

SAFVAL

VALVE TECHNOLOGY

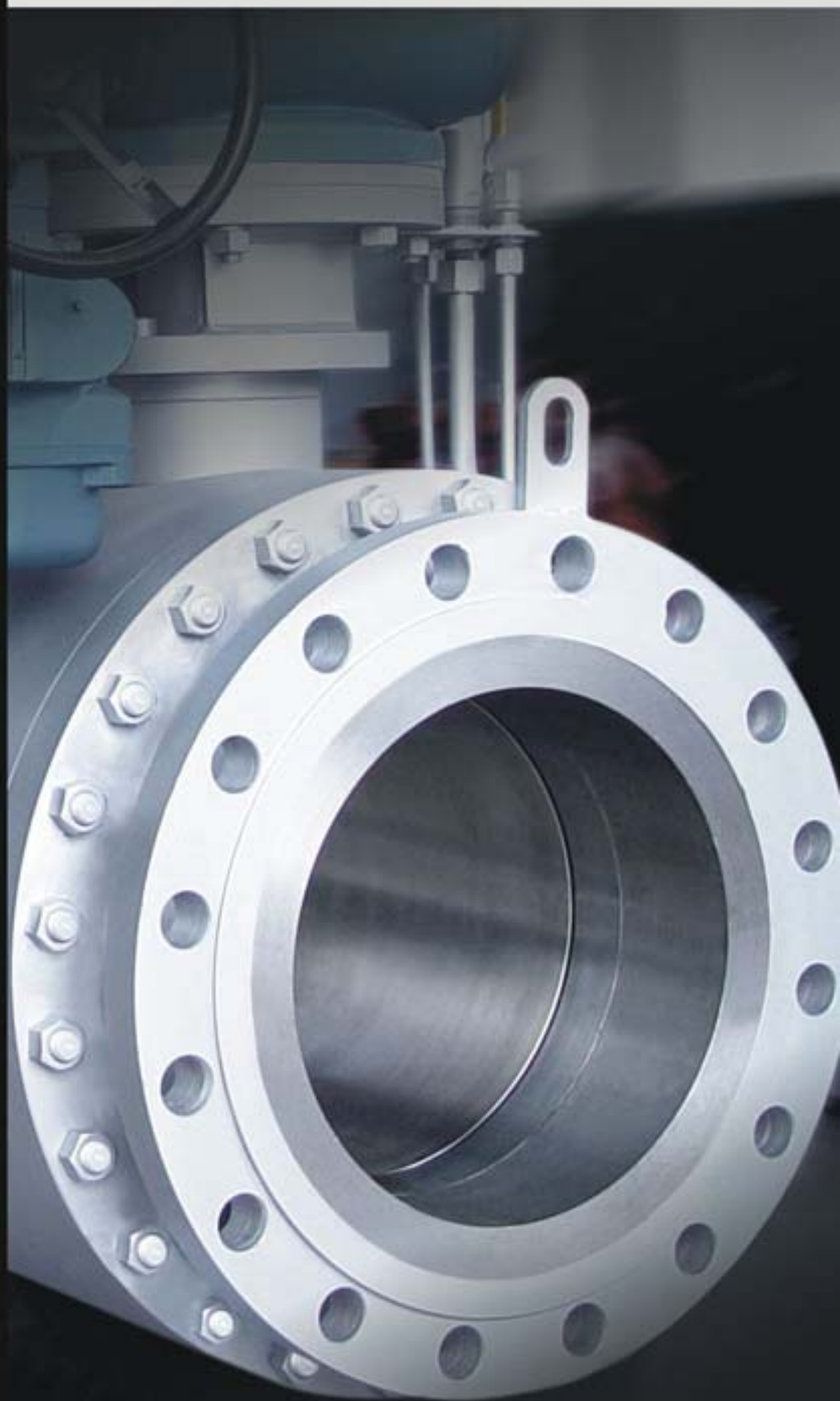
**CHINA
SAFVAL
GROUP CO.,LTD**

**ANSI & BS
CAST & FORGED
STEEL VALVES**

**YOU RELIABLE
BUSINESS
PARTNER**



ISO 9001



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Design

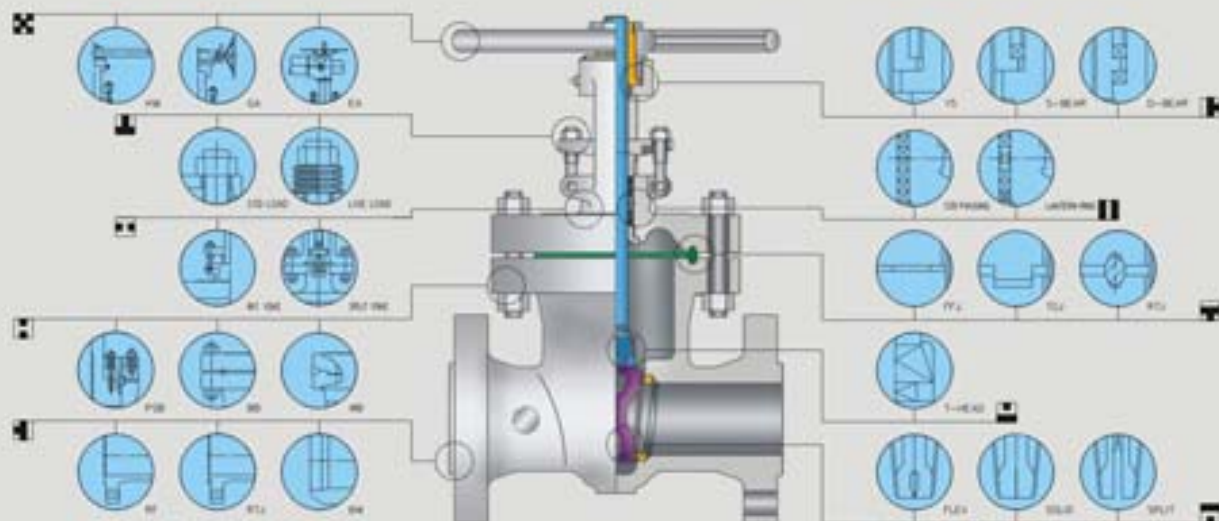
BAOYI cast steel gate valve are designed and manufactured to provide maximum service life and dependability. All gate valves are full ported and meet the design requirements of American Petroleum Institute Standard API 600 & API 6D, British Standard BS 1414 & BS EN 1984 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Range of Materials

Standard body/bonnet 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 BAOYI Cast Steel Valves

- * Trim Changes
- * End Connection Modifications
- * Packing and Gasket Changes
- * Operator Mounting
- * Handwheel Extensions
- * Pressure Equalizing
- * By-pass
- * Customer Specified Coatings
- * Weld End Bore Changes
- * Oxygen & Chlorine Cleaning & Packaging



Operating

Large handwheels for easy operation. Also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services.

OS & Y

Outside Screw and Yoke. Cast steel gate valve yoke integral with bonnet for 150Lb-8", 300Lb-8", 600Lb-6", 900Lb-4" & Small.

End Connections

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

Lantern ring and double packing set

Lantern ring with leak-off fitting connection and double packing stack is optionally available for critical services.

Stem

All wedge gate valves are provided with upset forged T-head stems. By forging the T-head, the stem at the stem-wedge connection is strengthened. This design also allows the wedge to self-align, eliminating the possibility of a bent stem jamming the wedge.

Live Load Packing

In services requiring frequent cycling or with high pressure/temperature variations, live loading extends the service life between maintenance periods by requiring less frequent packing gland adjustments. Belleville springs are employed to provide constant packing gland stress.

BB

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

Yokesleeve

Extra long thread engagement between yoke sleeve and stem provide long thread life. Valves of sizes larger than 150Lb-12", 300Lb-10", 600Lb-6", 900Lb / 1500Lb / 2500Lb-4" are regularly provided with roll bearing yokes.

Body-to-Bonnet Joint

A flat face gasket joint is used in the 150Lb valves. A male and female joint is used in 300Lb to 600Lb valves. Ring joint is used in the body to bonnet connection in 900Lb & higher rated valves.

Wedge

Integral guide rib faces assure self-centering of wedge. Flexible wedge gate valve has a one-piece, twin-disc wedge, which is designed so that each half flexes independently. Available in solid, flex split and HIS designs.

150Lb

Cast Steel Gate Valve

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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

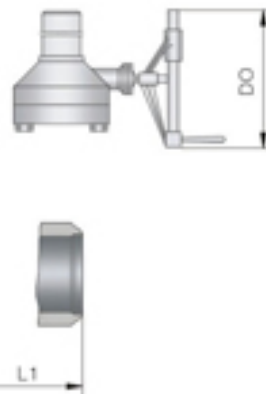
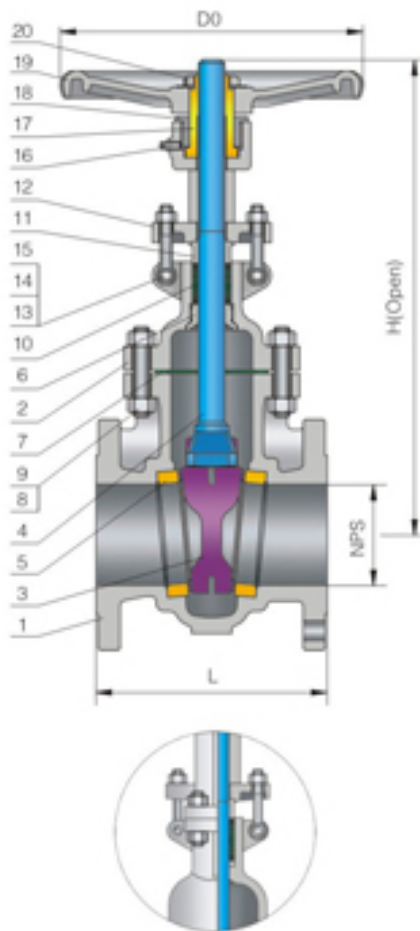
Fig. No:

- G1F01A G1F05D G1F01B
- G1B01A G1B05D G1B01B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2%Cr-1/2%Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem BackSeat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Spiral Wound (Graphite+304)		
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting	Brass+Steel		
17	Yokesleeve	Aluminum-Bronze ¹⁾		
18	Yokesleeve Jam Nut	Carbon Steel		
19	Handwheel	Malleable Iron		
20	Handwheel Nut	Carbon Steel		

Note: 1) Ductile Ni-Resist optional
 2) 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.



Design description:

- ▲ FULL PORT DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	mm

ANSI Class 150Lb

L (RF)	7.00	7.50	8.00	9.00	10.50	11.50	13.00	14.00	15.00	16.00	17.00	18.00	20.00	22.00	24.00	24.00	28.00	28.00	in
	178	191	203	229	267	292	330	356	381	406	432	457	508	559	610	610	711	711	mm
L1 (BW)	8.5	9.50	11.12	12.00	15.88	16.50	18.00	19.75	22.50	24.00	26.00	28.00	32.00	34.00	36.00	36.00	38.00	40.00	in
	216	241	283	305	403	419	457	502	572	610	660	711	813	864	914	914	965	1016	mm
H (OPEN)	15.25	17.00	18.88	23.00	30.50	37.62	45.50	53.12	59.38	67.00	74.50	83.50	98.25	110.50	116.50	124.00	129.00	146.50	in
	386	434	480	584	765	956	1149	1350	1508	1703	1892	2119	2500	2806	2960	3150	3280	3720	mm
D0	8	8	10	12	12	14	16	18	20	22	24	26	29	29	32	32	38	40	in
	200	200	250	300	300	350	400	450	500	550	600	640	720	720	800	800	950	1000	mm
WT (Kg)	18	25	32	50	77	121	178	265	363	463	621	792	1190	1521	1838	2261	2490	3310	RF
	15	18	26	41	69	108	156	248	330	424	587	752	1144	1570	1900	3310	2540	3380	BW

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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

Fig. No:

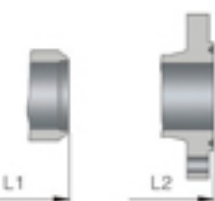
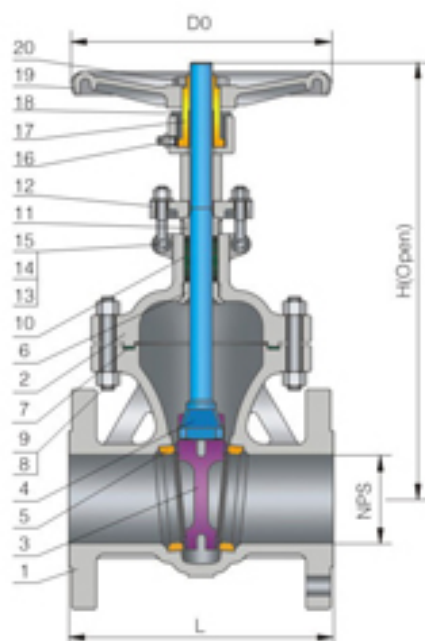
- G3F01A G3F05D G3F01B
- G3B01A G3B05D G3B01B
- G3R01A G3R05D G3R01B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{2}$ Cr- $\frac{1}{2}$ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem BackSeat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Spiral Wound (Graphite+304)		
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland Flange	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting	Brass+Steel		
17	Yokesleeve	Aluminum-Bronze ¹		
18	Yokesleeve Jam Nut	Carbon Steel		
19	Handwheel	Malleable Iron		
20	Handwheel Nut	Carbon Steel		

Note: 1) Ductile Ni-Resist optional

2) 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.



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- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in.
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	mm
ANSI Class 300Lb																			
L/L1 (RF/BW)	8.50	9.50	11.12	12.00	15.88	16.50	18.00	19.75	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00	in.
	216	241	283	305	403	419	457	502	762	838	914	991	1143	1245	1346	1397	1524	1727	mm
L2 (RTJ)	9.12	10.12	11.75	12.62	16.50	17.12	18.62	20.38	30.62	33.62	36.62	39.75	45.88	50.00	54.00	56.00	61.12	69.12	in.
	232	257	298	321	419	435	473	518	778	854	930	1010	1165	1270	1372	1422	1553	1756	mm
H (OPEN)	16.12	17.88	20.00	24.00	31.75	39.38	47.62	55.75	62.25	67.88	77.12	86.38	102.00	117.00	122.00	126.00	130.00	152.00	in.
	410	453	509	612	805	1000	1210	1415	1580	1725	1960	2195	2590	2975	3100	3200	3300	3860	mm
DO	8	8	10	12	14	16	18	20	22	22	24	26	29	29	32	32	38	40	in.
	200	200	250	300	350	400	450	500	550	550	600	640	720	720	800	800	950	1000	mm
WT (Kg)	23	35	50	71	144	209	322	482	683	950	1145	1635	2660	3090	3310	3595	3720	3985	RF/RTJ
	17	26	39	53	113	164	256	390	565	805	965	1410	2305	2540	2725	3055	3360	3630	BW

600Lb

Cast Steel Gate Valve

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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

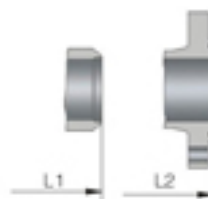
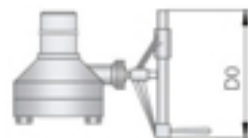
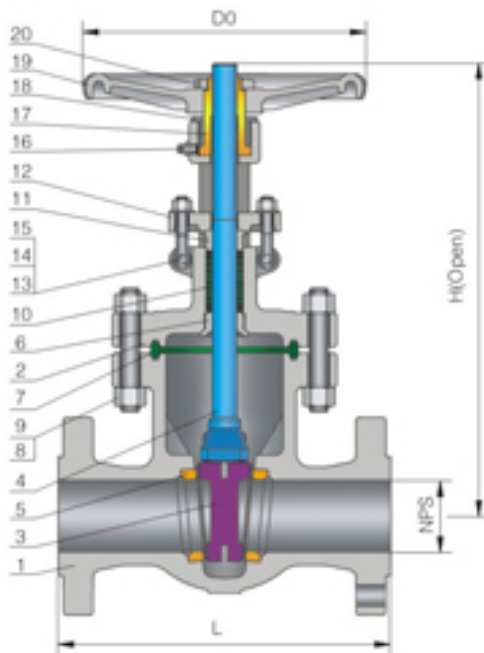
Fig. No:

- G6F01A G6F05D G6F01B
- G6B01A G6B05D G6B01B
- G6R01A G6R05D G6R01B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem BackSeat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting	Brass+Steel		
17	Yokesleeve	Aluminum-Bronze ¹⁾		
18	Yokesleeve Jam Nut	Carbon Steel		
19	Handwheel	Malleable Iron		
20	Handwheel Nut	Carbon Steel		

Note: 1) Ductile Ni-Resist optional
 2) 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.



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- ▲ RISING STEM AND NON-RISING HANDWHEEL
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- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	mm

ANSI Class 600Lb

LL1 (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	57.00	61.00	65.00	70.00	82.00	in
	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651	1778	2083	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	57.50	61.50	65.50	70.62	82.62	in
	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562	1664	1794	2099	mm
H (OPEN)	16.50	18.75	20.38	25.50	33.00	40.38	48.38	57.00	62.00	70.62	76.00	87.00	101.50	105.00	109.50	114.00	124.00	140.00	in
	418	476	518	646	840	1025	1230	1450	1575	1795	1930	2210	2580	2665	2780	2895	3150	3560	mm
D0	8	10	10	12	18	20	24	24	24	24	26	26	29	29	32	32	38	40	in
	200	250	250	300	450	500	600	600	600	600	640	640	720	720	800	800	950	1000	mm
WT (Kg)	36	52	67	112	170	393	610	890	1245	1530	1965	2450	2905	3475	3725	4045	4185	4480	RF/RTJ
	29	42	53	83	125	310	472	730	1055	1240	1625	2030	2590	2855	3065	3440	3780	4085	BW

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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

Fig. No:

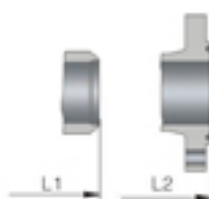
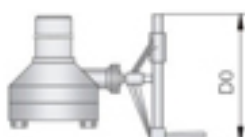
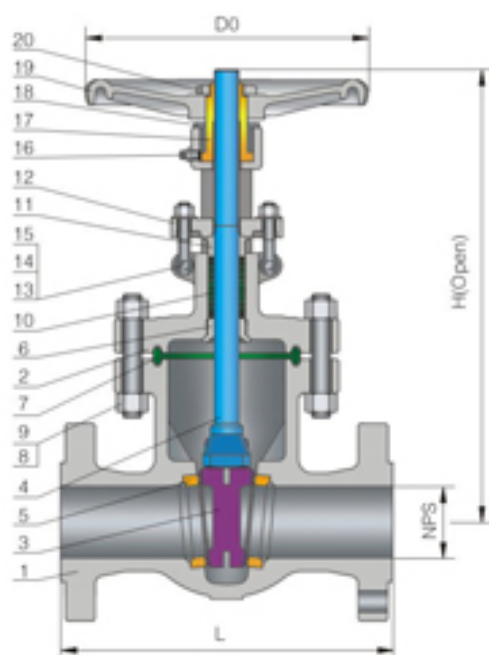
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- G9B05A G9B05D G9B05B
- G9R05A G9R05D G9R05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
6	Stem BackSeat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing		Graphite	
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting		Brass+Steel	
17	Yokesleeve		Aluminum-Bronze)	
18	Yokesleeve Jam Nut		Carbon Steel	
19	Handwheel		Malleable Iron	
20	Handwheel Nut		Carbon Steel	

Note: 1). Ductile Ni-Resist optional

2). 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.



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- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	in. mm
ANSI Class 900Lb														
L/L1 (RF/BW)	14.50 368	16.50 419	15.00 381	18.00 457	24.00 610	29.00 737	33.00 838	38.00 965	40.50 1029	44.50 1130	48.00 1219	52.00 1321	61.00 1549	in. mm
L2 (RTJ)	14.62 371	16.62 422	15.12 384	18.12 460	24.12 613	29.12 740	33.12 841	38.12 968	40.88 1038	44.88 1140	48.50 1232	52.50 1334	61.75 1568	in. mm
H (OPEN)	19.62 498	21.50 547	22.50 573	26.62 678	35.50 900	43.50 1103	53.00 1345	60.00 1525	74.88 1900	81.00 2055	87.00 2215	101.00 2565	104.00 2640	in. mm
D0	10 250	10 250	12 300	18 450	20 500	24 600	26 640	29 720	32 800	32 800	38 950	38 950	40 1000	in. mm
WT (Kg)	74 54	131 105	101 78	172 135	335 260	640 515	1100 920	1600 1380	2250 2010	2850 2565	3060 2485	3935 3250	4900 4065	RF/RTJ BW

1500Lb

Cast Steel Gate Valve

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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

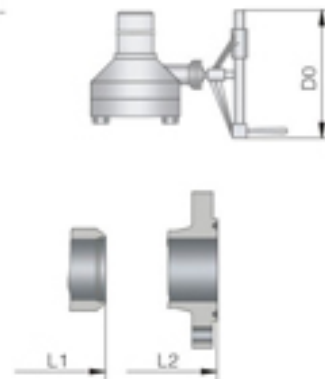
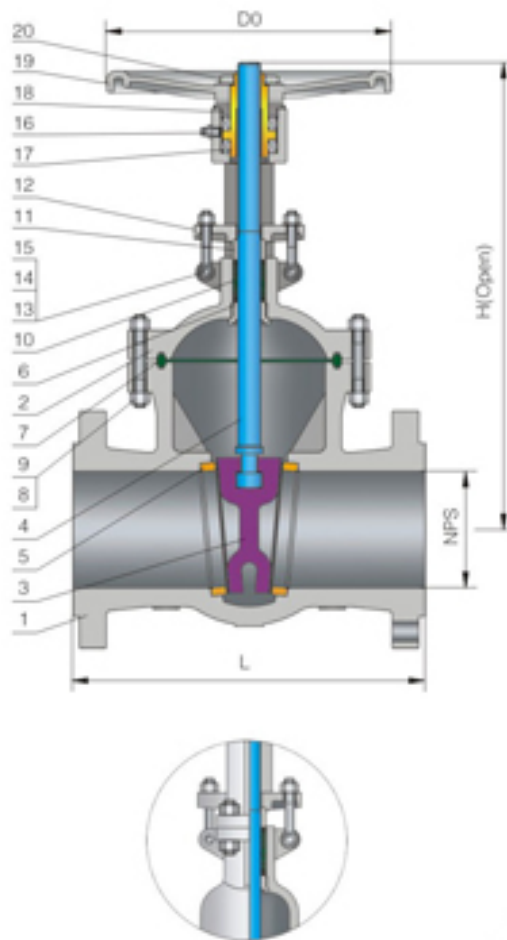
Fig. No:

- G15F05A G15F05D G15F05B ○ G25F05A G25F05D G25F05B
- G15B05A G15B05D G15B05B ○ G25B05A G25B05D G25B05B
- G15R05A G15R05D G15R05B ○ G25R05A G25R05D G25R05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
6	Stem BackSeat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting	Brass+Steel		
17	Yokesleeve	Aluminum-Bronze ¹		
18	Yokesleeve Jam Nut	Carbon Steel		
19	Handwheel	Malleable Iron		
20	Handwheel Nut	Carbon Steel		

Note: 1). Ductile Ni-Resist optional
 2). 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.



Design description:

- ▲ FULL PORT DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	in mm
ANSI Class 1500Lb														
LL1 (RF/BW)	14.50 368	16.50 419	18.50 470	21.50 546	27.75 705	32.75 832	39.00 991	44.50 1130	49.50 1257	54.50 1384	60.50 1537	65.50 1664	76.50 1943	in mm
L2 (RTJ)	15.50 371	16.62 422	18.62 473	21.62 549	28.00 711	33.12 841	39.38 1000	45.12 1146	50.25 1276	55.38 1407	61.38 1559	66.38 1686	77.62 1972	in mm
H (OPEN)	24.25 615	26.00 658	30.00 760	34.12 868	39.50 1005	45.00 1145	54.00 1370	61.00 1550	74.88 1900	80.50 2050	93.75 2380	101.50 2580	114.75 2915	in mm
D0	10 250	12 300	18 450	20 500	24 600	18 460	18 460	24 600	24 600	24 600	24 600	24 600	24 600	in mm
WT (Kg)	116 105	166 150	209 188	296 265	510 412	920 760	1910 1640	3145 2755	4100 3200	6200 5300	8965 8070	13100 11790	15660 14275	RF/RTJ BW

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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

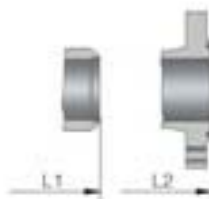
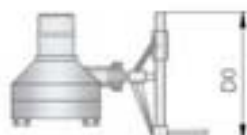
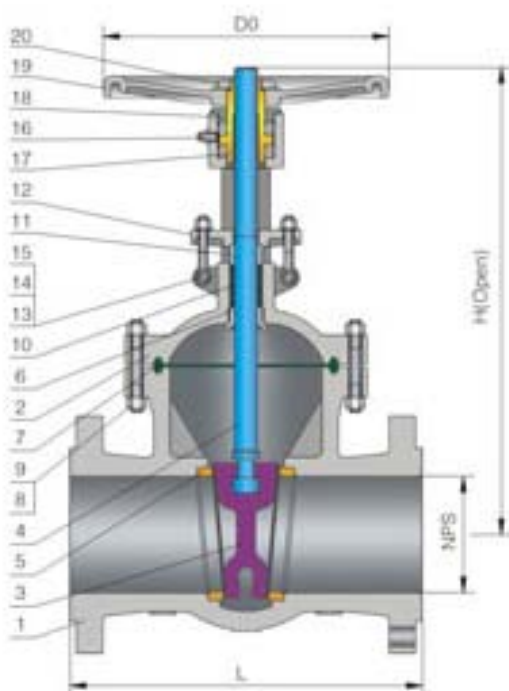
Fig. No:

- G15F05A G15F05D G15F05B
- G15B05A G15B05D G15B05B
- G15R05A G15R05D G15R05B
- G25F05A G25F05D G25F05B
- G25B05A G25B05D G25B05B
- G25R05A G25R05D G25R05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{2}$ Cr- $\frac{1}{2}$ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing		Graphite	
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Grease Fitting		Brass+Steel	
17	Yokesleeve		Aluminum-Bronze)	
18	Yokesleeve Jam Nut		Carbon Steel	
19	Handwheel		Malleable Iron	
20	Handwheel Nut		Carbon Steel	

- Note: 1) Ductile Ni-Resist optional
 2) 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.



