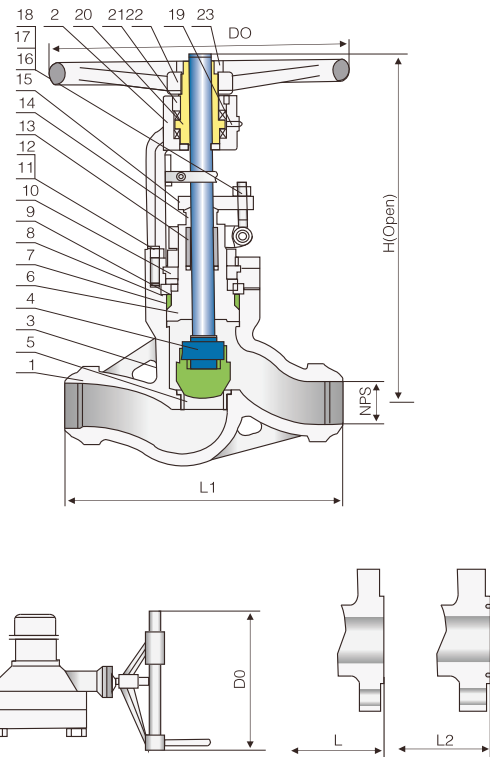


### Applicable Standards:

- STEEL GLOBE VALVES, BS EN 13709/API 600
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES ASME B16.5
- BUTTWELDING ENDS, ASME B16.25
- INSPECTION AND TEST ,API 598

### Design descriptions:

- PSB, PRESSURE SEAL BONNET
- OS&Y, OUTSIDE SCREW AND YOKE
- BB, BOLTED BONNET
- RENEWABLE SEAT RINGS
- RISING STEM AND HANDWHEEL
- FLANGED OR BUTTWELDING ENDS
- AVAILABLE WITH BG OPERATOR



### Materials of parts

No	Part Name	Carbon Steel	ASTM Materials 1 <sup>1</sup> / <sub>4</sub> Cr-1 <sup>1</sup> / <sub>2</sub> Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Yoke	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A216-WCB+HF	A217-WC6+HF	A351-CF8M+HF
4	Stem	A182-F6a	CR-MO-V	A182-316
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Bonnet	A105	A182-F11	A240-316
7	Bonnet Gasket <sup>1)</sup>	Steel Ring	304SS Ring	316SS Ring
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Yoke Cap	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B16	A193-B8M
12	Bonnet Stud Nut	A194-2H	A194-7	A194-8M
13	Packing		Graphite	
14	Gland	A276-420	A276-304	A276-316L
15	Gland Flange	A216-WCB	A217-WC6	A351-CF8M
16	Eyebolt Pin	Carbon Steel	A276-420	A276-316
17	Eyebolt	Carbon Steel	A193-B7	A193-B8
18	Eyebolt Nut	Carbon Steel	A194-2H	A194-8
19	Grease Fitting		Brass+Steel	
20	Yokesleeve		Aluminum-Bronze <sup>2)</sup>	
21	Yokesleeve Jam Nut	Carbon Steel		Stainless Steel
22	Handwheel		Malleable Iron	
23	Handwheel Nut		Carbon Steel	

Note: 1) Graphite optional  
2) Ductile Ni-resist optional  
3) Wedge and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

FIG.VK645/6 Dimensional datas of ANSI Globe Valve

Class 1500/2500LB

NPS DN	2	2 1/2	3	4	6	8	2	2 1/2	3	4	6	in	
	50	65	80	100	150	200	50	65	80	100	150	mm	
	<b>ANSI Class 1500Lb</b>						<b>ANSI Class 2500Lb</b>						
L1 (BW)	8.50	10.00	12.00	16.00	22.00	28.00	11.00	13.00	14.50	18.00	24.00	in	
	216	254	305	406	559	711	279	330	368	457	610	mm	
L (RF)	14.50	16.50	18.50	21.50	27.75	32.75	17.75	20.00	22.75	26.50	36.00	in	
	368	419	470	546	705	832	451	508	578	673	914	mm	
L2 (RTJ)	14.62	16.62	18.62	21.62	28.00	33.12	17.88	20.50	23.00	26.88	36.50	in	
	371	422	473	549	711	842	454	514	584	683	927	mm	
H (open)	22	22	24.38	30	44.62	54.75	23.38	23.38	28	32.25	49.62	in	
	557	557	620	760	1135	1390	595	595	710	820	1260	mm	
DO	16	18	20	24	28	36	16	20	24	28	36	in	
	400	450	500	600	700	900	400	500	600	700	900	mm	
WT(kg)	57	65	90	190	450	730	65	78	125	155	480	BW	
	86	112	162	240	580	950	115	136	205	275	860	RF/RTJ	

