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Valves, Automation & Controls

Series 25114 150# FLANGED CAST STEEL CHECK VALVE

Design Features

- Bolted Cover
- Swing Type
- Integral Seat

Applicable Standards

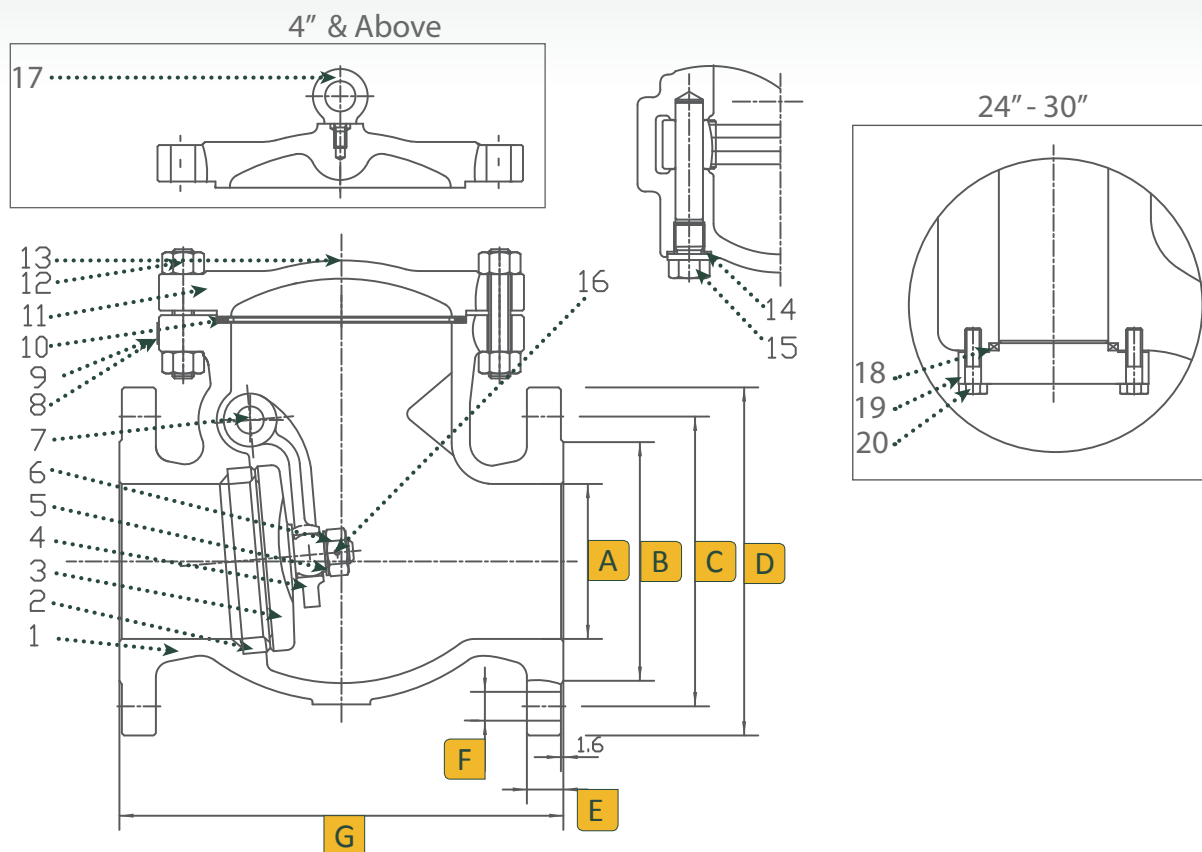
- Steel valves ANSI B16.34
- Face to face ANSI B16.10
- End flanges ANSI B16.5
- Butt-weld ends ANSI B16.25
- Inspection and test API 598
- NACE MR-0175



Series 25114

150# FLANGED CAST STEEL CHECK VALVE

Dimensions, Parts & Materials



Dimensions (Inches)

Size	A	B	C	D	E	F	G	Num of Bolt Holes
2	2.00	3.62	4.75	6.00	0.62	0.75	8.00	4
2-1/2	2.50	4.12	5.50	7.00	0.68	0.75	8.50	4
3	3.00	5.00	6.00	7.50	0.75	0.75	9.50	4
4	4.00	6.19	7.50	9.00	0.94	0.75	11.50	8
6	6.00	8.50	9.50	11.00	1.00	0.875	14.00	8
8	8.00	10.62	11.75	13.50	1.12	0.875	19.50	8
10	10.00	12.75	14.25	16.00	1.18	1.00	24.50	12
12	12.00	15.00	17.00	19.00	1.25	1.00	27.50	12
14	14.00	16.25	18.75	21.00	1.37	1.125	31.00	12
16	16.00	18.50	21.25	23.50	1.44	1.125	34.00	16
18	18.00	21.00	22.75	25.00	1.56	1.25	38.50	16
20	20.00	23.00	25.00	27.50	1.68	1.25	38.50	20
22	21.26	25.25	27.25	29.50	1.80	1.25	42.00	20
24	24.00	27.24	29.50	32.00	1.87	1.375	51.00	20

No.	Part Name	Material
1	Body	Carbon Steel A216 - WCB
2	Seat	A105 & STL 6
3	Disc	A105 & 410 Stainless Steel
4	Hinge	Carbon Steel A216
5	Gasket	A276 410
6	Nut	A276 410
7	Pin	A276 410
8	Rivit	304 Stainless Steel
9	Name Plate	304 Stainless Steel
10	Gasket	F304 & Flexible Graphite
11	Cover	Carbon Steel A216 - WCB
12	Bolt	B7 Steel A193
13	Nut	2H Steel A194
14	Gasket	Soft Iron
15	Plug	410 Stainless Steel
16	Pin	304 Stainless Steel
17	Eyebolt	Carbon Steel
18	Gasket	F304 & Flexible Graphite
19	Bolt	Carbon Steel
20	Gland	Carbon Steel



