

GATE VALVES

* **Desing**-Neway cast steel wedge gate valve have been designed to meet the requirement bo British Standard BS1414,American Petroleum Institute Standard API600 and generally conform to American National Standard ANSI B16.34

Face to face and end to end dimension conform to BS 2080,ANSI B 16.10 and ISO5752

End flange dimension conform to ANSI B 16.5

BW end dimension conform to ANSI B 16.25

Inspection and test in accordance with API 598 and BS 6755



* **Yoke Nut**-Extra long thread engagement between yoke nut and stem provide long thread life. Valves of sizes larger than 12” class 150,10” class 300,6” class 600,4” class 900, 1500 and 2500 are regularly provided with roll bearing yokes. Stem nut arrangement is designed to permit removal of hand wheel without allowing stem and gate to drop into closed position if hand wheel is removed with the valve open.

* **Gland EyeBolts** facilitate packing maintenance,For ease in re-packing the valve,gland eyebolts are mounted to swing aside.

* **Wedge & Stem Connection**-The connection is designed more strong than the thread area of stem assure the valve meet stem pull test in accordance with API 591.

***Stem and Packing Chamber Wall**-Close roundness,straightness and superior surface finishes of 32RMS or better for the stem and 63RMS for the packing chamber ensure the valve meet low fugitive emission test.

* **Adequate Clearances** prevent stem scoring.Two piece gland with sufficient clearance between the gland, stem, and stuffing box, prevents scoring stem even if the gland is inserted unevenly.

* **Stuffing Boxes**-Packing sizes conform to API requirements for refinery service.In all cases,when valve is back seated,the pressure on the packing is releved,allowing valve to be repacked under pressure. Packing is of the latest sandwich style.

* **Body-To-Bonnet Joint**-A flat face gasket joint is used in the 150-lb valve,A male and female joint is used in 300-lb, 600-lb Valve. Ring joint is used in the body-bonnet connection in 900-lb and higher rated valves.

* **Adequate Clearance For Bolting**-Bodies of all valves give adequate clearance between the body neck and back face of flange for bolts and nuts. On300-lb and higher valves,body-bonnet flanges are made circular for greater strength and for minimum distortion.

* **Streamlined Ports**-Ports are streamlined,which permits unobstructed flow,reduces turbulence,results in minimum pressure drop,and lowers erosion.

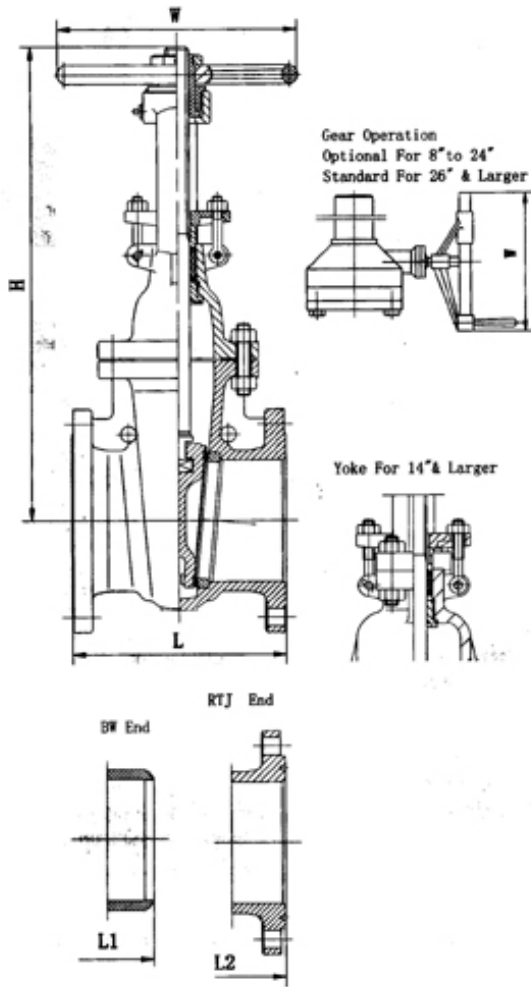
* **Wedge**-Integral guide rib faces assure self-centering of wedge.All wedges of 1-beam cross section for greated strength.Long guide slots are in wedges making centering of wedges certain at all times. The wedge has integrally cast heavy hoods to provide a substantial connection for the tee-head stem, while allowing the wedge to center itself.Neway flexible wedge gate valve has a one-Piece, twin-disc wedge,which is designed so that each half flexes independently,The wedge cannot jam,bind or stick,and less torque is required to open after the valve cools.Flexible twin-disc sealing, and minimum optroleum refineries, power power plants,and industrial service.

