48.1	51.9	32.7	14.6	7.2	8
	DN	50	203	267	292	197	279	257	30	203	19.0	21.8	23.5	14.8			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

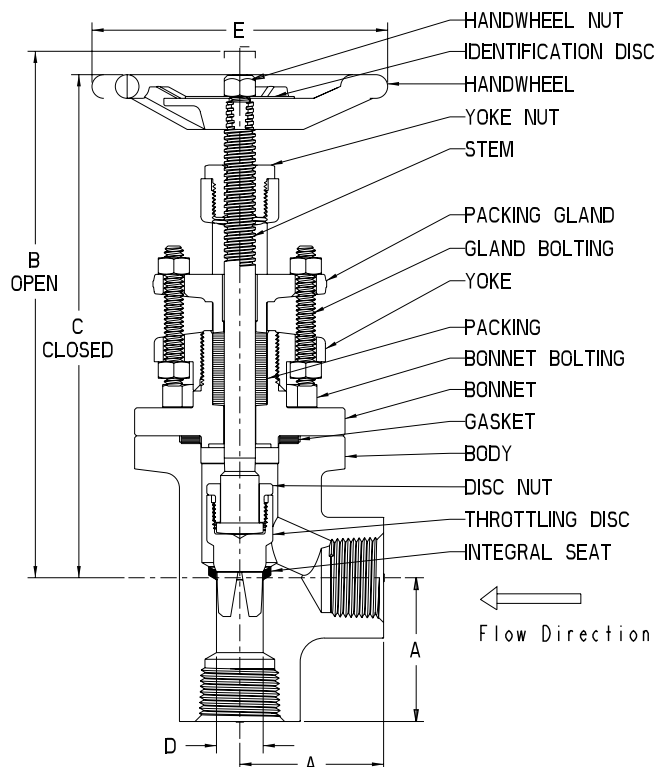
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Angle Valves – For Flow Control Service

Class 800 Globe Valve

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose V-Port Disc
Integral Hard Faced Seat
Dial & Indicator option*
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	*DIAL	RATING	
Threaded	1971VP	A105	13% Cr		1975 PSI @ 100 F	136.2 BAR @ 38 C
Socket Weld SW	D1971VP	A105	13% Cr	Dial		

*See page 63 for Dial and Indicator

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	1.62	6.82	6.57	0.37	4.00	5.1	1.6	3.0	12
	DN	15	41	173	167	9.4	102	2.3			
-05	NPS	¾	1.75	6.82	6.48	0.44	4.00	5.4	2.6	4.1	12
	DN	20	44	173	165	11.2	102	2.4			
-06	NPS	1	2.31	8.53	8.08	0.75	4.75	9.1	10.1	4.5	10
	DN	25	59	217	205	19.1	121	4.1			
-08	NPS	1½	2.44	9.91	9.25	0.94	5.75	16.7	16.2	6.6	10
	DN	40	62	252	235	23.9	146	7.6			
-09	NPS	2	3.56	13.35	12.37	1.19	8.00	37.4	21.0	7.8	8
	DN	50	90	339	314	30	203	17.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

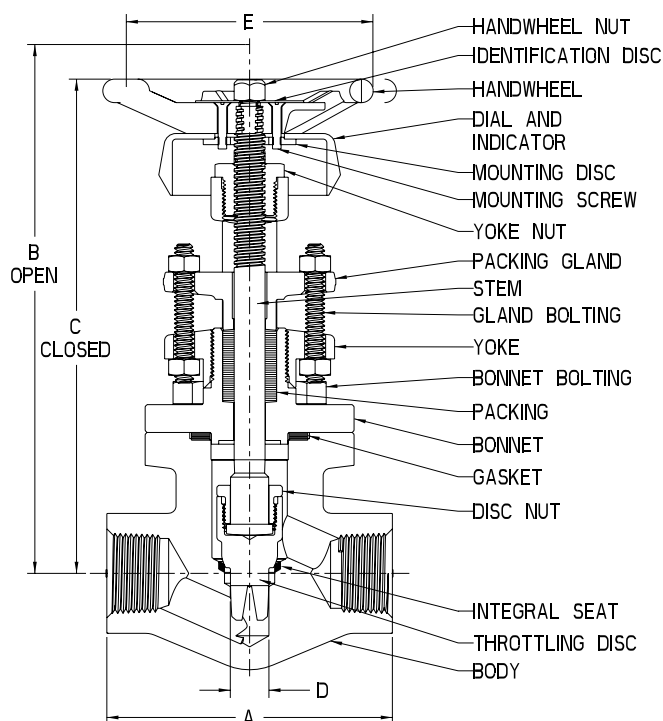
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – For Flow Control Service

Class 1500 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose V-Port Disc
Integral Hard Faced Seat
Dial & Indicator
ASME B16.34
API 602



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld SW	15443	A105	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
	35443	A350 LF2	13% Cr	3705 PSI @ 100 F	255.3 BAR @ 38 C
				3705 PSI @ -50 F	255.3 BAR @ -46 C
	15343	F11 Cl.2	13% Cr	3750 PSI @ 100 F	258.6 BAR @ 38 C
	15543	F22 Cl.3	13% Cr	3750 PSI @ 100 F	258.6 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.50	7.89	7.54	0.44	4.75	10.5	1.5	3.5	10
	DN	15	114	200	192	11.2	121	4.8			
-05	NPS	¾	4.50	7.89	7.54	0.44	4.75	10.3	2.4	3.5	10
	DN	20	114	200	192	11.2	121	4.7			
-06	NPS	1	6.25	10.14	9.71	0.62	7.00	23.2	4.5	4.3	10
	DN	25	159	258	247	15.7	178	10.5			
-08	NPS	1½	7.75	11.02	10.43	0.94	8.00	36.1	11.5	4.7	8
	DN	40	197	280	265	23.9	203	16.4			
-09	NPS	2	9.00	13.31	12.53	1.03	9.75	62.4	13	6.2	8
	DN	50	229	338	318	26.2	248	28.3			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

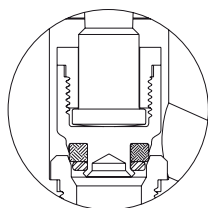
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