Valves, Automation & Controls

Series 25114 150# FLANGED CAST STEEL CHECK VALVE

Technical Information

Temperature °F	Working Pressure psi
-20 to 100	285
200	260
300	230
400	200
500	170
600	140
650	125
700	110
750	95
800	80
850	65
900	50
950	35
1000	20

Size (in)	Weight* (Lbs)	Cracking Pressure (PSI)
2	37	0.09
2½	53	0.07
3	62	0.06
4	93	0.06
6	119	0.07
8	150	0.07
10	260	0.08
12	394	0.08
14	666	0.08
16	884	0.09
18	1124	0.09
20	1407	0.07
22	1581	0.07
24	2562	0.06

* For Reference Only

How to Order

Size		Series	Class		Ends		Body Material		Options
2	12	25	1	150	1	Flange	4	Cast Steel	
2-1/2	14				2	Butt-weld*			
3	16								
4	18								
6	20								
8	22								
10	24								

*POA

Example: 8 - 25 - 1 - 1 - 4 = 8-25-1-1-4

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Series 25116 150# FLANGED STAINLESS STEEL CHECK VALVE

Design Features

- Bolted Cover
- Swing Type
- Integral Seat

Applicable Standards

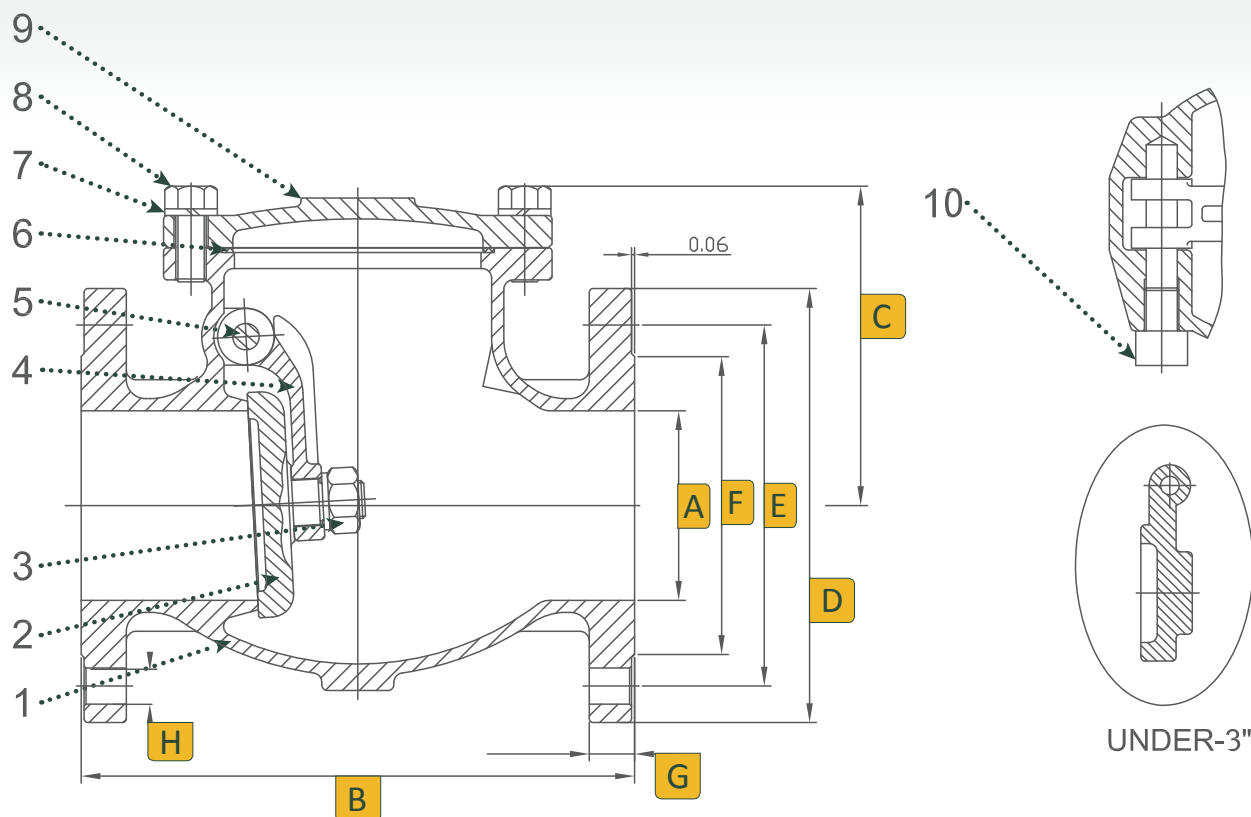
- Steel valves ANSI B16.34
- Face to face ANSI B16.10
- End flanges ANSI B16.5
- Butt-weld ends ANSI B16.25
- Inspection and test API 598



Series 25116

150# FLANGED STAINLESS STEEL CHECK VALVE

½" - 14" Dimensions, Parts & Materials



Dimensions (Inches)

Size	A	B	C	D	E	F	G	H	Num of Bolt Holes
1/2	0.59	4.25	2.00	3.50	2.38	1.38	0.43	0.625	4
3/4	0.79	4.62	2.13	3.88	2.75	1.69	0.43	0.625	4
1	0.98	5.00	2.52	4.25	3.12	2.00	0.43	0.625	4
1-1/2	1.57	6.50	2.95	5.00	3.88	2.88	0.56	0.625	4
2	1.97	7.99	3.82	6.00	4.75	3.62	0.62	0.75	4
2-1/2	2.56	8.50	4.37	7.00	5.50	4.12	0.69	0.75	4
3	3.15	9.49	4.72	7.50	6.00	5.00	0.75	0.75	4
4	3.94	11.50	6.38	9.00	7.50	6.19	0.94	0.75	8
5	4.92	13.00	7.05	10.00	8.50	7.31	0.94	0.88	8
6	5.90	14.02	7.99	11.00	9.50	8.50	1.00	0.88	8
8	7.87	19.49	9.29	13.50	11.75	10.62	1.12	0.88	8
10	9.84	24.49	11.90	16.00	14.25	12.75	1.19	1.00	12
12	11.81	27.48	13.40	19.00	17.00	15.00	1.25	1.00	12
14	13.27	30.98	15.16	21.00	18.75	16.26	1.38	1.125	12

