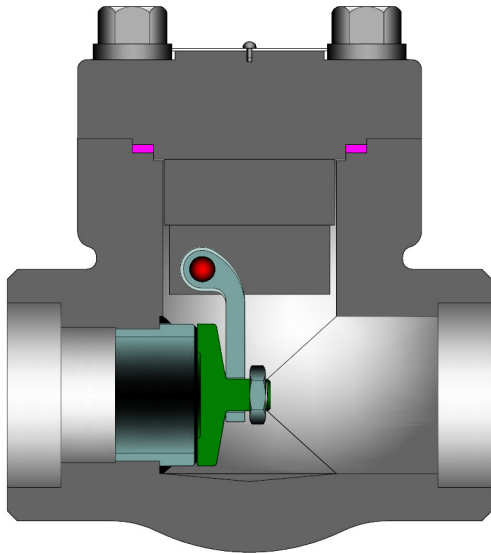


API 602 SWING CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 150 - 2680



Class	Bore	Fig. No.
150	Standard	SW01
	Full	SWL1
300	Standard	SW03
	Full	SWL3
600	Standard	SW06
	Full	SWL6
800	Standard	SW08
	Full	SWL8
1500	Standard	SW15
	Full	SWL5
1680	Standard	SW16
2500	Standard	SW25
2690	Standard	SW26

DESIGN FEATURES:

- Standard trim is stellite faced seat rings and 13% chrome disc (API trim 8). Other trims available on request.
- Seat faces lapped for smooth finish and superior sealing.
- Wall thickness per heavy wall API 602 requirements.
- Swivel disc for improved seat alignment and longer life.
- Each valve is shell and seat pressure tested per industry standard API 598.
- Check valve are suitable for service in horizontal line with cap vertical or in a vertical line with flow upward.
- Carrier Pin is confined within the body wall and is not accessible from the exterior, thus no side body penetrations, eliminating a common leak path.

STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
Body	A105	A182 F11	A182 F22	A182 F316 (1)
Cap	A105	A182 F11	A182 F22	A182 F316
Disc	A276 T420			A276 T316
Seat Ring	SST 410 + Stellite 6 Faced			316 SST
Gasket (2)	Spiral Wound SST with Graphite			Spiral Wound SST with PTFE
Carrier	304 SST			316 SST
Carrier Pin	304 SST			316 SST
Disc Nut	A182 F304 or A194 Gr. 8			A182 F316 or
				A194 Gr. 8M
Body / Cap Bolting (2)	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Identification Plate	Series 300 SST			

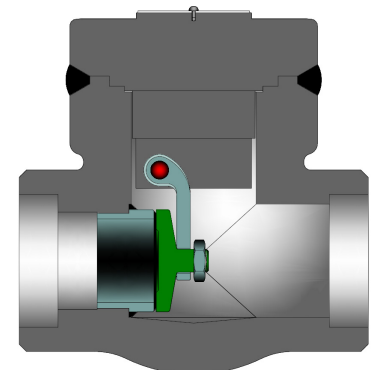
1. Threaded and weld end valve bodies A182 F316L
2. Welded bonnets also available.

NOTE: See page 43 for flow, safety and maintenance information.

Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM

- End Flanges have the following raised faces per ASME B16.5:
 - Classes 150-300: 1/16" (2mm).
 - Classes 600: 1/4" (7mm).
- Other available options as follows:
 - » Alternate valve materials such as chrome and stainless steel alloys
 - » Alternate trim materials
 - » NACE service
 - » Special cleaning for applications such as oxygen or chlorine
 - » Other options available as specified



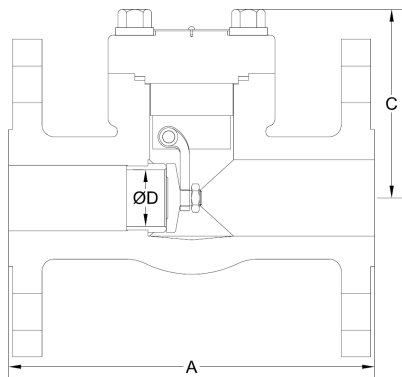
Welded Bonnet Design

SWING CHECK VALVE DIMENSIONS

(CLASSES 150 - 800)