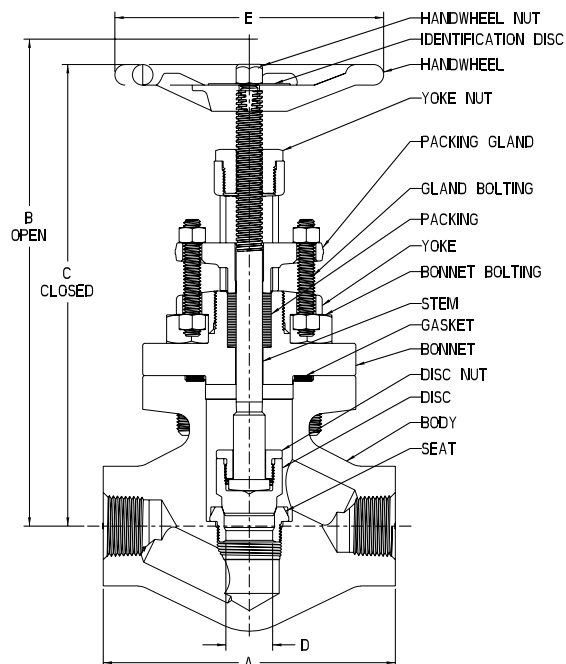
Forged Globe Valves – For HF Alkylation Service

Class 600/800 Globe Valve Full Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Renewable Seat
ASME B16.34



Disc with Teflon Insert (MTP)



Listed in Phillips Petroleum Company's HF Alkylation Process Design Spec. Manual. Valve contains Teflon - 500 F max. temperature

CONNECTION	SERIES	BODY/BONNET	TRIM	RATING		CLASS
Threaded	43241MMP	A105	Monel	1480 PSI @ 100 F	102.1 BAR @ 38 C	600
	43241MTP		Monel/Teflon			

(UOP) Universal Oil Products Approved

CONNECTION	SERIES	BODY/BONNET	TRIM	RATING		CLASS
Socket Weld	SW23141HF4	A105	Monel	1975 PSI @ 100 F	136.2 BAR @ 38 C	800
	SW23141HF5					

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P	CLASS
-04	NPS	½	4.00	6.62	6.34	0.41	4.00	5.1	1.7	3.4	12	Class 600 Class 800
	DN	15	102	168	161	10.4	102	2.3				
-05	NPS	¾	4.62	8.44	8.06	0.69	4.75	9.1	5.9	3.8	10	
	DN	20	117	214	205	17.5	121	4.1				
-06	NPS	1	6.25	10.38	9.88	1.00	5.75	21.4	13.7	5.0	10	
	DN	25	159	264	251	25.4	146	9.7				
-08	NPS	1½	7.75	11.09	10.41	1.44	8	31.7	21	6.8	10	
	DN	40	197	282	264	36.6	203	14.4				
-09	NPS	2	7.75	28.22	27.30	1.53	8.00	52.0	34	7.4	8	
	DN	50	197	717	693	39	203	23.6				

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

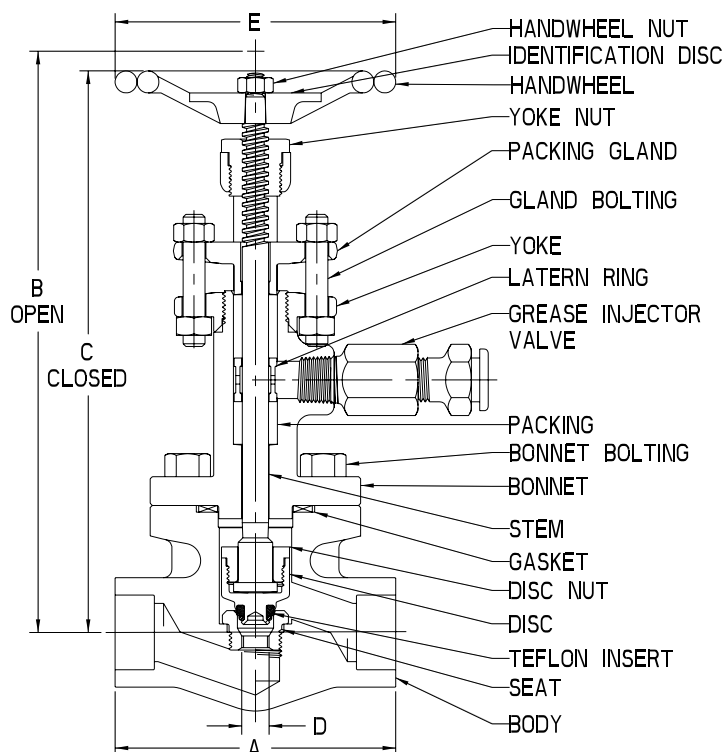
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – For HF Alkylation Service

Class 800 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Double Packing
Lantern Ring
Grease Injector
Teflon-Inserted Disc
Renewable Seat



HYDROFLUORIC ACID (HF) ALKYLATION VALVES.

CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded	42241MTG	A105	Monel/Teflon	1975 PSI @ 100 F	136.2 BAR @ 38 C
Socket Weld SW	42241HF2*				

Valve contains Teflon - 500 F max. temperature

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04*	NPS	½	3.75	8.28	8.00	0.41	4.00	5.9	1.7	3.4	12
	DN	15	95	210	203	10.4	102	2.7			
-05*	NPS	¾	4.00	8.28	8.00	0.41	4.00	6.60	3.1	3.4	12
	DN	20	102	210	203	10.4	102	3.0			
-06*	NPS	1	4.62	10.19	9.75	0.69	4.75	10.20	5.9	4.4	10
	DN	25	117	259	248	17.5	121	4.6			
-08	NPS	1½	6.25	11.94	11.28	1.22	5.75	21.7	18.4	6.6	10
	DN	40	159	303	287	31.0	146	9.8			
-09	NPS	2	7.75	13.40	12.48	1.44	8.00	82.7	22.5	7.4	8
	DN	50	197	340	317	37	203	37.5			

*SW44241HF2 is UOP APPROVED.