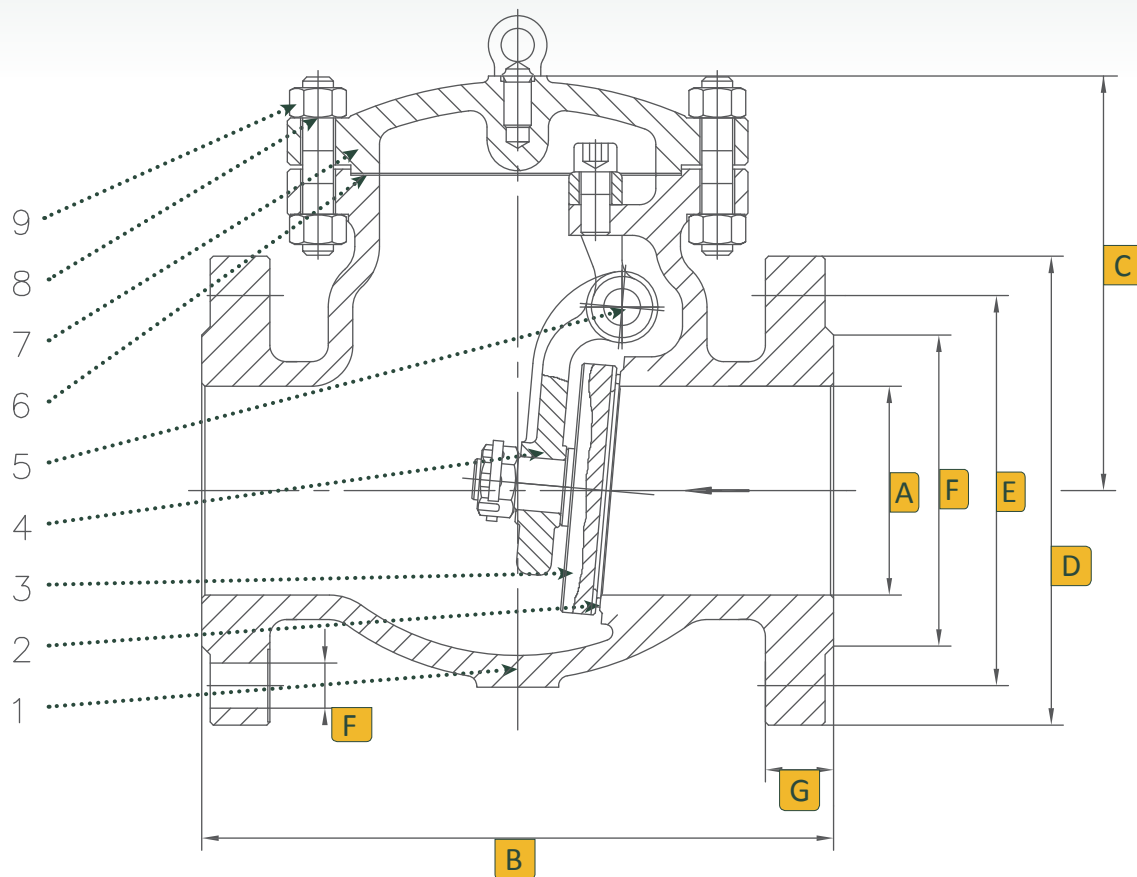
No.	Part Name	Material
1	Body	316 Stainless Steel - CF8M
2	Disc	316 Stainless Steel - CF8M
3	Nut	304 Stainless Steel
4	Arm Hinge	316 Stainless Steel
5	Hinge Pin	316 Stainless Steel
6	Gasket	RTFE (Grafoil + 316 Sheet*)
7	Washer	304 Stainless Steel
8	Bolt	304 Stainless Steel
9	Cover	316 Stainless Steel - CF8M
10	Bolt	304 Stainless Steel

*Optional

Series 25116

150# FLANGED STAINLESS STEEL CHECK VALVE

16" - 24" Dimensions, Parts & Materials



Dimensions (Inches)

Size	A	B	C	D	E	F	G	H	Num of Bolt Holes
16	15.24	34.00	1.44	23.50	21.25	18.25	1.44	1.125	24
18	17.24	38.50	1.56	25.00	22.75	21.00	1.56	1.25	24
20	19.25	38.50	1.69	27.50	25.00	23.00	1.69	1.25	24
24	23.27	51.00	1.88	32.00	29.50	27.25	1.88	1.25	24

No.	Part Name	Material
1	Body	316 Stainless Steel - CF8M
2	Seal Facing	316 Stainless Steel - CF8M
3	Disc	316 Stainless Steel - CF8M
4	Hinge	316 Stainless Steel
5	Hinge Pin	316 Stainless Steel
6	Gasket	RTFE (Grafoil + 316 Sheet*)
7	Cover	316 Stainless Steel - CF8M
8	Cover Bolt	B8 Stainless Steel
9	Cover Nut	Grade 8 Nut

*Optional



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Series 25116

150# FLANGED STAINLESS STEEL CHECK VALVE

Technical Information

Temperature °F	Working Pressure psi
-20 to 100	275
200	235
300	215
400	195
500	170
600	140
650	125
700	110
750	95
800	80
850	65
900	50
950	35
1000	20

*Standard PTFE seals limited to 450°F,
over 450°F use graphite.