* **Seat Rings** are designed to eliminate turbulence,erosion and pressure drop.Cylindrical bottom seated type, having ample cross section for strength,are inserted so that no recess exists at the bace of the ring. Seat rings are provided with welded in and threaded seat rings will be supplied on request.

* **Lantern Ring** will be provided on request only for class 300 and up.

Class 150

Figure No. G1RA8 G1JA8 G1BA8



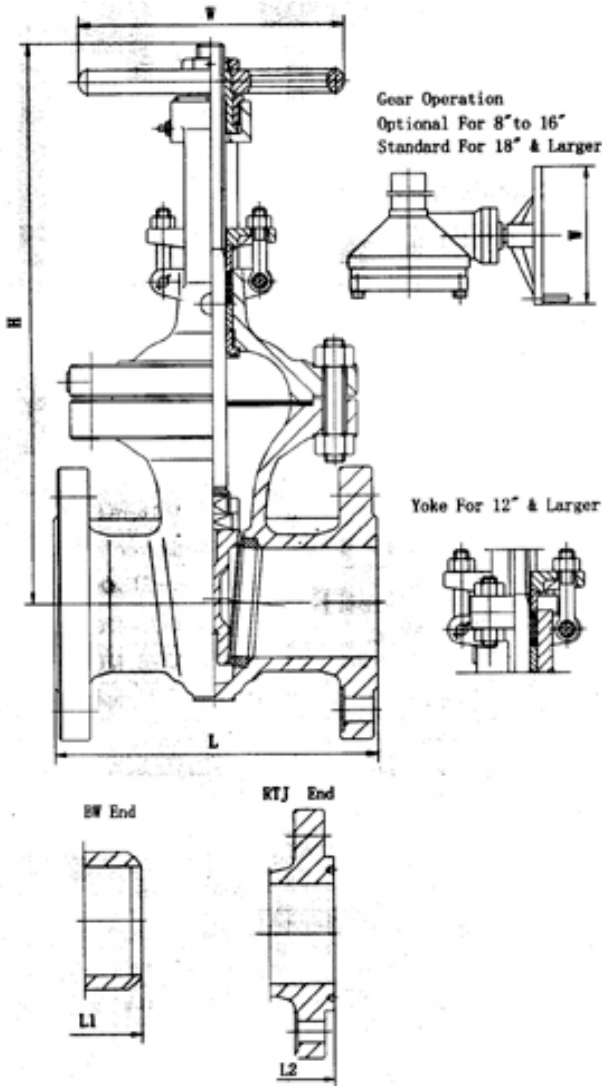
Standard materials of parts

Parts	Materials
body	ASTM A216-WCB
Bonnet	ASTM A216-WCB
Stem	ASTM A182-F6a
Wedge	ASTM A216-WCB/Cr13 Overlay ASTM 217-CA15(10" & smaller)
Yoke sleeve	ASTM A439 D-2
Gland flange	ASTM A216-WCB
Handwheel	Ductile iron
Seat ring	ASTM A 105+STL.Overlay
Back seat	ASTM A 276-420
Gland	ASTM A 276-420
Gasket	Reinforced graphite
Packing	Graphite
Retaining nut	Carbon steel
Bonnet stud/nut	ASTM A 193-B7/ASTM A194-2H
Gland bolt/nut	ASTM A 193-B7/ASTM A194-2H
Spacer ring	ASTM A276-420
Handwheel nut	Carbon steel
Grease fitting	Steel
Yoke	ASTM A216-WCB

Dimensions(in./mm)