Design description:

- ▲ FULL PORT DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS.
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
ANSI Class 2500Lb														
LL1 (RF/BW)	17.75	20.00	22.75	26.50	36.00	40.25	50.00	56.00	-	-	-	-	-	in
	451	508	578	673	914	1022	1270	1422	-	-	-	-	-	mm
L2 (RTJ)	17.88	20.50	23.00	26.88	36.50	40.88	50.88	56.88	-	-	-	-	-	in
	454	514	584	683	927	1038	1292	1445	-	-	-	-	-	mm
H (OPEN)	24.88	29.00	35.00	41.50	57.00	63.38	81.75	89.75	-	-	-	-	-	in
	631	736	890	1055	1450	1610	2075	2280	-	-	-	-	-	mm
D0	12	18	20	20	24	24	24	24	-	-	-	-	-	in
	300	450	500	500	600	600	600	600	-	-	-	-	-	mm
WT (Kg)	155	210	310	580	1800	2450	4570	7150	-	-	-	-	-	RF/RTJ
	124	160	245	460	1310	2010	3800	6000	-	-	-	-	-	BW

Ball Valve, CS, FL

Design

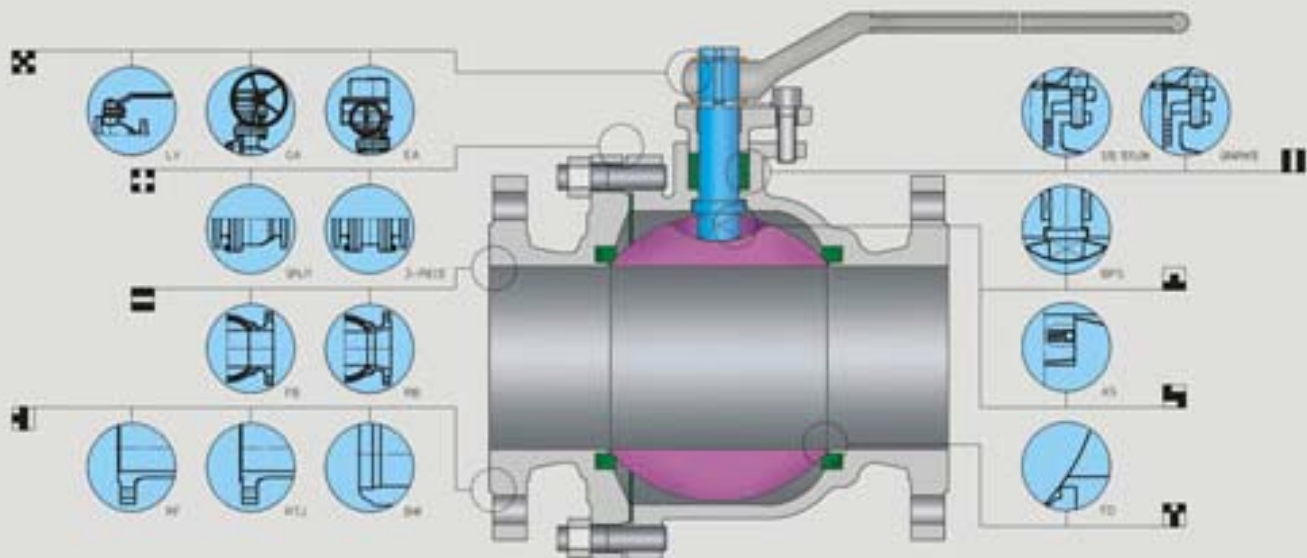
BAOYI steel ball valves are designed and manufactured to provide maximum service life and dependability. All ball valves are full ported and meet the design requirements of American Petroleum Institute Standard API 608 & API 6D, British Standard BS 5351 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Range of Materials

Standard body/bonnet 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 BAOYI Steel Valves

- * Trim Changes
- * End Connection Modifications
- * Packing and Gasket Changes
- * Operator Mounting
- * Handwheel Extensions
- * Pressure Equalizing
- * AS or FD
- * Customer Specified Coatings
- * Weld End Bore Changes
- * Oxygen & Chlorine Cleaning & Packaging



X Operating

Extended lever for easy operation. Also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services.

■ BORE

Full Bore or Reduced Bore. Full-bore design provides exceptional flow control.

|| Packing

STD Packing Multiple V-TEFLON packing, combined with live loading, maintains packing compression under high-cycle and severe service applications. Graphite packing use situation for high-temperature.

▧ AS

Anti Static. A metallic contact is always granted between ball and stem / body to discharge eventual statics build-up during service.

▣ BODY & BONNET

split or 3-piece, split body & bonnet for 12" & Small. Disassembles easily for repair or replacement of internal components.

▣ End Connections

A choice of Flanged, RTJ flanged or Buttwelding end for piping flexibility

▣ BPS

Blow-out Proof Stem. A pressure-safe stem shoulder design that protects against failure under excess pressure.

▣ FD

Fire Durable. Designed to API 607 or BS 6755 to grant their operation suitability in case of fire. Secondary metal-to-metal seal acts as backup if primary seal is destroyed by fire. Valves ordered for compliance with API 607 will be provided with graphite packing and gaskets.

Applicable standards:

- STEEL BALL VALVES, API 608/API 6D
- STEEL BALL VALVES, ISO 14313
- FIRE DURABLE, API 607
- ANTI STATIC, API 608
- 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

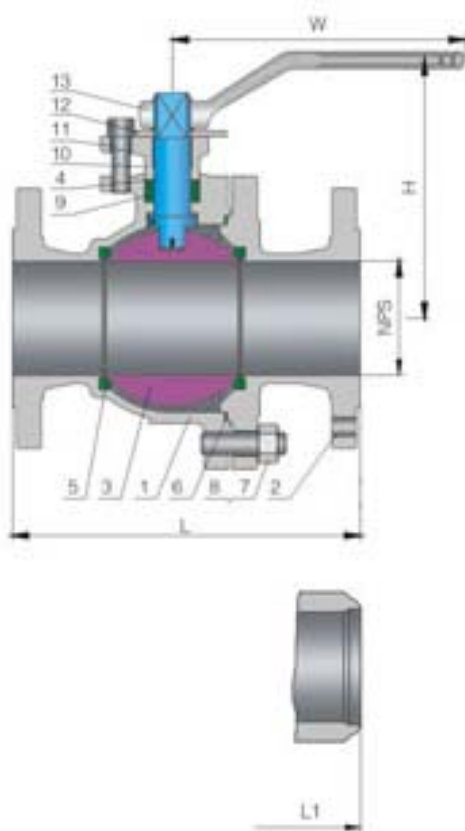
Fig. No:

- B1F56A B1F59L B1F56B
- B1B56A B1B59L B1B56B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304 ¹	A182-F316	A182-F304
4	Stem	A276-304	A276-316	A276-304
5	Seal Ring		RLPTFE	
6	Bonnet Gasket	Graphite+304 ¹	PTFE	Graphite+304 ¹
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing		PTFE	
10	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle		Carbon Steel	

Note: 1) A105+ENP optional
2) Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ FLOATING BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 150Lb													
L (RF)	4.25 108	4.62 117	5.00 127	6.50 165	7.00 178	7.50 190	8.00 203	9.00 229	15.50 394	18.00 457	21.00 533	24.00 610	in mm
L1 (BW)	5.50 140	6.00 152	6.50 165	7.50 190	8.50 216	9.50 241	11.12 283	12.00 305	18.00 457	20.50 521	22.00 559	25.00 635	in mm
H	2.12 55	2.12 55	2.75 70	3.50 90	4.12 105	6.12 155	7.25 185	8.00 205	10.00 255	11.00 280	13.50 345	16.50 420	in mm
W	5 130	5 130	6 160	8 200	14 350	16 400	20 500	20 500	24 600	32 800	32 800	32 800	in mm
WT (Kg)	2.3 1.8	3 2.8	4.5 3.7	7 6.2	9.5 8.5	15 14	19 21	33 35	93 98	160 170	200 225	280 295	RF BW

300Lb

Floating Cast Steel Ball Valve

SAFVAL

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI-STATIC, API 608
- ★ 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

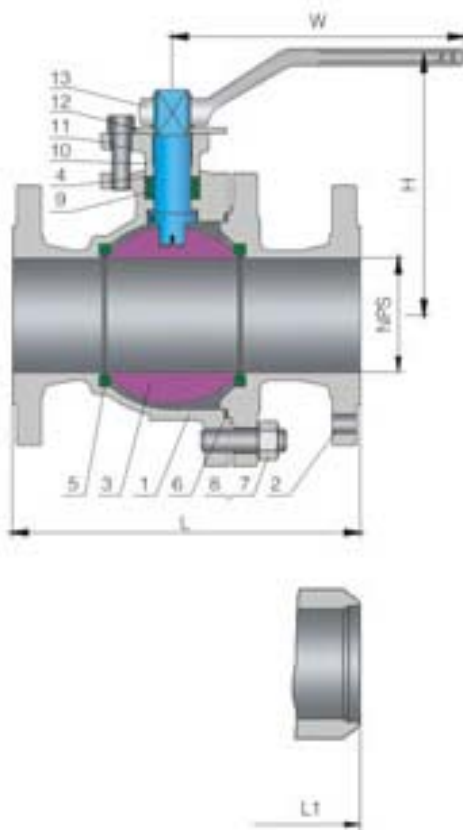
Fig. No:

- B3F56A B3F59L B3F56B
- B3B56A B3B59L B3B56B
- B3R56A B3R59L B3R56B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat Ring		R PTFE	
6	Bonnet Gasket	Graphite+304 ²	PTFE	Graphite+304 ²
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing		PTFE	
10	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle		Carbon Steel	

Note: 1) A105+ENP optional
2) Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ FLOATING BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI-STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 300Lb													
L (RF)	5.50 140	6.00 152	6.50 165	7.50 190	8.50 216	9.50 241	11.12 283	12.00 305	15.88 403	19.75 502	22.38 568	25.50 648	in mm
L1 (BW)	5.50 140	6.00 152	6.50 165	7.50 190	8.50 216	9.50 241	11.12 283	12.00 305	18.00 457	20.50 521	22.00 558	25.00 635	in mm
H	2.12 55	2.12 55	2.75 70	3.50 90	4.12 105	6.12 153	7.25 187	8.00 206	10.00 255	11.00 280	13.50 345	16.50 420	in mm
W	5 130	5 130	6 160	8 200	14 350	16 400	20 500	20 500	24 600	32 800	32 800	32 800	in mm
WT (Kg)	2.5 1.8	3.5 2	5.5 3.2	10.5 5.5	14.5 8.7	23.5 15	30 18	55 36	118 85	200 152	250 182	330 232	RF BW

Applicable standards:

- STEEL BALL VALVES, API 608/API 6D
- STEEL BALL VALVES, ISO 14313
- FIRE DURABLE, API 607
- ANTI STATIC, API 608
- 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

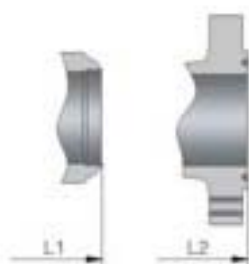
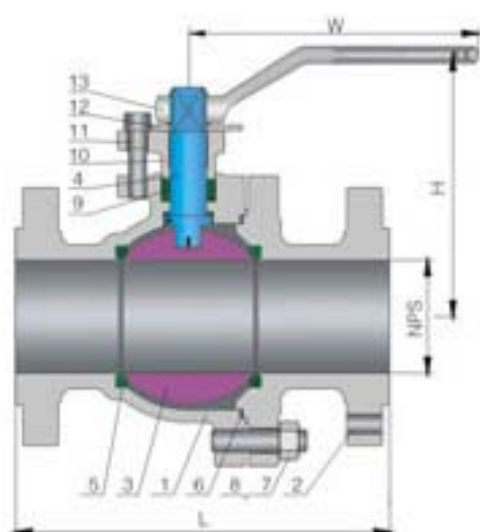
Fig. No:

- O B6F56A B6F59L B6F56B
- O B6B56A B6B59L B6B56B
- O B6R56A B6R59L B6R56B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304 ¹	A182-F316	A182-F304
4	Stem	A276-304	A276-316	A276-304
5	Seal Ring	RLPTFE		
6	Bonnet Gasket	Graphite+304 ¹	PTFE	Graphite+304 ¹
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing	PTFE		
10	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle	Carbon Steel		

Note: 1) A105+ENP optional
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Design description:

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- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 600Lb													
L1	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00	22.00	-	-	-	in.
(RF/BW)	165	190	216	241	292	330	356	432	559	-	-	-	mm
L2	-	-	-	-	11.62	13.12	14.12	17.12	22.12	-	-	-	in.
(RTJ)	-	-	-	-	295	333	359	435	562	-	-	-	mm
H	2.38	2.38	3.00	4.00	4.75	6.88	8.38	9.25	11.38	-	-	-	in.
	61.5	61.5	78	101	120	174	212	234	289	-	-	-	mm
W	5	6	8	14	16	20	24	24	32	-	-	-	in.
	130	160	200	350	400	500	600	600	800	-	-	-	mm
WT	3.3	4.5	7.2	13.5	19	31	39	71	153	-	-	-	RF/RTJ
(Kg)	2.6	3.1	4.8	8	13	22	27	53	120	-	-	-	BW

Ball Valve CS, TM

Design

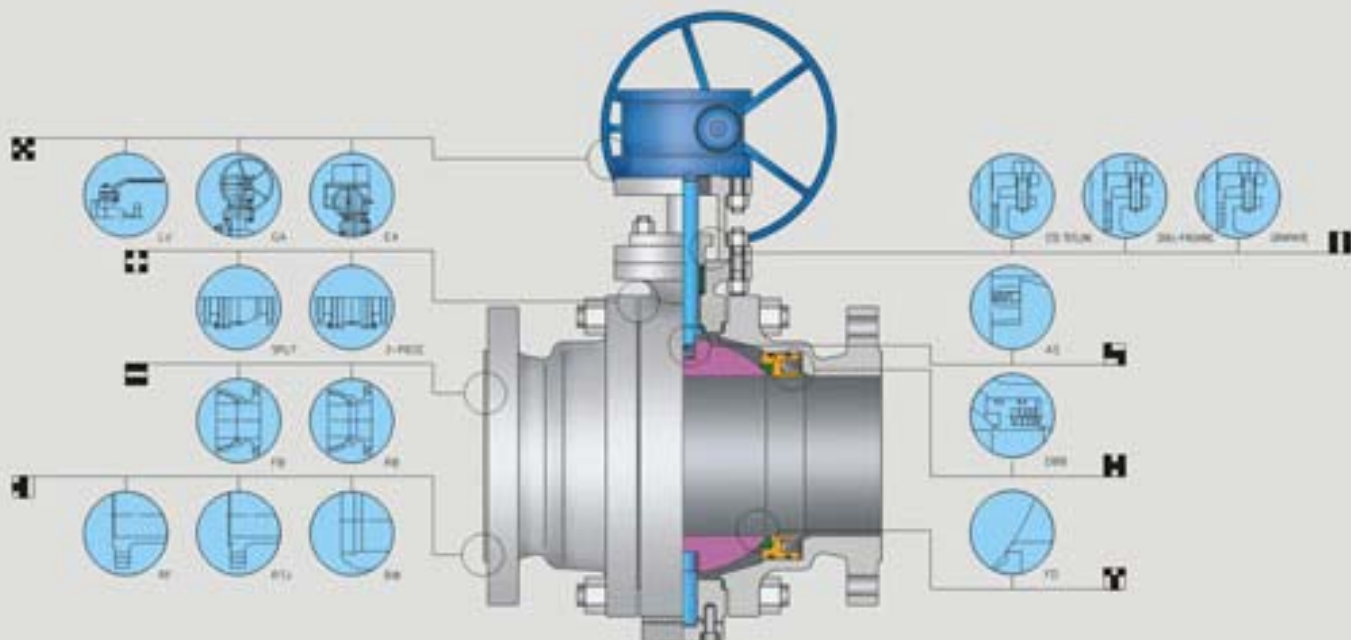
BAOYI steel ball valve are designed and manufactured to provide maximum service life and dependability. All ball valves are full ported and meet the design requirements of American Petroleum Institute Standard API 608 & API 6D, British Standard BS 5351 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Rang of Materials

Standard body/bonnet 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 BAOYI Steel Valves

- * Trim Changes
- * End Connection Modifications
- * Packing and Gasket Changes
- * Operator Mounting
- * Handwheel Extensions
- * Pressure Equalizing
- * AS or FD
- * Customer Specified Coatings
- * Weld End Bore Changes
- * Oxygen & Chlorine Cleaning & Packaging



Operating

Extended lever for easy operation. Also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services.

BORE

Full Bore or Reduced Bore. Full-bore design provides exceptional flow control.

Packing

STD Packing Multiple V-TEFLON packing, combined with live loading, maintains packing compression under high-cycle and severe service applications. Graphite packing use situation for high-temperature.

DDB

Double Block & Bleed. The body cavity is isolated when the ball is in either fully closed or fully opened position, the medium entrapped in it can easily be bled to avoid overpressure.

BODY & BONNET

split or 3-piece, split body & bonnet for 12" & Small. Disassembles easily for repair or replacement of internal components.

End Connections

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

AS

Anti Static. A metallic contact is always granted between ball and stem / body to discharge eventual statics build-up during service.

FD

Fire Durable. Designed to API 607 or BS 6755 to grant their operation suitability in case of fire. Secondary metal-to-metal seal acts as backup if primary seal is destroyed by fire. Valves ordered for compliance with API 607 will be provided with graphite packing and gaskets.

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

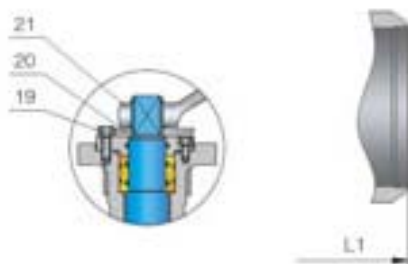
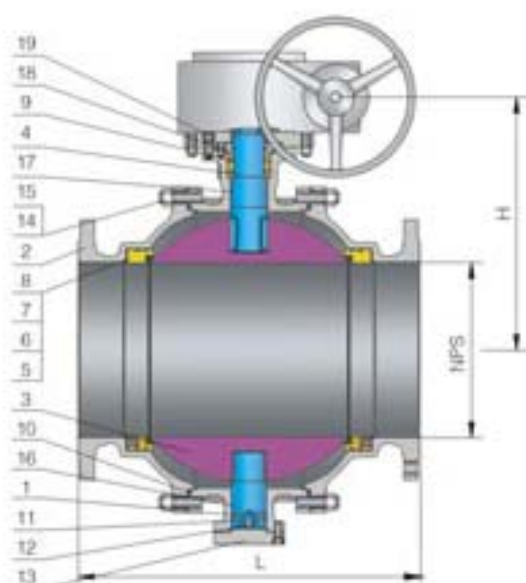
Fig. No:

- BM1F56A BM1F59L BM1F56B
- BM1B56A BM1B59L BM1B56B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
11	Bonnet O-Ring	NBR	Viton	Viton
12	Anistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A216-WCB	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1) A105+ENP optional
2) Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ THREE PIECE BODY FOR 12" & ABOVE
- ▲ TRUNNION MOUNTED BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	28 700	30 750	32 800	36 900	in mm
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ANSI Class 150Lb

L (RF)	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00	45.00	49.00	51.00	54.00	60.00	in mm
L1 (BW)	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00	in mm
H	7.00	7.50	8.25	9.25	20.88	24.62	25.62	30.75	31.00	36.25	38.25	43.38	45.25	50.75	55.12	64.12	70.88	80.75	in mm
W	14	16	20	20	24	24	24	24	32	32	32	32	32	32	32	32	32	32	in mm
WT (Kg)	15	19	27	38	81	140	160	205	260	390	510	750	1200	1400	1860	2100	2530	2970	RF BW
	13.5	15.5	24.5	32.5	76	132	147	182	241	370	495	726	1125	1250	1640	1900	2390	2760	

300Lb

Trunnion Mounted Cast Steel Ball Valve

SAFVAL

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI-STATIC, API 608
- ★ 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

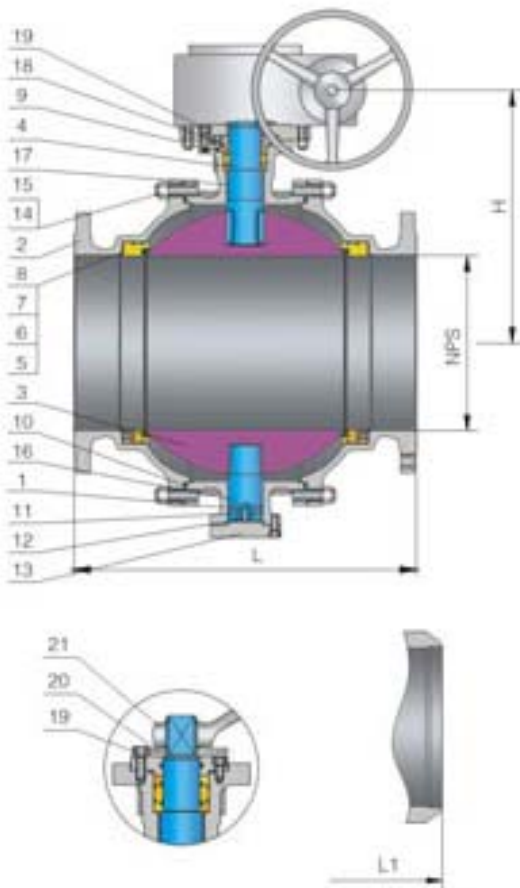
Fig. No:

- BM3F56A BM3F59L BM3F56B
- BM3B56A BM3B59L BM3B56B
- BM3R56A BM3R59L BM3R56B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A216-WCB	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1) A105+ENP optional
2) Spiral wound construction.



Design description:

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- ▲ THREE PIECE BODY FOR 12" & ABOVE
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- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI-STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	2 50	2½ 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	28 700	30 750	32 800	36 900	in mm
ANSI Class 300Lb																			
L (RF)	8.50 216	9.50 241	11.12 283	12.00 305	15.88 403	19.75 502	22.38 568	25.50 648	30.00 762	33.00 838	36.00 914	39.00 991	45.00 1143	49.00 1245	53.00 1346	55.00 1397	60.00 1524	-	in mm
L1 (BW)	8.50 216	9.50 241	11.12 283	12.00 305	18.00 403	20.50 521	22.00 559	25.00 635	30.00 762	33.00 838	36.00 914	39.00 991	45.00 1143	49.00 1245	53.00 1346	55.00 1397	60.00 1524	-	in mm
H	7.00 177	7.50 190	8.25 210	9.25 235	20.88 530	24.62 625	25.62 650	30.75 780	31.00 790	36.25 920	38.25 970	43.38 1100	45.25 1150	50.75 1290	55.12 1400	64.12 1630	70.88 1800	-	in mm
W	14 350	16 400	20 500	20 500	24 600	24 600	24 600	24 600	32 800	32 800	32 800	32 800	32 800	32 800	32 800	32 800	32 800	-	in mm
WT (Kg)	19 14	24 16	34 25	48 34	101 82	175 145	200 155	255 185	325 238	485 375	635 516	935 712	1500 1280	1750 1375	2225 1825	2450 2180	2870 2260	-	RF BW

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

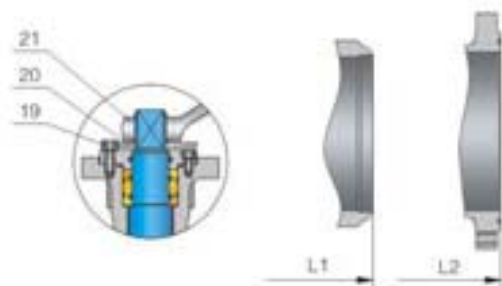
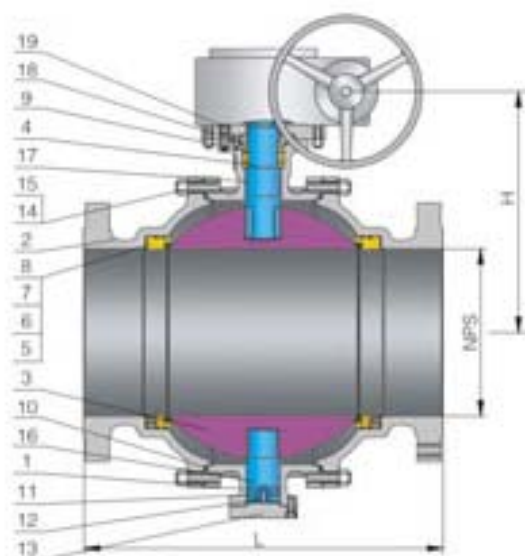
Fig. No:

- BM6F56A BM6F59L BM6F56B
- BM6B56A BM6B59L BM6B56B
- BM6R56A BM6R59L BM6R56B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A216-WCB	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1) A105+ENP optional
2) Spiral wound construction.