Size (in)	Weight* (Lbs)	Cracking Pressure* (PSI)
1/2	4	0.02
3/4	4	0.02
1	6	0.02
1 1/2	10	0.02
2	17	0.02
2 1/2	26	0.03
3	32	0.02
4	62	0.03
5	83	0.03
6	104	0.03
8	168	0.03
10	296	0.04
12	431	0.06
14	859	0.06
16	1257	0.04
18	1466	0.05
20	1984	0.05
24	2996	0.06

* For Reference Only

How to Order

Size		Series	Class		Ends		Body Material		Options	
1/2	6	25	1	150	1	Flange	6	316 Stainless Steel	G	Graphite Bonnet Seal*
3/4	8				2	Butt-weld*				
1	10									
1-1/2	12									
2	14*									
2-1/2	16*									
3	18*									
4	20*									
5	24*									

*POA

Example: 3 - 25 - 1 - 1 - 6 = 3-25-1-1-6

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Series 25314 300# FLANGED CAST STEEL CHECK VALVE

Design Features

- Bolted Cover
- Swing Type
- Integral Seat

Applicable Standards

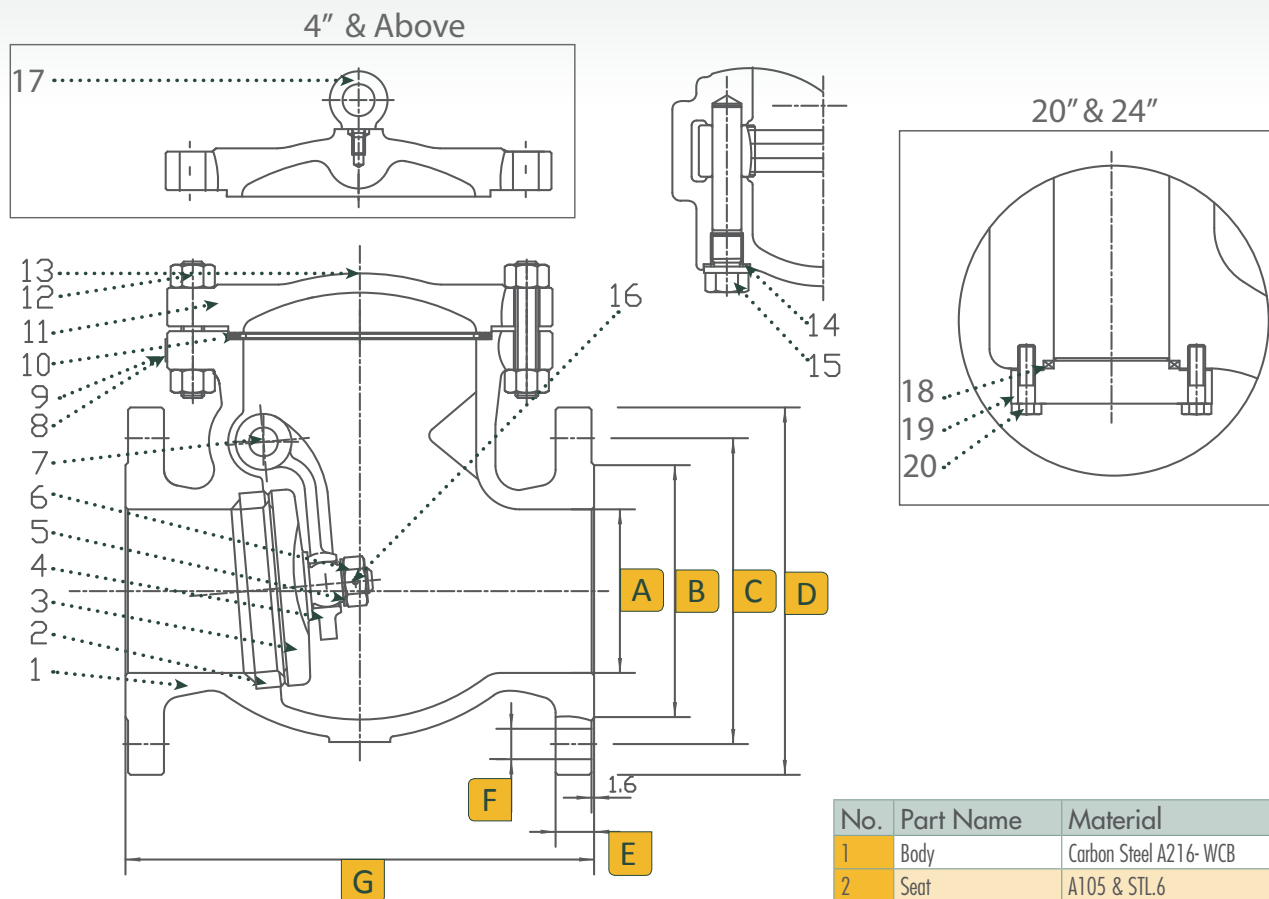
- | | |
|-----------------------|-------------|
| • Steel valves | ANSI B16.34 |
| • Face to face | ANSI B16.10 |
| • End flanges | ANSI B16.5 |
| • Butt-weld ends | ANSI B16.25 |
| • Inspection and test | API 598 |
| • NACE | MR-0175 |



Series 25314

300# FLANGED CAST STEEL CHECK VALVE

Dimensions, Parts & Materials



Dimensions (Inches)