NPS	In	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	26	28	30	32	36
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900
L	In	7	7.5	8	9	10	10.5	11.5	13	14	15	16	17	18	20	22	24	24	26	28
(RF)	mm	178	191	203	229	254	267	292	330	356	381	406	432	457	508	559	610	610	660	711
L1	In	8.5	9.5	11.12	12	15	15.88	16.5	18	19.75	22.5	24	26	28	32	34	36	36	38	40
(BW)	mm	216	241	283	305	381	403	419	457	502	572	610	660	711	813	864	914	914	965	1016
L2	In	7.5	8	8.5	9.5	10.5	11	12	13.5	14.5	15.5	16.5	17.5	18.5	20.5	---	---	---	---	---
RTJ	mm	191	203	216	241	267	279	305	343	368	394	419	445	470	521					
W	In	8	8	10	12	12	12	14	16	18	20	22	24	27	30	24	24	24	24	24
	mm	200	200	250	300	300	300	350	400	450	500	550	600	680	760	610	610	610	610	610
H	In	15.2	17.1	18.9	23	26.8	30.1	37.6	45.2	53.2	59.4	67	74.5	83.4	98.4	110	117	124	129	146
open	mm	386.5	434.5	480.5	584.5	681	765	956	1149	1350.5	1508	1703	1892	2119	2500	2806	2960	3148	3281	3721
WT	RF	18	25	32	50	64	77	121	178	265	362	463	621	792	1190	1521	1838	2261	2490	3310
(kg)	BW	15	18	26	41	58	69	108	156	248	330	424	587	752	1144	1570	1900	3310	2540	3380

Figure No. G1RA8 G1JA8 G1BA8



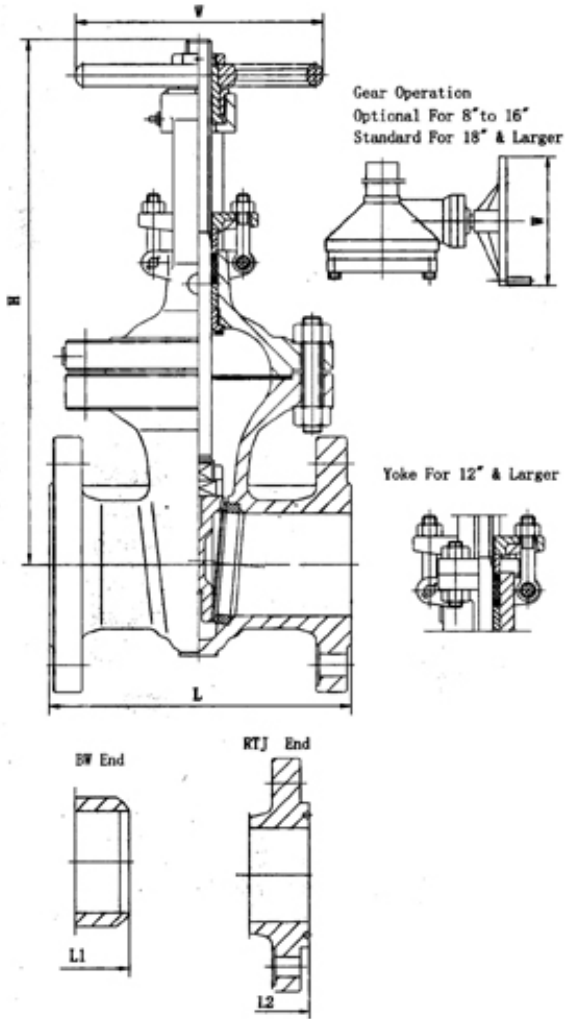
Standard materials of parts

Parts	Materials
body	ASTM A216-WCB
Bonnet	ASTM A216-WCB
Stem	ASTM A182-F6a
Wedge	ASTM A216-WCB/Cr13 Overlay ASTM 217-CA15(8" & smaller)
Yoke sleeve	ASTM A439 D-2
Gland flange	ASTM A216-WCB
Handwheel	Ductile iron
Seat ring	ASTM A 105+STL.Overlay
Back seat	ASTM A 276-420
Gland	ASTM A 276-420
Gasket	Spiral wound graphite
Packing	Graphite
Retaining nut	Carbon steel
Bonnet stud/nut	ASTM A 193-B7/ASTM A194-2H
Gland bolt/nut	ASTM A 193-B7/ASTM A194-2H
Spacer ring	ASTM A276-420
Handwheel nut	Carbon steel
Grease fitting	Steel
Yoke	ASTM A216-WCB

Dimensions(in./mm)