Design description:

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- ▲ BB, BOLTED BONNET, SPLIT BODY
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- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	2 50	2½ 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	28 700	in mm
ANSI Class 600Lb																
L1 (RF/BW)	11.50 292	13.00 330	14.00 356	17.00 432	22.00 559	26.00 660	31.00 787	33.00 838	35.00 889	39.00 991	43.00 1092	47.00 1194	55.00 1397	57.00 1448	61.00 1549	in. mm
L2 (RTJ)	11.62 295	13.12 333	14.12 359	17.12 435	22.12 562	26.12 664	31.12 791	33.12 841	35.12 892	39.12 994	43.12 1095	47.25 1200	55.38 1407	57.50 1461	61.50 1562	in. mm
H	7.12 180	7.62 193	8.50 215	9.50 241	21.25 540	25.00 635	26.12 668	31.12 790	31.88 810	36.38 925	38.75 985	44.50 1130	46.62 1185	52.50 1335	57.00 1450	in. mm
W	14 350	16 400	20 500	20 500	24 600	24 600	24 600	24 600	32 800	32 800	32 800	32 800	32 800	32 800	32 800	in. mm
WT (Kg)	26 19	35 25	58 42	81 51	142 85	287 200	540 385	780 610	1000 805	1300 1010	1700 1350	2100 1656	3400 2775	3800 3125	4500 3790	RF/RTJ BW

900Lb

Trunnion Mounted Cast Steel Ball Valve

SAFVAL

Applicable standards:

- ★ APPLICABLE STANDARDS:
- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

Fig. No:

- BM9F56A BM9F59L BM9F56B
- BM9B56A BM9B59L BM9B56B
- BM9R56A BM9R59L BM9R56B

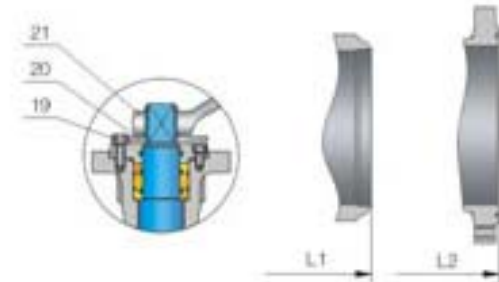
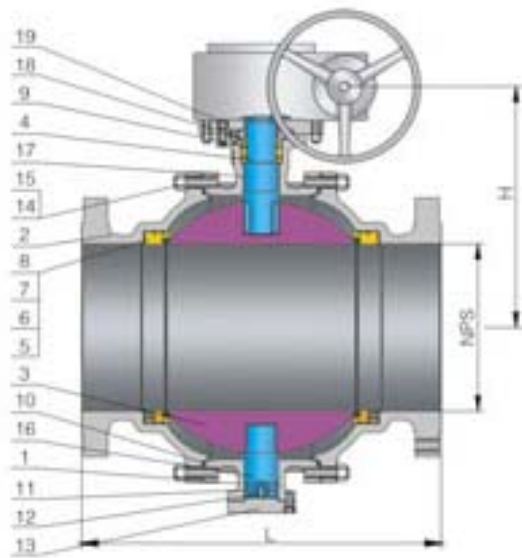
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304	A182-F316	A182-F304
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105-ENP	A182-F316	A350-LF2-ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304	Graphite+316	Graphite+304
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A216-WCB	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

- Note: 1) A105+ENP optional
2) Spiral wound construction.

Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ THREE PIECE BODY FOR 12" & ABOVE
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- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR



Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
ANSI Class 900Lb														
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	61.00	in
	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	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	61.75	in
	371	422	394	460	613	740	841	968	1038	1140	1232	1334	1568	mm
H	8.62	9.25	10.25	15.38	25.75	30.25	31.75	38.00	38.50	45.00	47.00	53.50	56.00	in
	219	235	260	390	655	770	805	965	980	1145	1195	1360	1425	mm
W	20	20	20	24	24	24	24	32	32	32	32	32	32	in
	500	500	500	600	600	600	600	800	800	800	800	800	800	mm
WT (Kg)	31	43	68	98	171	345	650	940	1205	1565	2050	2535	3950	RF/RTJ
	23	31	51	61	102	240	480	735	965	1215	1625	1995	3335	BW

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

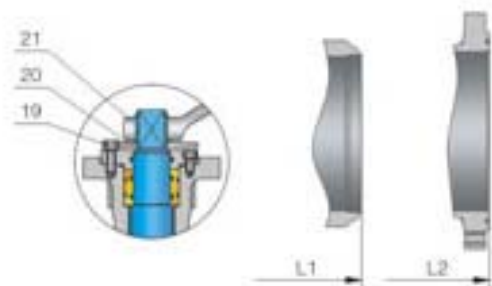
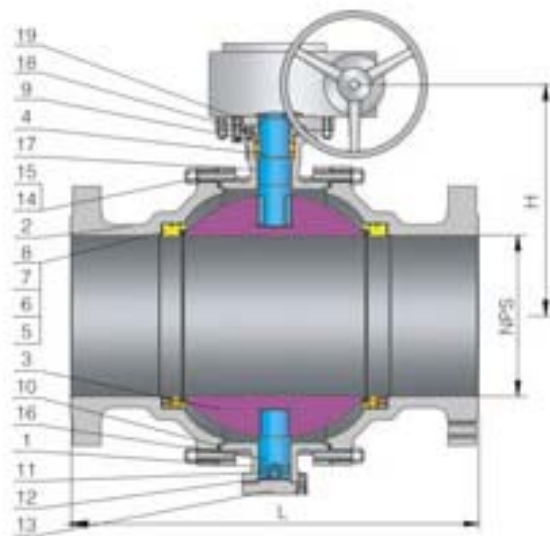
Fig. No:

- BM15F56A BM15F59L BM15F56B ○ BM25F56A BM25F59L BM25F56B
- BM15B56A BM15B59L BM15B56B ○ BM25B56A BM25B59L BM25B56B
- BM15R56A BM15R59L BM15R56B ○ BM25R56A BM25R59L BM25R56B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet	A216-WCB	A351-CF8M	A352-LCB
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ²	Graphite+316 ²	Graphite+304 ²
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A216-WCB	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland Flange	A216-WCB	A351-CF8M	A352-LCB
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1) A105+ENP optional
2) Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
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- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	DN	L/L1 (RF/BW)	L2 (RTJ)	H	W	WT (Kg)	L/L1 (RF/BW)	L2 (RTJ)	H	W	WT (Kg)		
						ANSI Class 1500Lb							
2	50	14.50	368	14.62	371	11.25	285	20	500	49	33		
2½	65	16.50	419	16.62	422	12.00	306	20	500	67	44		
3	80	18.50	470	18.62	473	13.25	338	24	600	106	73		
4	100	21.50	548	21.62	549	20.00	506	24	600	153	87		
6	150	27.75	705	28.00	711	33.50	852	24	600	268	145		
8	200	32.75	832	33.12	841	39.38	1000	32	800	540	345		
10	250	39.00	991	39.38	1000	41.12	1045	32	800	1020	685		
12	300	44.50	1130	45.12	1148	49.38	1255	32	800	1475	1050		
14	350	49.50	1257	50.25	1276	50.00	1270	32	800	1885	1385		
16	400	54.50	1384	55.38	1407	58.50	1485	32	800	2455	1735		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
						ANSI Class 2500Lb							
17.5	451	17.88	454	12.00	304	20	500	55	41				
20.00	508	21.25	540	12.88	327	24	600	76	55				
22.75	578	23.00	584	14.25	362	24	600	120	91				
26.50	673	26.88	683	21.25	540	24	600	173	110				
36.00	914	36.50	927	35.88	911	32	800	302	182				
40.25	1022	40.88	1038	42.12	1070	32	800	612	430				
50.00	1270	50.88	1292	44.00	1120	32	800	1150	655				
56.00	1422	56.88	1445	53.00	1345	32	800	1665	1315				
-	-	-	-	-	-	-	-	-	-	-	-		
						RF/RTJ BW							
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		

Ball Valve FS, FL

Design

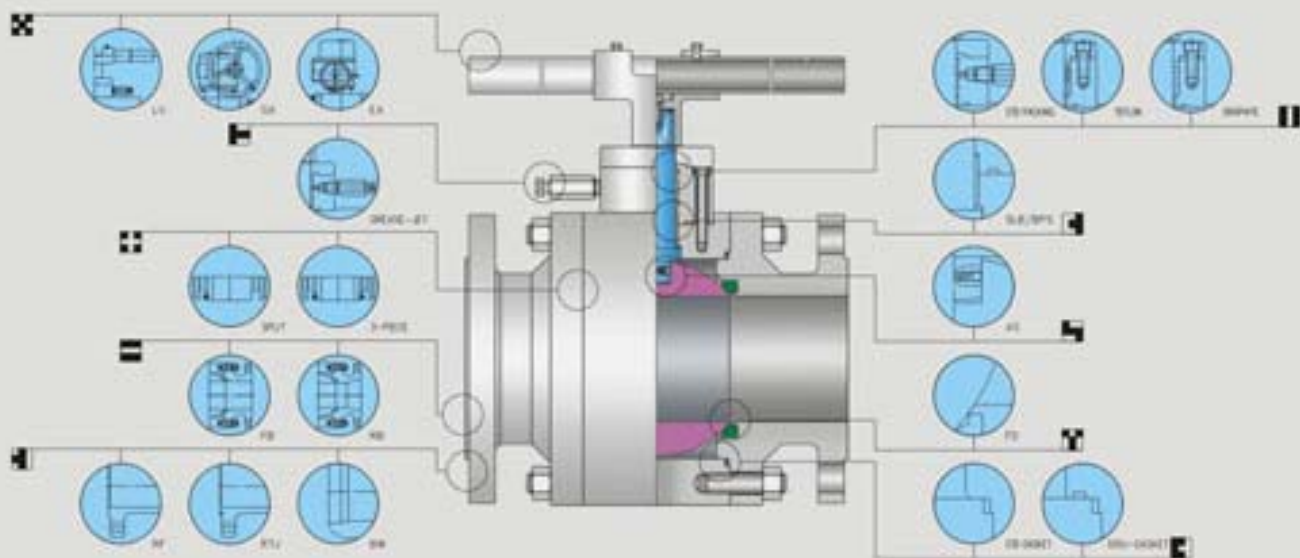
BAOYI steel ball valve are designed and manufactured to provide maximum service life and dependability. All ball valves are full ported and meet the design requirements of American Petroleum Institute Standard API 608 & API 6D, British Standard BS 5351 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Rang of Materials

Standard body/bonnet 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 BAOYI Cast Steel Valves

- * Trim Changes
- * End Connection Modifications
- * Packing and Gasket Changes
- * Operator Mounting
- * Handwheel Extensions
- * Pressure Equalizing
- * AS or FD
- * Customer Specified Coatings
- * Weld End Bore Changes
- * Oxygen & Chlorine Cleaning & Packaging



Operating

Extended lever for easy operation. Also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services.

BODY & BONNET

Split or 3-piece, split body & bonnet for 8" & Small. Disassembles easily for repair or replacement of internal components.

End Connections

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

SLB

Self-Lubrication Bearing. Non-maintenance, easy operation, low torque and longer life.

BPS

Blow-out Proof Stem. A pressure-safe stem shoulder design that protects against failure under excess pressure.

FD

Fire Durable. Designed to API 607 or BS-6755 to grant their operation suitability in case of fire. Secondary metal-to-metal seal acts as backup if primary seal is destroyed by fire. Valves ordered for compliance with API 607 will be provided with graphite packing and gaskets.

Grease-Jet Joint

Installed in prescriptive part accord with the apply and satisfied with ecumenical situations and realize seal in spot with maintenance easily.

BORE

Full Bore or R reduced Bore. Full-bore design provides exceptional flow control.

Packing

STD Packing adopt high-performance rubber seal ring, STD Packing and TEFLON use situation for smooth pressure. With snap ring apply high-pressure situation. Graphite packing use situation for high-temperature.

AS

Anti Static. A metallic contact is always granted between ball and stem / body to discharge eventual statics build-up during service.

GASKET

STD Gasket or DOU-Gasket. STD Gasket adopt high-performance rubber seal ring. DOU-Gasket adopt high-performance rubber seal ring and spiral wound graphite.

Applicable standards:

- STEEL BALL VALVES, API 608/API 6D
- STEEL BALL VALVES, ISO 14313
- FIRE DURABLE, API 607
- ANTI STATIC, API 608
- 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

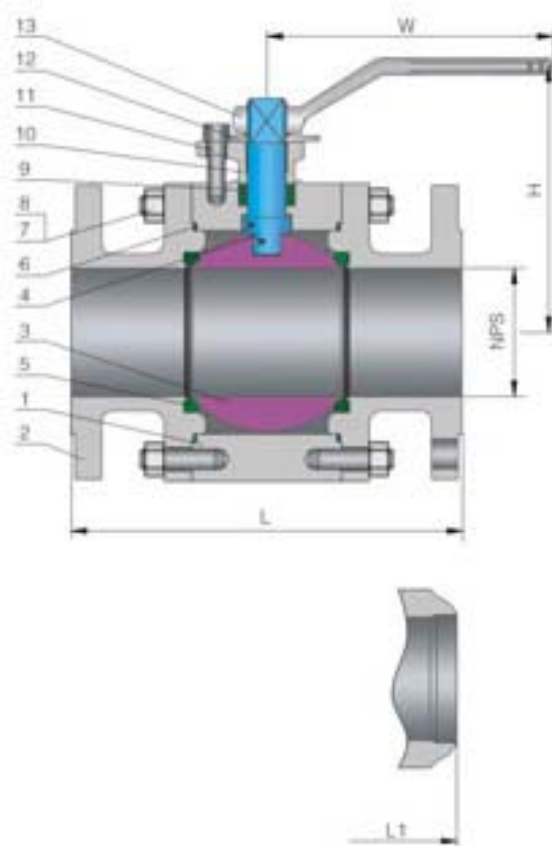
Fig. No:

- B1F56FA B1F59FL B1F56FB
- B1B56FA B1B59FL B1B56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304
4	Stem	A276-304	A276-316	A276-304
5	Seal Ring		RPTFE	
6	Bonnet Gasket	Graphite+304 ¹	PTFE	Graphite+304 ¹
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing		PTFE	
10	Gland	A105	A182-F316	A350-LF2
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle		Carbon Steel	

Note: 1) A105+ENP optional.
2) Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ FLOATING BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 150Lb													
L (RF)	4.25 108	4.62 117	5.00 127	6.50 165	7.00 178	7.50 190	8.00 203	9.00 229	15.50 394	18.00 457	21.00 533	24.00 610	in mm
L1 (BW)	5.50 140	6.00 152	6.50 165	7.50 190	8.50 216	9.50 241	11.12 283	12.00 305	18.00 457	20.50 521	22.00 559	25.00 635	in mm
H	2.12 55	2.12 55	2.50 65	3.38 85	4.00 100	6.00 150	7.00 180	9.25 235	9.88 250	11.00 280	12.62 320	15.38 390	in mm
W	8 200	8 200	12 300	12 300	16 400	16 400	24 600	24 600	24 600	24 600	32 800	32 800	in mm
WT (Kg)	3.1 2.6	4.1 3.9	6 5.2	9.5 8.7	12.8 11.8	20 19	26 26	45 47	126 131	216 226	270 295	378 393	RF BW

300Lb

Floating Forged Steel Ball Valve

SAFVAL

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI-STATIC, API 608
- ★ 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

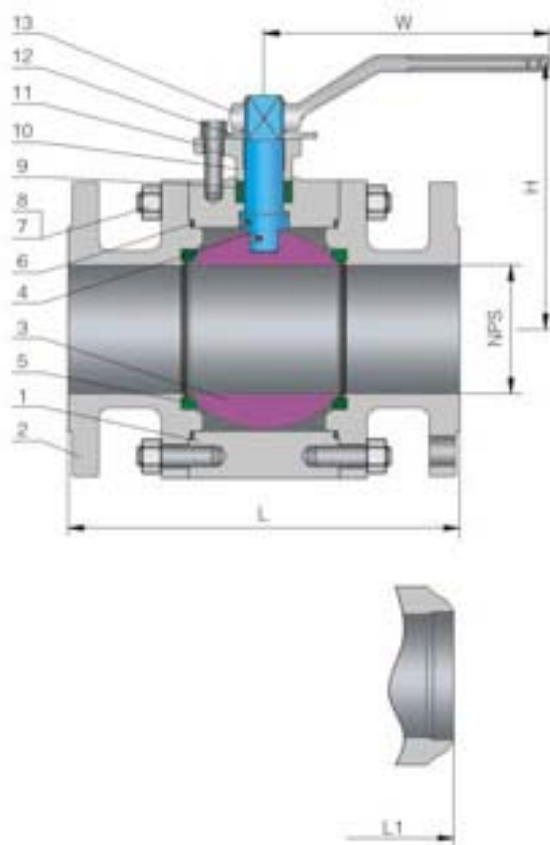
Fig. No:

- B3F56FA B3F59FL B3F56FB
- B3B56FA B3B59FL B3B56FB
- B3R56FA B3R59FL B3R56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat Ring		R.PTFE	
6	Bonnet Gasket	Graphite+304 ²	PTFE	Graphite+304 ²
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing		PTFE	
10	Gland	A105	A182-F316	A350-LF2
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle		Carbon Steel	

Note: 1. A105+ENP optional
2. Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ FLOATING BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI-STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in
DN	15	20	25	40	50	65	80	100	150	200	250	300	mm
ANSI Class 300Lb													
L (RF)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	in
	140	152	165	190	216	241	283	305	403	502	568	648	mm
L1 (BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.50	3.38	16.00	16.00	24.00	24.00	9.88	11.00	12.62	15.38	in
	55	55	65	85	400	400	600	600	250	280	320	390	mm
W	8	8	12	12	10	12	14	19	24	24	32	32	in
	200	200	300	300	250	300	350	480	600	600	800	800	mm
WT (Kg)	3.5	4.6	6.7	10.5	14.5	22	29	50	141	242	302	423	RF
	2.8	3.1	4.4	5.5	8.7	13.5	17	31	108	194	234	325	BW

Applicable standards:

- STEEL BALL VALVES, API 608/API 6D
- STEEL BALL VALVES, ISO 14313
- FIRE DURABLE, API 607
- ANTI STATIC, API 608
- 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

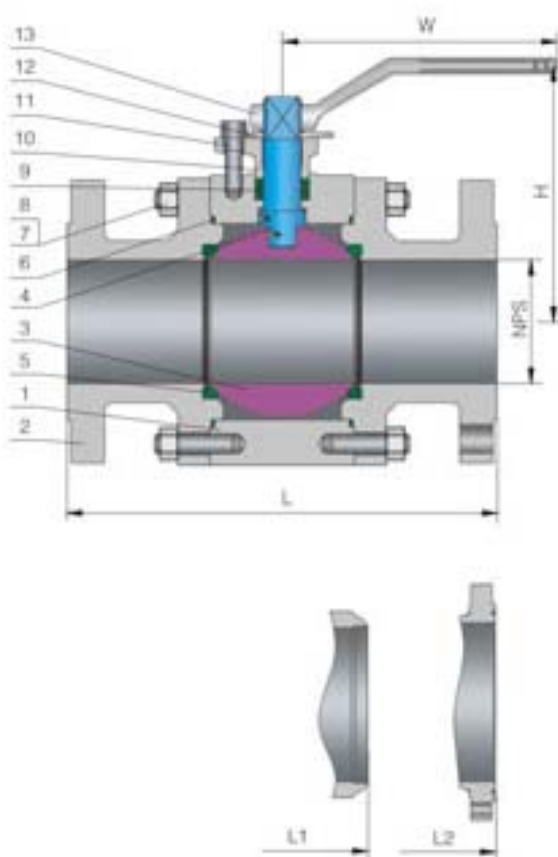
Fig. No:

- B6F56FA B6F59FL B6F56FB
- B6B56FA B6B59FL B6B56FB
- B6R56FA B6R59FL B6R56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304
4	Stem	A276-304	A276-316	A276-304
5	Seal Ring		RPTFE	
6	Bonnet Gasket	Graphite+304 ¹	PTFE	Graphite+304 ¹
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing		PTFE	
10	Gland	A105	A182-F316	A350-LF2
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle		Carbon Steel	

Note: 1) A105+ENP optional
2) Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ FLOATING BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 600Lb													
LL1 (RF/BW)	6.50 165	7.50 190	8.50 216	9.50 241	11.50 292	13.00 330	14.00 356	17.00 432	22.00 559	-	-	-	in. mm
L2 (RTJ)	-	-	-	-	11.62 295	13.12 333	14.12 359	17.12 435	22.12 562	-	-	-	in. mm
H	2.25 58	2.25 58	2.62 68	3.50 89	4.12 105	6.25 158	7.50 190	9.75 247	10.38 262	-	-	-	in. mm
W	8 200	12 300	12 300	16 400	16 400	24 600	24 600	24 600	32 800	-	-	-	in. mm
WT (Kg)	4.5 3.8	5.5 4.1	8 5.6	12.5 7	18 12	27 18	35 25	61 43	172 139	-	-	-	RF BW

Ball Valve FS, TM

Design

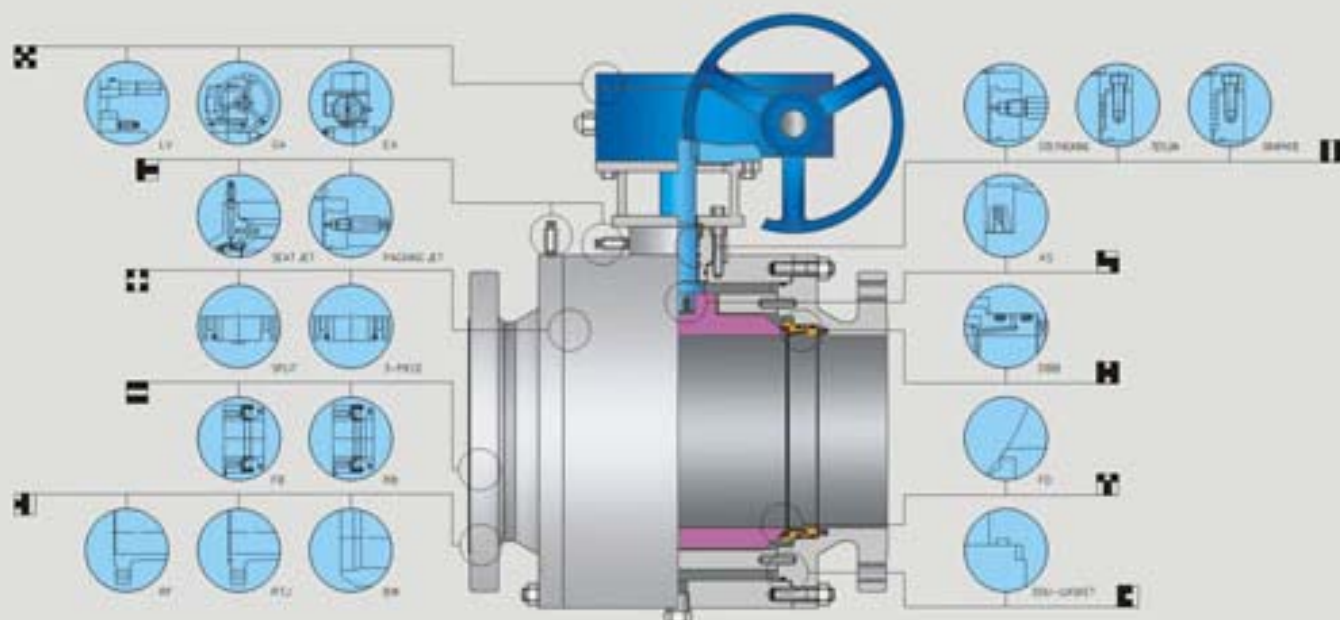
BAOYI steel ball valve are designed and manufactured to provide maximum service life and dependability. All ball valves are full ported and meet the design requirements of American Petroleum Institute Standard API 608 & API 6D, British Standard BS 5351 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Range of Materials

Standard body/bonnet 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 BAOYI Cast Steel Valves

- * Trim Changes
- * End Connection Modifications
- * Packing and Gasket Changes
- * Operator Mounting
- * Handwheel Extensions
- * Pressure Equalizing
- * AS or FD
- * Customer Specified Coatings
- * Weld End Bore Changes
- * Oxygen & Chlorine Cleaning & Packaging



Operating

Extended lever for easy operation. Also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services.

BODY & BONNET

Split or 3-piece, split body & bonnet for 4" & Small. Disassembles easily for repair or replacement of internal components.

End Connections

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

AS

Anti Static. A metallic contact is always granted between ball and stem / body to discharge eventual statics build-up during service.

FD

Fire Durable. Designed to API 607 or BS 6755 to grant their operation suitability in case of fire. Secondary metal-to-metal seal acts as backup if primary seal is destroyed by fire. Valves ordered for compliance with API 607 will be provided with graphite packing and gaskets.

Grease-Jet Joint

Installed in prescriptive part accord with the apply and satisfied with ecumenical situations and realize seal in spot with maintenance easily.

BORE

Full Bore or Reduced Bore. Full-bore design provides exceptional flow control.

Packing

STD Packing adopt high-performance rubber seal ring. STD Packing and TEFLON use situation for smooth pressure. With snap ring apply high-pressure situation. Graphite packing use situation for high-temperature.

DDB

Double Block & Bleed. The body cavity is isolated when the ball is in either fully closed or fully opened position, the medium entrapped in it can easily be bled to avoid overpressure.

GASKET

Adopt high-performance rubber seal ring and spiral wound graphite.