Size	A	B	C	D	E	F	G	Num of Bolt Holes
2	2.01	3.62	5.00	6.50	0.87	0.75	10.51	8
2-1/2	2.52	4.12	5.88	7.50	1.00	0.875	11.50	8
3	2.99	5.00	6.62	8.25	1.12	0.875	12.52	8
4	4.02	6.19	7.88	10.00	1.25	0.875	14.02	8
6	5.98	8.50	10.62	12.50	1.44	0.875	17.48	12
8	7.99	10.62	13.00	15.00	1.62	1.00	20.98	12
10	10.00	12.75	15.25	17.50	1.88	1.125	24.49	16
12	12.01	15.00	17.75	20.50	2.00	1.25	28.00	16
14	13.27	16.25	20.25	23.00	2.12	1.25	33.00	20
16	15.24	18.50	22.50	25.50	2.25	1.375	34.00	20
18	17.24	21.00	24.75	28.00	2.38	1.375	38.50	24
20	19.25	23.00	27.00	30.50	2.50	1.375	40.00	24
24	23.27	27.25	32.00	36.00	2.75	1.625	53.00	24

No.	Part Name	Material
1	Body	Carbon Steel A216- WCB
2	Seat	A105 & STL6
3	Disc	A105 & 410 Stainless Steel
4	Hinge	Carbon Steel A216
5	Gasket	A276 410
6	Nut	A276 410
7	Pin	A276 410
8	Rivet	304 Stainless Steel
9	Name Plate	304 Stainless Steel
10	Gasket	F304 & Flexible Graphite
11	Cover	Carbon Steel A216 - WCB
12	Bolt	B7 Steel A193
13	Nut	2H Steel A194
14	Gasket	Soft Iron
15	Plug	410 Stainless Steel
16	Pin	304 Stainless Steel
17	Eyebolt	Carbon Steel
18	Gasket	F304 & Flexible Graphite
19	Bolt	Carbon Steel
20	Gland	Carbon Steel



Valves, Automation & Controls

Series 25314

300# FLANGED CAST STEEL CHECK VALVE

Technical Information

Temperature °F	Working Pressure psi	Size (in)	Weight* (Lbs)	Cracking Pressure* (PSI)
-20 to 100	740	2	49	0.09
200	680	2½	66	0.07
300	655	3	90	0.06
400	635	4	132	0.06
500	605	6	185	0.06
600	570	8	238	0.06
650	550	10	406	0.08
700	530	12	657	0.08
750	505	14	937	0.08
800	410	16	1499	0.09
850	320	18	1852	0.08
900	230	20	2359	0.09
950	135	22	2601	0.10
1000	65	24	3497	0.11

* For Reference Only

How to Order

Size		Series	Class	Ends		Body Material	Options
2	12	25	3	1	Flange	4	Cast Steel
2-1/2	14*			2	Butt-weld*		
3	16*						
4	18*						
6	20*						
8	22*						
10	24*						

*POA

Example: 8 - 25 - 3 - 1 - 4 = 8-25-3-1-4

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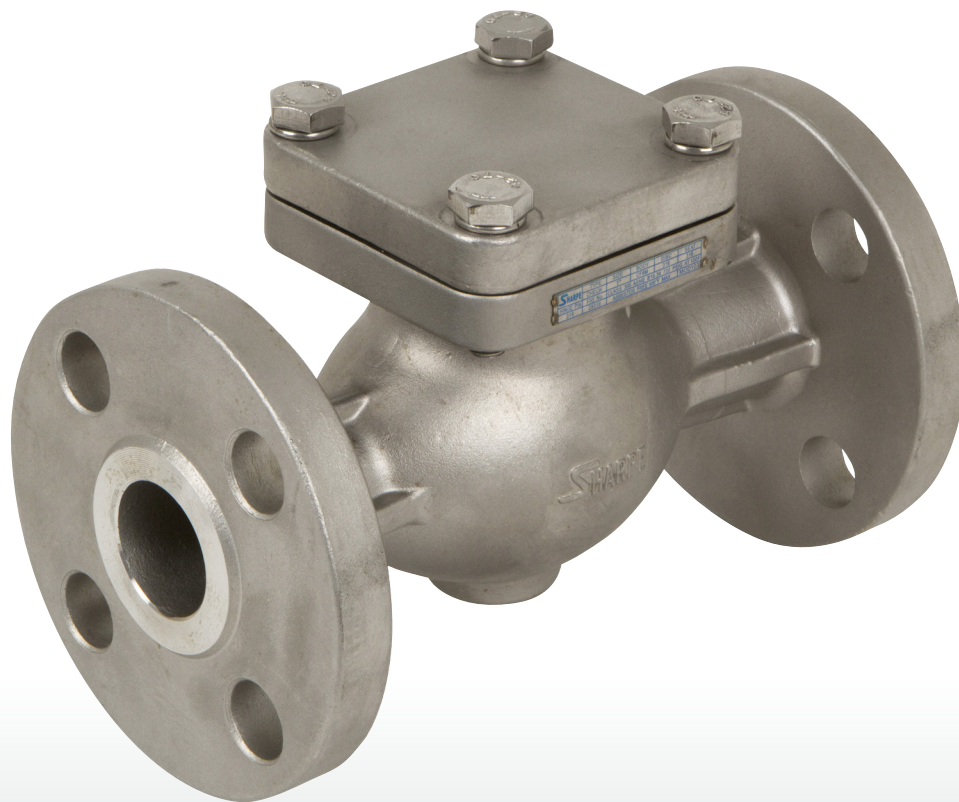
Series 25316 300# FLANGED STAINLESS STEEL CHECK VALVE