NPS	In	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	26	28	30
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750
L-L1 (RF-BW)	In	8.5	9.5	11.12	12	15	15.88	16.5	18	19.75	30	33	36	39	45	49	53	55
	mm	216	241	283	305	381	403	419	457	502	762	838	914	991	1143	1245	1346	1397
L2	In	9.12	10.12	11.74	12.62	15.62	16.50	17.12	18.62	20.37	30.62	33.62	36.62	39.75	45.88	50.00	54.00	56.00
RTJ	mm	232	257	298	321	397	419	435	473	517	778	854	930	1010	1165	1270	1372	1422
W	In	8	8	10	10	12	14	16	18	20	22	24	24	24	24	24	24	24
	mm	200	200	250	250	300	350	400	450	500	550	600	610	610	610	610	610	610
H	In	16.1	17.8	20	24.1	26.4	31.7	39.4	47.6	55.7	62.3	67.9	77.1	86.4	102.3	117.6	122.8	126.2
open	mm	410	453	509	612	670	805	1000	1209	1416	1582	1725	1959	2194	2598	2986	3120	3205
WT	RF	23	35	50	71	100	144	209	322	482	683	950	1145	1634	2660	3090	3312	3597
(kg)	BW	17	26	39	53	79	113	164	256	390	565	805	964	1412	2304	2540	2725	3057

Figure No. G1RA8 G1JA8 G1BA8



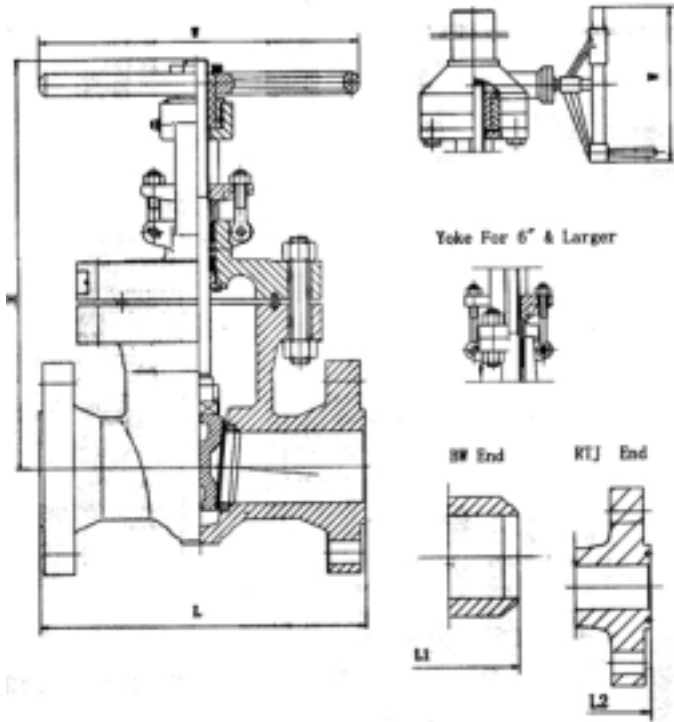
Standard materials of parts

Parts	Materials
body	ASTM A216-WCB
Bonnet	ASTM A216-WCB
Stem	ASTM A182-F6a
Wedge	ASTM A216-WCB/Cr13 Overlay ASTM 217-CA15(8" & smaller)
Yoke sleeve	ASTM A439 D-2
Gland flange	ASTM A216-WCB
Handwheel	Ductile iron
Seat ring	ASTM A 105+STL.Overlay
Back seat	ASTM A 276-420
Gland	ASTM A 276-420
Gasket	Spiral wound graphite
Packing	Graphite
Retaining nut	Carbon steel
Bonnet stud/nut	ASTM A 193-B7/ASTM A194-2H
Gland bolt/nut	ASTM A 193-B7/ASTM A194-2H
Spacer ring	ASTM A276-420
Handwheel nut	Carbon steel
Grease fitting	Steel
Yoke	ASTM A216-WCB

Dimensions(in./mm)

