

SERIES 410

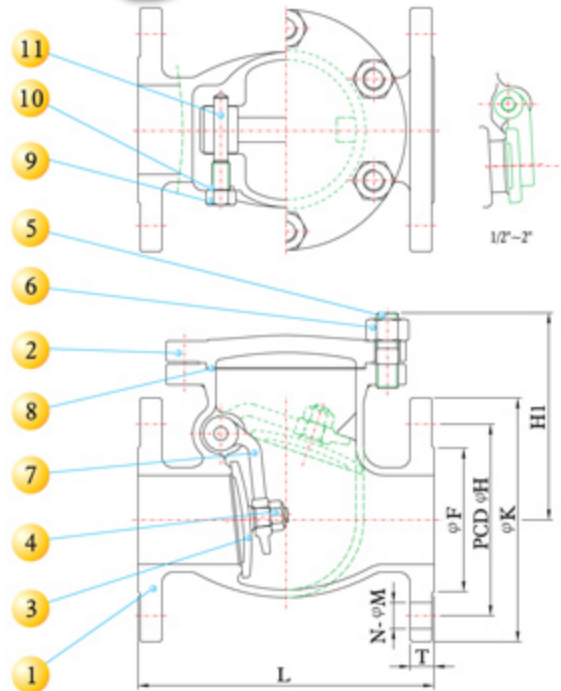
DESIGN FEATURES:

- Swing Type
- Body: ASTM A 351 Gr.CF8M
- Disc: ASTM A 351 Gr.CF8M
- End Type: Flange End
- Face to Face: ANSI B16.10
- Flange Dimensions: ANSI B16.5 150
- Wall Thickness: ANSI B16.34
- TEST STANDARD: API 598
- Pressure/ Temperature ratings in accordance with ASME/ASTM B16.34



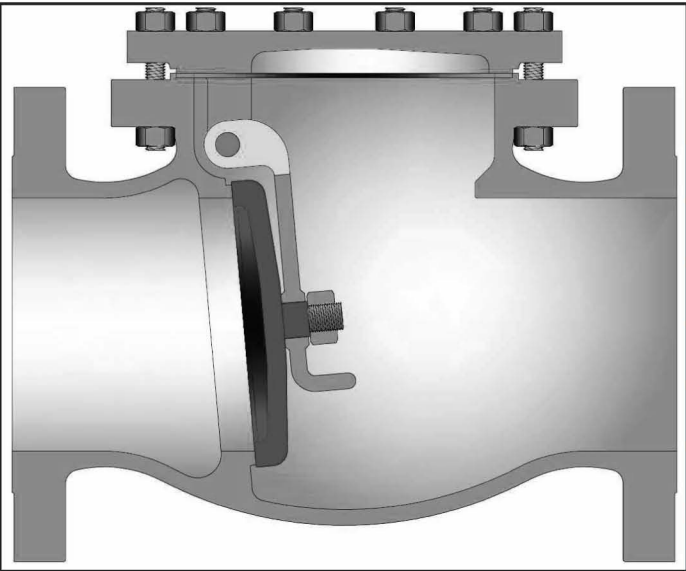
MATERIALS LIST

NO.	PART NAME	MATERIAL	QTY
1	BODY	ASTM A351 Gr.CF8M	1
2	COVER	ASTM A351 Gr.CF8M	1
3	DISC	ASTM A351 Gr.CF8M	1
4	DISC NUT	ASTM A194 Gr.8	1
5	COVER BOLT	ASTM A193 Gr.B8	4 - 12
6	COVER NUT	ASTM A194 Gr.8	4 - 12
7	ARM	ASTM A351 Gr.CF8M	1
8	GASKET	PTFE	1
9	PLUG	SS316	1
10	PLUG GASKET	SS304	1
11	HINGE PIN	SS316	1