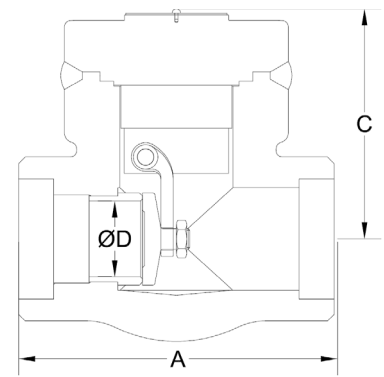
SIZE	ASME 150			ASME 300			ASME 600		
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet		
	Standard Bore			Standard Bore			Standard Bore		
in	A	C	D	A	C	D	A	C	D
mm	FE			FE			FE		
½	4.25	2.2	0.39	6	2.2	0.39	6.5	2.2	0.39
13	108	55	10	152	55	10	165	55	10
¾	4.62	2.2	0.5	7	2.2	0.5	7.5	2.2	0.5
19	117	55	13	178	55	13	190	55	13
1	5	2.8	0.69	8	2.8	0.69	8.5	2.8	0.69
25	127	72	18	203	72	18	216	72	18
1¼	5.5	3.2	0.91	8.5	3.2	0.91	9	3.2	0.91
32	140	81	23	216	81	23	229	81	23
1½	6.5	3.6	1.12	9	3.7	1.12	9.5	3.7	1.12
38	165	91	29	229	94	29	241	94	29
2	8	4.4	1.26	10.5	4.4	1.38	11.5	4.4	1.38
50	203	112	32	267	112	35	292	112	35

SIZE	ASME 800											
	Bolted Bonnet						Welded Bonnet					
	Standard Bore			Full Bore			Standard Bore			Full Bore		
in	A	C	D	A	C	D	A	C	D	A	C	D
mm	WE			WE			WE			WE		
¼	3.11	2.2	0.26	-	-	-	3.11	2.2	0.26	-	-	-
6	79	55	7	-	-	-	79	55	7	-	-	-
3/8	3.11	2.2	0.39	-	-	-	3.11	2.2	0.39	-	-	-
10	79	55	10	-	-	-	79	55	10	-	-	-
½	3.11	2.2	0.39	3.62	2.2	0.5	3.11	2.2	0.39	3.62	2.2	0.5
13	79	55	10	92	55	13	79	55	10	92	55	13
¾	3.62	2.2	0.5	4.37	3	0.69	3.62	2.2	0.5	4.37	3	0.69
19	92	55	13	111	72	18	92	55	13	111	72	18
1	4.37	3	0.69	4.72	3.2	0.91	4.37	3	0.69	4.72	3.2	0.91
25	111	72	18	120	81	23	111	72	18	120	81	23
1¼	4.72	3.2	0.91	4.72	3.7	1.12	4.72	3.2	0.91	4.72	3.7	1.12
32	120	81	23	120	94	29	120	81	23	120	94	29
1½	4.72	3.7	1.12	5.51	4.4	1.4	4.72	3.7	1.12	5.51	4.4	1.42
38	120	94	29	140	112	36	120	94	29	140	112	36
2	5.51	4.4	1.38	6.3	5.2	1.85	5.51	4.4	1.38	6.3	5.2	1.85
50	140	112	35	160	132	47	140	112	35	160	132	47



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged Ends
C = Center to top



Welded Bonnet Socket Weld Ends Design

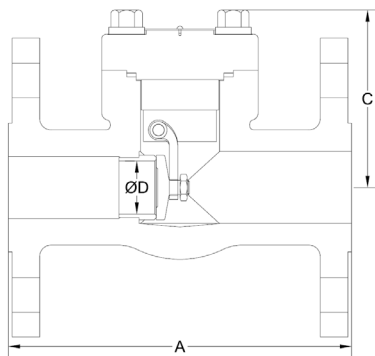
ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

SWING CHECK VALVE DIMENSIONS

(CLASSES 1500 - 2860)