NPS	In	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L-L1	In	11.5	13	14	17	20	22	26	31	33	35	39	43	47	55
(RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397
L2	In	11.62	13.12	14.12	17.12	20.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38
RTJ	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407
W	In	8	8	10	10	16	18	20	24	27	24	24	24	24	24
	mm	200	250	250	250	400	450	500	600	680	610	610	610	610	610
H	In	16.5	18.7	20.4	25.4	30.3	33	40.3	48.4	57.1	62	70.7	76.02	86.9	102
open	mm	418	476	518	646	770	839	1024	1229	1450	1574	1797	1931	2207	2582
WT	RF	36	52	67	112	170	234	393	610	890	1245	1530	1967	2450	3620
(kg)	BW	29	42	53	83	125	177	310	472	729	1054	1242	1626	2032	3017

Figure No.
G9RA5 G15RA5 G25RA5
G9JA5 G15JA5 G25JA5
G3JA5 G15BA5 G25BA5



Standard materials of parts

Parts	Materials
body	ASTM A216-WCB
Bonnet	ASTM A216-WCB
Stem	ASTM A182-F6a
Wedge	ASTM A216-WCB+STL Overlay
Yoke sleeve	ASTM A439 D-2
Gland flange	ASTM A216-WCB
Handwheel	Ductile iron
Seat ring	ASTM A 105+STL.Overlay
Back seat	ASTM A 276-420
Gland	ASTM A 276-420
Gasket	Soft iron
Packing	Graphite
Retaining nut	Carbon steel
Bonnet stud/nut	ASTM A 193-B7/ASTM A194-2H
Gland bolt/nut	ASTM A 193-B7/ASTM A194-2H
Spacer ring	ASTM A276-420
Handwheel nut	Carbon steel
Grease fitting	Steel
Yoke	ASTM A216-WCB

900#	NPS	In	2	2-1/2	3	4	6	8	10	12	14	16
	DN	mm	50	65	80	100	150	200	250	300	350	400
	L-L1 (RF-BW)	In	14.5	16.5	15	18	24	29	33	38	40.5	44.5
		mm	368	419	381	457	610	737	838	965	1029	1130
	L2 (RTJ)	In	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
		mm	371	422	384	460	613	740	841	968	1038	1140
W	In	10	10	12	14	20	24	24	24	24	24	24
	mm	250	250	300	350	500	600	610	610	610	610	610
H	In	19.6	21.5	22.6	26.7	35.4	43.4	53	59.8	74.9	80.7	
Open	mm	498	547	573	678	900	1103	1345	1520	1902	2051	
WT (KG)	RF	74	131	101	172	335	640	1100	1600	2250	2850	
	BW	54	105	78	135	260	517	922	1381	2009	2563	
	L-L1 (RF-BW)	In	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5	49.5	54.5
		mm	368	419	470	546	705	832	991	1130	1257	1384

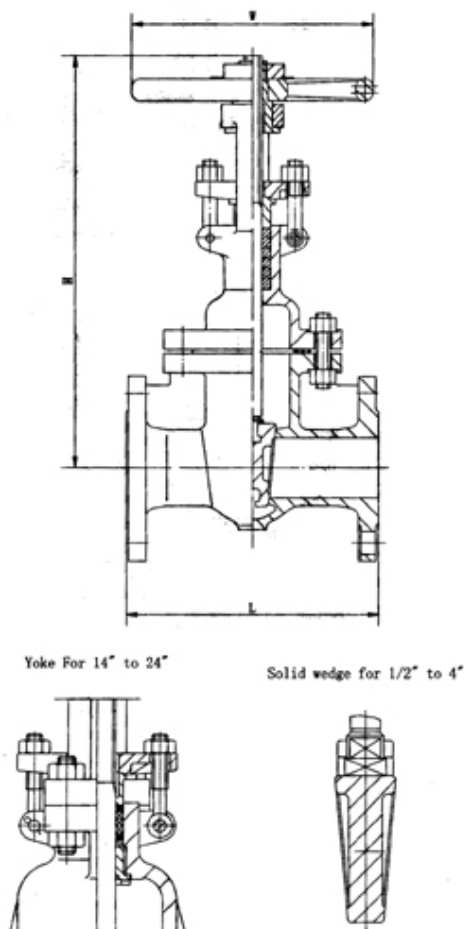
1500#	L2 (RTJ)	In mm	14.62 371	16.62 422	18.62 473	21.62 549	28.00 711	33.13 842	39.38 1000	45.12 1146	50.25 1276	55.38 1407
	W	In mm	10 250	12 300	14 350	20 500	24 600	18 458	18 458	24 610	24 610	24 610
	H Open	In mm	19.2 487	22.5 572	23.7 603	27.6 700	38.7 984	45.1 1146	54 1371	64.3 1633	70.8 1798	77.3 1963
	WT (KG)	RF BW	74 54	131 105	165 129	248 197	510 412	921 761	1910 1640	3145 2755	4100 3200	6200 5300
2500#	L-L1 (RF-BW)	In mm	17.75 451	20 508	22.75 578	26.5 673	36 914	40.25 1022	50 1270	56 1422	---	---
	L2 (RTJ)	In mm	17.88 454	20.25 514	23.00 584	26.88 683	36.50 927	40.88 1038	50.88 1292	56.88 1445	---	---
	W	In mm	14 350	18 450	18 450	20 500	24 610	24 610	24 610	24 610	---	---
	H Open	In mm	22.2 563	22.2 563	22.9 582	34.3 870	57.1 1450	63.4 1610	81.7 2076	89.8 2281	---	---
	WT (KG)	RF BW	130 95	200 150	245 175	490 375	1600 1310	2450 2010	4570 3800	7150 6000	---	---