DIMENSIONS

SIZE		L		H1		K		H		F		T		M		N	Cv Factor	Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm			Kg	Lb
1/2"	15	4.25	108	2.87	73	3.50	89	2.38	60.5	1.38	35	0.44	11.2	0.62	15.7	4	9.5	2.30	5.07
3/4"	20	4.63	117	2.95	75	3.86	98	2.76	70.0	1.69	43	0.44	11.2	0.62	15.7	4	16	2.80	6.17
1"	25	5.00	127	3.15	80	4.25	108	3.13	79.5	2.01	51	0.44	11.2	0.62	15.7	4	27	4.30	9.47
1 1/2"	40	6.50	165	4.37	111	5.00	127	3.88	98.5	2.87	73	0.56	14.3	0.62	15.7	4	51	6.50	14.32
2"	50	8.00	203	4.84	123	5.98	152	4.74	120.5	3.62	92	0.63	15.9	0.75	19.0	4	70	9.30	20.48
2 1/2"	65	8.50	216	5.28	134	7.01	178	5.49	139.5	4.13	105	0.69	17.5	0.75	19.0	4	120	15.00	33.04
3"	80	9.50	241	5.83	148	7.48	190	6.00	152.5	5.00	127	0.75	19.1	0.75	19.0	4	170	18.00	39.65
4"	100	11.50	292	6.22	158	9.02	229	7.50	190.5	6.18	157	0.94	23.9	0.75	19.0	8	250	26.80	59.03
5"	125	13.00	330	7.56	192	10.00	254	8.50	216.0	7.32	186	0.94	23.9	0.88	22.3	8	470	35.00	77.09
6"	150	14.00	356	8.78	223	10.98	279	9.51	241.5	8.50	216	1.00	25.4	0.88	22.3	8	1100	49.30	108.59
8"	200	19.50	495	11.14	283	13.50	343	11.75	298.5	10.63	270	1.13	28.6	0.88	22.3	8	2000	78.00	171.81
10"	250	24.50	622	12.52	318	15.98	406	14.25	362.0	12.76	324	1.19	30.2	1.00	25.4	12	3300	138.00	303.96
12"	300	27.50	698	14.06	357	19.02	483	17.01	432.0	15.00	381	1.25	31.8	1.00	25.4	12	4900	205.00	451.54



STANDARD MATERIALS (Other materials available)

PART	MATERIALS
Body	A351 Gr. CF8M (2)
Cap	A351 Gr. CF8M
Disc	A276 316
Gasket	PTFE
Carrier	A351 Gr. CF8M
Carrier Pin	A276 316
Disc Nut	SST 316
Disc Carrier Hanger (1)	A351 Gr. CF8M
Disc Carrier Hanger Bolts (1)	A193 Gr. B8
Body / Cap Stud	A193 Gr. B8
Body / Cap Nut	A194 Gr.8

DESIGN FEATURES:

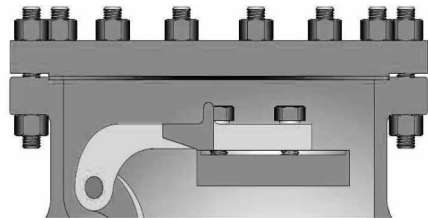
- **Integral Seats**, however, renewable screwed-in seat rings are available on order.
- **Wall** thickness per API 603 requirements.
- **Swivel disc** for improved seat alignment and longer life.
- **Each** valve is shell and seat pressure tested per industry standard API 598.
- **Check** valve are 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 reducing potential leak points.
- **End Flanges** have the following raised faces per ASME B16.5:
 Classes 150-300: 1/16" (2mm).
 Classes 600-1500: 1/4" (7mm).
- **Weld ends** are available per ASME B16.25 or per customer's specification.
- **Thicker** walled API 600 design available.

- (1) 10" Valve size and up have a hanger design as shown below.
- (2) CF3M for weld end bodies.