### Design

WEKE cast steel check valves are designed and manufactured to provide maximum service life and dependability. All check valves meet the design requirements of American Petroleum Institute standard API600 & 6D, BS EN 13709 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/cover materials and trims.

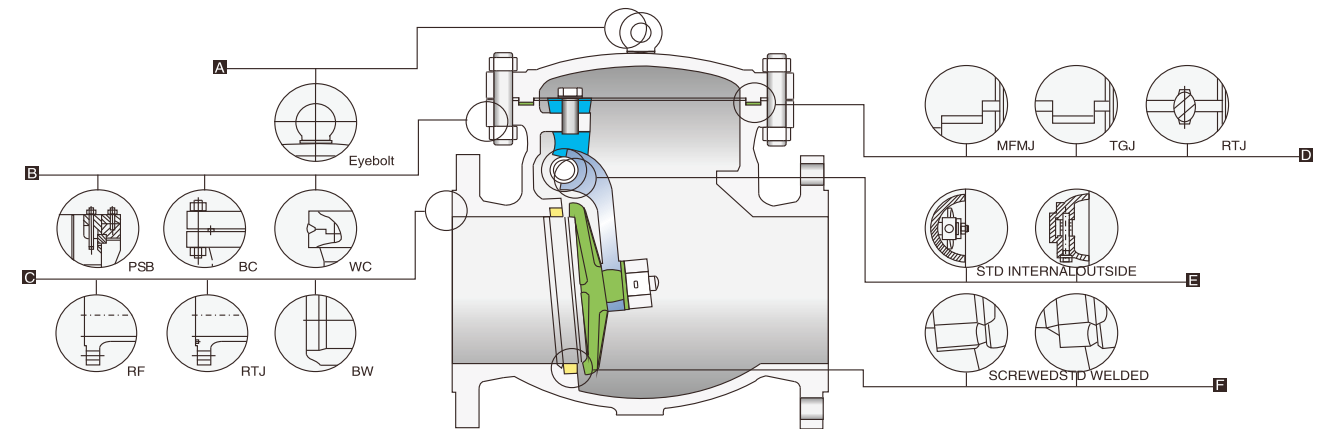
### Ranges of Materials

Standard body/cover materials include nine grades of carbon, low alloy and stainless steels, for special applications they can be supplied in other grades of alloy and stainless steel, there's a full range of trim materials to match any service optional packing and gasket materials are available for a full range of service conditions.

### Available Modifications For WEKE Cast Steel Valves

Trim changes  
End connection modifications  
Packing and gasket changes  
Operator mounting  
Handwheel extensions

Pressure equalizing  
Customer specified coatings  
Weld end bore changes  
Oxygen & chlorine cleaning & packaging



#### A) Eyebolt

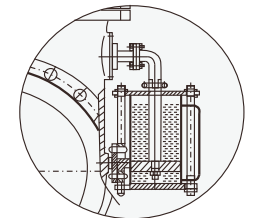
For 150Lb-8", 300Lb-8", 600Lb-6", 900Lb/1500Lb/2500Lb-4" & over.

#### B) BC

Bolted cover, welded cover and pressure seal bonnet in services requiring frequent cycling or with high pressure/temperature variations.

#### C) End Connections

A choice of flanged, RTJ flanged or buttwelding end for piping flexibility.



#### D) Body-to-Cover Joint

A male and female joint or tongue and groove joint is used 150Lb to 600Lb valves. Ring joint is used in the body to cover connection in 900Lb & higher rated valves.