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

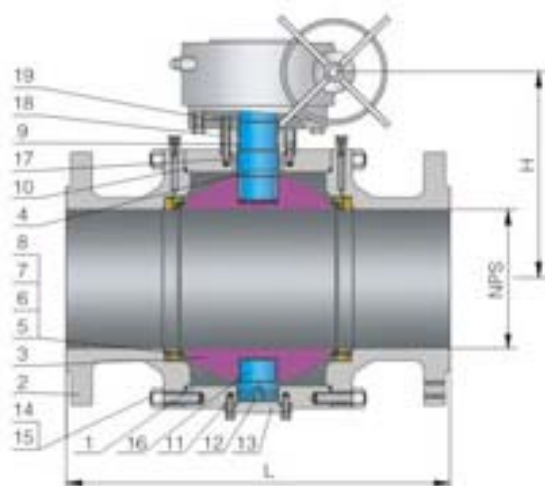
Fig. No:

- BM1F56FA BM1F59FL BM1F56FB
- BM1B56FA BM1B59FL BM1B56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP ²	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A182-F304	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland	A105	A182-F316	A350-LF2
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1). A105+ENP optional
2). Spiral wound construction



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ THREE PIECE BODY FOR 12" & ABOVE
- ▲ TRUNNION MOUNTED BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	mm
ANSI Class 150Lb																			
L (RF)	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00	45.00	49.00	51.00	54.00	60.00	in.
	178	190	203	229	394	457	533	610	686	762	864	914	1067	1143	1245	1295	1372	1524	mm
L1 (BW)	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	66.00	in.
	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727	mm
H	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	38.50	in.
	120	150	180	235	250	280	320	390	420	555	600	635	710	750	800	865	915	980	mm
W	16	16	24	24	24	24	32	32	32	32	32	32	32	40	40	40	40	40	in.
	400	400	600	600	600	600	800	800	800	800	800	800	800	1000	1000	1000	1000	1000	mm
WT (Kg)	28	35	55	80	190	290	445	570	780	1520	2300	2500	3950	4890	6300	7100	8950	13500	RF
	25	28	49	71	182	277	423	553	747	1481	2266	2460	3904	4939	6362	8149	9000	13570	BW

300Lb

Trunnion Mounted Forged Steel Ball Valve

SAFVAL

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI-STATIC, API 608
- ★ 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

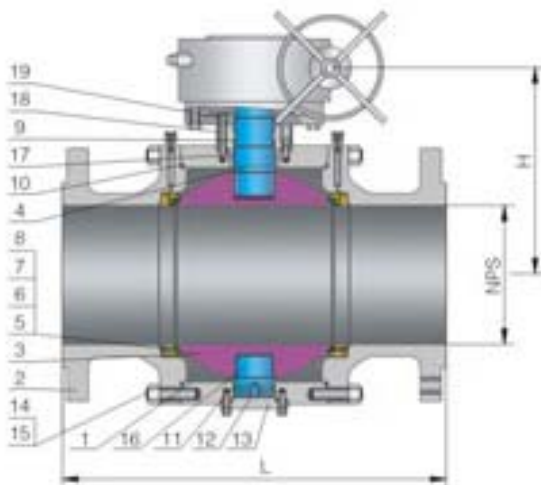
Fig. No:

- BM3F56FA BM3F59FL BM3F56FB
- BM3B56FA BM3B59FL BM3B56FB
- BM3R56FA BM3R59FL BM3R56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ²	Graphite+316 ²	Graphite+304 ²
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A182-F304	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-B	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland	A105	A182-F316	A350-LF2
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Slop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1. A105+ENP optional.
2. Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ THREE PIECE BODY FOR 12" & ABOVE
- ▲ TRUNNION MOUNTED BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI-STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	mm
ANSI Class 300Lb																			
L (RF)	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-	in
	216	241	283	305	403	502	568	648	762	838	914	991	1143	1245	1346	1397	1524	-	mm
L1 (BW)	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-	in
	216	241	283	305	403	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	-	mm
H	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	-	in
	120	150	180	235	250	280	320	390	420	555	600	635	710	750	800	865	915	-	mm
W	16	16	24	24	24	24	32	32	32	32	32	32	32	40	40	40	40	-	in
	400	400	600	600	600	600	800	800	800	800	800	800	800	1000	1000	1000	1000	-	mm
WT (Kg)	30	40	60	90	200	325	490	690	990	1810	2620	2860	4430	5430	6810	7655	9590	-	RF
	24	31	49	72	169	280	424	598	872	1665	2440	2635	4075	4880	6225	7115	9230	-	BW

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

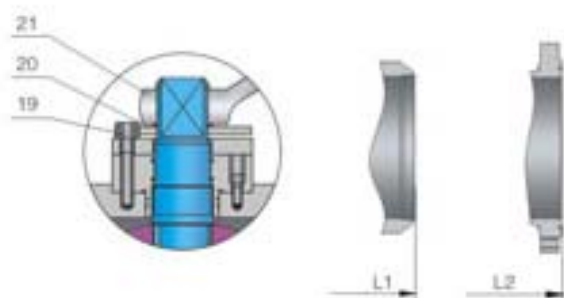
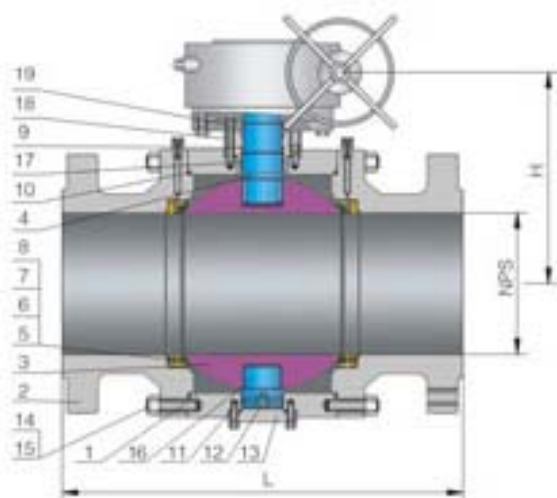
Fig. No:

- BM6F56FA BM6F59FL BM6F56FB
- BM6B56FA BM6B59FL BM6B56FB
- BM6R56FA BM6R59FL BM6R56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP ²	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A182-F304	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland	A105	A182-F316	A350-LF2
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1). A105+ENP optional
2). Spiral wound construction



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ THREE PIECE BODY FOR 12" & ABOVE
- ▲ TRUNNION MOUNTED BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	mm
ANSI Class 600Lb																
LL1 (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	57.00	61.00	in.
	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	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	57.50	61.50	in.
	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562	mm
H	6.50	7.00	7.88	11.00	12.25	14.00	16.12	18.00	19.25	21.00	24.88	25.62	30.12	31.88	34.62	in.
	165	180	200	280	310	355	410	455	490	535	630	650	765	810	880	mm
W	16	24	24	24	32	32	32	32	32	32	40	40	40	40	40	in.
	400	600	600	600	800	800	800	800	800	800	1000	1000	1000	1000	1000	mm
WT (Kg)	34	53	65	125	245	505	640	910	1380	2250	3400	3850	4900	6700	8300	RF/RTJ
	27	43	49	95	188	418	495	740	1185	1960	3050	3406	4275	6025	7580	BW

900Lb

Trunnion Mounted Forged Steel Ball Valve

SAFVAL

Applicable standards:

- ★ APPLICABLE STANDARDS:
- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

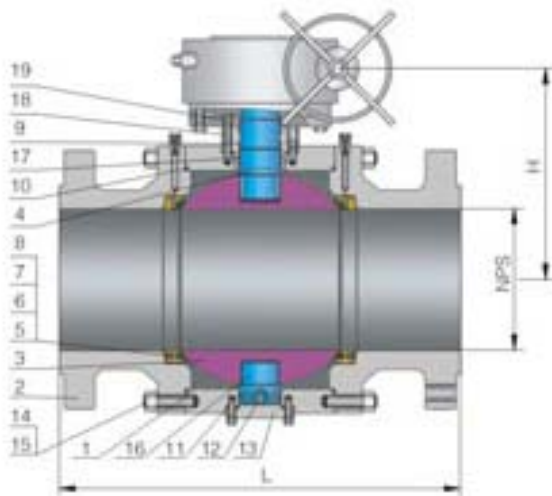


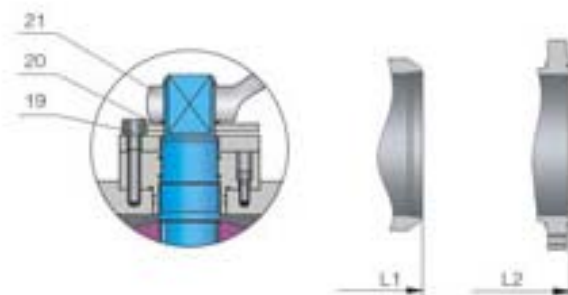
Fig. No:

- BM9F56FA BM9F59FL BM9F56FB
- BM9B56FA BM9B59FL BM9B56FB
- BM9R56FA BM9R59FL BM9R56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ²	Graphite+316 ²	Graphite+304 ²
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A182-F304	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-B	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland	A105	A182-F316	A350-LF2
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Slop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1. A105+ENP optional.
2. Spiral wound construction.



Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ THREE PIECE BODY FOR 12" & ABOVE
- ▲ TRUNNION MOUNTED BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
ANSI Class 900Lb														
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	61.00	in.
	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	mm
L2 (RT/J)	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.50	52.50	61.75	in.
	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568	mm
H	6.72	7.50	8.25	11.38	12.62	15.38	17.00	18.50	20.88	24.00	26.00	27.50	30.75	in.
	170	190	210	290	320	390	430	470	530	610	660	700	780	mm
W	24	24	24	32	32	32	32	32	32	40	40	40	40	in.
	600	600	600	800	800	800	800	800	800	1000	1000	1000	1000	mm
WT (Kg)	45	65	73	135	360	650	930	1350	1890	3100	4300	4950	7100	RF/RTJ
	37	53	56	98	291	545	760	1145	1650	2750	3875	4410	6485	BW

Applicable standards:

- ★ STEEL BALL VALVES, API 608/API 6D
- ★ STEEL BALL VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 608
- ★ 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

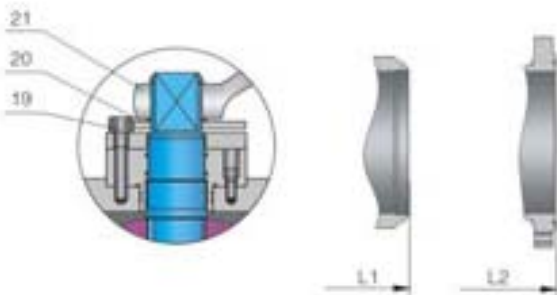
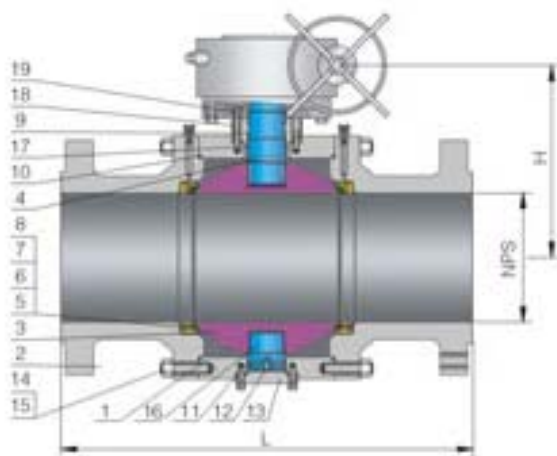


Fig. No:

- BM15F56FA BM15F59FL BM15F56FB ○ BM25F56FA BM25F59FL BM25F56FB
- BM15B56FA BM15B59FL BM15B56FB ○ BM25B56FA BM25B59FL BM25B56FB
- BM15R56FA BM15R59FL BM15R56FB ○ BM25R56FA BM25R59FL BM25R56FB

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP ²	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
11	Bonnet O-Ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Grounding Plunger	A182-F304	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-S	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland	A105	A182-F316	A350-LF2
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel		

Note: 1). A105+ENP optional
2). Spiral wound construction

Design description:

- ▲ FULL PORT DESIGN
- ▲ BB, BOLTED BONNET, SPLIT BODY
- ▲ THREE PIECE BODY FOR 12" & ABOVE
- ▲ TRUNNION MOUNTED BALL TYPE
- ▲ BLOW-OUT PROOF STEM
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ ISO 5211 MOUNTING PAD
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	DN	L/L1 (RF/BW)	L2 (RTJ)	H	W	WT (Kg)	L/L1 (RF/BW)	L2 (RTJ)	H	W	WT (Kg)
						ANSI Class 1500Lb					
2	50	14.50	368	14.62	371	6.75	170	24	600	55	40
2½	65	16.50	419	16.62	422	7.50	190	24	600	75	55
3	80	18.50	470	18.62	473	8.25	210	32	800	95	65
4	100	21.50	546	21.62	549	11.38	290	32	800	150	115
6	150	27.75	705	28.00	711	13.00	330	32	800	540	420
8	200	32.75	832	33.12	841	15.75	400	32	800	880	685
10	250	39.00	991	39.38	1000	17.38	440	32	800	1360	1025
12	300	44.50	1130	45.12	1148	22.00	560	40	1000	1980	1555
14	350	49.50	1257	50.25	1276	25.25	640	40	1000	3100	2600
16	400	54.50	1384	55.38	1407	27.12	690	40	1000	4650	3600
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
						ANSI Class 2500Lb					
2	50	17.75	451	17.88	454	7.50	190	24	800	68	54
2½	65	20.00	508	21.25	540	9.00	230	32	800	95	74
3	80	22.75	578	23.00	584	11.00	260	32	800	120	91
4	100	26.50	673	26.88	683	14.12	360	32	800	185	122
6	150	36.00	914	36.50	927	15.75	400	32	800	675	555
8	200	40.25	1022	40.88	1038	18.88	480	40	1000	1100	818
10	250	50.00	1270	50.88	1292	20.50	520	40	1000	1650	1355
12	300	56.00	1422	56.88	1445	26.38	670	40	1000	2300	1950
14	350	-	-	-	-	-	-	-	-	-	-
16	400	-	-	-	-	-	-	-	-	-	-
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
						RF/RTJ BW					

Swing Check Valve, BB, CS

Design

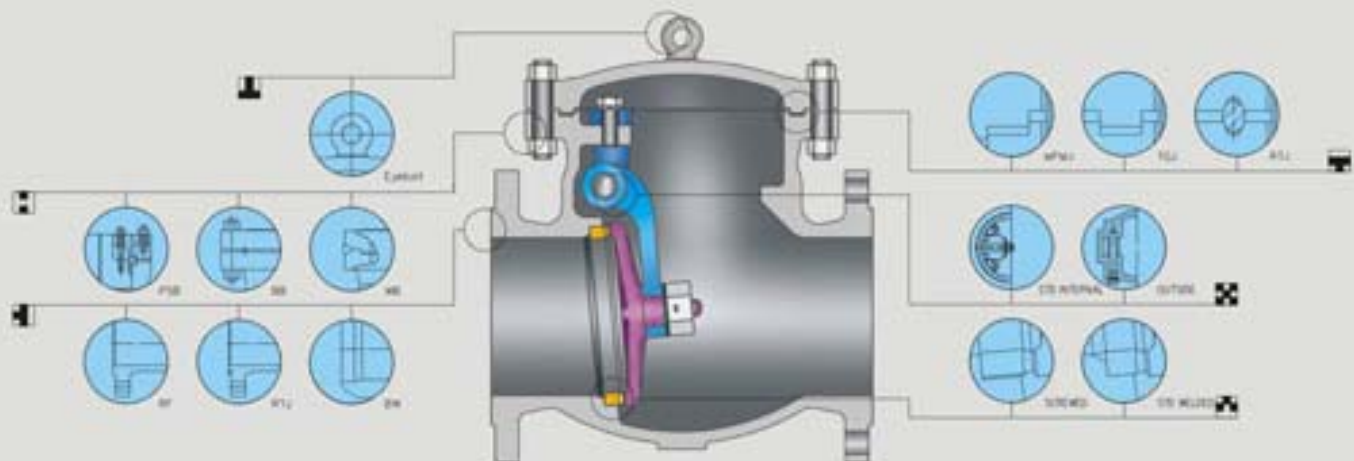
BAOYI cast steel check valve are designed and manufactured to provide maximum service life and dependability. All check valves meet the design requirements of American Petroleum Institute Standard API 600 & API 6D, BS EN 13709 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Range of Materials

Standard body/bonnet 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 steels. 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 BAOYI Cast Steel Valves

- * Trim Changes
- * End Connection Modifications
- * Gasket Changes
- * Outside Lever and Weight
- * Stem Retarders
- * Pressure Equalizing
- * Outside Lever and Weight
- * Customer Specified Coatings
- * Weld End Bore Changes
- * Oxygen & Chlorine Cleaning & Packaging



Eyebolt

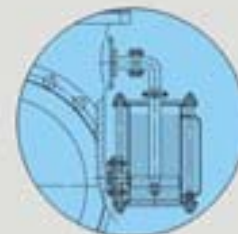
For 150Lb-8", 300Lb-8", 600Lb-6", 900Lb / 1500Lb / 2500Lb-4" & Over.

End Connections

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

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.



BB

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

Body-to-Bonnet 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 bonnet connection in 900Lb & higher rated valves.

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, ISO 14313
- 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

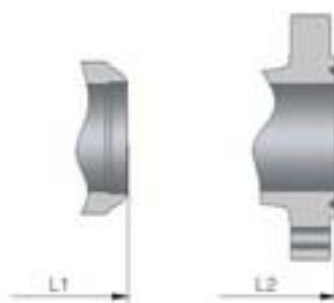
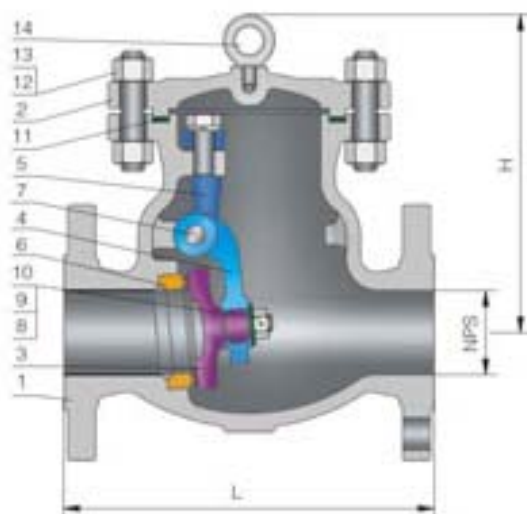
Fig. No:

- C1F01A C1F05D C1F01B
- C1B01A C1B05D C1B01B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1%Cr-1%Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A105+CR13	A182-F11+HF	A350-LF2+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seal 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	Bonnet Gasket	Spiral Wound (Graphite+304)		
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ²⁾	Carbon Steel		

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



Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ RENEWABLE SEAT RINGS
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	900	mm
ANSI Class 150Lb																		
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 (RT/J)	6.50	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	35.88	37.00	38.62	48.00	in
	152	165	175	204	290	353	390	432	475	525	582	627	883	910	940	990	1220	mm
WT (Kg)	14	20	25	40	71	118	177	263	353	542	632	855	970	1275	1600	1990	2760	RF/RT/J
	10	12	17	29	57	96	143	227	295	468	552	755	831	1120	1420	1780	2230	BW

300Lb

Cast Steel Check Valve

Applicable standards:

- ★ STEEL CHECK VALVES, API 6D
- ★ STEEL CHECK VALVES, ISO 14313
- ★ 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

Fig. No:

- C3F01A C3F05D C3F01B
- C3B01A C3B05D C3B01B
- C3R01A C3R05D C3R01B

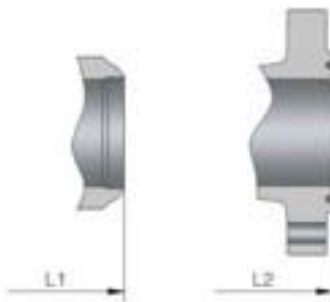
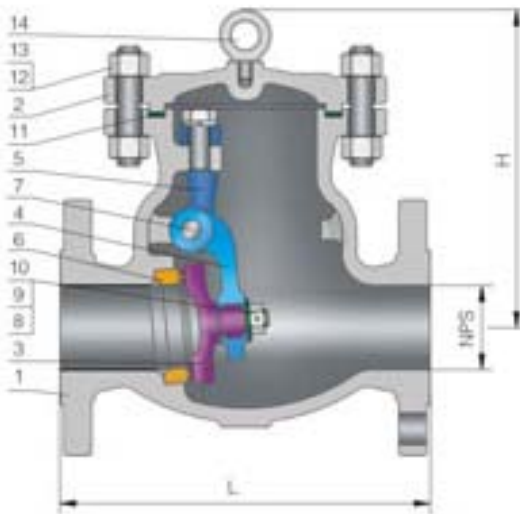
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{2}$ Cr- $\frac{1}{2}$ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A105+CR13	A182-F11+HF	A350-LF2+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	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	Bonnet Gasket	Spiral Wound (Graphite+304)		
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ²⁾	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.



Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ RENEWABLE SEAT RINGS
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS DN	2 50	2½ 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	28 700	30 750	36 900	in mm
ANSI Class 300Lb																		
L/L1 (RF/BW)	10.50 267	11.50 292	12.50 318	14.00 356	17.50 445	21.00 533	24.50 622	28.00 711	33.00 838	34.00 864	38.50 978	40.00 1016	53.00 1346	53.00 1346	59.00 1499	62.75 1594	82.00 2083	in mm
L2 (RTJ)	11.12 283	12.12 308	13.12 333	14.62 371	18.12 460	21.62 549	25.12 638	28.62 727	33.62 854	34.62 879	39.12 994	40.75 1035	53.88 1368	54.00 1372	60.00 1524	63.75 1619	- -	in mm
H	6.00 152	6.50 165	6.88 175	8.00 204	11.50 292	13.88 353	15.38 390	17.00 432	18.75 475	20.62 525	22.88 582	24.62 627	34.75 880	35.88 910	37.00 940	38.62 980	48.00 1220	in mm
WT (Kg)	16 11	23 13	29 18	48 31	82 61	136 103	204 155	302 245	405 315	625 503	730 593	985 812	1115 895	1465 1205	1840 1525	2290 1895	3180 2395	RF/RTJ BW

Applicable standards:

- STEEL CHECK VALVES, API 6D
- STEEL CHECK VALVES, ISO 14313
- 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

Fig. No:

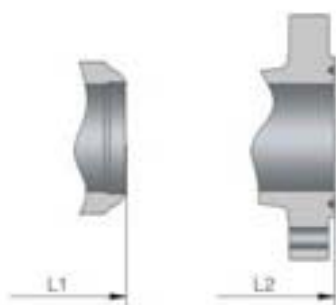
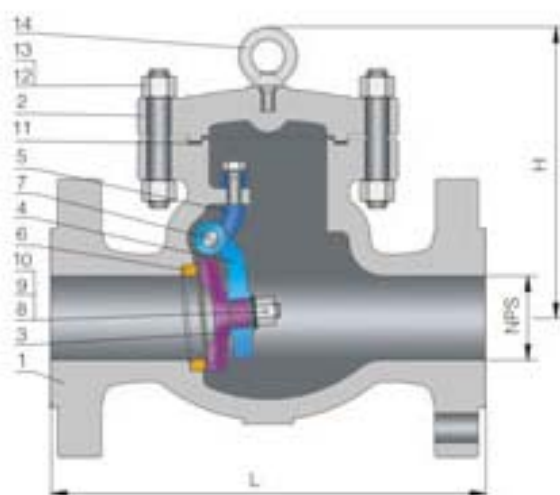
- C6F01A C6F05D C6F01B
- C6B01A C6B05D C6B01B
- C6R01A C6R05D C6R01B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seal 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	Bonnet Gasket	Spiral Wound (Graphite+304)		
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt	Carbon Steel		

Note: 1). NPS 6" & larger.

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.



Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ RENEWABLE SEAT RINGS
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
ANSI Class 600Lb														
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	29.75	31.00	43.50	in
	190	205	222	255	368	445	490	540	595	655	730	795	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

900Lb

Cast Steel Check Valve

Applicable standards:

- ★ STEEL CHECK VALVES, API 6D
- ★ STEEL CHECK VALVES, ISO 14313
- ★ 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

Fig. No:

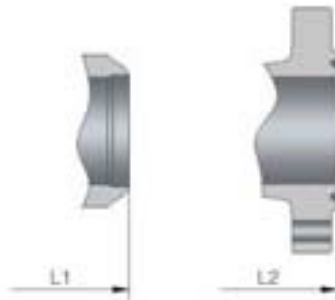
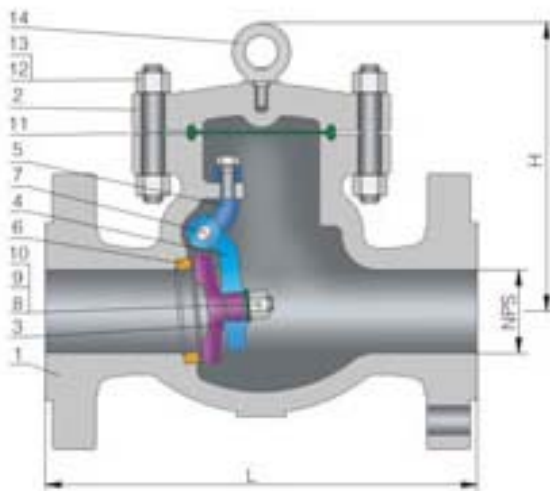
- C9F05A C9F05D C9F05B
- C9B05A C9B05D C9B05B
- C9R05A C9R05D C9R05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{2}$ Cr- $\frac{1}{2}$ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc ¹⁾	A216-WCB+Cr13	A217-WC6+HF	A352-LCB+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
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	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt ¹⁾	Carbon Steel		

Note: 1) NPS 6" & larger.

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.



Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ RENEWABLE SEAT RINGS
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS DN	2 50	2½ 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	in mm
ANSI Class 900Lb														
L/L1 (RF/BW)	14.50 368	16.50 419	15.00 381	18.00 457	24.00 610	29.00 737	33.00 838	38.00 965	40.50 1029	44.50 1130	48.00 1219	52.00 1321	-	in mm
L2 (RTJ)	14.62 371	16.62 422	15.12 384	18.12 460	24.12 613	29.12 740	33.12 841	38.12 968	40.88 1038	44.88 1140	48.50 1232	52.50 1334	-	in mm
H	9.50 240	10.00 256	11.00 278	12.50 320	18.12 460	22.00 560	24.00 610	26.50 675	29.38 745	32.00 815	33.50 850	38.75 985	-	in mm
WT (Kg)	37 21	54 25	68 34	109 58	195 115	321 194	481 290	711 461	956 597	1468 950	1870 1210	2316 1533	-	RF/RTJ BW

Applicable standards:

- STEEL CHECK VALVES, API 6D
- STEEL CHECK VALVES, ISO 14313
- 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

Fig. No:

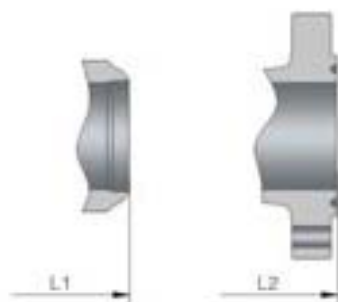
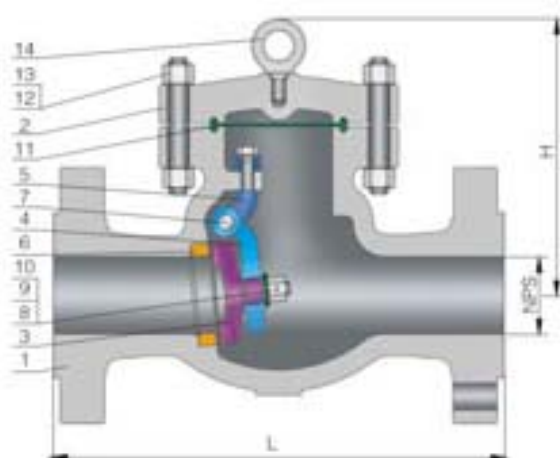
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- C15B05A C15B05D C15B05B
- C15R05A C15R05D C15R05B
- C25F05A C25F05D C25F05B
- C25B05A C25B05D C25B05B
- C25R05A C25R05D C25R05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 ¹ / ₂ Cr- ¹ / ₂ Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet Cap	A216-WCB	A217-WC6	A352-LCB
3	Disc	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seal Ring	A105+HF	A182-F11+HF	A350-LF2+HF
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	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
12	Bonnet Stud	A193-B7	A193-B16	A320-L7
13	Bonnet Stud Nut	A194-2H	A194-7	A194-4
14	Eyebolt	Carbon Steel		

Note: 1) NPS 6" & larger.

