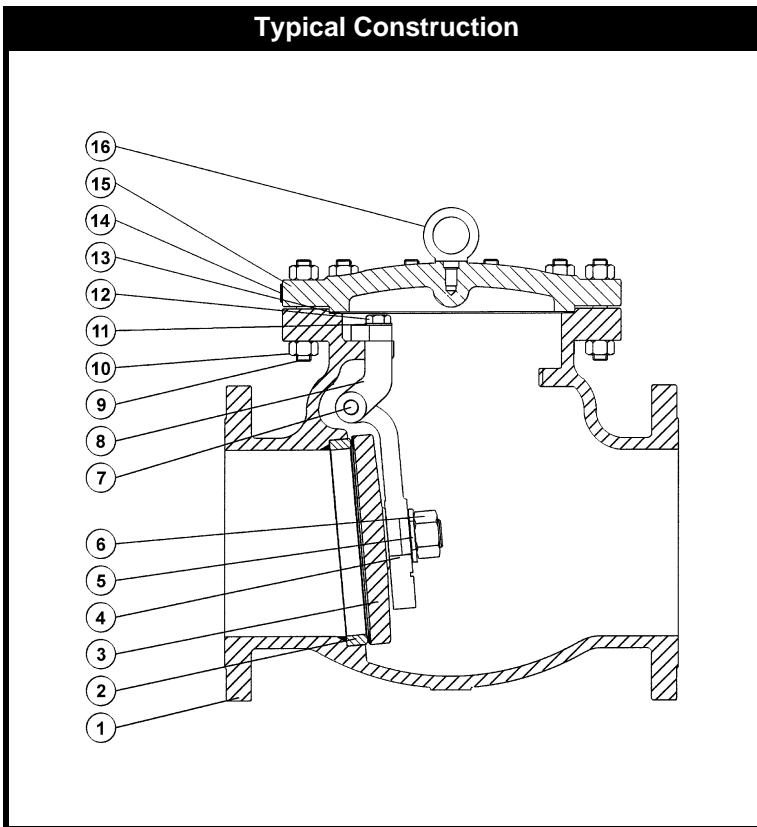


## SWING CHECK VALVE DESIGN FEATURES

- ◆ Swing Disc Design
- ◆ Regular Opening Type
- ◆ Bolted Cover Construction
- ◆ Internal Hinge Design Standard
- ◆ Through-Body Hinge Pin Design Available
- ◆ Renewable Threaded-In or Welded-In Seat Ring

- ◆ Design : API 6D / BS 1868 / API 600
- ◆ Shell Thickness : API 6D / BS 1868 / API 600
- ◆ Flanged Ends : ANSI B16.5 (Sizes ≤ 24")  
MSS SP-44 (Sizes > 24")  
API 605 (Sizes > 24")
- ◆ Face-to-Face : ANSI B16.10 / API 6D
- ◆ Testing : API 598 / API 6D / BS 6755 Pt 1

**Typical Construction**



No.	Part Name
1	Body
2	Seat Ring
3	Disc
4	Hinge
5	Disc Washer
6	Disc Nut
7	Hinge Pin
8	Bracket
9	Stud Bolt
10	Hex Nut
11	Washer
13	Capscrew
14	Nameplate
15	Cover
16	Lifting Lug

Note: Weld end valves available upon request

- ◆ Heavy duty BODY with shell thickness to API / BS standards (where applicable)
- ◆ SEAT RING and DISC ground and lapped to a mirror finish to provide matching sealing surfaces
- ◆ Free rotating DISC design to minimize localized wear on sealing surface
- ◆ Y Body Pattern available

- ◆ Standard internal HINGE design eliminates body penetration and allows ease of maintenance since all parts are accessible from the top and the valve can be serviced insitu
- ◆ Through-body HINGE PIN design available for outside lever, counter weight or slam retarder
- ◆ High strength alloy steel STUD BOLTS and heavy series HEX NUTS used

# SWING CHECK VALVES



## STANDARD MATERIALS OF CONSTRUCTION

Part	ANSI B16.34 Material Group				
	Carbon Steel	C-Mn Steel	Alloy Steel		
	1.1	1.2	1.9	1.10	1.13
Body / Cover	A216 Gr. WCB	A352 Gr. LCC	A217 Gr. WC6	A217 Gr. WC9	A217 Gr. C5
Hinge / Bracket	A216 Gr. WCB	A352 Gr. LCC	A217 Gr. WC6	A217 Gr. WC9	A217 Gr. C5
Stud Bolts	A193 Gr. B7	A320 Gr. L7	← Alloy Steel ASTM A193 Gr. B16 →		
Hex Nuts	A194 Gr. 2H	A194 Gr. 7	← Carbon Steel ASTM A194 Gr. 2H →		
Washer / Capscrew	← Carbon Steel →		← Alloy Steel →		
Part	Corrosion Resistant Steel				
	2.1		2.2		3.17
	A351 Gr. CF8	A351 Gr. CF3	A351 Gr. CF8M	A351 Gr. CF3M	A351 Gr. CN7M
Body / Cover	A351 Gr. CF8	A351 Gr. CF3	A351 Gr. CF8M	A351 Gr. CF3M	A351 Gr. CN7M
Hinge / Bracket	A351 Gr. CF8	A351 Gr. CF3	A351 Gr. CF8M	A351 Gr. CF3M	A351 Gr. CN7M
Stud Bolts	← ASTM A193 Gr. B8 →		← ASTM A193 Gr. B8M →		
Hex Nuts	← ASTM A194 Gr. 8 →		← ASTM A194 Gr. 8M →		
Washer / Capscrew	← Corrosion Resistant Steel →				

Note: Other materials available upon request.