#### E) Outside Lever And Weight

All external hinge pin swing check valves 12" and smaller are available with an optional outside lever and weight, internal hinge available with all swing check valves.

#### F) Seat Rings

Separate heavy duty, full ported rings for easy maintenance. Screwed or welded connection into body.

#### HCU weighted mechanical accumulator

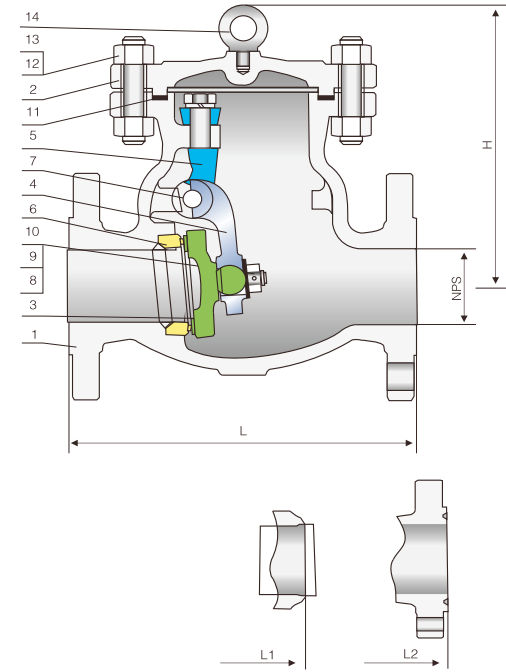
This design can be used to either dampen or assist closing of the check valve disc depending on orientation, by using the hydraulic control unit to buffer action the disc, the valve opens at lower flow rates.

**Applicable Standards:**

- STEEL CHECK VALVES, API 6D
- STEEL CHECK VALVES, ISO14313
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS, ASME B16.25
- INSPECTION AND TEST, API 598/API 6D

**Design descriptions:**

- BC, BOLTED COVER
- SWING TYPE, ANTI-ROTATION DISC
- RENEWABLE SEAT RINGS
- NON-PENETRATE DISC SHAFT
- HORIZONTAL OR VERTICAL SERVICE
- FLANGED OR BUTTWELDING ENDS



**Materials of parts**

No	Part Name	Carbon Steel	ASTM Materials 1 1/4Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Cover	A216-WCB	A217-WC6	A352-LCB
3	Disc <sup>1)</sup>	A105-CR13	A182-F11+HF	A350-LF2+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Fork Part	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
7	Hinge Pin	A276-420	A276-304	A276-420
8	Disc Washer	Carbon Steel	A276-304	Carbon Steel
9	Disc Nut	Carbon Steel	A194-7	Carbon Steel
10	Disc Nut Pin	Carbon Steel	A276-420	Carbon Steel
11	Gasket	Spiral Wound(Graphite+304)		
12	Stud	A193-B7	A193-B16	A320-L7
13	Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt <sup>2)</sup>	Carbon Steel		

Note: 1)Cast steel disc for NPS 4" and above.  
2)NPS 6" & larger.  
3)Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

**FIG.VK421 Dimensional datas of ANSI Swing Check Valve**

**Class 150LB**

NPS DN	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	900	mm
L/L1 (RF/BW)	8.00	8.50	9.50	11.50	14.00	19.50	24.50	27.50	31.00	34.00	38.50	38.50	51.00	51.00	57.00	60.00	77.00	in
	203	216	241	292	356	495	622	699	787	864	978	978	1295	1295	1448	1524	1956	mm
L2 (RTJ)	8.50	9.00	10.00	12.00	14.50	20.00	25.00	28.00	31.50	34.50	39.00	39.00	51.50	-	-	-	-	in
	216	229	254	305	368	508	635	711	800	876	991	991	1308	-	-	-	-	mm
H	6.00	6.50	6.88	8.00	11.50	13.88	15.38	17.00	18.75	20.62	22.88	24.62	34.75	37.00	37.00	38.62	48.00	in
	152	165	175	204	293	353	390	432	475	525	582	627	883	940	940	980	1220	mm
wt(kg)	14	20	25	40	71	118	177	263	353	542	632	855	970	1600	1600	1990	2760	RF/RTJ
	10	12	17	29	57	96	143	227	295	468	552	755	831	1420	1420	1760	2230	BW