2) Disc and seal ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ RENEWABLE SEAT RINGS
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H		WT (Kg)		L/L1 (RF/BW)		L2 (RTJ)		H		WT (Kg)	
		in.	mm	in.	mm	in.	mm	RF/RTJ	BW	in.	mm	in.	mm	in.	mm	RF/RTJ	BW
ANSI Class 1500Lb																	
2	50	14.50	368	14.62	371	9.50	240	40	29	17.75	451	17.88	454	10.75	275	50	35
2 1/2	65	16.50	419	16.62	422	10.00	256	63	47	20.00	508	20.25	514	13.25	305	76	55
3	80	18.50	470	18.62	473	13.00	300	70	49	22.75	578	23.00	584	13.75	350	85	68
4	100	21.50	546	21.62	549	14.75	375	115	84	26.50	673	26.88	683	15.12	385	165	115
6	150	27.75	705	28.00	711	18.88	480	250	152	36.00	914	36.50	927	19.50	495	460	225
8	200	32.75	832	33.12	841	23.50	595	470	310	40.25	1022	40.88	1038	24.62	625	900	580
10	250	39.00	991	39.38	1000	26.00	660	740	470	50.00	1270	50.88	1292	26.00	712	1300	860
12	300	44.50	1130	45.12	1148	29.12	740	1100	710	56.00	1422	56.88	1445	35.62	905	1800	1150
14	350	49.50	1257	50.25	1276	30.88	785	1410	910	-	-	-	-	-	-	-	-
16	400	54.50	1384	55.38	1407	32.88	835	1600	1100	-	-	-	-	-	-	-	-
in.	mm	in.	mm	in.	mm	in.	mm	RF/RTJ	BW	in.	mm	in.	mm	in.	mm	RF/RTJ	BW

Butterfly Dual-plate

SAFVAL

150Lb/300Lb

Cast Steel Check Valve

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

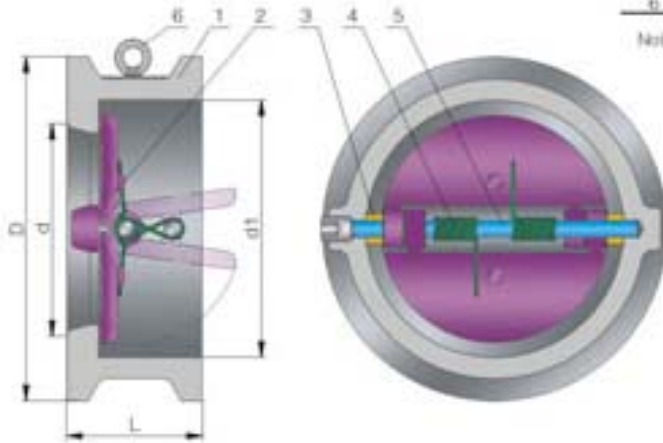
Fig. No:

- CD1W01A
- CD1W05D
- CD1W01B
- CD3W01A
- CD3W05D
- CD3W01B
- CD1F01A
- CD1F05D
- CD1F01B
- CD3F01A
- CD3F05D
- CD3F01B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Plate	A216-WCB+CR13	A351-CF8M+HF	A352-LCB+CR13
3	Stop Pin	A276-420	A276-304	A276-420
4	Back Spring	A313-304	A313-316	A313-304
5	Hinge Pin	A276-420	A276-304	A276-420
6	Eyebolt	Carbon Steel		

Note: 1). NPS 8" & larger.



Design description:

- ▲ ONE PIECE BODY
- ▲ BUTTERFLY SWING TYPE
- ▲ DUAL-PLATE DISC, LONG-PATTERN
- ▲ RENEWABLE SPLIT DISC
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ WAFER ENDS
- ▲ AVAILABLE WITH FLANGED ENDS

Dimensions data

NPS	2	2½	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
ANSI Class 150Lb														
L	2.38	2.62	2.88	2.88	3.88	5.00	5.75	7.12	7.25	7.50	8.00	8.62	8.75	in.
	60	67	73	73	98	127	146	181	184	191	203	219	222	mm
D	4.00	4.88	5.38	6.75	8.62	10.88	13.25	16.00	17.62	20.12	21.50	23.75	28.12	in.
	103	122	136	173	220	277	337	407	448	512	547	604	715	mm
d	2.00	2.50	3.25	4.00	6.00	8.00	10.00	12.00	13.75	15.75	17.75	19.75	23.62	in.
	51	65	80	102	152	203	254	305	350	400	450	500	600	mm
d1	2.25	2.88	3.50	4.25	6.25	8.25	10.50	12.12	14.00	16.00	18.00	19.88	23.75	in.
	56	73	88	108	160	210	266	310	355	405	455	505	605	mm
WT	2	3	4	6	13	25	39	54	80	117	138	163	331	Kg
ANSI Class 300Lb														
L	2.38	2.62	2.88	2.88	3.88	5.00	5.75	7.12	8.75	9.12	10.38	11.50	12.50	in.
	60	67	73	73	98	127	146	181	222	232	264	292	318	mm
D	4.25	5.00	5.75	7.00	8.88	12.00	14.12	16.50	19.00	21.12	23.38	25.62	30.38	in.
	110	128	147	179	249	305	359	420	483	537	594	652	772	mm
d	2.00	2.50	3.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00	in.
	51	65	80	102	152	203	254	305	350	400	450	500	600	mm
d1	2.25	2.88	3.50	4.25	6.38	8.25	10.50	12.25	14.00	16.00	18.00	20.00	24.00	in.
	56	73	88	108	160	210	266	310	355	405	455	505	605	mm
WT	3	4	6	8	18	31	51	77	117	190	200	265	410	Kg

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

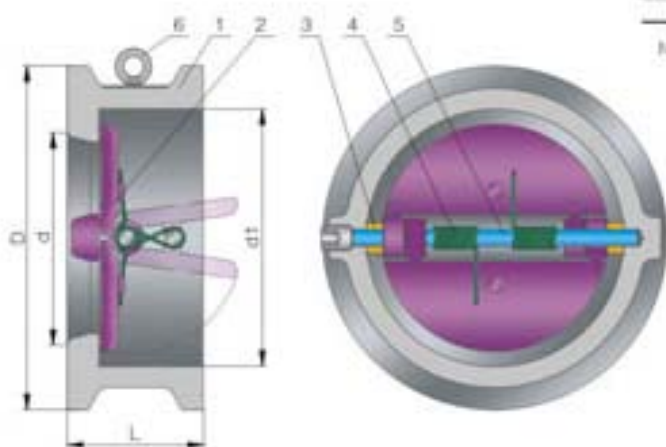
Fig. No:

- CD6W01A CD6W05D CD6W01B
- CD6F01A CD6F05D CD6F01B
- CD9W05A CD9W05D CD9W05B
- CD9F05A CD9F05D CD9F05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CFRM	A352-LCB
2	Plate	A216-WCB+CR13	A351-CFRM+HF	A352-LCB+CR13
3	Stop Pin	A276-420	A276-304	A276-420
4	Back Spring	A313-304	A313-316	A313-304
5	Hinge Pin	A276-420	A276-304	A276-420
6	Eyebolt	Carbon Steel		

Note: 1) NPS 8" & larger.



Design description:

- ▲ ONE PIECE BODY
- ▲ BUTTERFLY SWING TYPE
- ▲ DUAL-PLATE DISC, LONG-PATTERN
- ▲ RENEWABLE SPLIT DISC
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ WAFER ENDS
- ▲ AVAILABLE WITH FLANGED ENDS

Dimensions data

NPS	DN	ANSI Class 600Lb					ANSI Class 900Lb					
		L	D	d	d1	WT	L	D	d	d1	WT	
2	50	2.38	60	4.38	110	2.00	51	2.25	58	4	8	
2½	65	2.62	67	5.00	128	2.50	65	2.88	73	5	11	
3	80	2.88	73	5.75	147	3.00	80	3.50	88	8	14	
4	100	3.12	79	7.50	191	4.00	102	4.25	108	11	20	
6	150	5.38	137	10.38	264	6.00	152	6.38	162	28	42	
8	200	6.50	165	12.50	318	7.88	200	8.38	212	55	84	
10	250	8.38	213	15.62	398	9.88	250	10.50	266	95	145	
12	300	9.00	229	17.88	455	12.00	305	12.25	312	140	220	
14	350	10.75	273	19.25	490	13.25	337	14.00	355	223	-	
16	400	12.00	305	22.12	562	15.25	387	15.75	400	360	-	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Kg

Globe Valve, BB, CS

Design

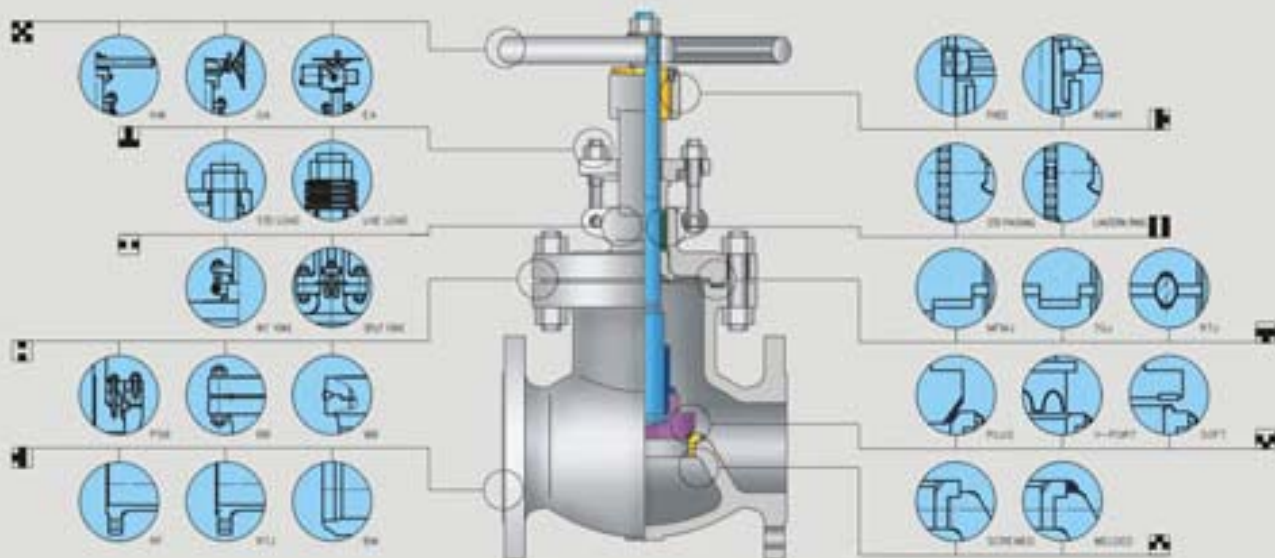
BAOYI cast steel globe valve are designed and manufactured to provide maximum service life and dependability. All globe valves are full ported and meet the design requirements of American Petroleum Institute Standard API 600 & API 6D, BS EN 13709 and generally conform to American Society of Mechanical Engineers standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

Range of Materials

Standard body/bonnet 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 BAOYI Cast Steel Valves

- * Trim Changes
- * End Connection Modifications
- * Packing and Gasket Changes
- * Operator Mounting
- * Handwheel Extensions
- * Pressure Equalizing
- * By-pass
- * Customer Specified Coatings
- * Weld End Bore Changes
- * Oxygen & Chlorine Cleaning & Packaging



Operating

Large handwheels for easy operation. Also available with gearing motor actuators, pneumatic or hydraulic actuators for more difficult services.

OS & Y

Outside Screw and Yoke. Cast steel globe valve yoke integral with bonnet for 105 and smaller.

End Connections

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

Lantern ring and double packing set

Lantern ring with leak-off fitting connection and double packing stack is optionally available for critical services.

Disc

Plug disc is stem guided on all sizes. Disc has a differential angle front the seat to provide a line contact for maximum sealing. The bottom of V-port disc is guided by the body seat ring for maximum disc stability in throttling applications. The soft TEFLON ring is excellent for lower temperature service where tight shutoff is required.

Live Load Packing

In services requiring frequent cycling or with high pressure / temperature variations, live loading extends the service life between maintenance periods by requiring less frequent packing gland adjustments. Belleville springs are employed to provide constant packing gland stress.

BB

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

Yokesleeve

Furnished in aluminum bronze to reduce operating torque. Most sizes furnished with ball bearing yokesleeves.

Body-to-Bonnet 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 bonnet connection in 900Lb & higher rated valves.

Seat Rings

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

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

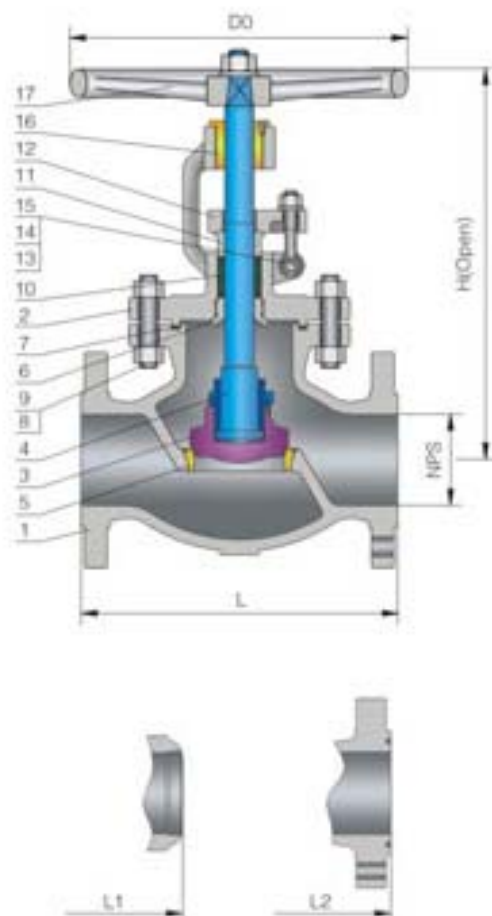
Fig. No:

- GL1F01A GL1F05D GL1F01B
- GL1B01A GL1B05D GL1B01B
- GL3F01A GL3F05D GL3F01B
- GL3B01A GL3B05D GL3B01B
- GL3R01A GL3R05D GL3R01B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{2}$ %Cr-1%Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Disc	A105+CR13	A182-F11+HF	A350-LF2+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Spiral Wound (Graphite+304)		
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Yoke sleeve	Aluminum-Bronze ¹		
17	Handwheel	Malleable Iron		

- Note: 1) Ductile Fe-Resist 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.



Design description:

- ▲ STRAIGHT PATTERN BODY DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND HANDWHEEL
- ▲ LOOSE DISC, CHOICE OF PLUG OR BALL
- ▲ RENEWABLE SEAT RING
- ▲ IMPACT HANDWHEEL FOR 10" & ABOVE
- ▲ HORIZONTAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H (OPEN)		D0	WT (Kg)		L/L1 (RF/BW)		L2 (RTJ)		H (OPEN)		D0	WT (Kg)			
		in	mm	in	mm	in	mm		in	mm	in	mm	in	mm	in	mm		in	mm	RF	BW
ANSI Class 150Lb																					
2	50	8.00	203	8.00	203	15.00	380	7	180	18	14	10.50	267	11.12	282	16.75	425	8	200	25	20
2½	65	8.50	216	8.50	216	21.00	535	10	240	30	22	11.50	292	12.12	308	19.00	485	10	240	32	22
3	80	9.50	241	9.50	241	17.50	445	11	280	41	33	12.50	318	13.12	333	19.88	505	11	280	38	27
4	100	11.50	292	11.50	292	20.25	515	11	280	64	43	14.00	356	14.62	371	22.50	570	13	320	56	41
6	150	16.00	406	16.00	406	22.00	560	13	320	86	72	17.50	444	18.12	460	25.25	640	16	400	96	75
8	200	19.50	495	19.50	495	24.25	615	13	320	110	88	22.00	559	22.62	575	33.25	845	18	450	150	117
10	250	24.50	622	24.50	622	32.00	815	16	400	280	245	24.50	622	25.12	638	35.50	900	20	500	360	310
12	300	27.50	698	27.50	698	35.88	910	18	450	380	345	28.00	711	28.62	727	38.62	980	24	600	550	492
14	350	31.00	787	31.00	787	48.38	1230	20	500	510	450	-	-	-	-	-	-	-	-	-	-
16	400	36.00	914	36.00	914	57.00	1450	24	600	740	665	-	-	-	-	-	-	-	-	-	-
in mm		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	RF	BW

600Lb/900Lb

Cast Steel Globe Valve

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

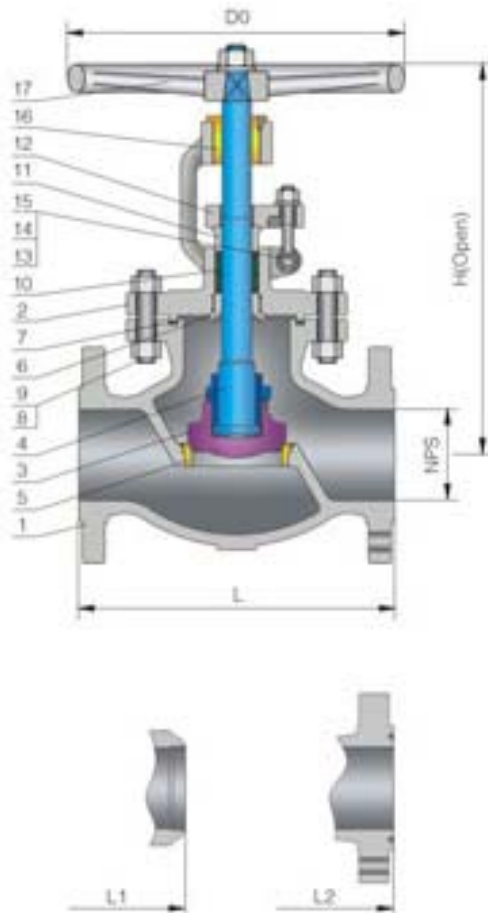
Fig. No:

- GL6F01A GL6F05D GL6F01B
- GL6B01A GL6B05D GL6B01B
- GL6R01A GL6R05D GL6R01B
- GL9F05A GL9F05D GL9F05B
- GL9B05A GL9B05D GL9B05B
- GL9R05A GL9R05D GL9R05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2%Cr-1/2%Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Disc	A105+CR13	A182-F11+HF	A350-LF2+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
6	Stem BackSeat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Spiral Wound (Graphite+304)		
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Yokesleeve	Aluminum-Bronze ¹		
17	Handwheel	Malleable Iron		

Note: 1) Ductile Ni-Resist 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.



Design description:

- ▲ STRAIGHT PATTERN BODY DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
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- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND HANDWHEEL
- ▲ LOOSE DISC, CHOICE OF PLUG OR BALL
- ▲ RENEWABLE SEAT RING
- ▲ IMPACT HANDWHEEL FOR 10" & ABOVE
- ▲ HORIZONTAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H (OPEN)		D0		WT (Kg)	L/L1 (RF/BW)		L2 (RTJ)		H (OPEN)		D0		WT (Kg)		
		ANSI Class 600Lb	ANSI Class 900Lb	ANSI Class 600Lb	ANSI Class 900Lb	ANSI Class 600Lb	ANSI Class 900Lb	ANSI Class 600Lb	ANSI Class 900Lb		ANSI Class 600Lb	ANSI Class 900Lb									
2	50	11.50	292	11.62	295	17.50	445	10	240	35	27	14.50	368	14.62	371	22.00	560	11	280	57	41
2 1/2	65	13.00	330	13.12	333	19.75	502	11	280	50	34	16.50	419	16.62	422	23.25	590	13	320	62	53
3	80	14.00	356	14.12	359	21.00	533	13	320	60	42	15.00	381	15.12	384	25.25	640	16	400	92	58
4	100	17.00	432	17.12	435	24.50	622	16	400	110	84	18.00	457	18.12	460	31.88	810	18	450	168	117
6	150	22.00	559	22.12	562	29.50	750	18	450	230	192	24.00	610	24.12	613	41.38	1050	20	500	365	238
8	200	26.00	660	26.12	663	36.50	927	20	500	410	350	29.00	737	29.12	740	53.50	1360	24	600	665	538
10	250	31.00	787	31.12	790	44.88	1140	24	600	770	680	33.00	838	33.12	841	61.88	1570	24	600	1250	1060
12	300	33.00	838	33.12	841	53.12	1350	24	600	1140	1030	-	-	-	-	-	-	-	-	-	-
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	RF/RTJ	BW	in.	mm	in.	mm	in.	mm	in.	mm	RF/RTJ	BW

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

Fig. No:

- GL15F05A GL15F05D GL15F05B ○ GL25F05A GL25F05D GL25F05B
- GL15B05A GL15B05D GL15B05B ○ GL25B05A GL25B05D GL25B05B
- GL15R05A GL15R05D GL15R05B ○ GL25R05A GL25R05D GL25R05B

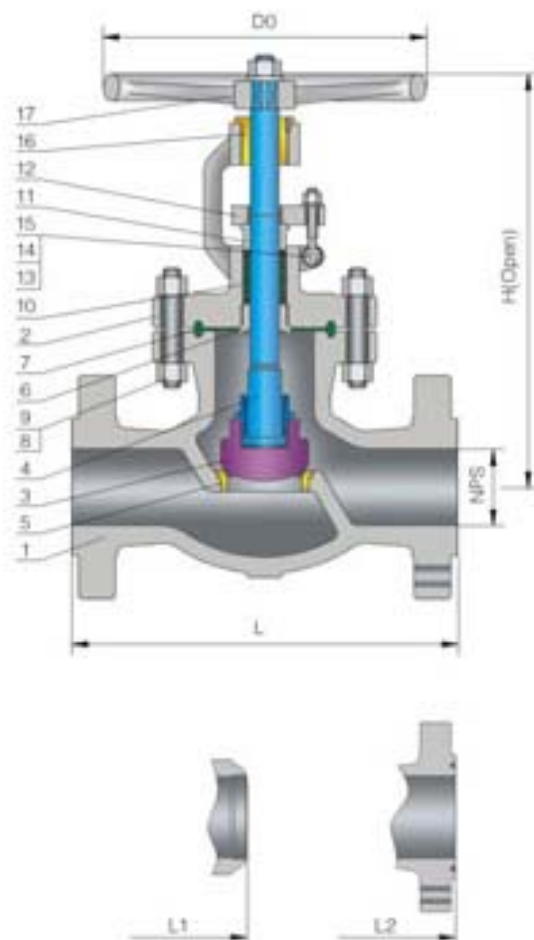
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Disc	A105+CR13	A182-F11+HF	A350-LF2+CR13
4	Stem	A182-F8a	CR-MO-V	A182-F8a
5	Seat Ring	A105+HF	A182-F11+HF	A350-LF2+HF
6	Stem Back Seat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Steel Ring	304SS Ring	Steel Ring
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing		Graphite	
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Yoke sleeve		Aluminum-Bronze ¹	
17	Handwheel		Malleable Iron	

- Note: 1) Ductile Fe-Resist optional
 2) Disc and seal ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Design description:

- ▲ STRAIGHT PATTERN BODY DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND HANDWHEEL
- ▲ LOOSE DISC, CHOICE OF PLUG OR BALL
- ▲ RENEWABLE SEAT RING
- ▲ IMPACT HANDWHEEL FOR 10" & ABOVE
- ▲ HORIZONTAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR



Dimensions data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H (OPEN)		D0	WT (Kg)		L/L1 (RF/BW)		L2 (RTJ)		H (OPEN)		D0	WT (Kg)			
		in.	mm	in.	mm	in.	mm		in.	mm	in.	mm	in.	mm	in.	mm		in.	mm	in.	mm
ANSI Class 1500Lb																					
2	50	14.50	368	14.62	371	22.00	560	13	320	68	57	17.75	451	17.88	454	25.50	650	16	400	97	72
2 1/2	65	16.50	419	16.62	422	23.25	590	16	400	97	81	20.00	508	20.50	514	28.12	715	18	450	138	95
3	80	18.50	470	18.62	473	29.50	750	18	450	116	95	22.75	578	23.00	584	32.50	825	20	500	167	108
4	100	21.50	546	21.62	549	36.00	915	20	500	215	184	26.50	673	26.88	683	47.00	1195	24	600	305	196
6	150	27.75	705	28.00	711	48.62	1235	24	600	445	347	36.00	914	36.50	927	70.50	1790	28	700	633	351
8	200	32.75	832	33.12	841	65.00	1650	28	700	795	635	-	-	-	-	-	-	-	-	-	-
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	RF/RTJ	BW	in.	mm	in.	mm	in.	mm	in.	mm	RF/RTJ	BW

150Lb/300Lb

Cast Steel Plug Valve

Applicable standards:

- ★ STEEL PLUG VALVES, API 599/API 6D
- ★ STEEL PLUG VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI-STATIC, API 599
- ★ 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 599/API 6D

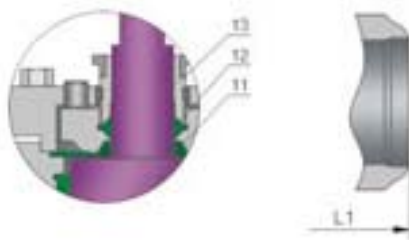
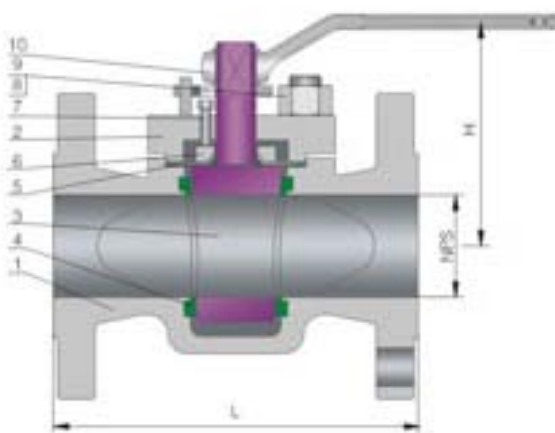
Fig. No:

- P1F57A
- P1F59L
- P1F57B
- P3F57A
- P3F59L
- P3F57B
- P1B57A
- P1B59L
- P1B57B
- P3B57A
- P3B59L
- P3B57B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet Cap	A216-WCB	A351-CF8M	A352-LCB
3	Plug	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Sleeve	Glass Filled PTFE		
5	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
6	Adjusting Gasket	A182-F6a	A182-F316	A182-F6a
7	Adjusting Bolt	A193-B7	A193-B8	A320-L7
8	Bonnet Stud	A193-B7	A193-B8	A320-L7
9	Bonnet Bolt	A194-2H	A194-J	A194-4
10	Handle	Carbon Steel		
11	Diaphragm	A167-304+PTFE	A167-316+PTFE	A167-304+PTFE
12	Packing	Graphite		
13	Gland Flange	A216-WCB	A217-WC6	A352-LCB

Note: 1) A105+ENP optional
2) Jacketed construction.