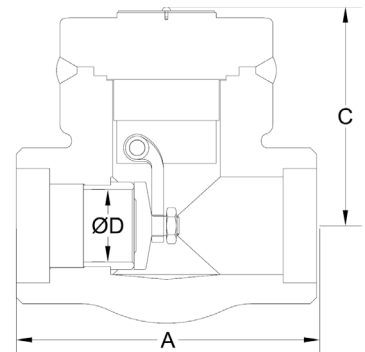
SIZE	ASME 1500 & 1690												
	Bolted Bonnet						Welded Bonnet						
	Standard Bore			Full Bore			Standard Bore			Full Bore			
	in	A		C	D	A	C	D	A	C	D	A	C
mm	FE	WE	WE										
¼	-	3.11	2.9	0.26	-	-	-	3.11	2.9	0.39	-	-	-
6	-	79	73	7	-	-	-	79	65	10	-	-	-
3/8	-	3.11	2.9	0.39	-	-	-	3.11	2.9	0.5	-	-	-
10	-	79	73	10	-	-	-	79	65	13	-	-	-
½	8.5	3.62	2.9	0.39	4.37	2.9	0.5	3.62	2.9	0.39	4.37	2.9	0.5
13	216	92	73	10	111	73	13	92	65	10	111	65	13
¾	9	4.37	2.9	0.5	4.72	3.3	0.69	4.37	2.9	0.51	4.72	3.3	0.69
19	229	111	73	13	120	84	18	111	65	13	120	77	18
1	10	4.72	3.3	0.69	4.72	3.8	0.91	4.72	3.3	0.69	4.72	3.8	0.91
25	254	120	84	18	120	97	23	120	77	18	120	89	23
1¼	11	4.72	3.8	0.91	5.51	4.5	1.12	4.72	3.8	0.91	5.51	4.5	1.12
32	279	120	97	23	140	115	29	120	89	23	140	103	29
1½	12	5.51	4.5	1.12	6.3	5.2	1.38	5.51	4.5	1.12	6.3	5.2	1.38
38	305	140	115	29	160	132	35	140	103	29	160	115	35
2	14.5	6.3	5.2	1.38	8.66	5.2	1.85	6.3	5.2	1.38	8.66	5.2	1.85
50	368	160	132	35	220	152	47	160	115	35	220	132	47

SIZE	ASME 2500 & 2680					
	Bolted Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore		
	in	A	C	D	A	C
mm	WE			WE		
½	5.91	3.4	0.55	5.91	3.4	0.55
13	150	87	14	150	87	14
¾	5.91	3.6	0.55	5.91	3.4	0.55
19	150	92	14	150	87	14
1	6.69	4.4	0.75	6.69	3.6	0.75
25	170	113	19	170	92	19
1¼	7.87	4.4	1.1	7.87	4.4	1.1
32	200	113	28	200	113	28
1½	7.87	5.2	1.1	7.87	4.4	1.1
38	200	131	28	200	113	28
2	9.84	5.9	1.5	9.84	5.2	1.5
50	250	151	38	250	131	38



Bolted Bonnet Flanged Ends Design

WE = Socket Weld / Threaded Ends
FE = Flanged Ends
C = Center to top open



Welded Bonnet Socket Weld Ends Design

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

API 602 SWING CHECK VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 150 - 2680