**FIG.VK422 Dimensional datas of ANSI Swing Check Valve**

**Class 300LB**

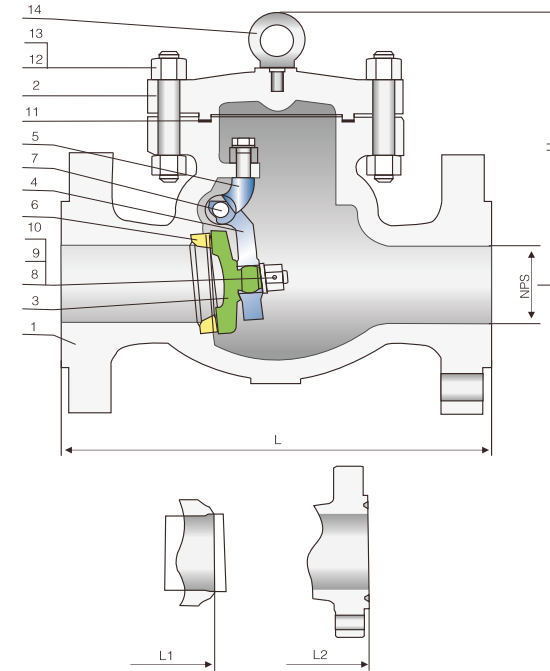
NPS DN	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	900	mm
L/L1 (RF/BW)	10.50	11.50	12.50	14.00	17.50	21.00	24.50	28.00	33.00	34.00	38.50	40.00	53.00	53.00	59.00	62.75	82.00	in
	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1346	1499	1594	2083	mm
L2 (RTJ)	11.12	12.12	13.12	14.62	18.12	21.62	25.12	28.62	33.62	34.62	39.12	40.75	53.88	54.00	60.00	63.75	-	in
	283	308	333	371	460	549	638	727	854	879	994	1035	1368	1372	1524	1619	-	mm
H	6.00	6.50	6.88	8.00	11.50	13.88	15.38	17.00	18.75	20.62	22.88	24.62	34.75	35.88	37.00	38.62	48.00	in
	152	165	175	204	292	353	390	432	475	525	582	627	883	910	940	980	1220	mm
wt(kg)	16	23	29	46	82	136	204	302	405	625	730	985	1115	1465	1840	2290	3180	RF/RTJ
	11	13	18	31	61	103	155	245	315	503	593	812	895	1205	1525	1895	2395	BW

**Applicable Standards:**

- STEEL CHECK VALVES, API 6D
- STEEL CHECK VALVES, ISO14313
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS, ASME B16.25
- INSPECTION AND TEST, API 598/API 6D

**Design descriptions:**

- BC, BOLTED COVER
- SWING TYPE, ANTI-ROTATION DISC
- RENEWABLE SEAT RINGS
- NON-PENETRATE DISC SHAFT
- HORIZONTAL OR VERTICAL SERVICE
- FLANGED OR BUTTWELDING ENDS



**Materials of parts**

No	Part Name	Carbon Steel	ASTM Materials 1 1/4Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Cover	A216-WCB	A217-WC6	A352-LCB
3	Disc <sup>1)</sup>	A105-CR13	A182-F11+HF	A350-LF2+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Fork Part	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
7	Hinge Pin	A276-420	A276-304	A276-420
8	Disc Washer	Carbon Steel	A276-304	Carbon Steel
9	Disc Nut	Carbon Steel	A194-7	Carbon Steel
10	Disc Nut Pin	Carbon Steel	A276-420	Carbon Steel
11	Gasket	Spiral Wound(Graphite+304)		
12	Stud	A193-B7	A193-B16	A320-L7
13	Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt <sup>2)</sup>	Carbon Steel		

Note: 1)Cast steel disc for NPS 4" and above.  
2)NPS 6" & larger.  
3)Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