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

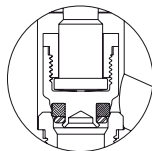
Refer to pages 114-115 for other ratings

Forged Globe Valves – For Water-Free Chlorine Service

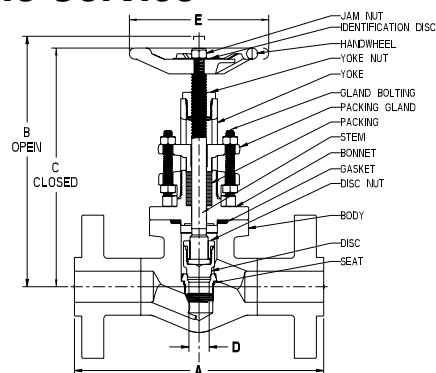
Forged Globe Valves – Removable Seat

Class 300/600 Globe Valve Conventional Port

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Renewable Seat
ASME B16.34



Disc with Teflon Insert (MT)



REMOVABLE SEAT						
CONNECTION	SERIES	BODY/BONNET	TRIM	RATING		CLASS
1/16 RF	22483	A105	13% Cr	740 PSI @ 100 F	51.1 BAR @ 38 C	300
	36483	A350 LF2		740 PSI @ 100 F	51.1 BAR @ 38 C	
				740 PSI @ -50 F	51.1 BAR @ -46 C	
1/4 RF	22493	A105	13% Cr	1480 PSI @ 100 F	102.1 BAR @ 38 C	600
	36493	A350 LF2		1480 PSI @ 100 F	102.1 BAR @ 38 C	
				1480 PSI @ -50 F	102.1 BAR @ -46 C	

WATER-FREE CHLORINE SERVICE				Chlorine Service Temperature Not to Exceed 300°F		
CONNECTION	SERIES	BODY/BONNET	TRIM	RATING		CLASS
1/16 RF	22483CL	A105	Monel/Hastelloy	740 PSI @ 100 F	51.1 BAR @ 38 C	300
	22483MT					
	36483CL	A350 LF2		740 PSI @ 100 F	51.1 BAR @ 38 C	
	36483MT			740 PSI @ -50 F	51.1 BAR @ -46 C	
1/4 RF	22493CL	A105	Monel/Hastelloy	1480 PSI @ 100 F	102.1 BAR @ 38 C	600
	22493MT					
	36493CL	A350 LF2		1480 PSI @ 100 F	102.1 BAR @ 38 C	
	36493MT			1480 PSI @ -50 F	102.1 BAR @ -46 C	

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P	CLASS				
-04	NPS	½	6.00	6.63	6.36	0.41	4.00	8.5	1.7	3.2	12	300				
	DN	15	152	168	162	10.4	102	3.9								
-05	NPS	¾	7.00	6.63	6.36	0.41	4.00	11.6	3.1	3.2	12		300			
	DN	20	178	168	162	10.4	102	5.3								
-06	NPS	1	8.00	8.54	8.14	0.69	4.75	17.6	5.9	4.0	10			300		
	DN	25	203	217	207	17.5	121	8.0								
-08	NPS	1½	9.00	10.48	10.02	1.22	5.75	33.4	18.4	4.6	10				300	
	DN	40	229	266	255	31.0	146	15.1								
-09	NPS	2	10.50	11.09	10.41	1.44	8.00	46.4	22.5	5.4	8					300
	DN	50	267	282	264	36.6	203	21.0								
-04	NPS	½	6.50	6.63	6.36	0.41	4.00	9.0	1.7	3.2	12	600				
	DN	15	165	168	162	10.4	102	4.1								
-05	NPS	¾	7.50	6.63	6.31	0.41	4.00	12.3	3.1	3.8	12		600			
	DN	20	191	168	160	10.4	102	5.6								
-06	NPS	1	8.50	8.54	8.14	0.69	4.75	18.4	5.9	4.0	10			600		
	DN	25	216	217	207	17.5	121	8.3								
-08	NPS	1½	9.50	10.48	10.02	1.22	5.75	35.6	18.4	4.6	10				600	
	DN	40	241	266	255	31.0	146	16.1								
-09	NPS	2	11.50	11.09	10.41	1.44	8.00	50.2	22.5	5.4	8					600
	DN	50	292	282	264	36.6	203	22.8								

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

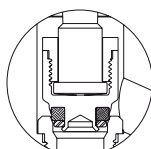
Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

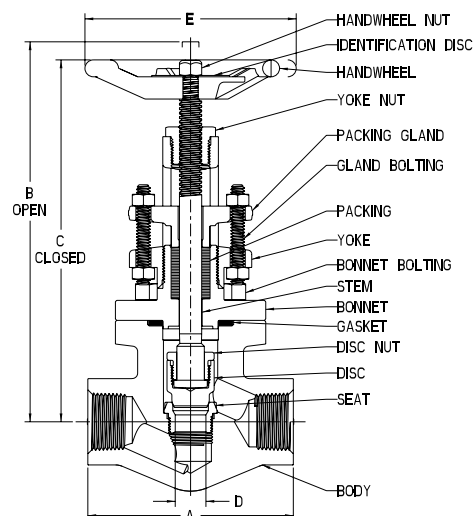
Refer to pages 114-115 for other ratings

Forged Globe Valves – For Water-Free Chlorine Service **Forged Globe Valves – Removable Seat** **Class 800 Globe Valve Conventional Port**

Round Bolted Bonnet
Spiral Wound Gasket
Outside Screw & Yoke
Bolted Gland
Loose Disc
Renewable Seat
ASME B16.34



Disc with Teflon Insert (MT)



REMOVABLE SEAT					
CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld	SW	22141	A105	13% Cr	1975 PSI @ 100 F 136.2 BAR @ 38 C
		22142	A350 LF2	13% Cr	1975 PSI @ 100 F 136.2 BAR @ 38 C
		22501	A182 F316	316	1975 PSI @ -50 F 136.2 BAR @ -46 C
				1920 PSI @ 100 F	132.4 BAR @ 38 C

WATER-FREE CHLORINE SERVICE				Chlorine Service Temperature Not to Exceed 300°F	
CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded Socket Weld	SW	22141CL	A105	Monel/Hastelloy	1975 PSI @ 100 F 136.2 BAR @ 38 C
		22141MT	A105	Monel/Hastelloy	1975 PSI @ 100 F 136.2 BAR @ 38 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.75	6.66	6.43	0.41	4.00	5.2	1.7	2.8	12
	DN	15	95	169	163	10.4	102	2.4			
-05	NPS	¾	4.00	6.66	6.40	0.41	4.00	5.6	3.1	3.1	12
	DN	20	102	169	163	10.4	102	2.5			
-06	NPS	1	4.62	8.54	8.18	0.69	4.75	9.5	5.9	3.6	10
	DN	25	117	217	208	17.5	121	4.3			
-07	NPS	1¼	6.25	10.42	9.96	1.22	5.75	21.1	13.7	4.6	10
	DN	32	159	265	253	31.0	146	9.6			
-08	NPS	1½	6.25	10.42	9.96	1.22	5.75	20.2	18.4	4.6	10
	DN	40	159	265	253	31.0	146	9.2			
-09	NPS	2	7.75	11.09	10.41	1.44	8.00	30.6	22.5	5.4	8
	DN	50	197	282	264	37	203	13.9			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