Design Features

- Bolted Cover
- Swing Type
- Integral Seat

Applicable Standards

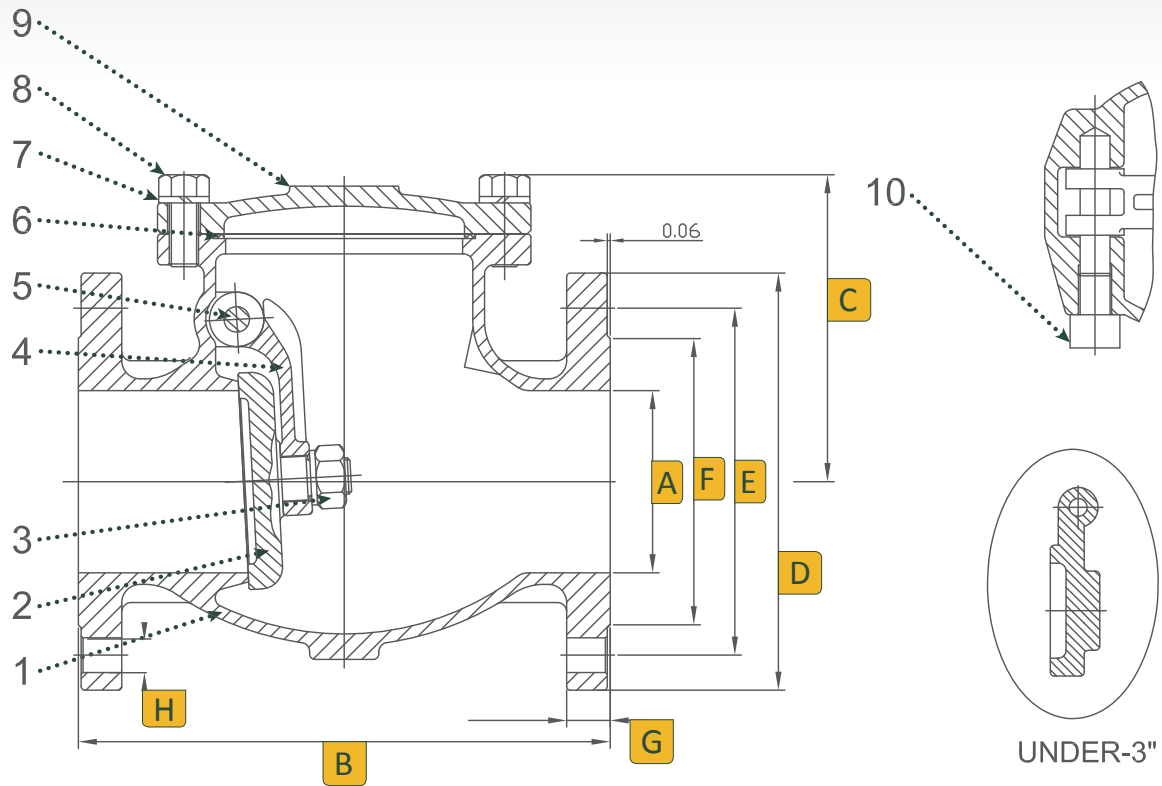
- Steel valves ANSI B16.34
- Face to face ANSI B16.10
- End flanges ANSI B16.5
- Butt-weld ends ANSI B16.25
- Inspection and test API 598



Series 25316

300# FLANGED STAINLESS STEEL CHECK VALVE

**½" - 8" Dimensions,
Parts & Materials**



Dimensions (Inches)

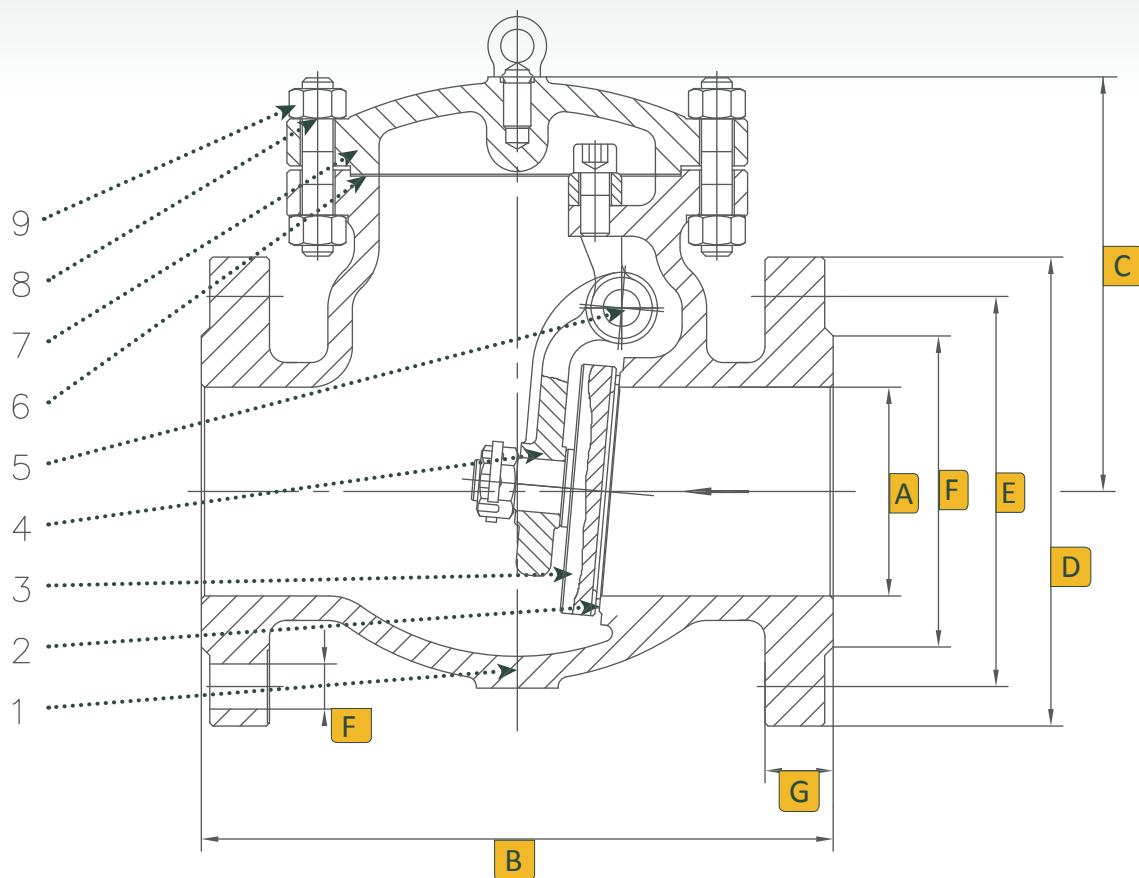
Size	A	B	C	D	E	F	G	H	Num of Bolt Holes
1/2	0.59	5.98	2.40	3.75	2.62	1.38	0.56	0.625	4
3/4	0.79	7.01	2.41	4.62	3.25	1.69	0.62	0.75	4
1	0.98	7.99	3.11	4.88	3.50	2.00	0.69	0.75	4
1-1/2	1.57	9.49	3.66	6.12	4.50	2.88	0.81	0.875	4
2	1.97	10.51	5.00	6.50	5.00	3.62	0.88	0.75	8
2-1/2	2.56	11.50	5.67	7.50	5.88	4.12	1.00	0.875	8
3	3.15	12.52	6.06	8.25	6.62	5.00	1.12	0.875	8
4	3.94	14.02	7.71	10.00	7.88	6.19	1.25	0.875	8
6	5.90	17.48	9.06	12.50	10.62	8.50	1.44	0.875	12
8	7.87	20.98	10.43	15.00	13.00	10.62	1.62	1.00	12