**FIG.VK423 Dimensional datas of ANSI Swing Check Valve**

**Class 600LB**

NPS DN	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
L/L1 (RF/BW)	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00	in
	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	mm
L2 (RTJ)	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38	in
	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	mm
H	7.50	8.00	8.75	10.00	14.50	17.50	19.25	21.38	23.38	25.75	28.75	31.00	43.50	in
	190	205	222	255	368	445	490	540	595	655	730	785	1105	mm
wt(kg)	24	35	44	70	125	207	310	460	615	945	1105	1495	1695	RF/RTJ
	16	19	26	44	87	147	220	350	452	720	845	1160	1280	BW

**FIG.VK424 Dimensional datas of ANSI Swing Check Valve**

**Class 900LB**

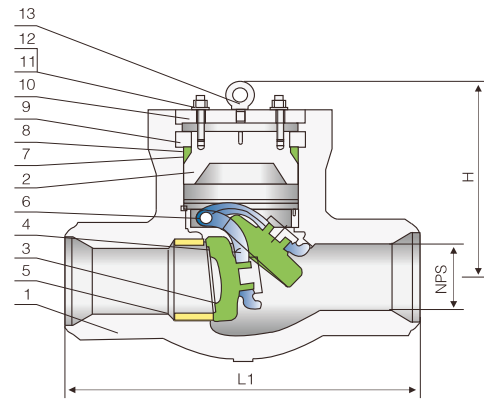
NPS DN	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
L/L1 (RF/BW)	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	-	in
	368	419	381	457	610	737	838	965	1029	1130	1219	1321	-	mm
L2 (RTJ)	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.50	52.50	-	in
	371	422	384	460	613	740	841	968	1038	1140	1232	1334	-	mm
H	9.50	10.00	11.00	12.50	18.12	22.00	24.00	26.50	29.38	32.00	33.50	38.75	-	in
	240	256	278	320	460	560	610	675	745	815	850	985	-	mm
wt(kg)	37	54	68	109	195	321	481	711	956	1468	1870	2316	-	RF/RTJ
	21	25	34	58	115	194	290	461	597	950	1210	1533	-	BW

**Applicable Standards:**

- STEEL CHECK VALVES, API 594/API 6D
- STEEL CHECK VALVES, ISO 14313
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES, ASME B16.5
- INSPECTION AND TEST, API 598/API 6D

**Design descriptions:**

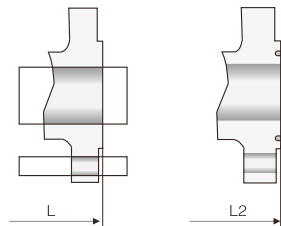
- PSB, PRESSURE SEAL BONNET
- FLEXIBLE DISC, FULLY GUIDED
- RENEWABLE SEAT RINGS
- FLANGED OR BUTTWELDING ENDS



**Materials of parts**

No	Part Name	Carbon Steel	ASTM Materials 1 <sup>1</sup> / <sub>4</sub> Cr-1 <sup>1</sup> / <sub>2</sub> Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Pres. Seal Bonnet	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A105+HF	A182-F11+HF	A351-CF8M+HF
4	Hinge	A216-WCB	A217-WC6	A351-CF8M
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Hinge Pin	A276-420	A276-304	A276-316
7	Bonnet Gasket <sup>1)</sup>	Steel Ring	304SS Ring	316SS RING
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Cover	Carbon Steel	Alloy Steel	Stainless Steel
11	Stud	A193-B7	A193-B7	A193-B8M
12	Stud Nut	A194-2H	A194-2H	A194-8M
13	Eyebolt	Carbon Steel		

Note: 1) graphite optional  
2) disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