Class 150

Basic Design:API603

Wall Thickness:ANSI B16.34

Figure No. G1RG10



Standard materials of parts

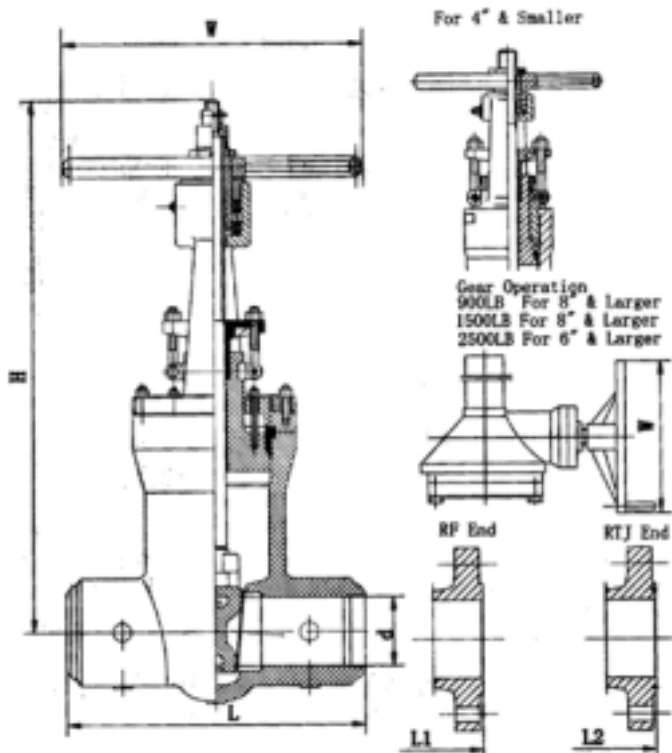
Parts	Materials
body	ASTM A315-CF8M
Bonnet	ASTM A315-CF8M
Stem	ASTM A182-F316
Wedge	ASTM A315-CF8M
Yoke sleeve	ASTM A439 D-2
Gland flange	ASTM A315-CF8
Handwheel	Ductile iron
Gland	ASTM A276-316
Gasket	Reinforced graphite
Packing	Graphite
Retaining nut	ASTM A276-304
Bonnet stud/nut	ASTM A 193-B8/ASTM A194-8
Gland bolt/nut	ASTM A 193-B8/ASTM A194-8
Spacer ring	ASTM A182-F316
Handwheel nut	ASTM A 276-304
Grease fitting	Caron Steel Ni Plated
Yoke	ASTM A315-CF8

Dimensions(in./mm)