Design description:

- ▲ RUGGED, HEAVY-DUTY BODY
- ▲ BOLTED BONNET CAP
- ▲ PTFE SLEEVED, TAPERED PLUG
- ▲ LARGE PORT OPENINGS
- ▲ NON-LUBRICATED
- ▲ STEM INTEGRAL WITH PLUG
- ▲ IN-LINE ADJUSTMENT
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI-STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ RENEWABLE SEAT RING
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	DN	L (RF)		L1 (BW)		H	W	WT (Kg)		L (RF)	L1 (BW)	H	W	WT (Kg)			
		RF	BW	RF	BW			RF	BW								
ANSI Class 150Lb																	
2	50	7.00	178	10.50	267	6.00	150	13	320	17	13						
2½	65	7.50	191	12.00	305	6.50	165	14	350	20	14						
3	80	8.00	203	13.00	330	7.12	180	16	410	25	17.5						
4	100	9.00	229	14.00	356	15.00	380	13	320	40	29						
6	150	10.50	267	18.00	457	20.50	520	13	320	70	55						
8	200	11.50	292	20.50	521	22.88	580	13	320	135	110						
10	250	13.00	330	22.00	559	24.50	620	14	350	220	185						
12	300	14.00	356	25.00	635	26.75	680	15	380	300	247						
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	RF	BW	in.	mm	in.	mm	RF	BW
ANSI Class 300Lb																	
2	50	8.5	216	10.50	267	6.00	150	13	320	17	13						
2½	65	9.5	241	12.00	305	6.50	165	14	350	20	14						
3	80	11.0	283	13.00	330	7.12	180	16	410	25	17.5						
4	100	12.0	305	14.00	356	15.00	380	13	320	40	29						
6	150	16.0	403	18.00	457	20.50	520	13	320	70	55						
8	200	16.5	419	20.50	521	22.88	580	13	320	135	110						
10	250	18.0	457	22.00	559	24.50	620	14	350	220	185						
12	300	20.0	502	25.00	635	26.75	680	15	380	300	247						

Applicable standards:

- ★ STEEL PLUG VALVES, API 599/API 6D
- ★ STEEL PLUG VALVES, ISO 14313
- ★ FIRE DURABLE, API 607
- ★ ANTI STATIC, API 599
- ★ 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

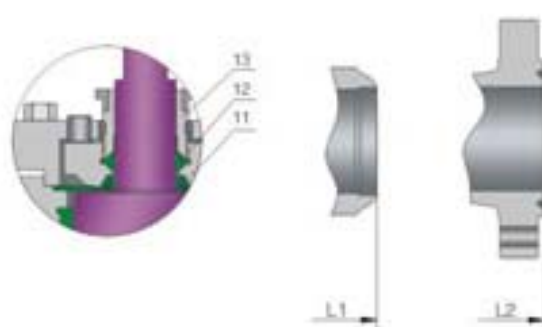
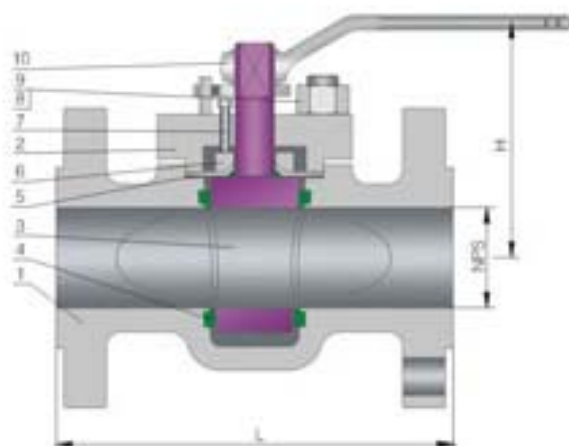
Fig. No:

○ P6F57A	P6F59L	P6F57B	○ P9F57A	P9F59L	P9F57B
○ P6B57A	P6B59L	P6B57B	○ P9B57A	P9B59L	P9B57B
○ P6R57A	P6R59L	P6R57B	○ P9R57A	P9R59L	P9R57B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet Cap	A216-WCB	A351-CF8M	A352-LCB
3	Plug	A182-F304 ¹	A182-F316	A182-F304 ¹
4	Sleeve	Glass Filled PTFE		
5	Bonnet Gasket	Graphite+304 ¹	Graphite+316 ¹	Graphite+304 ¹
6	Adjusting Gasket	A182-F6a	A182-F316	A182-F6a
7	Adjusting Bolt	A193-B7	A193-B8	A320-L7
8	Bonnet Stud	A193-B7	A193-B8	A320-L7
9	Bonnet Bolt	A194-2H	A194-8	A194-4
10	Handle	Carbon Steel		
11	Diaphragm	A216-WCB	A217-WC6	A352-LCB
12	Packing	Graphite		
13	Gland Flange	A216-WCB	A217-WC6	A352-LCB

Note: 1) A105+ENP optional
2) Jacketed construction.



Design description:

- ▲ RUGGED, HEAVY-DUTY BODY
- ▲ BOLTED BONNET CAP
- ▲ PTFE SLEEVED, TAPERED PLUG
- ▲ LARGE PORT OPENINGS
- ▲ NON-LUBRICATED
- ▲ STEM INTEGRAL WITH PLUG
- ▲ IN-LINE ADJUSTMENT
- ▲ FIRE DURABLE CONSTRUCTION
- ▲ ANTI STATIC DEVICE
- ▲ STOPPER DEVICE
- ▲ RENEWABLE SEAT RING
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH WG OPERATOR

Dimensions data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H		W		WT (Kg)		L/L1 (RF/BW)		L2 (RTJ)		H		W		WT (Kg)	
ANSI Class 600Lb												ANSI Class 900Lb									
2	50	11.50	292	11.62	295	6.12	155	14	350	28	21	14.50	368	14.62	371	6.12	155	14	350	52	32
2½	65	13.00	330	13.12	333	6.75	170	16	410	33	23.5	16.50	419	16.62	422	6.75	170	16	410	60	34
3	80	14.00	356	14.12	359	7.25	185	13	320	37	23	15.00	361	15.12	364	7.25	185	13	320	70	47
4	100	16.00	432	16.12	435	15.38	390	13	320	75	46	18.00	457	18.12	460	15.38	390	13	320	92	55
6	150	19.50	559	19.62	562	20.88	530	13	320	142	97	24.00	610	24.12	613	20.88	530	13	320	195	120
8	200	23.50	660	23.62	664	23.25	590	14	350	250	167	29.00	737	29.12	740	23.25	590	14	350	320	197
10	250	26.50	767	26.62	791	24.88	630	15	380	365	227	33.00	838	33.12	841	24.88	630	15	380	455	277
12	300	30.00	838	30.12	841	27.12	690	15	380	515	354	38.00	965	38.12	968	27.12	690	15	380	625	405
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	RF/RTJ	BW	in.	mm	in.	mm	in.	mm	in.	mm	RF/RTJ	BW

150Lb/300Lb

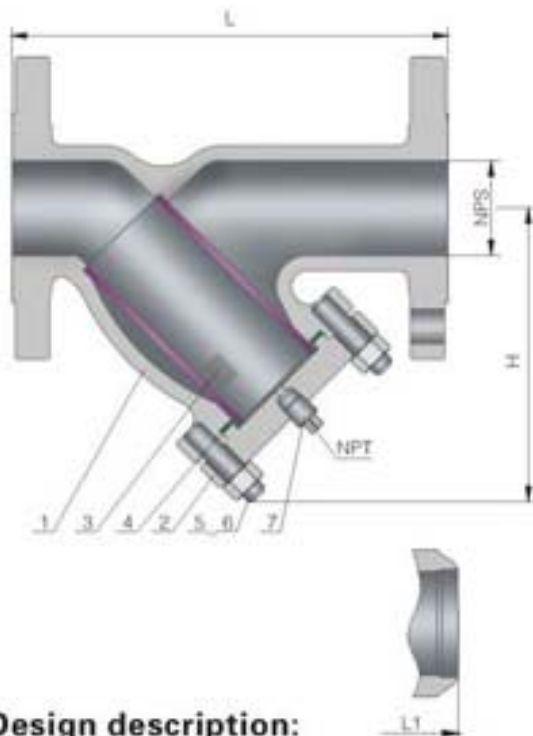
Cast Steel Y-strainer

Applicable standards:

- ★ 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

Fig. No:

- SY1F57A
- SY1F59L
- SY1F57B
- SY3F57A
- SY3F59L
- SY3F57B
- SY1B57A
- SY1B59L
- SY1B57B
- SY3B57A
- SY3B59L
- SY3B57B



Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	18Cr-9Ni-2Mo	Carbon Steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Bonnet Cap	A216-WCB	A351-CF8M	A352-LCB
3	Screen	A240-304	A240-316	A240-304
4	Bonnet Gasket	Graphite+304	PTFE	Graphite+3041)
5	Bonnet Stud	A193-B7	A193-B8	A320-L7
6	Bonnet Stud Nut	A194-2H	A194-8	A194-7
7	Plug	A276-410	A276-316	A276-410

Note: 1). Spiral wound construction.

Percentage Open Area

MESH	A SWG	B m/m	C m/m	D %
5	20	0.914	4.166	67.3
10	22	0.711	1.829	51.8
20	28	0.356	0.914	51.8
30	32	0.274	0.572	45.7
40	36	0.193	0.442	48.4
50	37	0.172	0.336	43.6
60	38	0.152	0.271	41.0
80	40	0.122	0.195	37.8
100	42	0.102	0.152	35.8
120	43	0.092	0.119	31.8
150	45 1/2	0.066	0.103	37.1
180	46 1/2	0.053	0.088	38.9
200	47	0.051	0.076	35.8
250	48	0.040	0.062	37.7
300	48	0.039	0.044	27.6

Even the MESH is same, OPEN AREA is not always same due to the diameter of wire. The details of wire as follows:

- A: Number of Wire
- B: Diameter of Wire
- C: Width of Opening
- D: Percentage of OPEN AREA

Design description:

- ▲ Y-PATTERN TYPE
- ▲ BOLTED BONNET CAP WITH DRAIN PLUG
- ▲ PERFORATED STAINLESS STEEL SCREEN
- ▲ STRAINER DENSITY 100 MESH DESIGN
- ▲ FULL RANGE OF STRAINER DENSITY
- ▲ RENEWABLE STRAINER DENSITY
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS	DN	L/L1 (RF/BW)		H		PLUG (NPT)	WT (Kg)		L/L1 (RF/BW)		H		PLUG (NPT)	WT (Kg)	
		ANSI Class 150Lb					ANSI Class 300Lb								
1/2	15	5.50	140	3.38	87	1/8	2.1	0.8	5.50	140	3.38	87	1/8	2.5	1.2
3/4	20	6.00	152	4.12	105	1/2	2.3	1.2	6.00	152	4.12	105	1/2	3.4	1.8
1	25	6.50	165	4.50	114	1/2	3.1	1.4	6.50	165	4.50	114	1/2	4.2	2.3
1 1/2	40	8.00	203	6.12	156	1/2	6.2	3.7	8.00	203	6.12	156	1/2	8.6	4.8
2	50	9.00	229	7.12	181	1/2	9.7	6.7	9.00	229	7.12	181	1/2	11.2	8.2
2 1/2	65	11.00	279	10.25	259	3/4	23.5	16.5	11.00	279	10.25	259	3/4	29	20
3	80	12.50	318	11.50	293	3/4	28	22	12.50	318	11.50	293	3/4	38	27
4	100	14.50	368	12.75	324	3/4	37	28	14.50	368	12.75	324	3/4	57	39
6	150	18.50	470	17.62	448	3/4	67	59	18.50	470	17.62	448	3/4	105	74
8	200	23.50	597	21.00	535	3/4	91	78	23.50	597	21.00	535	3/4	176	131
10	250	28.50	673	27.12	690	1	135	113	28.50	673	27.12	690	1	230	164
12	300	30.50	775	30.75	780	1	168	151	30.50	775	30.75	780	1	360	268
in.	mm	in.	mm	in.	mm	in.	RF	BW	in.	mm	in.	mm	in.	RF	BW

Applicable standards:

- ★ STEEL GATE VALVES, API 602
- ★ STEEL VALVES, ASME B16.34
- ★ FACE TO FACE, MANUFACTURER STANDARD
- ★ FACE TO FACE, FLANGED, ASME B16.10
- ★ END FLANGES, ASME B16.5
- ★ BUTTWELDING ENDS, ASME B16.25
- ★ SOCKET-WELDING ENDS, ASME B16.11
- ★ SCREWED ENDS, ASME B1.20.1
- ★ INSPECTION AND TEST, API 598

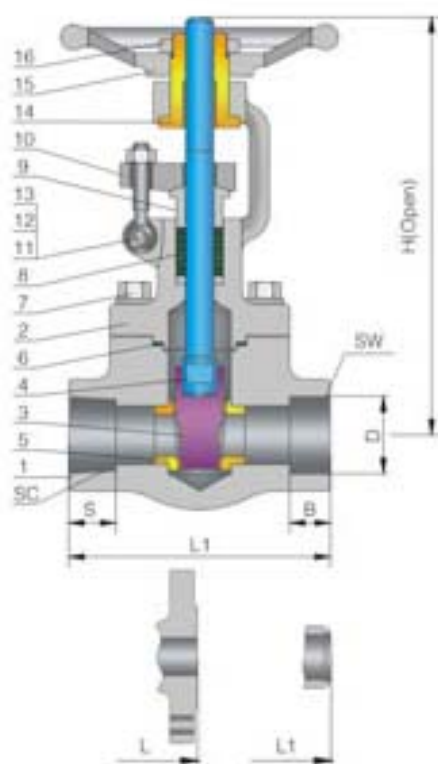
Fig. No:

- G8F01FA G8B01FA G8S01FA G8T01FA
- G8F01FD G8B01FD G8S01FD G8T01FD
- G8F01FN G8B01FN G8S01FN G8T01FN

Materials of parts

NO	Part Name	ASTM Material		
		C-Si	16Cr-12Ni-2Mo	1 1/2Cr-1/2Mo-Si
1	Body	A105	A182-F316	A182-F11
2	Bonnet	A105	A182-F316	A182-F11
3	Wedge	A182-F6a	A182-F316	A182-F6a+HF
4	Stem	A276-410	A276-316	A276-410
5	Seat Ring	A276-410	A182-F316	A276-410+HF
6	Bonnet Gasket	Graphite+304	Graphite+316	Graphite+304
7	Bonnet Stud	A193-B7	A193-B8M	A193-B16
8	Packing	Graphite		
9	Gland	A276-410	A276-316	A276-410
10	Gland Flange	A105	A182-F316	A182-F11
11	Eyebolt Pin	A276-410	A276-316	A276-410
12	Eyebolt	A193-B7	A193-B8M	A193-B16
13	Eyebolt Nut	A194-2H	A194-8M	A194-2H
14	Yokesleeve	A276-410		
15	Handwheel	Malleable Iron		
16	Handwheel Nut	Carbon Steel		

Note: 1) Spiral wound construction.



150-600Lb

Dimensions data

NPS DN	Unit	L1*	L (Flanged Ends)			d	SW		SC	H (Open)	D0	WT ² (Kg)	
			150Lb	300Lb	600Lb		D	B					
3/8	in.	3.12	4.00	5.50	6.50	0.394	0.693	0.378	3/8	0.540	6.00	4.00	4.5/4
10	mm	79	102	140	165	10	17.6	9.6		13.6	151	100	
1/2	in.	3.12	4.25	5.50	6.50	0.394	0.858	0.378	1/2	0.535	6.00	4.00	5.1/4
15	mm	79	108	140	165	10	21.8	9.6		13.6	151	100	
3/4	in.	3.62	4.62	6.00	7.50	0.531	1.067	0.500	3/4	0.547	6.25	4.00	8.2/4.3
20	mm	92	117	152	190	13.5	27.1	12.7		13.9	158	100	
1	in.	4.38	5.00	6.50	8.50	0.709	1.331	0.500	1	0.681	7.25	5.00	10.5/6.6
25	mm	111	127	165	216	18	33.8	12.7		17.3	185	125	
1 1/4	in.	4.75	5.50	7.00	9.00	0.945	1.877	0.500	1 1/4	0.709	9.38	6.25	12.4/9.5
32	mm	120	140	178	229	24	42.6	12.7		18	239	160	
1 1/2	in.	4.75	6.50	7.50	9.50	1.181	1.917	0.500	1 1/2	0.724	9.50	6.25	20.1/11
40	mm	120	165	190	241	30	48.7	12.7		18.4	243	160	
2	in.	5.50	7.00	8.50	11.50	1.437	2.406	0.626	2	0.756	11.00	7.00	28/14.5
50	mm	140	178	216	292	36.5	61.1	15.9		19.2	279	180	

NOTES: 1) SW, BW or SC.
2) 600Lb-FF800Lb-((BW/SW/SC).

Design description:

- ▲ OUTSIDE SCREW AND YOKE (OS&Y)
- ▲ BOLTED BONNET
- ▲ CHOICE OF WB, WELDING BONNET
- ▲ SINGLE WEDGE, FULLY GUIDED
- ▲ RENEWABLE SEAT RINGS
- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ SW, SOCKET-WELDING ENDS
- ▲ SC, SCREWED ENDS
- ▲ BW, BUTTWELDING ENDS
- ▲ FLANGED ENDS

800Lb Compact Steel Check Valve

Applicable standards:

- ★ STEEL CHECK VALVES, API 602
- ★ STEEL VALVES, ASME B16.34
- ★ FACE TO FACE, MANUFACTURER STANDARD
- ★ FACE TO FACE, FLANGED, ASME B16.10
- ★ END FLANGES, ASME B16.5
- ★ BUTTWELDING ENDS, ASME B16.25
- ★ SOCKET-WELDING ENDS, ASME B16.11
- ★ SCREWED ENDS, ASME B1.20.1
- ★ INSPECTION AND TEST, API 598

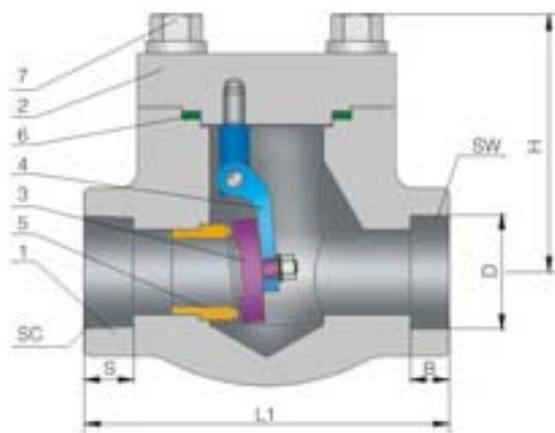
Fig. No:

SWING

○ C8F01FA	C8B01FA	C8S01FA	C8T01FA
○ C8F01FD	C8B01FD	C8S01FD	C8T01FD
○ C8F01FN	C8B01FN	C8S01FN	C8T01FN

LIFT

○ CL8F01FA	CL8B01FA	CL8S01FA	CL8T01FA
○ CL8F01FD	CL8B01FD	CL8S01FD	CL8T01FD
○ CL8F01FN	CL8B01FN	CL8S01FN	CL8T01FN



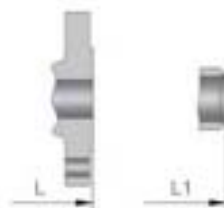
Materials of parts

NO	Part Name	ASTM Material		
		C-Si	16Cr-12Ni-2Mo	1',Cr-',Mo-Si
1	Body	A105	A182-F316	A182-F11
2	Bonnet	A105	A182-F316	A182-F11
3	Disc	A182-F6a	A182-F316	A182-F6a+HF
4	Hinge	A276-410	A276-316	A276-410
5	Seat	A276-410	A182-F316+HF	A276-410+HF
6	Bonnet Gasket ¹⁾	Graphite+304	Graphite+316	Graphite+304
7	Bonnet Stud	A193-B7	A193-B8M	A193-B16

Note: 1) Lift type check valve seat ring integral with body.
2) Spiral wound construction.



Lift Type



150-600Lb

Design description:

- ▲ BOLTED BONNET CAP
- ▲ CHOICE OF WB, WELDING BONNET
- ▲ LIFT OR SWING TYPE
- ▲ SEAT RINGS INTEGRAL WITH BODY OF LIFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ SOCKET WELD ENDS
- ▲ SW, SOCKET-WELDING ENDS
- ▲ SC, SCREWED ENDS
- ▲ BW, BUTTWELDING ENDS
- ▲ FLANGED ENDS

Dimensions data

NPS DN	Unit	L1*	L (Flanged Ends)			d	SW		SC		H	WT ²⁾ (Kg)
			150Lb	300Lb	600Lb		D	B	NPT	S		
3/8	in.	3.12	4.00	6.00	6.50	0.354	0.693	0.378	3/8	0.540	2.40	3.8/2.8
10	mm	79	102	152	165	9	17.6	9.6		13.6	61	
1/2	in.	3.12	4.25	6.00	6.50	0.354	0.858	0.378	1/2	0.535	2.40	5.6/3.4
15	mm	79	108	152	165	10	21.8	9.6		13.6	61	
3/4	in.	3.62	4.62	7.00	7.50	0.512	1.067	0.500	3/4	0.547	2.40	7.8/4.7
20	mm	92	117	178	190	13	27.1	12.7		13.9	61	
1	in.	4.38	5.00	8.00	8.50	0.689	1.331	0.500	1	0.681	3.07	12.5/9.2
25	mm	111	127	203	216	17.5	33.8	12.7		17.3	78	
1 1/4	in.	4.75	5.50	8.50	9.00	0.906	1.677	0.500	1 1/4	0.709	3.31	17/10.5
32	mm	120	140	216	229	23	42.6	12.7		18	84	
1 1/2	in.	4.75	6.50	9.00	9.50	1.142	1.917	0.500	1 1/2	0.724	10.25	23.5/13.3
40	mm	120	165	229	241	30	48.7	12.7		18.4	3.98	
2	in.	5.50	8.00	10.50	11.50	1.378	2.406	0.626	2	0.756	4.72	38.8/18.9
50	mm	140	203	267	292	35	61.1	15.9		19.2	120	

NOTES: 1) BW, SW or SC.
2) 600Lb-RF, 800Lb-(BW/SW/SC).

Applicable standards:

- ★ STEEL GLOBE VALVES, API 602
- ★ STEEL VALVES, ASME B16.34
- ★ FACE TO FACE, MANUFACTURER STANDARD
- ★ FACE TO FACE, FLANGED, ASME B16.10
- ★ END FLANGES, ASME B16.5
- ★ BUTTWELDING ENDS, ASME B16.25
- ★ SOCKET-WELDING ENDS, ASME B16.11
- ★ SCREWED ENDS, ASME B1.20.1
- ★ INSPECTION AND TEST, API 598

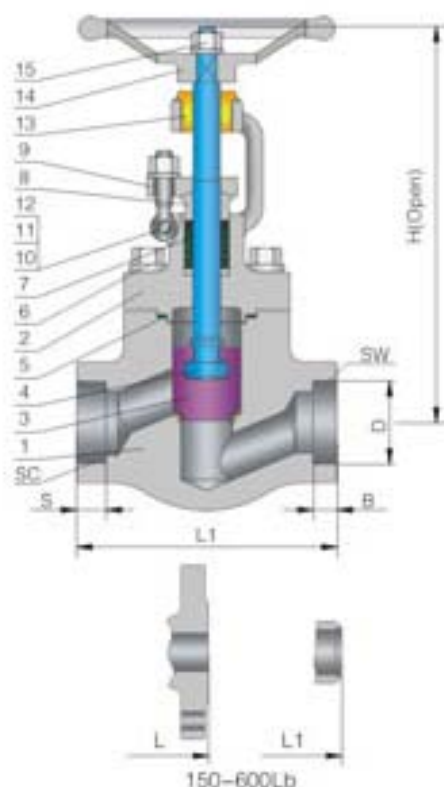


Fig. No:

- GL8F01FA GL8B01FA GL8S01FA GL8T01FA
- GL8F01FD GL8B01FD GL8S01FD GL8T01FD
- GL8F01FN GL8B01FN GL8S01FN GL8T01FN

Materials of parts

NO	Part Name	ASTM Material		
		C-Si	16Cr-12Ni-2Mo	1 1/2Cr-1/2Mo-Si
1	Body	A105	A182-F316	A182-F11
2	Bonnet	A105	A182-F316	A182-F11
3	Disc	A182-F6a	A182-F316	A182-F6a+HF
4	Stem	A276-410	A276-316	A276-410
5	Bonnet Gasket ¹⁾	Graphite+304	Graphite+316	Graphite+304
6	Bonnet Stud	A193-B7	A193-B8M	A193-B16
7	Packing	Graphite		
8	Gland	A276-410	A276-316	A276-410
9	Gland Flange	A105	A182-F316	A182-F11
10	Eyebolt Pin	A276-410	A276-316	A276-410
11	Eyebolt	A193-B7	A193-B8M	A193-B16
12	Eyebolt Nut	A194-2H	A194-8M	A194-2H
13	Yokesteave	A276-410		
14	Handwheel	Malleable Iron		
15	Handwheel Nut	Carbon Steel		

Note: 1) Seat integral with body
2) Spiral wound construction.