**FIG.VK434 Dimensional datas of Pressure Seal Check Valve Class 900LB**

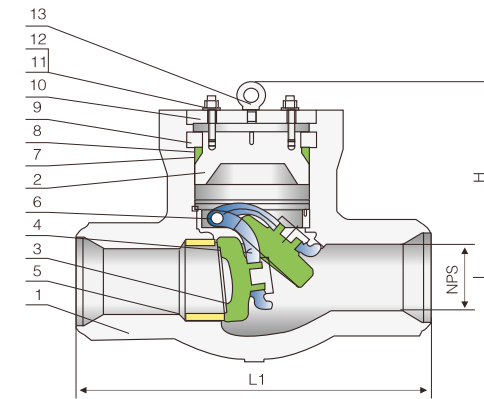
NPS DN	2	2½	3	4	6	8	10	12	14	16	in mm
	50	65	80	100	150	200	250	300	350	400	
<b>ANSI Class900Lb</b>											
L1 (BW)	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	39.00	43.00	in
	216	254	305	356	508	660	787	914	991	1092	mm
L (RF)	14.50	16.60	15.00	18.00	24.00	29.00	33.00	38.00	40.5	44.5	in
	368	419	381	457	610	737	838	965	1029	1130	mm
L2 (RTJ)	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	in
	371	422	384	460	613	740	841	968	1038	1140	mm
H	9.50	9.50	10.00	13.38	15.75	18.12	21.62	24.00	27.00	29.50	in
	240	240	255	340	400	460	550	610	685	750	mm
wt(kg)	22	34	38	71	176	485	761	1125	1345	1490	BW
	44	55	61	116	255	630	940	1433	1710	1820	RF/RTJ

**Applicable Standards:**

- STEEL CHECK VALVES, BS EN 13709/API 600
- STEEL VALVES, ASME B16.34
- FACE TO FACE, ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS, ASME B16.25
- INSPECTION AND TEST, API 598

**Design descriptions:**

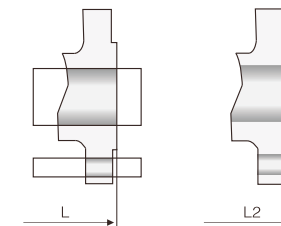
- PSB, PRESSURE SEAL BONNET
- FLEXIBLE DISC, FULLY GUIDED
- RENEWABLE SEAT RINGS
- FLANGED OR BUTTWELDING ENDS



**Materials of parts**

No	Part Name	Carbon Steel	ASTM Materials 1 <sup>1</sup> / <sub>4</sub> Cr-1 <sup>1</sup> / <sub>2</sub> Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Pres. Seal Bonnet	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A105+HF	A182-F11+HF	A351-CF8M+HF
4	Hinge	A216-WCB	A217-WC6	A351-CF8M
5	Seat Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Hinge Pin	A276-420	A276-304	A276-316
7	Bonnet Gasket <sup>1)</sup>	Steel Ring	304SS Ring	316SS RING
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Cover	Carbon Steel	Alloy Steel	Stainless Steel
11	Stud	A193-B7	A193-B7	A193-B8M
12	Stud Nut	A194-2H	A194-2H	A194-8M
13	Eyebolt	Carbon Steel		

Note: 1) graphite optional  
2) disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



**FIG.VK435/6 Dimensional datas of Pressure Seal Check Valve Class 1500/2500LB**

NPS DN	2	2½	3	4	6	8	10	12	14	2	2½	3	4	6	8	10	12	in
	50	65	80	100	150	200	250	300	350	50	65	80	100	150	200	250	300	mm
<b>ANSI Class1500Lb</b>																		
L1 (BW)	8.50	10.00	12.00	16.00	22.00	28.00	34.00	39.00	42.00	11.00	13.00	14.50	18.00	24.00	30.00	36.00	41.00	in
	216	254	305	406	559	711	864	991	1067	279	330	368	457	610	762	914	1041	mm
L (RF)	14.50	16.50	18.50	21.50	27.75	32.75	39	44.5	49.5	17.75	20.00	22.75	26.50	36.00	40.25	50	56	in
	368	419	470	546	705	832	991	1130	1257	451	508	578	673	914	1022	1270	1422	mm
L2 (RTJ)	14.62	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	17.88	20.50	23.00	26.88	36.50	40.88	50.88	56.88	in
	371	422	473	549	711	842	1000	1146	1276	454	514	584	683	927	1038	1292	1445	mm
H	9.50	9.50	11.88	15.38	18.00	20.62	24.00	27.00	30.00	10.25	10.25	13.75	16.12	18.88	22.38	25.25	32.00	in
	240	240	300	390	455	525	610	685	760	260	260	350	410	480	570	640	815	mm
wt(kg)	22	37	45	78	245	530	815	1213	1555	55	78	95	182	300	630	825	1580	BW
	44	61	110	155	378	675	1160	1710	2315	93	130	170	315	618	1125	1760	2910	RF/RTJ