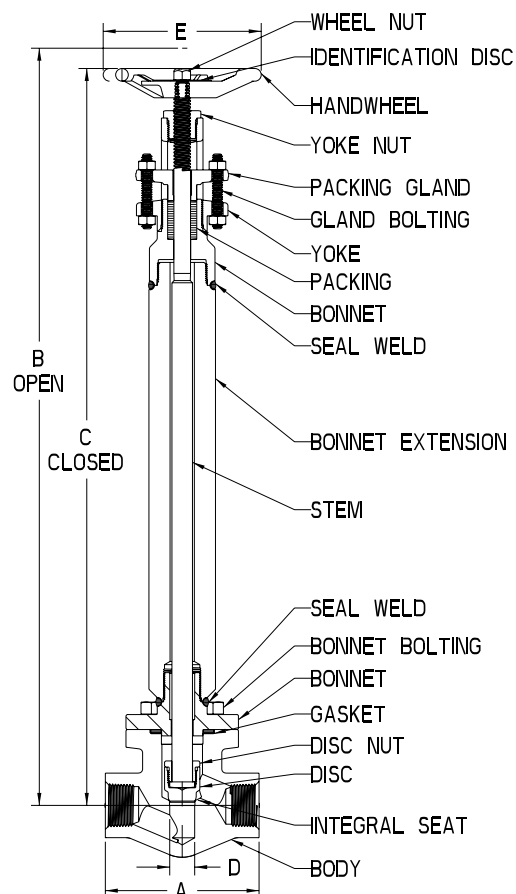
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – Cryogenic Service to -325°F (-198°C)

Class 800 Globe Valve Conventional Port

Round Bolted Bonnet
 Spiral Wound Gasket
 Outside Screw & Yoke
 Bolted Gland
 Loose Disc
 Integral Seat
 Extended Bonnet
 ASME B16.34
 MSS SP-134
 Valve contains TEFLON – Max temp of 500°F



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Threaded	SW	12501C	F316/F316L	316	1920 PSI @ 100 F
Socket Weld					132.4 BAR @ 38 C
					1920 PSI @ -325 F
					132.4 BAR -198 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.75	21.22	20.78	0.50	4.00	12.3	2.4	5.3	12
	DN	15	95	539	528	12.7	102	5.6			
-05	NPS	¾	4.00	21.22	20.78	0.50	4.00	13.00	4.3	5.3	12
	DN	20	102	539	528	12.7	102	5.9			
-06	NPS	1	4.62	22.76	22.15	0.75	4.75	21.5	7.3	6.1	10
	DN	25	117	578	563	19.1	121	9.8			
-08	NPS	1½	6.25	27.64	26.72	1.28	5.75	35.0	20.4	9.2	10
	DN	40	159	702	679	32.5	146	15.9			
-09	NPS	2	7.75	26.72	25.80	1.53	8.00	44.2	23.1	7.4	8
	DN	50	197	679	655	39	203	20.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

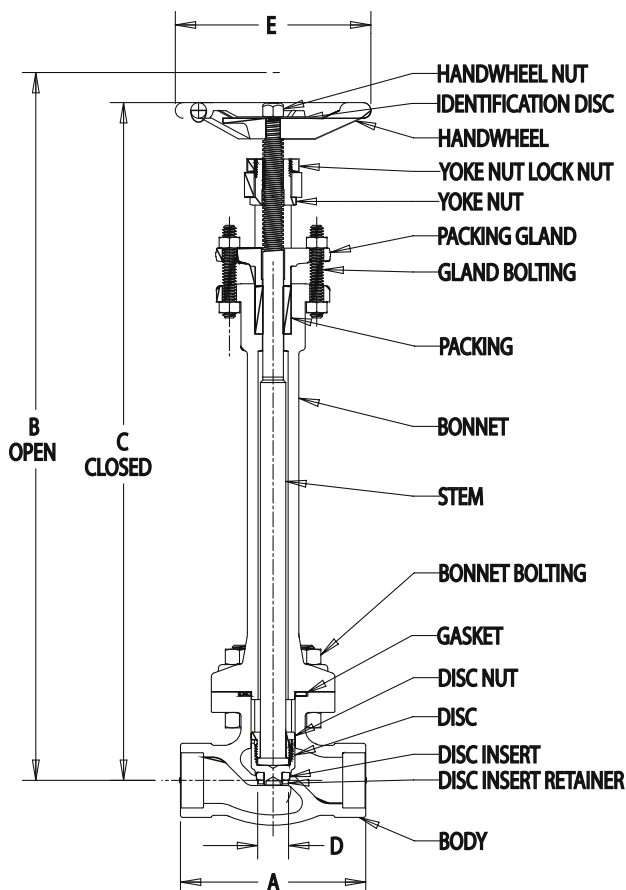
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Cast Globe Valves – Cryogenic Service to -325°F (-198°C)

Class 300 Globe Valve Conventional Port

Round Bolted Bonnet
 Spiral Wound Gasket
 Outside Screw & Yoke
 Bolted Gland
 Loose Disc with PCTFE Insert
 Integral Body Seat
 Extended Bonnet
 ASME B16.34
 MSS SP-134
 Valve contains TEFLON – Max temp of 500°F



CONNECTION	SERIES	BODY/BONNET	TRIM	RATING	
Socket Weld	SW	CF3M	316	720 PSI @ 100 F	132.4 BAR @ 38 C
				720 PSI @ -325 F	132.4 BAR @ -198 C

Dimensions

NPS- Black numerals are inches and pounds
DN- Blue numerals are in millimeters and kilograms.