No.	Part Name	Material
1	Body	316 Stainless Steel - CF8M
2	Disc	316 Stainless Steel - CF8M
3	Nut	304 Stainless Steel
4	Arm Hinge	316 Stainless Steel
5	Hinge Pin	316 Stainless Steel
6	Gasket	Grafoil + 304 Sheet
7	Washer	304 Stainless Steel
8	Bolt	304 Stainless Steel
9	Cover	316 Stainless Steel - CF8M
10	Bolt	304 Stainless Steel

Series 25316

300# FLANGED STAINLESS STEEL CHECK VALVE

10" - 24" Dimensions, Parts & Materials



Dimensions (Inches)

Size	A	B	C	D	E	F	G	H	Num of Bolt Holes
10	9.84	24.50	1.88	17.50	12.76	15.25	1.88	1.125	16
12	11.81	28.00	2.00	20.50	15.00	17.75	2.00	1.25	16
14	13.27	33.00	2.12	23.00	16.26	20.25	2.12	1.25	20
16	15.24	34.00	2.25	25.50	18.50	22.50	2.25	1.375	20
18	17.24	38.50	2.38	28.00	20.98	24.75	2.38	1.375	24
20	19.25	40.00	2.50	30.50	22.99	27.00	2.50	1.375	24
24	23.27	53.00	2.75	26.00	27.28	32.00	2.75	1.625	24

No.	Part Name	Material
1	Body	316 Stainless Steel - CF8M
2	Seal Facing	316 Stainless Steel
3	Disc	316 Stainless Steel - CF8M
4	Hinge	316 Stainless Steel
5	Hinge Pin	316 Stainless Steel
6	Gasket	Grafoil + 304 Sheet
7	Cover	316 Stainless Steel - CF8M
8	Cover Bolt	B8 Stainless Steel
9	Cover Nut	Grade 8 Nut



Valves, Automation & Controls

Series 25316

300# FLANGED STAINLESS STEEL CHECK VALVE

Technical Information

Temperature °F	Working Pressure psi
-20 to 100	720
200	620
300	560
400	515
500	480
600	450
650	440
700	435
750	425
800	420
850	420
900	415
950	385
1000	365

*Standard PTFE seals limited to 450°F,
over 450°F use graphite.

Size (in)	Weight* (Lbs)	Cracking Pressure* (PSI)
1/2	6	0.06
3/4	8	0.04
1	12	0.03
1 1/2	21	0.04
2	32	0.03
2 1/2	45	0.03
3	56	0.03
4	101	0.04
6	178	0.03
8	221	0.03
10	847	0.05
12	990	0.06
14	1499	0.06
16	1852	0.06
18	2260	0.07
20	2901	0.09
24	4321	0.09

* For Reference Only

How to Order

Size	Series	Class	Ends	Body Material	Options
1/2	8*	25	3	300	1 Flange
3/4	10*		2	Butt-weld*	6 316 Stainless Steel
1	12*				G Graphite Bonnet Seal*
1-1/2	14*				
2	16*				
2-1/2	18*				
3	20*				
4	24*				
6					

*POA

Example: 3 - 25 - 3 - 1 - 6 = 3-25-3-1-6

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Series 25614 600# FLANGED CAST STEEL CHECK VALVE