Design description:

- ▲ OUTSIDE SCREW AND YOKE (OS&Y)
- ▲ BOLTED BONNET
- ▲ CHOICE OF WB, WELDING BONNET
- ▲ LOOSE DISC, CHOICE OF PLUG OR BALL
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND HANDWHEEL
- ▲ HORIZONTAL SERVICE
- ▲ SW, SOCKET-WELDING ENDS
- ▲ SC, SCREWED ENDS
- ▲ BW, BUTTWELDING ENDS

Dimensions data

NPS DN	Unit	L1 ¹⁾	L (Flanged Ends)			d	SW		SC		H (Open)	D0	WT ²⁾ (Kg)
			150Lb	300Lb	600Lb		D	B	NPT	S			
3/8	in.	3.12	4.00	6.00	6.50	0.354	0.693	0.378	3/8	0.540	6.50	4.00	3.8/2.8
10	mm	79	102	152	165	9	17.6	9.6		13.6	164	100	
1/2	in.	3.12	4.25	6.00	6.50	0.354	0.858	0.378	1/2	0.535	6.50	4.00	5.6/3.4
15	mm	79	108	152	165	9	21.8	9.6		13.6	164	100	
3/4	in.	3.62	4.62	7.00	7.50	0.512	1.067	0.500	3/4	0.547	6.50	4.00	7.8/4.7
20	mm	92	117	178	190	13	27.1	12.7		13.9	164	100	
1	in.	4.38	5.00	8.00	8.50	0.689	1.331	0.500	1	0.681	8.00	5.00	12.5/9.2
25	mm	111	127	203	216	17.5	33.8	12.7		17.3	203	125	
1 1/4	in.	4.75	5.50	8.50	9.00	0.906	1.877	0.500	1 1/4	0.709	8.88	6.25	17/10.5
32	mm	120	140	216	229	23	42.6	12.7		18	224	160	
1 1/2	in.	6.00	6.50	9.00	9.50	1.142	1.917	0.500	1 1/2	0.724	10.25	6.25	23.5/13.3
40	mm	152	165	229	241	29	48.7	12.7		18.4	260	160	
2	in.	6.75	8.00	10.50	11.50	1.378	2.406	0.626	2	0.756	11.88	7.00	38.8/18.9
50	mm	172	203	267	292	35	61.1	15.9		19.2	300	180	

NOTES: 1) SW, BW or SC.
2) 600Lb-RF/800Lb-(BW/SW/SC)

150Lb Cast Stainless Steel Gate Valve

Applicable standards:

- ★ STEEL GATE VALVES, API 603
- ★ 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

Fig. No:

- G1F02K G1F10L G1F10N
- G1B02K G1B10L G1B10N

Materials of parts

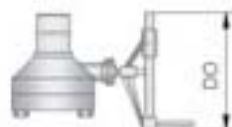
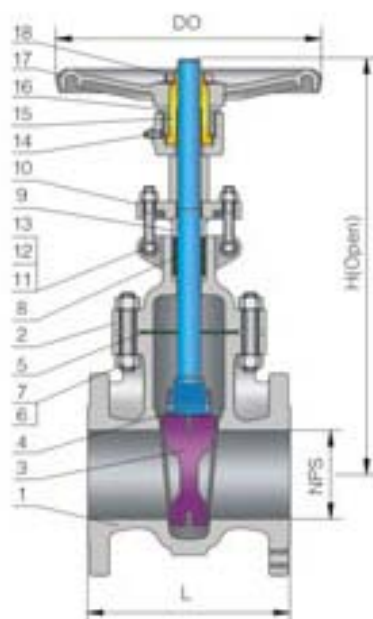
NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CF8	A351-CF8M	A351-CF3M
2	Bonnet	A351-CF8	A351-CF8M	A351-CF3M
3	Wedge	A351-CF8	A351-CF8M	A351-CF3M
4	Stem	A182-F304	A182-F316	A182-F316L
5	Bonnet Gasket ¹⁾	Graphite+304	Graphite+316	Graphite+316L
6	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
7	Bonnet Stud Nut	A194-8	A194-8M	A194-8M
8	Packing ²⁾	Graphite		
9	Gland	A276-304	A276-316	A276-316L
10	Gland Flange	A351-CF8	A351-CF8M	A351-CF8M
11	Eyebolt Pin	A276-304	A276-316	A276-316
12	Eyebolt	A193-B8	A193-B8	A193-B8
13	Eyebolt Nut	A194-8	A194-8	A194-8
14	Grease Fitting	Carbon Steel Ni Plated		
15	Yokesleeve	Aluminum-Bronze ³⁾		
16	Yokesleeve Jam Nut	A276-304		
17	Handwheel	Malleable Iron		
18	Handwheel Nut	Carbon Steel		

Note: 1) Spiral wound construction, Teflon optional.

2) Teflon optional.

3) Ductile Ni-Resist optional.

4) Wedge and seat (Integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Design description:

- ▲ FULL PORT DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	in mm
ANSI Class 150Lb															
L	4.25	4.62	5.00	6.50	7.00	7.50	8.00	9.00	10.50	11.50	13.00	14.00	15.00	16.00	in
(RF)	108	117	127	165	178	190	203	229	267	292	330	356	381	406	mm
L1	4.25	4.62	5.50	7.00	7.50	8.00	8.50	9.50	11.00	12.00	13.50	14.50	15.50	16.50	in
(BW)	108	117	140	178	191	203	216	242	280	305	343	369	394	419	mm
H	8.25	8.50	9.25	11.75	15.25	17.00	18.88	23.00	30.50	37.62	45.50	53.12	59.38	67.00	in
(OPEN)	210	215	235	300	386	434	480	584	765	956	1149	1350	1508	1703	mm
DO	4	4	6	6	8	8	10	12	12	14	16	18	20	22	in
	100	100	140	140	200	200	250	300	300	350	400	450	500	550	mm
WT	3	3.5	5.5	9.2	15	21	27	42	64.5	101	149	221	300	387	BW
(Kg)	2.5	3	4	8	12.5	15	21.5	34	58	90	130.5	207	275	355	RF/RTJ

Applicable standards:

- ★ STEEL GATE VALVES, API 603
- ★ 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

Fig. No:

- G3F02K G3F10L G3F10N
- G3B02K G3B10L G3B10N
- G3R02K G3R10L G3R10N

Materials of parts

NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CF8	A351-CF8M	A351-CF3M
2	Bonnet	A351-CF8	A351-CF8M	A351-CF3M
3	Wedge	A351-CF8	A351-CF8M	A351-CF3M
4	Stem	A182-F304	A182-F316	A182-F316L
5	Bonnet Gasket	Graphite+304	Graphite+316	Graphite+316L
6	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
7	Bonnet Stud Nut	A194-8	A194-8M	A194-8M
8	Packing	Graphite		
9	Gland	A276-304	A276-316	A276-316L
10	Gland Flange	A351-CF8	A351-CF8M	A351-CF8M
11	Eyebolt Pin	A276-304	A276-316	A276-316
12	Eyebolt	A193-B8	A193-B8	A193-B8
13	Eyebolt Nut	A194-8	A194-8	A194-8
14	Grease Fitting	Carbon Steel Ni Plated		
15	Yokesleeve	Aluminum-Bronze		
16	Yokesleeve Jam Nut	A276-304		
17	Handwheel	Malleable Iron		
18	Handwheel Nut	Carbon Steel		

Note: 1) Spiral wound construction, Teflon optional.

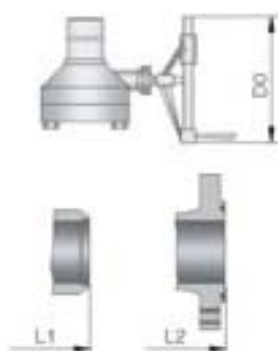
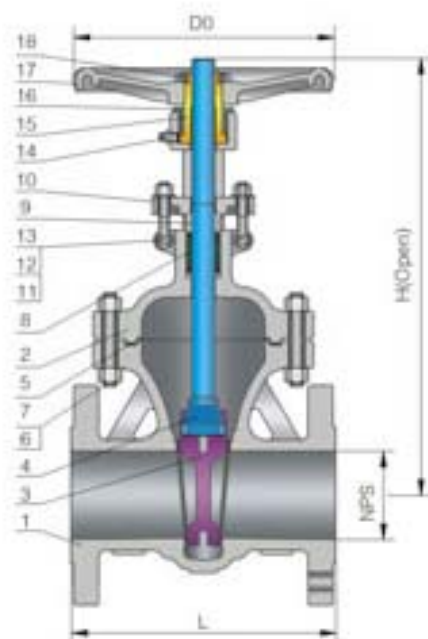
2) Teflon optional.

3) Ductile Ni-Resist optional.

4) Wedge and seal (Integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Design description:

- ▲ FULL PORT DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR



Dimensions data

NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	in
DN	15	20	25	40	50	65	80	100	150	200	250	300	350	400	mm

ANSI Class 300Lb

LL1	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	16.50	18.00	19.75	30.00	33.00	in.
(RF/BW)	140	152	165	190	216	241	283	305	403	419	457	502	762	838	mm
L2	-	-	-	-	9.12	10.12	11.75	12.62	16.50	17.12	18.62	20.38	30.62	33.62	in.
(RTJ)	-	-	-	-	232	257	298	321	419	435	473	518	778	854	mm
H	6.34	6.42	7.72	9.88	16.12	17.88	20.00	24.00	31.75	39.38	47.62	55.75	62.25	67.88	in.
(OPEN)	161	163	196	251	410	453	509	612	805	1000	1210	1415	1580	1725	mm
D0	4	4	6	6	8	8	10	10	14	16	18	20	22	22	in.
	100	100	140	140	200	200	250	250	350	400	450	500	550	550	mm
WT	3.3	4	6.5	10.5	20	30	43	61	123	179	276	413	585	813	BW
(Kg)	2.7	3.5	4.7	8.5	14.5	22.5	33	45.5	97	140	219	334	484	689	RF/RTJ

600Lb Cast Stainless Steel Gate Valve

Applicable standards:

- ★ STEEL GATE VALVES, API 603
- ★ 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

Fig. No:

- G6F05K G6F12L G6F12N
- G6B05K G6B12L G6B12N
- G6R05K G6R12L G6R12N

Materials of parts

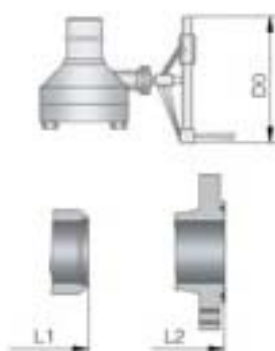
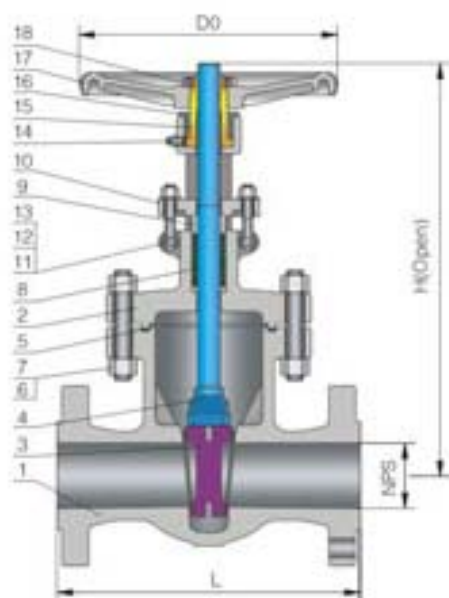
NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CF8	A351-CF8M	A351-CF3M
2	Bonnet	A351-CF8	A351-CF8M	A351-CF3M
3	Wedge	A351-CF8	A351-CF8M	A351-CF3M
4	Stem	A182-F304	A182-F316	A182-F316L
5	Bonnet Gasket ¹	Graphite+304	Graphite+316	Graphite+316L
6	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
7	Bonnet Stud Nut	A194-B	A194-BM	A194-BM
8	Packing ²	Graphite		
9	Gland	A276-304	A276-316	A276-316L
10	Gland Flange	A351-CF8	A351-CF8M	A351-CF8M
11	Eyebolt Pin	A276-304	A276-316	A276-316
12	Eyebolt	A193-B8	A193-B8	A193-B8
13	Eyebolt Nut	A194-B	A194-B	A194-B
14	Grease Fitting	Carbon Steel Ni Plated		
15	Yokesleeve	Aluminum-Bronze ³		
16	Yokesleeve Jam Nut	A276-304		
17	Handwheel	Malleable Iron		
18	Handwheel Nut	Carbon Steel		

Note: 1) Spiral wound construction, Teflon optional.

2) Teflon optional.

3) Ductile Ni-Resist optional.

4) Wedge and seat (Integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Design description:

- ▲ FULL PORT DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	in mm
ANSI Class 600Lb															
L	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	in
(RF)	165	190	216	241	292	330	356	432	559	660	787	838	889	991	mm
L1	-	-	-	-	11.82	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	in
(BW)	-	-	-	-	295	333	359	435	562	664	791	841	892	994	mm
H	6.34	6.42	7.72	9.88	16.50	18.75	20.38	25.50	33.00	40.38	48.38	57.00	62.00	70.62	in
(OPEN)	161	163	196	251	418	476	518	646	840	1025	1230	1450	1575	1795	mm
D0	4	6	6	8	8	10	10	12	18	20	24	24	24	24	in
	100	140	140	200	200	250	250	300	450	500	600	600	600	600	mm
WT	4.5	5.5	8.5	16.5	32	46	59	99	151	348	540	789	1103	1359	BW
(Kg)	3.7	4.2	6.5	9.5	26	37	47	74	111	275	418	647	905	1098	RF/RTJ

Applicable standards:

- ★ STEEL GLOBE VALVES, API 603
- ★ 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

Fig. No:

- GL1F02K GL1F10L GL1F10N
- GL1B02K GL1B10L GL1B10N

Materials of parts

NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CF8	A351-CF8M	A351-CF3M
2	Bonnet	A351-CF8	A351-CF8M	A351-CF3M
3	Disc	A351-CF8	A351-CF8M	A351-CF3M
4	Stem	A182-F304	A182-F316	A182-F316L
5	Bonnet Gasket ¹	Graphite+304	Graphite+316	Graphite+316L
6	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
7	Bonnet Stud Nut	A194-8	A194-8M	A194-8M
8	Packing ²	Graphite		
9	Gland	A276-304	A276-316	A276-316L
10	Gland Flange	A351-CF8	A351-CF8M	A351-CF8M
11	Eyebolt Pin	A276-304	A276-316	A276-316
12	Eyebolt	A193-B8	A193-B8	A193-B8
13	Eyebolt Nut	A194-8	A194-8	A194-8
14	Yokesleeve	Aluminum-Bronze ³		
15	Handwheel	Malleable Iron		

Note: 1) Spiral wound construction, Teflon optional.

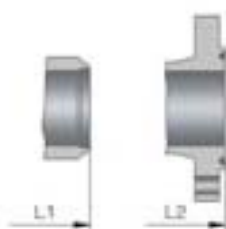
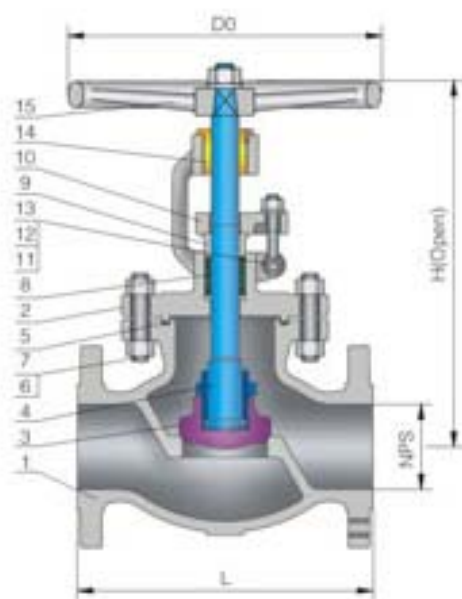
2) Teflon optional.

3) Ductile N-Resist optional.

4) Disc and seat (Integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Design description:

- ▲ STRAIGHT PATTERN BODY DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND HANDWHEEL
- ▲ LOOSE DISC, CHOICE OF PLUG OR BALL
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ IMPACT HANDWHEEL FOR 10" & ABOVE
- ▲ HORIZONTAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR



Dimensions data

NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	in	
DN	15	20	25	40	50	65	80	100	150	200	250	300	350	400	mm	
ANSI Class 150Lb																
LL1	4.25	4.62	5.00	6.50	8.00	8.50	9.50	11.50	16.00	19.50	24.50	27.50	31.00	36.00	in.	
(RF/BW)	108	117	127	165	203	216	241	292	406	496	622	698	787	914	mm	
L2	-	-	-	-	8.50	9.00	10.00	12.00	16.50	20.00	25.00	28.00	31.50	36.50	in.	
(RTJ)	-	-	-	-	216	229	254	306	419	508	635	711	800	927	mm	
H	7.00	7.50	8.25	9.25	15.00	21.00	17.50	20.25	22.00	24.25	32.00	35.88	48.38	57.00	in.	
(OPEN)	180	190	210	235	380	535	445	515	560	615	815	910	1230	1450	mm	
DO	4	4	4	6	7	10	11	11	13	13	16	18	20	24	in.	
	100	100	100	140	180	240	280	280	320	320	400	450	500	600	mm	
WT	3	3.5	4.5	11	18	30	41	64	86	110	280	380	510	740	BW	
(Kg)	2.5	3	4	8	14	22	33	43	72	88	245	345	450	665	RF/RTJ	

300Lb Cast Stainless Steel Globe Valve

Applicable standards:

- ★ STEEL GLOBE VALVES, API 603
- ★ 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

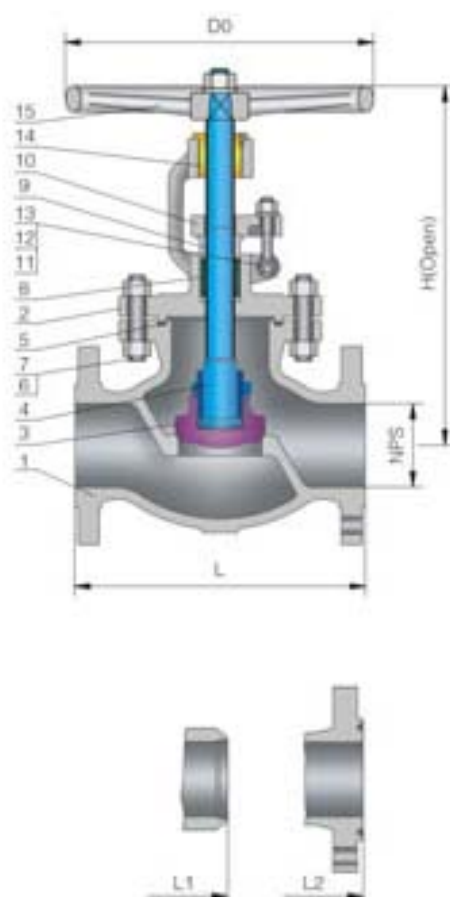


Fig. No:

- GL3F02K GL3F10L GL3F10N
- GL3B02K GL3B10L GL3B10N
- GL3R02K GL3R10L GL3R10N

Materials of parts

NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CF8	A351-CF8M	A351-CF3M
2	Bonnet	A351-CF8	A351-CF8M	A351-CF3M
3	Disc	A351-CF8	A351-CF8M	A351-CF3M
4	Stem	A182-F304	A182-F316	A182-F316L
5	Bonnet Gasket ¹⁾	Graphite+304	Graphite+316	Graphite+316L
6	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
7	Bonnet Stud Nut	A194-B	A194-BM	A194-BM
8	Packing ²⁾	Graphite		
9	Gland	A276-304	A276-316	A276-316L
10	Gland Flange	A351-CF8	A351-CF8M	A351-CF8M
11	Eyebolt Pin	A276-304	A276-316	A276-316
12	Eyebolt	A193-B8	A193-B8	A193-B8
13	Eyebolt Nut	A194-B	A194-B	A194-B
14	Yokesleeve	Aluminum-Bronze ³⁾		
15	Handwheel	Malleable Iron		

- Note: 1) Spiral wound construction, Teflon optional.
 2) Teflon optional.
 3) Ductile Ni-Resist optional.
 4) Disc and seat (Integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Design description:

- ▲ STRAIGHT PATTERN BODY DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND HANDWHEEL
- ▲ LOOSE DISC, CHOICE OF PLUG OR BALL
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ IMPACT HANDWHEEL FOR 10" & ABOVE
- ▲ HORIZONTAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	in mm
ANSI Class 300Lb															
LL1 (RF/BW)	6.00 152	7.00 178	8.00 203	9.00 229	10.50 267	11.50 292	12.50 318	14.00 356	17.50 444	22.00 559	24.50 622	28.00 711	-	-	in mm
L2 (RTJ)	-	-	-	-	11.12 282	12.12 308	13.12 333	14.62 371	18.12 460	22.62 575	25.12 638	28.62 727	-	-	in mm
H (OPEN)	7.00 180	7.50 190	8.25 210	9.25 235	16.75 425	19.00 485	19.88 505	22.50 570	25.25 640	33.25 845	35.50 900	38.62 980	-	-	in mm
D0	4 100	4 100	4 100	6 140	8 200	10 240	11 280	13 320	16 400	18 450	20 500	24 600	-	-	in mm
WT (Kg)	4 3	4.5 3.5	6 5	15 12	25 20	32 22	38 27	56 41	96 75	150 117	360 310	550 492	-	-	BW RF/RTJ

Applicable standards:

- ★ STEEL GLOBE VALVES, API 603
- ★ 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

Fig. No:

- GL6F05K GL6F12L GL6F12N
- GL6B05K GL6B12L GL6B12N
- GL6R05K GL6R12L GL6R12N

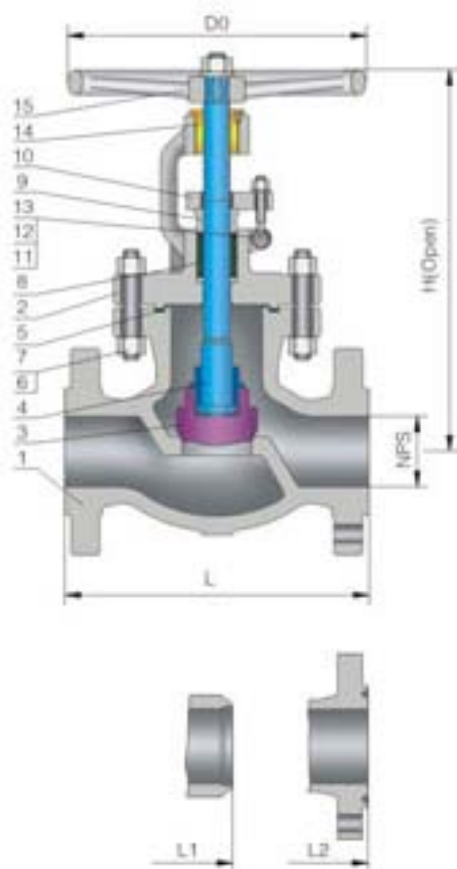
Materials of parts

NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CF8	A351-CF8M	A351-CF3M
2	Bonnet	A351-CF8	A351-CF8M	A351-CF3M
3	Disc	A351-CF8	A351-CF8M	A351-CF3M
4	Stem	A182-F304	A182-F316	A182-F316L
5	Bonnet Gasket ¹	Graphite+304	Graphite+316	Graphite+316L
6	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
7	Bonnet Stud Nut	A194-8	A194-8M	A194-8M
8	Packing ²	Graphite		
9	Gland	A276-304	A276-316	A276-316L
10	Gland Flange	A351-CF8	A351-CF8M	A351-CF8M
11	Eyebolt Pin	A276-304	A276-316	A276-316
12	Eyebolt	A193-B8	A193-B8	A193-B8
13	Eyebolt Nut	A194-8	A194-8	A194-8
14	Yokesleeve	Aluminum-Bronze ³		
15	Handwheel	Malleable Iron		

- Note: 1) Spiral wound construction, Teflon optional.
 2) Teflon optional.
 3) Ductile N-Resist optional.
 4) Disc and seat (Integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Design description:

- ▲ STRAIGHT PATTERN BODY DESIGN
- ▲ OS&Y, OUTSIDE SCREW AND YOKE
- ▲ BB, BOLTED BONNET
- ▲ YOKE INTEGRAL WITH BONNET
- ▲ RISING STEM AND HANDWHEEL
- ▲ LOOSE DISC, CHOICE OF PLUG OR BALL
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ IMPACT HANDWHEEL FOR 10" & ABOVE
- ▲ HORIZONTAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR



Dimensions data

NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	in
DN	15	20	25	40	50	65	80	100	150	200	250	300	350	400	mm
ANSI Class 600Lb															
LL1	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	-	-	in.
(RF/BW)	165	190	216	241	292	330	356	432	559	660	787	838	-	-	mm
L2	-	-	-	-	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	-	-	in.
(RTJ)	-	-	-	-	295	333	359	435	562	663	790	841	-	-	mm
H	7.25	7.62	9.00	11.00	17.50	19.75	21.00	24.50	29.50	36.50	44.88	53.12	-	-	in.
(OPEN)	185	195	230	280	445	502	533	622	750	927	1140	1350	-	-	mm
D0	4	4	6	8	10	11	13	16	18	20	24	24	-	-	in.
	100	100	140	200	240	280	320	400	450	500	600	600	-	-	mm
WT	6	8	14	23	35	50	60	110	230	410	770	1140	-	-	lbw
(Kg)	4.8	6.2	9.5	16.5	27	34	42	84	192	350	680	1030	-	-	RF/RTJ

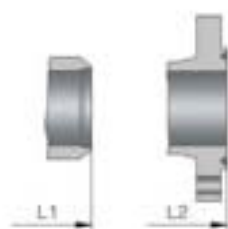
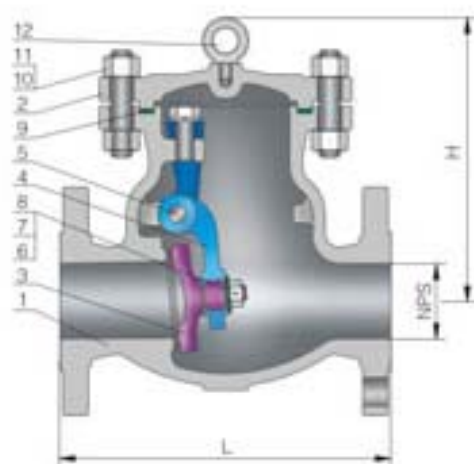
150Lb Cast Stainless Steel Swing Check Valve

Applicable standards:

- ★ STEEL CHECK VALVES, API 603
- ★ 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

Fig. No:

- C1F02K C1F10L C1F10N
- C1B02K C1B10L C1B10N



Materials of parts

NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CFR	A351-CF8M	A351-CF3M
2	Bonnet Cap	A351-CFR	A351-CF8M	A351-CF3M
3	Disc	A351-CFR	A351-CF8M	A351-CF3M
4	Hinge	A351-CFR	A351-CF8M	A351-CF3M
5	Hinge Pin	A276-304	A276-316	A276-316L
6	Disc Washer	A276-304	A276-316	A276-316L
7	Disc Nut	A193-B8	A193-B8M	A193-B8M
8	Disc Nut Pin	A276-304	A276-316	A276-316L
9	Bonnet Gasket ¹⁾	Graphite+304	Graphite+316	Graphite+316L
10	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
11	Bonnet Stud Nut	A194-B	A194-BM	A194-BM
12	Eyebolt ¹⁾	A194-B	A194-B	A194-B

Note: 1) Spiral wound construction, Teflon optional.