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	3.75	16.3	15.66	0.50	4.00	7.3	4.6	7.7	12
	DN	15	95	414	398	12.7	102	3.3			
-06	NPS	1	4.50	17.19	16.46	0.75	4.75	10.4	9.8	7.3	10
	DN	25	114	437	418	19.1	121	4.7			
-08	NPS	1.5	6.00	19.65	18.65	1.28	5.75	19.4	26.5	9.9	10
	DN	40	152	499	474	32.5	146	8.8			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

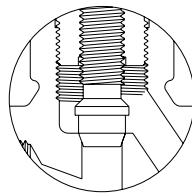
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

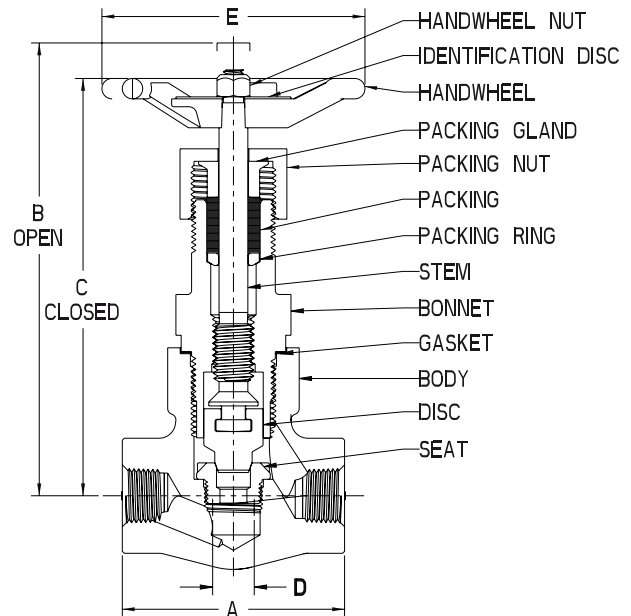
Forged Globe Valves – For Hydraulic Oil Service

Type 3000 Globe Valve Conventional Port

Screw Bonnet
Flat Gasket
Inside Screw Stem
Loose Plug Type Disc or Plug Stem
Renewable Seat or Integral Seat
Temperature Not to Exceed 450°F
Not Recommended for Steam or Dry Gas Service



PLUG STEM 1331



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded	1871	A105	13% Cr	13CR	3000 PSI @ 100 F	206.8 BAR @ 38 C
Socket Weld	1331	A105	13% Cr	INT		

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P	SERIES
------	--	--	---	---	---	---	---	--------	----	---	---	--

-04	NPS	½	3.38	6.89	6.50	0.52	4.00	5.3	2.9	4.3	11	1871
	DN	15	86	175	165	13.2	102	2.4				
-05	NPS	¾	4.00	8.06	7.56	0.53	4.75	8.8	3.8	5.0	10	
	DN	20	102	205	192	13.5	121	4.0				
-06	NPS	1	5.00	9.14	8.65	0.83	5.75	15.0	8.1	4.4	9	
	DN	25	127	232	220	21.1	146	6.8				
-07	NPS	1¼	6.25	10.08	9.39	1.00	7.00	19.9	15.3	5.5	8	
	DN	32	159	256	239	25.4	178	9.0				
-08	NPS	1½	6.75	10.83	9.81	1.22	8.00	28.8	18.4	8.2	8	
	DN	40	171	275	249	31.0	203	13.1				
-09	NPS	2	8.25	12.53	11.51	1.55	8.75	57.2	25.5	7.1	7	
	DN	50	210	318	292	39.4	222	25.9				

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

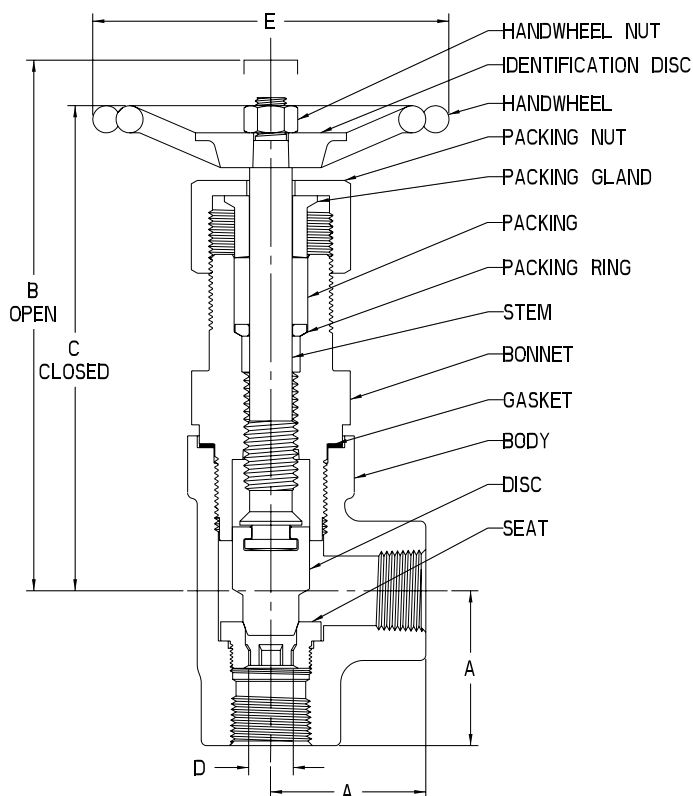
Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Angle Valves – For Hydraulic Oil Service **Type 3000 Angle Valve Conventional Port**

Screw Bonnet
 Flat Gasket
 Inside Screw Stem
 Screw Gland
 Loose Plug Type Disc
 Renewable Seat
 Temperature Not to Exceed 450°F
 Not Recommended for Steam Service or Dry Gas Service



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded	SW	2891	A105	13% Cr	13CR	3000 PSI @ 100 F
Socket Weld						3000 PSI @ 450 F
						206.8 BAR @ 38 C
						206.8 BAR @ 232 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	1.18	6.52	5.90	0.50	4.00	5.4	2.6	6.8	11
	DN	15	30	166	150	12.7	102	2.4			
-05	NPS	¾	2.19	8.00	7.38	0.50	4.75	8.0	4.5	6.2	10
	DN	20	56	203	187	12.7	121	3.6			
-06	NPS	1	2.50	8.94	7.97	0.72	5.75	11.4	11.9	8.7	9
	DN	25	64	227	202	18.3	146	5.2			
-07	NPS	1¼	3.00	9.22	8.53	0.97	7.00	16.5	19.0	5.5	8
	DN	32	76	234	217	24.6	178	7.5			
-08	NPS	1½	3.38	10.12	9.44	1.19	8.00	25.0	25.0	5.4	8
	DN	40	86	257	240	30.2	203	11.3			
-09	NPS	2	4.12	10.50	9.75	1.41	9.75	35.2	49.0	5.3	7
	DN	50	105	267	248	35.8	248	16.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