Design Specifications

Item	Applicable Specification
Wall thickness	API 603 & B16.34
Pressure - temperature ratings	ASME B16.34
General valve design	B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Butt Weld design	ASME B16.25
Materials	ASTM

- **Other** available options as follows:
 -Alternate valve materials such as chrome and stainless steel alloys
 -Alternate trim materials
 -Bypass, drain and other auxiliary connections
 -NACE service
 -Special cleaning for applications such as oxygen or chlorine
 -Other options available as specified



Valve design for valve sizes 10" and above all classes.

SWING CHECK VALVE DIMENSIONS (CLASS 150–600).

SIZE in mm	ASME 150				ASME 300				ASME 600			
	A	B	C	D	A	B	C	D	A	B	C	D
½	4.25	2.2	2.4	0.50	6.00	2.2	2.4	0.50	6.50	2.3	2.4	0.50
13	108	55	61	13	152	55	61	13	165	58	61	13
¾	4.62	3.0	2.8	0.75	7.00	3.0	2.8	0.75	7.50	3.1	2.8	0.75
20	117	76	70	19	178	76	70	19	190	79	70	19
1	5.00	3.4	3.2	1.00	8.50	3.4	3.2	1.00	8.50	3.5	3.2	1.00
25	127	86	81	25	216	86	81	25	216	90	81	25
1½	6.50	4.1	4.2	1.50	9.50	4.1	4.2	1.50	9.50	4.3	4.2	1.50
38	165	103	106	38	241	103	106	38	241	108	106	38
2	8.00	4.6	4.6	2.00	10.50	4.6	4.6	2.00	11.50	5.4	6.5	2.00
50	203	116	117	51	267	116	117	51	292	138	165	51
2½	8.50	5.6	5.9	2.50	11.50	5.6	5.9	2.50	13.00	7.4	7.9	2.50
65	216	142	151	170	292	142	151	170	330	189	200	64
3	9.50	5.8	6.8	3.00	12.50	5.8	6.8	3.00	14.00	8.3	8.5	3.00
80	241	148	171	192	318	148	171	192	356	212	215	76
4	11.50	6.5	7.4	4.00	14.00	6.5	7.4	4.00	17.00	10.3	10.6	4.00
100	292	165	189	213	356	164	189	213	432	262	270	102
6	14.00	8.2	10.0	6.00	17.50	8.6	10.0	6.00	22.00	14.0	13.5	6.00
150	356	208	254	273	444	218	254	299	559	356	342	152
8	19.50	10.1	13.8	8.00	21.00	10.7	13.8	8.00	26.00	18.5	17.1	7.88
200	495	257	349	349	533	273	349	375	660	469	435	200
10	24.50	14.2	17.8	10.00	24.50	15.3	18.5	10.00	31.00	21.2	20.1	9.75
250	622	359	451	451	622	388	470	470	787	539	510	248
12	27.50	15.6	20.5	12.00	28.00	17.9	22.3	12.00	33.00	23.4	22.6	11.75
300	698	397	521	521	711	455	565	305	838	594	575	298
14	31.00	16.3	20.9	13.25	33.00	23.4	21.7	13.25	35.00	25.4	23.5	12.88
350	787	413	532	337	838	595	550	337	889	645	598	327
16	34.00	23.7	25.3	15.25	34.00	24.9	27.4	15.25	39.00	28.6	27.6	14.75
400	864	602	642	387	864	632	695	387	991	727	700	375
18	38.50	27.9	29.6	17.25	38.50	28.5	30.4	17.00	43.00	32.5	29.1	16.50
450	978	709	752	438	978	723	772	432	1092	826	740	419
20	38.50	26.7	27.0	19.25	40.00	24.9	29.1	19.00	47.00	31.6	32.3	18.25
500	978	679	685	489	1016	632	738	483	1194	802	820	464
24	51.00	33.5	36.0	23.25	53.00	34.8	37.6	23.00	55.00	40.2	39.4	22.00
600	1295	852	915	591	1346	884	955	584	1397	1020	1000	559