### Trim Materials

Part	API Trim No.										
	1	2	5	8	9	10	11	12	13	14	15
Disc	F6	304SS	HF	F6	Ni-Cu	316SS	Ni-Cu	316SS	Alloy 20	Alloy 20	HF
Seat Ring	F6	304SS	HF	HF	Ni-Cu	316SS	HF	HF	Alloy 20	HF	HF
Disc Washer	F6	304SS	F6	F6	Ni-Cu	316SS	Ni-Cu	316SS	Alloy 20	Alloy 20	304SS
Disc Nut	F6	304SS	F6	F6	Ni-Cu	316SS	Ni-Cu	316SS	Alloy 20	Alloy 20	304SS
Hinge Pin	F6	304SS	F6	F6	Ni-Cu	316SS	Ni-Cu	316SS	Alloy 20	Alloy 20	304SS
Part	API Trim No.					DPV Trim No.					
	16	17	18	A	B	C	D	E	F	G	H
Disc	HF	HF	HF	HF	Bronze	F6	304SS	316SS	Ni-Cu	Alloy 20	Bronze
Seat Ring	HF	HF	HF	HF	Bronze	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Disc Washer	316SS	347SS	Alloy 20	Ni-Cu	Bronze	F6	304SS	316SS	Ni-Cu	Alloy 20	Bronze
Disc Nut	316SS	347SS	Alloy 20	Ni-Cu	Bronze	F6	304SS	316SS	Ni-Cu	Alloy 20	Bronze
Hinge Pin	316SS	347SS	Alloy 20	Ni-Cu	Bronze	F6	304SS	316SS	Ni-Cu	Alloy 20	Bronze

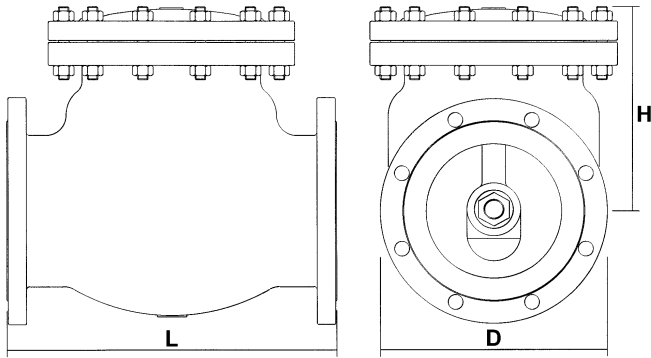
Note: Trim will be supplied either as a base material equal to body with overlay or solid trim at manufacturer's option.

### Gasket Materials

Type	ANSI Class				
	150	300	600	900	1500
S.S. Spiral Wound	●	●	○	○	○
Soft Iron Ring	N/A	N/A	●	●	●

● Standard      ○ Optional      Other types available upon request.

## DIMENSIONS



### ANSI Class 150

Size	Dimensions (mm)			Approx. Wt.	
	L	H	D	( lb. )	( kg. )
2"	203	156	152	42	19
2½"	216	170	178	57	26
3"	241	180	191	62	28
4"	292	213	229	105	48
5"	330	229	254	152	69
6"	356	307	279	172	78
8"	495	357	343	293	133
10"	622	390	406	587	266
12"	699	410	483	765	347
14"	787	415	533	994	451
16"	864	460	597	1,226	556
18"	978	570	635	1,738	788
20"	978	625	699	2,020	916
24"	1,295	675	813	2,811	1,275

### ANSI Class 300

Size	Dimensions (mm)			Approx. Wt.	
	L	H	D	( lb. )	( kg. )
2"	267	198	165	46	21
2½"	292	203	191	66	30
3"	318	222	210	94	43
4"	356	266	254	146	66
5"	400	292	279	185	84
6"	445	326	318	276	125
8"	533	400	381	430	195
10"	622	455	445	666	302
12"	711	543	521	858	389
14"	838	500	584	1,433	650
16"	864	545	648	1,764	800
18"	978	605	711	2,139	970
20"	1,016	675	775	2,977	1,350
24"	1,346	785	914	4,873	2,210

### DPV Figure Numbers

Material	ANSI Class	
	150	300
A216 Gr. WCB	1532F	3032F
A352 Gr. LCC	153CF	303CF
A217 Gr. WC6	1536F	3036F
A217 Gr. WC9	1539F	3039F
A217 Gr. C5	1535F	3035F
A351 Gr. CF8	1534F	3034F
A351 Gr. CF3	1534LF	3034LF
A351 Gr. CF8M	1533F	3033F
A351 Gr. CF3M	1533LF	3033LF
A351 Gr. CN7M	1537F	3037F