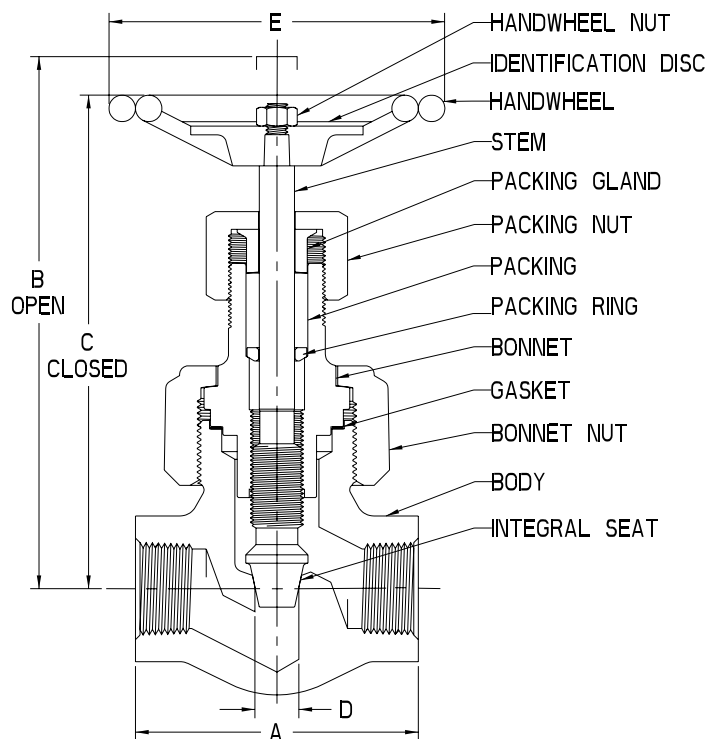
Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Globe Valves – For Hydraulic Meter & Gauge Line Service *Type 4000 Globe Valve Conventional Port*

Union Bonnet
 Flat Gasket Joint
 Inside Screw Stem
 Screw Gland
 Needle Point Control
 MSS-SP-105
 Temperature Not to Exceed 450°F
 Not Recommended for Steam or Dry Gas Service



CONNECTION		SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded Socket Weld	SW	58431	A105	13% Cr	INT	4000 PSI @ 100 F	275.8 BAR @ 38 C
						4000 PSI @ 450 F	275.8 BAR @ 232 C

Dimensions

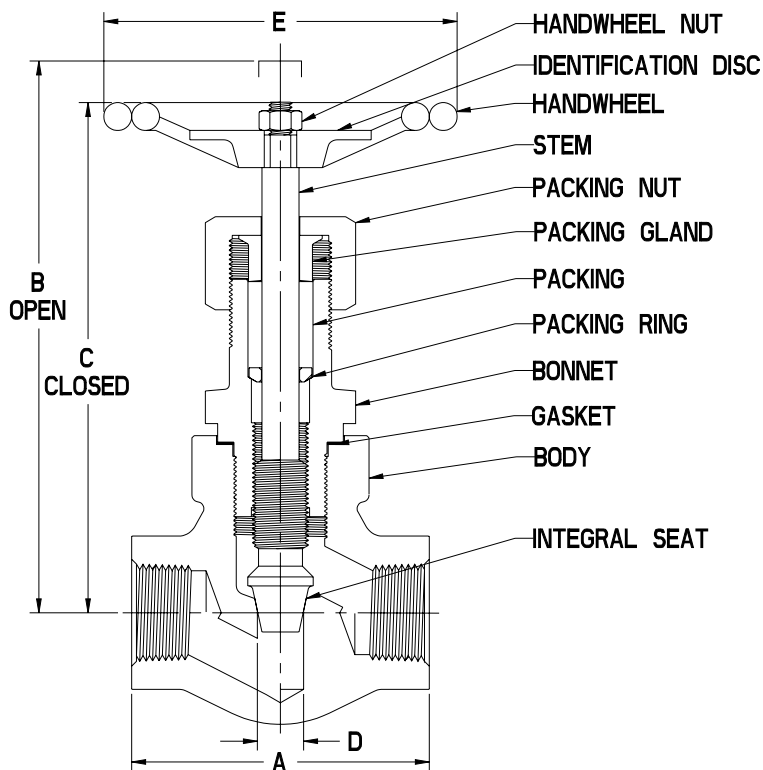
SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	2.75	5.47	4.97	0.38	3.25	2.9	1.8	10.0	20
	DN	15	70	139	126	9.7	83	1.3			
-05	NPS	¾	3.38	6.88	6.25	0.50	4.00	5.9	3.5	11.3	18
	DN	20	86	175	159	12.7	102	2.7			
-06	NPS	1	4.00	7.75	7.00	0.62	4.75	8.8	5.8	12.0	16
	DN	25	102	197	178	15.7	121	4.0			

T – Approximate number of turns from open to close.
 P – Pitch of stem thread.
 Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
 Refer to page 111-113 for end connections.
 Refer to pages 114-115 for other ratings

Forged Globe Valves – For Hydraulic Meter & Gauge Line Service *Type 5000 Globe Valve Conventional Port*

Screw Bonnet
 Flat Gasket Joint
 Inside Screw Stem
 Screw Gland
 Needle Point Control
 MSS-SP-105
 Temperature Not to Exceed 450°F
 Not Recommended for Steam or Dry Gas Service



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING	
Threaded	9871	A105	13% Cr	INT	5000 PSI @ 100 F	344.7 BAR @ 38 C
Socket Weld	SW 9821	A182 F316	13% Cr	INT	5000 PSI @ 450 F	344.7 BAR @ 232 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	2.75	5.47	4.97	0.38	3.25	2.7	1.8	10.0	20
	DN	15	70	139	126	9.7	83	1.2			
-05	NPS	¾	3.38	6.78	6.25	0.50	4.00	5.0	3.5	9.5	18
	DN	20	86	172	159	12.7	102	2.3			
-06	NPS	1	4.00	7.75	7.00	0.62	4.75	7.3	5.8	12.0	16
	DN	25	102	197	178	15.7	121	3.3			
-07	NPS	1¼	4.75	8.71	7.85	0.75	5.75	13.2	7.6	7.7	9
	DN	32	121	221	199	19.1	146	6.0			
-08	NPS	1½	6.25	9.79	8.95	1.00	7.00	18.8	11.7	6.7	8
	DN	40	159	249	227	25.4	178	8.5			
-09	NPS	2	7.75	11.12	10.06	1.25	8.00	28.6	17.7	7.4	7
	DN	50	195	282	256	31.8	203	13.0			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