2) NPS 6" & larger

3) Disc and seat (integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	in
DN	15	20	25	40	50	65	80	100	150	200	250	300	350	400	450	500	600	650	mm
ANSI Class 150Lb																			
LL1	4.25	4.62	5.00	6.50	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	-	in.
(RF/BW)	108	117	127	165	203	216	241	290	356	495	622	699	787	864	978	978	1295	-	mm
L2	-	-	-	-	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.
(RTJ)	-	-	-	-	216	229	254	305	368	508	635	711	800	876	991	991	1308	-	mm
H	3.12	3.38	3.88	4.38	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	-	in.
	80	85	100	110	152	165	175	204	290	353	390	432	475	525	582	627	883	-	mm
WT	2.5	3.5	5	7.5	14	20	25	40	71	118	177	263	353	542	632	855	970	-	BW
(Kg)	2	3	3.5	5.5	10	12	17	29	57	96	143	227	295	468	552	755	831	-	RF/RTJ

Applicable standards:

- ★ STEEL CHECK VALVES, API 603
- ★ 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

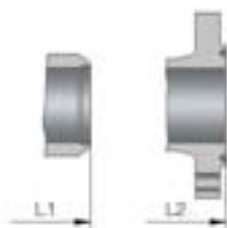
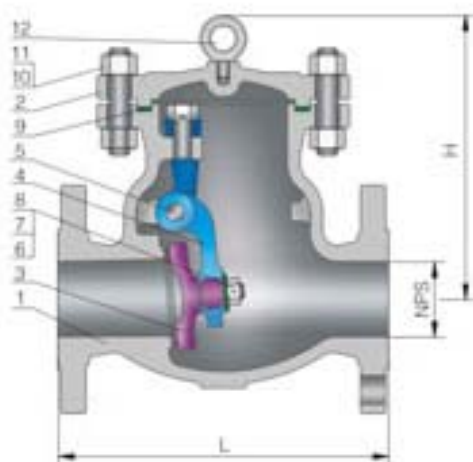
Fig. No:

- C3F02K C3F10L C3F10N
- C3B02K C3B10L C3B10N
- C3R02K C3R10L C3R10N

Materials of parts

NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CF8	A351-CF8M	A351-CF3M
2	Bonnet Cap	A351-CF8	A351-CF8M	A351-CF3M
3	Disc	A351-CF8	A351-CF8M	A351-CF3M
4	Hinge	A351-CF8	A351-CF8M	A351-CF3M
5	Hinge Pin	A276-304	A276-316	A276-316L
6	Disc Washer	A276-304	A276-316	A276-316L
7	Disc Nut	A193-B8	A193-B8M	A193-B8M
8	Disc Nut Pin	A276-304	A276-316	A276-316L
9	Bonnet Gasket ¹	Graphite+304	Graphite+316	Graphite+316L
10	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
11	Bonnet Stud Nut	A194-8	A194-8M	A194-8M
12	Eyebolt ²	A194-8	A194-8	A194-8

- Note: 1) Spiral wound construction, Teflon optional.
 2) NPS 6" & larger.
 3) Disc and seat (Integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.



Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS DN	1/2 15	3/4 20	1 25	1 1/2 40	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	in mm
ANSI Class 300Lb																			
LL1	6.00	7.00	8.00	9.00	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	-	in.
(RF/BW)	152	178	203	229	267	292	318	356	445	533	622	711	838	864	978	1016	1348	-	mm
L2	-	-	-	-	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	-	in.
(RTJ)	-	-	-	-	283	308	333	371	460	549	638	727	854	879	994	1035	1368	-	mm
H	3.12	3.38	3.88	4.38	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	-	in.
	80	85	100	110	152	165	175	204	293	353	390	432	475	525	582	627	883	-	mm
WT	3	4	6	10	16	23	29	46	82	136	204	302	405	625	730	985	1115	-	BW
(Kg)	2.5	3.5	5	7	11	13	18	31	61	103	155	245	315	503	593	812	895	-	RF/RTJ

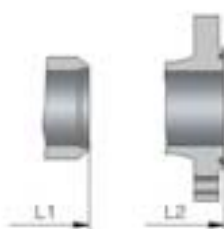
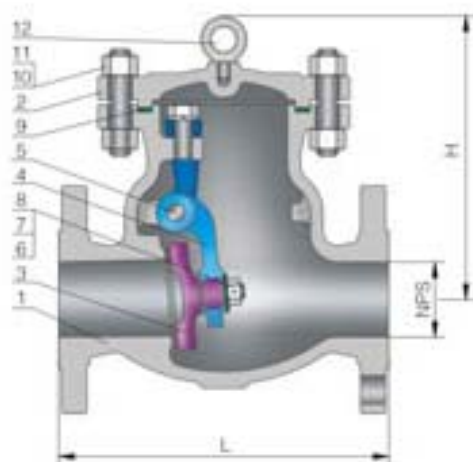
600Lb Cast Stainless Steel Swing Check Valve

Applicable standards:

- ★ STEEL CHECK VALVES, API 603
- ★ 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

Fig. No:

- C6F05K C6F12L C6F12N
- C6B05K C6B12L C6B12N
- C6R05K C6R12L C6R12N



Materials of parts

NO	Part Name	ASTM Material		
		18Cr-18Ni	18Cr-9Ni-2Mo	17Cr-9Ni-2Mo
1	Body	A351-CFR	A351-CF8M	A351-CF3M
2	Bonnet Cap	A351-CFR	A351-CF8M	A351-CF3M
3	Disc	A351-CFR	A351-CF8M	A351-CF3M
4	Hinge	A351-CFR	A351-CF8M	A351-CF3M
5	Hinge Pin	A276-304	A276-316	A276-316L
6	Disc Washer	A276-304	A276-316	A276-316L
7	Disc Nut	A193-B8	A193-B8M	A193-B8M
8	Disc Nut Pin	A276-304	A276-316	A276-316L
9	Bonnet Gasket ¹⁾	Graphite+304	Graphite+316	Graphite+316L
10	Bonnet Stud	A193-B8	A193-B8M	A193-B8M
11	Bonnet Stud Nut	A194-B	A194-BM	A194-BM
12	Eyebolt ¹⁾	A194-B	A194-B	A194-B

Note: 1) Spiral wound construction, Teflon optional.

2) NPS 6" & larger

3) Disc and seat (integral with body) may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Design description:

- ▲ BB, BOLTED BONNET CAP
- ▲ SWING TYPE, ANTI-ROTATION DISC
- ▲ SEAT RINGS INTEGRAL WITH BODY
- ▲ NON-PENETRATE DISC SHAFT
- ▲ HORIZONTAL OR VERTICAL SERVICE
- ▲ FLANGED OR BUTTWELDING ENDS

Dimensions data

NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	in
DN	15	20	25	40	50	65	80	100	150	200	250	300	350	400	450	500	600	650	mm
ANSI Class 600Lb																			
LL1	6.50	7.50	8.50	9.50	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.
(RF/BW)	165	190	216	241	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	-	mm
L2	-	-	-	-	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.
(RTJ)	-	-	-	-	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	-	mm
H	3.38	3.50	4.50	5.50	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.
	85	90	115	140	190	205	222	255	368	445	490	540	595	655	730	785	1105	-	mm
WT	5.5	7.5	12	18	24	35	44	70	125	207	310	460	615	945	1105	1495	1695	-	BW
(Kg)	4	6	8	12.5	16	19	26	44	87	147	220	350	452	720	845	1160	1280	-	RF/RTJ

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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

Fig. No:

- GP9F05A GP9F05D GP9F05B
- GP9B05A GP9B05D GP9B05B
- GP9R05A GP9R05D GP9R05B

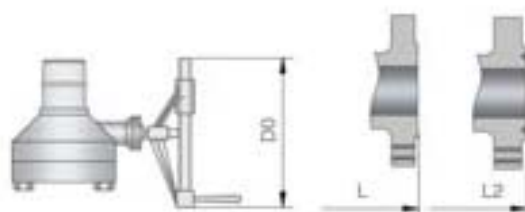
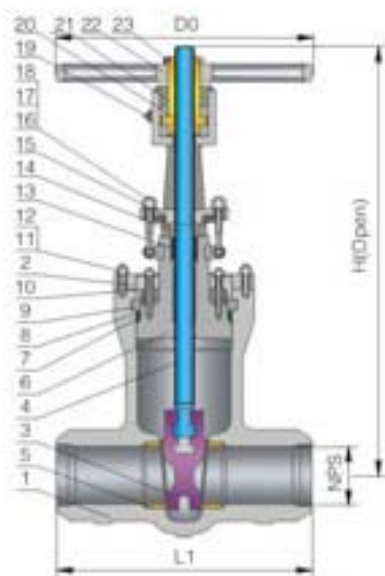
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{2}$ Cr- $\frac{1}{2}$ Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Yoke	A216-WCB	A217-WC6	A351-CF8M
3	Wedge	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 ¹	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 ²	
21	Yokesleeve Jam Nut	Carbon Steel		Stainless Steel
22	Handwheel		Malleable Iron	
23	Handwheel Nut		Carbon Steel	

- Note: 1) Graphite optional
 2) Ductile Ni-flux 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.

Design description:

- ▲ PSB, PRESSURE SEAL BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR



Dimensions data

NPS	2	2 1/2	3	4	6	8	10	12	14	16	in
DN	50	65	80	100	150	200	250	300	350	400	mm
ANSI Class 900Lb											
L1	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	39.00	43.00	in.
(BW)	216	254	305	356	508	660	787	914	991	1092	mm.
L	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	in.
(RF)	368	419	381	457	610	737	838	965	1029	1130	mm
L2	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	in.
(RTJ)	371	422	384	460	613	740	841	968	1038	1140	mm
H	17.62	17.62	19.5	22.88	32.62	67.62	45.5	53.12	59	70.5	in.
(OPEN)	448	448	495	580	830	955	1155	1350	1500	1790	mm
D0	14	14	14	14	18	24	28	34	34	34	in.
	350	350	350	350	450	600	700	850	850	850	mm
WT	39	39	48	69	158	289	482	710	908	1390	BW
(Kg)	69	69	72	110	253	430	710	1025	1452	1960	RF/RTJ

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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 59W/API 6D

Fig. No:

- GP15F05A GP15F05D GP15F05B
- GP15B05A GP15B05D GP15B05B
- GP15R05A GP15R05D GP15R05B

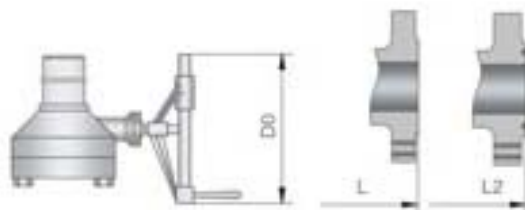
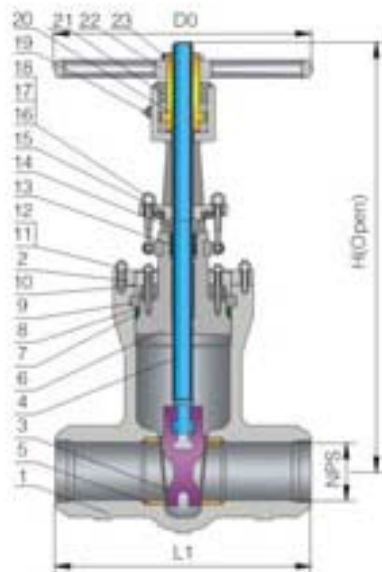
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2, Cr-1/2, Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Yoke	A216-WCB	A217-WC6	A351-CF8M
3	Wedge	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	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-B
19	Grease Fitting		Brass+Steel	
20	Yokesleeve		Aluminum-Bronze ¹⁾	
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.

Design description:

- ▲ PSB, PRESSURE SEAL BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR



Dimensions data

NPS DN	2	2 1/2	3	4	6	8	10	12	14	16	2	2 1/2	3	4	6	8	10	12	in mm
	50	65	80	100	150	200	250	300	350	400	50	65	80	100	150	200	250	300	
ANSI Class 1500Lb																			
L1	8.50	10.00	12.00	16.00	22.00	29.00	34.00	39.00	42.00	47.00	11.00	13.00	14.50	18.00	24.00	30.00	36.00	41.00	in.
(BW)	216	254	305	406	559	711	864	991	1067	1194	279	330	368	457	610	762	914	1041	mm
L	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	17.75	20.00	22.75	26.50	36.00	40.25	50.00	56.00	in.
(RF)	368	419	470	546	705	832	991	1130	1257	1384	451	508	578	673	914	1022	1270	1422	mm
L2	15.50	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	55.38	17.88	20.50	23.00	26.88	36.50	40.88	50.88	56.88	in.
(RTJ)	371	422	473	549	711	841	1000	1146	1276	1407	454	514	584	683	927	1036	1292	1445	mm
H	17.62	17.62	21.62	25.25	33.5	38.62	46.5	62.25	70.5	78	22.5	22.5	25.62	30	36.62	41.38	44.88	60.25	in.
(OPEN)	448	448	550	640	850	980	1180	1580	1790	1980	570	570	650	760	930	1050	1140	1530	mm
D0	14	14	14	18	24	28	34	34	34	34	14	14	18	24	28	34	34	34	in.
	350	350	350	450	600	700	850	850	850	850	350	350	450	600	700	850	850	850	mm
WT	45	45	55	77	175	323	540	795	1115	1556	110	110	150	175	380	575	980	1570	BW
(Kg)	80	80	95	123	263	481	795	1148	1626	2195	165	195	235	316	635	910	1780	2680	RF/RTJ

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

Fig. No:

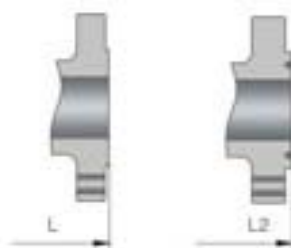
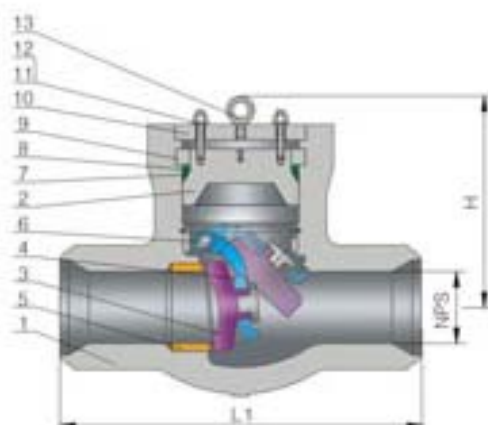
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- CP9B05A CP9B05D CP9B05B
- CP9R05A CP9R05D CP9R05B

Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 ¹ / ₂ Cr-1 ¹ / ₂ Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Bonnet Cap	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	Seal Ring	A105+HF	A182-F11+HF	A240-316+HF
6	Hinge Pin	A276-420	A276-304	A276-316
7	Bonnet Gasket	Steel Ring	304SS Ring	316SS Ring
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Bonnet Clamp	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B7	A193-B8M
12	Bonnet 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.



Design description:

- ▲ PSB, PRESSURE SEAL BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	in mm
ANSI Class 900Lb											
L1	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	39.00	43.00	in.
(BW)	216	254	305	356	508	660	787	914	991	1092	mm
L	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.5	44.5	in.
(RF)	368	419	381	457	610	737	838	965	1029	1130	mm
L2	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	in.
(RTJ)	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	22	34	38	71	176	485	761	1125	1345	1490	BW
(Kg)	44	55	61	116	255	630	940	1430	1710	1820	RF/RTJ

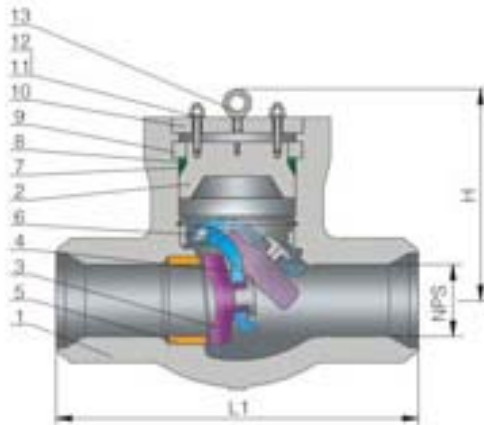
1500Lb/2500Lb Cast Steel Swing Check Valve

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

Fig. No:

- CP15R05A CP15F05D CP15F05B
- CP15B05A CP15B05D CP15B05B
- CP15R05A CP15R05D CP15R05B



Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	18Cr-9Ni-2Mo
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Bonnet Cap	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	Steel Ring	304SS Ring	316SS Ring
8	Adapter Ring	Carbon Steel	A276-420	A276-316
9	Retainer	Carbon Steel	A276-420	A276-316
10	Bonnet Clamp	Carbon Steel	Alloy Steel	Stainless Steel
11	Bonnet Stud	A193-B7	A193-B7	A193-B8M
12	Bonnet 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.



Design description:

- ▲ PSB, PRESSURE SEAL BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
- ▲ CHOICE OF SOLID OR SPLIT WEDGE
- ▲ RENEWABLE SEAT RINGS
- ▲ FORGED T-HEAD STEM
- ▲ RISING STEM AND NON-RISING HANDWHEEL
- ▲ FLANGED OR BUTTWELDING ENDS
- ▲ AVAILABLE WITH BG OPERATOR

Dimensions data

NPS DN	2	2 1/2	3	4	6	8	10	12	14	2	2 1/2	3	4	6	8	10	12	in mm
	50	65	80	100	150	200	250	300	350	50	65	80	100	150	200	250	300	
	ANSI Class 1500Lb									ANSI Class 2500Lb								
L1	8.50	10.00	12.00	16.00	22.00	29.00	34.00	39.00	42.00	11.00	13.00	14.50	18.00	24.00	30.00	36.00	41.00	in
(BW)	216	254	305	406	559	711	864	991	1067	279	330	368	457	610	762	914	1041	mm
L	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
(RF)	368	419	470	546	705	832	991	1130	1257	451	508	579	673	914	1022	1270	1422	mm
L2	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
(RTJ)	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	22	37	45	78	245	530	815	1213	1555	55	78	95	182	300	630	825	1580	LBW
(Kg)	44	61	110	155	378	675	1160	1710	2315	93	130	170	315	618	1125	1760	2910	RF&RTJ

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

Fig. No:

- GLP9F05A GLP9F05D GLP9F05B
- GLP9B05A GLP9B05D GLP9B05B
- GLP9R05A GLP9R05D GLP9R05B

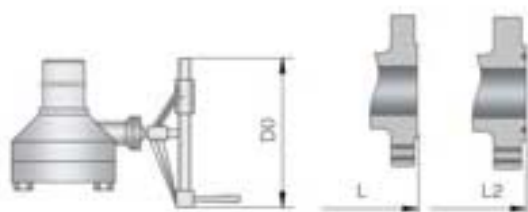
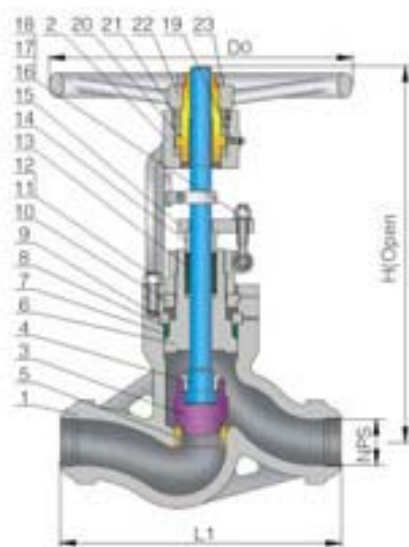
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 1/2Cr-1/2Mo	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 ¹⁾	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 ²⁾	
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.

Design description:

- ▲ PSB, PRESSURE SEAL BONNET
- ▲ FLEXIBLE WEDGE, FULLY GUIDED
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- ▲ AVAILABLE WITH BG OPERATOR



Dimensions data

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 900Lb									
L1	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	in.
(BW)	216	254	305	356	508	660	787	914	mm
L	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	in.
(RF)	368	419	381	457	610	737	838	965	mm
L2	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	in.
(RTJ)	371	422	384	460	613	740	841	968	mm
H	22	22	22	27	36.38	43.38	50.62	57	in.
(OPEN)	557	557	557	685	925	1100	1285	1450	mm
D0	16	16	16	16	28	28	36	36	in.
	400	400	400	400	700	700	900	900	mm
WT	46	53	68	100	270	450	740	1150	BW
(Kg)	75	82	95	135	355	680	1050	1480	RF/RTJ

Applicable standards:

- ★ STEEL GATE VALVES, API 600/API 6D
- ★ STEEL GATE VALVES, ISO 10434/ISO 14313
- ★ 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 59W/API 6D

Fig. No:

- GLP15F05A GLP15F05D GLP15F05B
- GLP15B05A GLP15B05D GLP15B05B
- GLP15R05A GLP15R05D GLP15R05B

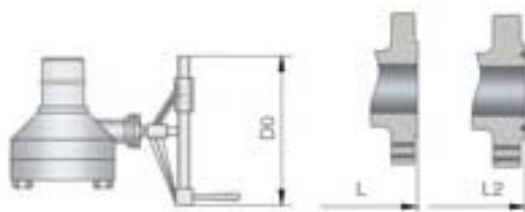
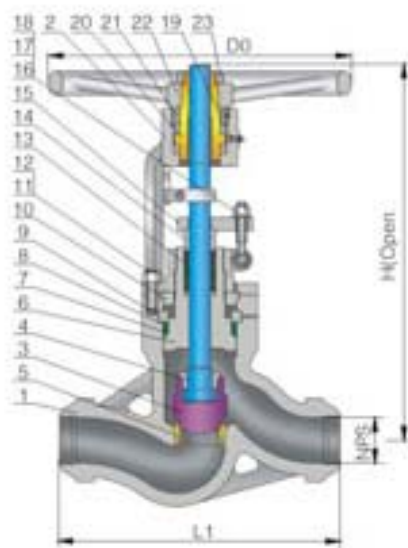
Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1 $\frac{1}{2}$ Cr- $\frac{1}{2}$ 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	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	Yoke sleeve	Aluminum-Bronze ¹⁾		
21	Yoke sleeve Jam Nut	Carbon Steel		Stainless Steel
22	Handwheel	Malleable Iron		
23	Handwheel Nut	Carbon Steel		

- Note: 1) Graphite optional
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Dimensions data

NPS	2	2 1/2	3	4	6	8	2	2 1/2	3	4	6	in
DN	50	65	80	100	150	200	50	65	80	100	150	mm
ANSI Class 1500Lb												
L1	8.50	10.00	12.00	16.00	22.00	28.00	11.00	13.00	14.50	18.00	24.00	in.
(BW)	216	254	305	406	559	711	279	330	368	457	610	mm
L	14.50	16.50	18.50	21.50	27.75	32.75	17.75	20.00	22.75	26.50	36.00	in.
(RF)	368	419	470	546	705	832	451	508	576	673	914	mm
L2	14.62	16.62	18.62	21.62	28.00	33.12	17.88	20.50	23.00	26.88	36.50	in.
(RTJ)	371	422	473	549	711	842	454	514	584	683	927	mm
H	22	22	24.38	30	44.62	54.75	23.38	23.38	28	32.25	49.62	in.
(OPEN)	557	557	620	760	1135	1390	595	595	710	820	1260	mm
D0	16	16	20	24	28	36	16	20	24	28	36	in.
	400	450	500	600	700	900	400	500	600	700	900	mm
WT	57	65	90	190	450	730	65	78	125	155	480	BW
(Kg)	86	112	162	240	580	950	115	136	205	275	660	RF/RTJ
ANSI Class 2500Lb												