NPS	In	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300	350	400	450	500	600
L	In	4.25	4.62	5	6.5	7	7.5	8	9	10.5	11.5	13	14	15	16	17	18	20
(BF)	mm	108	118	127	165	178	191	203	229	267	292	330	356	381	406	432	457	508
W	In	4	4	4	5.5	8	8	10	12	12	14	16	18	20	22	24	27	30
	mm	100	100	100	140	200	200	250	300	300	350	400	450	500	550	600	680	760
H	In	8.30	8.40	9.20	11.70	15.2	17.1	18.9	23	30.1	37.6	45.2	53.2	59.4	67	74.5	83.4	98.4
Open	mm	211	213	233	296	386.5	434.5	480.5	584.5	765	956	1149	1350.5	1508	1703	1892	2119	2500
WT	KG	3	3.3	4.5	9.5	14	22	26	40	64	98	145	225	327	417	477	620	952

Class 900/1500/2500

Figure No.G9BA5-PS G15BA5-PS G25BA5-PS Standard materials of parts
G9RA5-PS G15RA5-PS G25RA5-PS G9JA5-PS
G15JA5-PS G25JA5-PS



Parts	Materials
Body	ASTM A216-WCB
Bonnet	ASTM A105+STL.Overlay
Stem	ASTM A182-F6a
Wedge	ASTM A216-WCB+STL.Overlay
Yoke	ASTM A216-WCB
Yoke sleeve	ASTM A439 D-2
Gland flange	ASTM A216-WCB
Gland	ASTM A276-420
Handwheel	Ductile iron
Seat ring	ASTM A105+STL.Overlay
Gasket	ASTM A182-304
Packing	Reinforced graphite
Bonnet stud/nut	ASTM A193-B7/A194-2H
Gland bolt/nut	ASTM A193-B7/A194-2H
Spacer ring	ASTM A276-420
Thrust ring	ASTM A276-420
Supporting cover	ASTM A276-420
Handwheel nut	Carbon steel

Dimensions(in./mm)

900#	NPS	In	2	2-1/2	3	4	6	8	10	12	14	16
	DN	mm	50	65	80	100	150	200	250	300	350	400
	L	In	8.5	10	12	14	20	26	31	36	39	43
	(BW)	mm	216	254	305	356	508	660	787	914	991	1092
	L1	In	14.5	16.5	15	18	24	29	33	38	40.5	44.5
	(RF)	mm	368	419	381	457	610	737	838	965	1029	1130
	L-2	In	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	
W	In	10	10	12	14	20	24	24	24	24	24	24
	mm	250	250	300	350	500	600	610	610	610	610	610
H	In	23	30	30	34	40	50	61	70	80	89	
Open	mm	594	753	756	864	1013	1276	1543	1781	2026	2261	
WT	RF	63	99	107	158	294	693	1008	1418	1785	2520	
(KG)	BW	42	67	84	105	194	520	772	1103	1470	2048	
1500#	L	In	8.5	10	12	16	22	28	34	39	42	47
	(BW)	mm	216	254	305	406	559	711	864	991	1067	1194
	L1	In	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5	49.5	54.5
	(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384
	L-2	In	14.62	16.62	18.62	21.62	28.00	33.13	39.38	45.12	50.25	55.38
	(RTJ)	mm	371	422	473	549	711	842	1000	1146	1276	1407
W	In	10	12	14	20	24	18	18	24	24	24	24
	mm	250	300	350	500	600	458	458	610	610	610	610
H	In	23	30	30	34	39	53	58.3	73.6	87	92	
Open	mm	594	753	756	864	994	1349	1480	1870	2216	2331	
WT	RF	63	99	126	218	504	956	1481	2184	2741	3780	
(KG)	BW	42	67	84	155	367	718	1071	1523	1890	2888	
2500#	L	In	11	13	14.5	18	24	30	36	41	---	---
	(BW)	mm	279	330	368	457	610	762	914	1041		
	L1	In	17.75	20	22.75	26.5	36	40.25	50	56	---	---
	(RF)	mm	451	508	578	673	914	1022	1270	1422		
	L-2	In	17.88	20.25	23.00	26.88	36.50	40.88	50.88	56.88	---	---
	(RTJ)	mm	454	514	584	683	927	1038	1292	1445		
W	In	14	18	18	20	24	24	24	24	---	---	
	mm	350	450	450	500	610	610	610	610			
H	In	23	30	30	34	44	55	69	74	---	---	
Open	mm	594	753	756	870	1129	1389	1748	1873			
WT	RF	89	142	173	346	851	1386	2493	3091	---	---	
(KG)	BW	53	95	100	200	488	850	1680	2330			