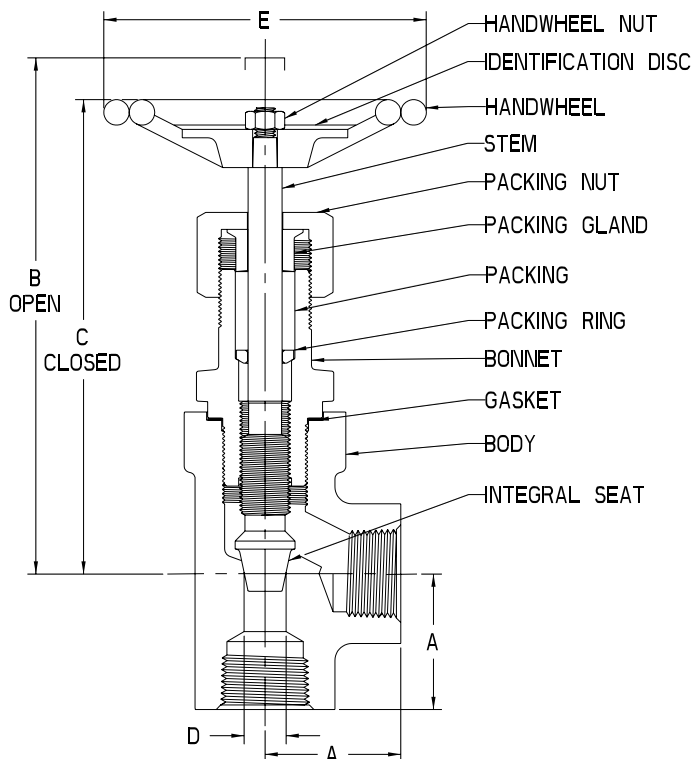
Refer to page 111-113 for end connections.

Refer to pages 114-115 for other ratings

Forged Angle Valves – For Hydraulic Meter & Gauge Line Service

Type 5000 Angle Valve Conventional Port

Screw Bonnet
Flat Gasket Joint
Inside Screw Stem
Screw Gland
Needle Point Control
Integral Seat
MSS-SP-105
Temperature Not to Exceed 450°F
Not Recommended for Steam or Dry Gas Service



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING
Threaded Socket Weld	SW	9841	A105	13% Cr	INT
					5000 PSI @ 100 F 5000 PSI @ 450 F
					344.7 BAR @ 38 C 344.7 BAR @ 232 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	1.38	5.47	4.97	0.38	3.25	2.7	2.6	10.0	20
	DN	15	35	139	126	9.7	83	1.2			
-05	NPS	¾	1.69	6.77	6.24	0.50	4.00	5.3	4.5	9.5	18
	DN	20	43	172	158	12.7	102	2.4			
-06	NPS	1	2.00	7.75	7.00	0.62	4.75	6.8	11.9	12.0	16
	DN	25	51	197	178	15.7	121	3.1			

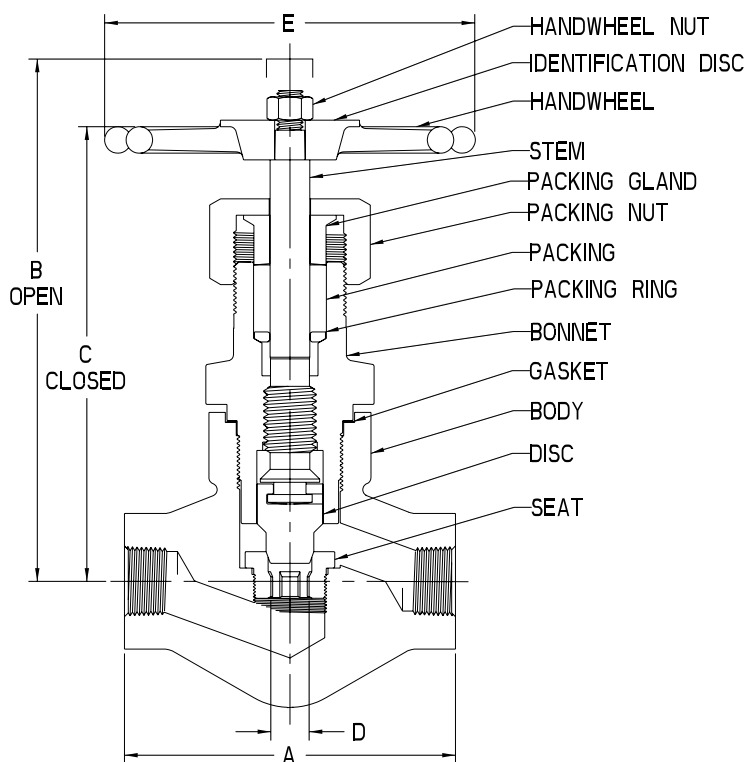
T – Approximate number of turns from open to close.
P – Pitch of stem thread.
Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.
Refer to page 111-113 for end connections.
Refer to pages 114-115 for other ratings

Forged Globe Valves – For Hydraulic Oil Service

Type 6000 Globe Valve Full Port

Screw Bonnet
Flat Gasket Joint
Inside Screw Stem
Screw Gland
Loose Plug Type Disc
Renewable Seat
Temperature Not to Exceed 450°F
Not Recommended for Steam Service or Dry Gas Service



CONNECTION	SERIES	BODY/BONNET	TRIM	SEAT	RATING
Threaded Socket Weld	SW	3991	A105	13% Cr	13CR
					6000 PSI @ 100 F 6000 PSI @ 450 F
					413.7 BAR @ 38 C 413.7 BAR @ 232 C

Dimensions

SIZE			A	B	C	D	E	WEIGHT	Cv	T	P
-04	NPS	½	4.00	8.00	7.62	0.39	4.75	9.0	2.9	3.8	10
	DN	15	102	203	194	9.9	121	4.1			
-05	NPS	¾	5.00	8.70	8.24	0.58	5.75	15.0	3.8	4.1	9
	DN	20	127	221	209	14.7	146	6.8			
-06	NPS	1	6.25	9.88	9.31	0.75	7.00	21.2	8.1	4.6	8
	DN	25	159	251	236	19.1	178	9.6			
-07	NPS	1¼	6.75	11.00	10.44	0.97	8.00	31.1	15.3	3.9	7
	DN	32	171	279	265	24.6	203	14.1			
-08	NPS	1½	8.25	12.86	12.01	1.29	8.75	60.5	18.4	6.0	7
	DN	40	210	327	305	32.8	222	27.4			
-09	NPS	2	8.50	12.94	12.19	1.54	12.00	65.7	25.5	5.3	7
	DN	50	216	329	310	39.1	305	29.8			

T – Approximate number of turns from open to close.