Design Features

- Bolted Cover
- Swing Type
- Integral Seat

Applicable Standards

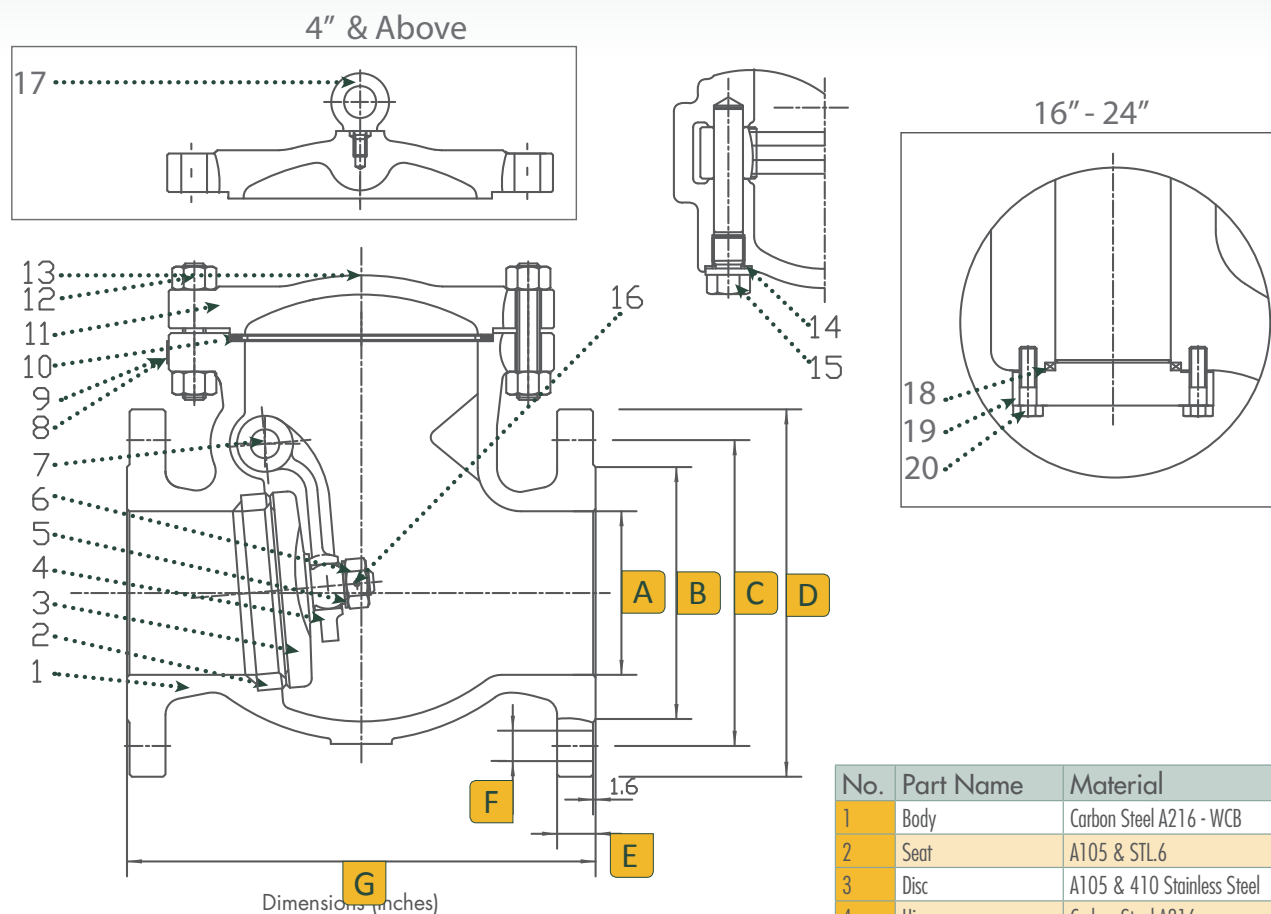
- Steel valves ANSI B16.34
- Face to face ANSI B16.10
- End flanges ANSI B16.5
- Butt-weld ends ANSI B16.25
- Inspection and test API 598
- NACE MR-0175



Series 25614

600# FLANGED CAST STEEL CHECK VALVE

Dimensions, Parts & Materials



Size	A	B	C	D	E	F	G	Num of Bolt Holes
2	2.00	3.62	5.00	6.50	1.00	0.75	11.50	8
2-1/2	2.50	4.12	5.88	7.50	1.12	0.875	13.00	8
3	3.00	5.00	6.62	8.25	1.25	0.875	14.00	8
4	4.00	6.19	8.50	10.75	1.50	1.00	17.00	8
6	6.00	8.50	11.50	14.00	1.88	1.125	22.00	12
8	8.00	10.62	13.75	16.50	2.19	1.25	26.00	12
10	9.76	12.75	17.00	20.00	2.50	1.375	31.00	16
12	11.73	15.00	19.25	22.00	2.62	1.375	33.00	20
14	13.35	16.25	20.75	23.75	2.75	1.50	35.00	20
16	14.76	18.50	23.75	27.00	3.00	1.625	39.00	20
18	16.50	21.00	25.75	29.25	3.25	1.75	43.00	20
20	18.27	23.00	28.50	32.00	3.50	1.75	47.00	24
24	22.00	27.25	33.00	37.00	4.00	2.00	55.00	24

No.	Part Name	Material
1	Body	Carbon Steel A216 - WCB
2	Seat	A105 & STL.6
3	Disc	A105 & 410 Stainless Steel
4	Hinge	Carbon Steel A216
5	Gasket	A276 410
6	Nut	A276 410
7	Pin	A276 410
8	Rivet	304 Stainless Steel
9	Name Plate	304 Stainless Steel
10	Gasket	F304 & Flexible Graphite
11	Cover	Carbon Steel A216 - WCB
12	Bolt	B7 Steel A193
13	Nut	2H Steel A194
14	Gasket	Soft Iron
15	Plug	410 Stainless Steel
16	Pin	304 Stainless Steel
17	Eyebolt	Carbon Steel
18	Gasket	F304 & Flexible Graphite
19	Bolt	Carbon Steel
20	Gland	Carbon Steel



Valves, Automation & Controls

Series 25614

600# FLANGED CAST STEEL CHECK VALVE

Technical Information

Temperature °F	Working Pressure psi	Size (in)	Weight* (Lbs)	Cracking Pressure* (PSI)
-20 to 100	1480	2	79	0.09
200	1360	2½	108	0.07
300	1310	3	99	0.06
400	1265	4	185	0.06
500	1205	6	362	0.06
600	1135	8	441	0.08
650	1100	10	794	0.09
700	1060	12	1299	0.10
750	1015	14	1713	0.10
800	825	16	2238	0.10
850	640	18	2976	0.11
900	460	20	3858	0.11
950	275	22	4674	0.12
1000	170	24	5556	0.12

* For Reference Only

How to Order

Size		Series	Class		Ends		Body Material		Options	
2	12*	25	6	600	1	Flange	4	Cast Steel		
2-1/2	14*				2	Butt-weld*				
3	16*									
4	18*									
6	20*									
8*	22*									
10*	24*									

*POA

Example: 3 - 25 - 6 - 1 - 4 = 3-25-6-1-4