SIZE	ASME 150			ASME 300			ASME 600			ASME 800											
	Bolted Bonnet			Bolted Bonnet			Bolted Bonnet			Bolted Bonnet			Welded Bonnet								
	Standard Bore			Standard Bore			Standard Bore			Standard Bore			Full Bore			Standard Bore			Full Bore		
in	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	FE	KG		FE	KG		FE	KG		WE	KG		WE	KG		WE	KG		WE	KG	
¼	-	-	-	-	-	-	-	-	2.9	0.7	-	-	2.9	0.7	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	1.3	-	-	-	1.3	-	-	-	-	-	-	-	-
3/8	-	-	-	-	-	-	-	-	2.9	1.5	-	-	2.9	1.5	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	1.3	-	-	-	1.3	-	-	-	-	-	-	-	-
½	7.1	1.5	7.7	1.5	7.1	1.5	2.6	1.5	3.7	2.6	2.6	1.5	3.7	2.6	-	-	-	-	-	-	-
13	3.2	-	3.5	-	3.2	-	1.2	-	1.7	-	1.2	-	1.7	-	-	-	-	-	-	-	-
¾	9.3	2.7	10.1	2.7	12.3	2.7	3.7	2.7	5.3	4.9	3.7	2.7	5.3	4.9	-	-	-	-	-	-	-
19	4.2	-	4.6	-	5.6	-	1.7	-	2.4	-	1.7	-	2.4	-	-	-	-	-	-	-	-
1	17.6	5.1	19	5.1	20.5	5.1	5.3	5.1	8.8	8.9	5.3	5.1	8.8	8.9	-	-	-	-	-	-	-
25	8	-	8.6	-	9.3	-	2.4	-	4	-	2.4	-	4	-	-	-	-	-	-	-	-
1¼	19.2	9.1	20.7	9.1	22.5	9.1	8.8	9.1	11.2	13.7	8.8	9.1	11.2	13.7	-	-	-	-	-	-	-
32	8.7	-	9.4	-	10.2	-	4	-	5.1	-	4	-	5.1	-	-	-	-	-	-	-	-
1½	26	14	29.8	14	34	14	11.2	14	19.2	21.9	11.2	14	19.2	21.9	-	-	-	-	-	-	-
38	11.8	-	13.5	-	15.4	-	5.1	-	8.7	-	5.1	-	8.7	-	-	-	-	-	-	-	-
2	31.1	22.4	38.8	22.4	53.6	22.4	19.4	22.4	33.7	40	19.4	22.4	33.7	40	-	-	-	-	-	-	-
50	14.1	-	17.6	-	24.3	-	8.8	-	15.3	-	8.8	-	15.3	-	-	-	-	-	-	-	-
SIZE	ASME 1500 & 1687											ASME 2500 & 2680									
	Bolted Bonnet						Welded Bonnet					Bolted Bonnet			Welded Bonnet						
	Standard Bore			Full Bore			Standard Bore			Full Bore		Standard Bore			Standard Bore						
in	WT	LB	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	
mm	FE	KG	WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		WE	KG		
¼	-	-	4.9	-	0.7	-	-	-	4.4	0.7	-	-	-	-	-	-	-	-	-	-	-
6	-	-	2.2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
3/8	-	-	4.4	-	1.5	-	-	-	4.4	1.5	-	-	-	-	-	-	-	-	-	-	-
10	-	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
½	20.3	4.9	4.9	1.5	6	1.5	4.4	1.5	6	1.5	16.1	1.8	14.3	3	-	-	-	-	-	-	-
13	9.2	-	2.2	-	2.7	-	2	-	2.7	-	7.3	-	6.5	-	-	-	-	-	-	-	-
¾	24.3	6	6	2.7	9.5	2.7	6	2.7	9.5	2.7	16.1	1.9	14.3	3.1	-	-	-	-	-	-	-
19	11	-	2.7	-	4.3	-	2.7	-	4.3	-	7.3	-	6.5	-	-	-	-	-	-	-	-
1	31.3	9.7	9.7	5.1	13.7	5.1	9.7	5.1	13.7	5.1	25.4	3.2	23.1	6	-	-	-	-	-	-	-
25	14.2	-	4.4	-	6.2	-	4.4	-	6.2	-	11.5	-	10.5	-	-	-	-	-	-	-	-
1¼	34.8	13.9	13.9	9.1	22.5	9.1	13.9	9.1	22.5	9.1	41.7	4.3	38.6	10.5	-	-	-	-	-	-	-
32	15.8	-	6.3	-	10.2	-	6.3	-	10.2	-	18.9	-	17.5	-	-	-	-	-	-	-	-
1½	47	22.7	22.7	14	33.7	14	22.7	14	33.7	14	41.7	10.7	38.6	13.5	-	-	-	-	-	-	-
38	21.3	-	10.3	-	15.3	-	10.3	-	15.3	-	18.9	-	17.5	-	-	-	-	-	-	-	-
2	61.3	33.7	33.7	22.4	36.8	22.4	33.7	22.4	36.8	22.4	58.9	14.2	62.8	22.4	-	-	-	-	-	-	-
50	27.8	-	15.3	-	16.7	-	15.3	-	16.7	-	26.7	-	28.5	-	-	-	-	-	-	-	-

FE = Flanged Ends
WE = Socket Weld / Threaded Ends

WT = Weight
CV = Flow Coefficient