P – Pitch of stem thread.

Refer to page 4 for optional trim and service configurations.

Refer to pages 126 & 127 for full materials description.

Refer to page 111-113 for end connections.

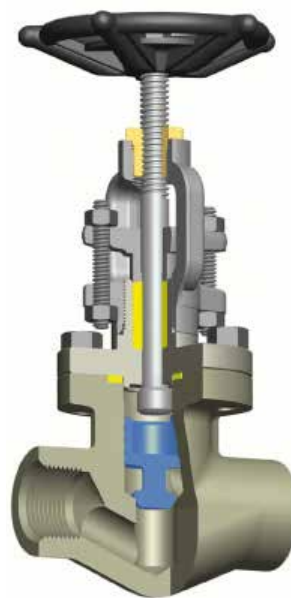
Refer to pages 114-115 for other ratings

Stop Check Valve (Non-Return Valve)

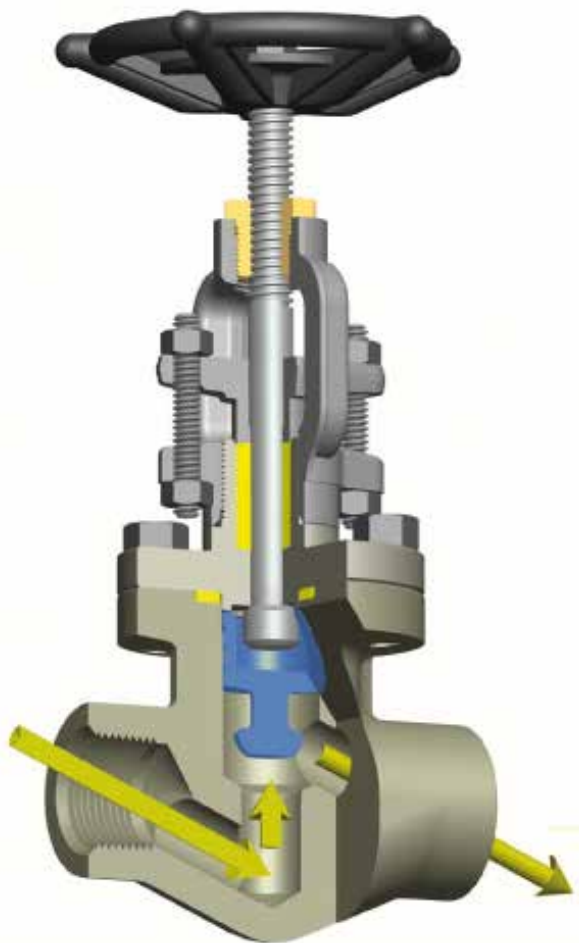
Stop check valves are used as a one-directional flow check valve with a positive shut-off to prevent flow from either direction.

Stop check valves are available in any configuration as the globe valve, by replacing the disc with a disc check from the corresponding check valve, and modifying the stem for “push” only.

Stop check valves are designated by the globe valve series with the suffix of “SC,” such as 12141SC, etc.



Valve in the open position to allow for one-directional flow control.



Valve in the closed position to stop flow in both directions.

MARPAC Union End Check Valves (2"– 3")

Petro and HB-Lug Union Ends for applications to 2000 psig

Exceptional Performance

- Short poppet travel, for quick closing, minimal backflow and gentle seating action
- Annular flow, for minimum pressure drop
- Union end allows efficient use of space

Exceptional Versatility

- Available with bronze or 316 stainless steel trim to suit your application
- Sturdy, thick poppet to support full line pressure, even with the nut removed
- Available in 2" and 3" sizes, with octagonal or Lug nut unions, for a variety of applications
- Socket-weld union end available

Exceptional Value

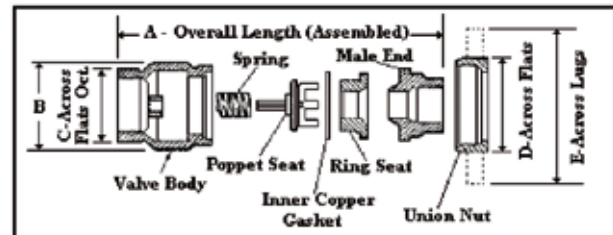
- Union end reduces fitting and labor costs, both in installation and maintenance
- Carbon steel body casting for durability (WCC)
- Zinc-coated carbon steel A105 union end and nut
- Seats can be re-lapped in the field, to minimize downtime



MARPAC PETRO®
Union End Check
Valves
Series 730P
2000 psi NSCWP
Octagonal Nut



MARPAC HB-LUG®
Union End Check
Valves
Series 730H
2000 psi NSCWP
Lug Nut



SPECIFICATIONS - REPRESENTATIVE DIMENSIONS & WEIGHT

SERIES	SIZE	A	B	C	D	E	PETRO Wt. lbs. @	HB-LUG Wt. lbs. @
730 J	2	6	3 3/4	3	4 3/32	6 1/4	10.7 (730 JxP)	12.1 (730 JxH)
730 L	3	7 1/4	5 3/16	4 3/16	5 3/4	8 1/4	22.9 (730 LxP)	25.1 (730 LxH)

X = Trim Code - see below

STANDARD ASSEMBLIES - HB-Lug: Series 730H, 2000 psi NSCWP, Lug Nut & Petro: Series 730P, 2000 psi NSCWP, Octagonal

END CONNECTION	MATERIAL (FINISH)			
	BODY	MALE END	NUT	TRIM: RING SEAT, POPPET
Threaded	Carbon Steel (Manganese Phosphate Coated)	Carbon Steel (Zinc)	Carbon Steel (Zinc)	Bronze (730xBx)
Threaded	Carbon Steel (Manganese Phosphate Coated)	Carbon Steel (Zinc)	Carbon Steel (Zinc)	316SS (730xSx)

TEMPERATURE / PRESSURE RATINGS

TEMPERATURE	BRONZE TRIM	STAINLESS TRIM
100°F	2000 PSI	2000 PSI
200°F	2000 PSI	1817 PSI
300°F	2000 PSI	1623 PSI
400°F	1929 PSI	1543 PSI
500°F	1671 PSI	1509 PSI