SLAB GATE VALVES, CLASS 600

THE ENERGY CONTROLLERS

WALWORTH Slab Gate Valves also named “Through Conduit Gate Valve” are manufactured and tested in accordance with the API-6D standard. This type of valve is very useful in transportation pipe lines for gas, crude oil and oil products. The Slab Gate Valve is through conduit and piggable. Slab Gate Valve has been designed to minimize pressure drop and catch foreign materials such as slurries into the disc cavity to keep clean the sealing surface areas.

FULL OPENING THROUGH CONDUIT DESIGN: WALWORTH Slab Gate valve allow the pipeline fluids to flow freely with a minimum of turbulence. In open position, Slab Gate allows the running of pigs, scraper wipers or hot tap cutters through the pipeline with no danger or damage to the internal mechanic components of the valve. Full-flow design keeps line scrapers from becoming stuck into the valve’s bore and prevents metal cuttings from jamming moving parts. Circular bore as per API-6D table 1.

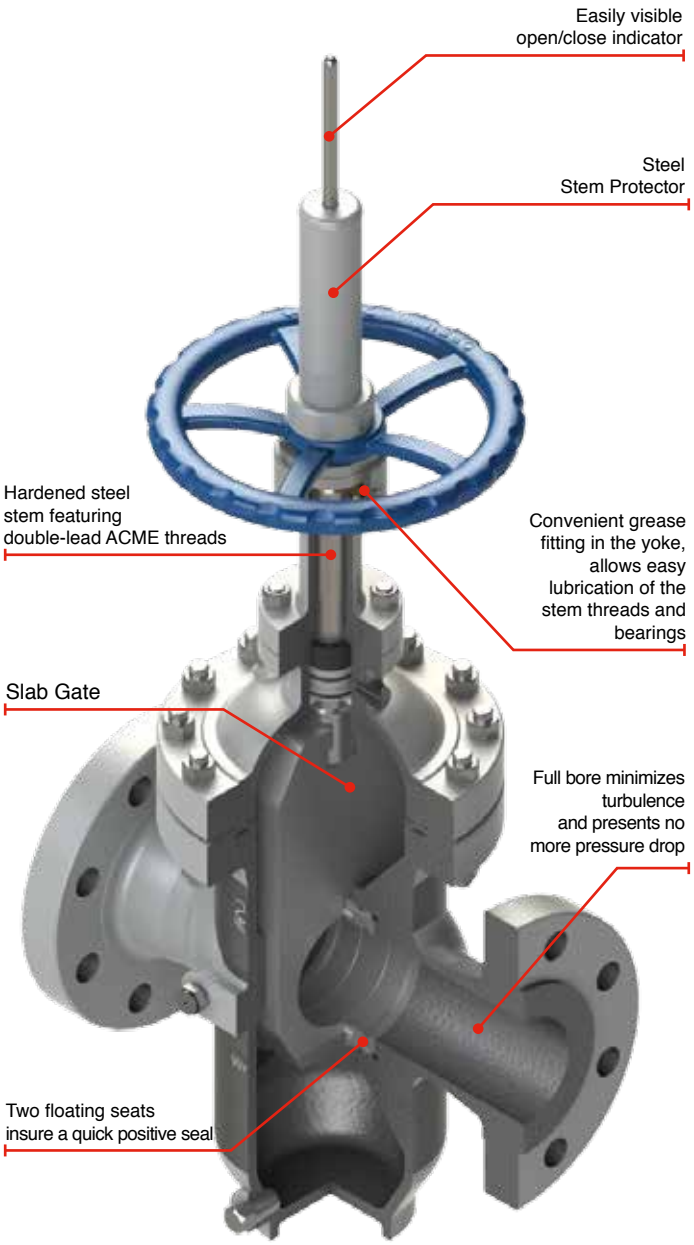
ENERGIZED SEAT FOR POSITIVE SEALING: When the slab-type disc is in the closed position, the seats (one on each side of the gate) are energized to have a tight seal upstream and downstream. The valve seats have a nylon or RPTFE (Reinforced PolyTetraFluoroEtlylene resine) circular insert on their sealing faces. Two elastomer O-rings on the peripherical surfaces of the seats prevent the fluid passing through the seats when the valve is expanded due to pressure. In this way, the sealing action of the O-rings actually increases with fluid pressure.

TIGHT SEALING: WALWORTH Slab Gate Valve uses the resultant force from the pressure line to help to have a mechanical tight sealing downstream side when high differential pressure occurs. Low pressure sealing is achieved by internal springs assisting pushing the seats against the disc to obtain the proper seal.

MAINTENANCE: Slab Gate valves are designed for free maintenance. The combination Chevron-Viton packing in the valve stem can be repacked while the valve is under pressure in open position. Slab Gate valves can be overhauled by trained serviceman or by the manufacturer.

NO LUBRICATING: In normal operating conditions, the Slab Gate valve does not need lubricant to maintain a seal. If damage occurs to sealing members, sealant can be injected as a temporary solution until valve is repaired.

BACKSEAT: Slab Gate Valve is designed with backseat bushing to keep packing chamber isolated for pressure line to permit packaging change. Also a secondary seal inside the packing chamber is included.

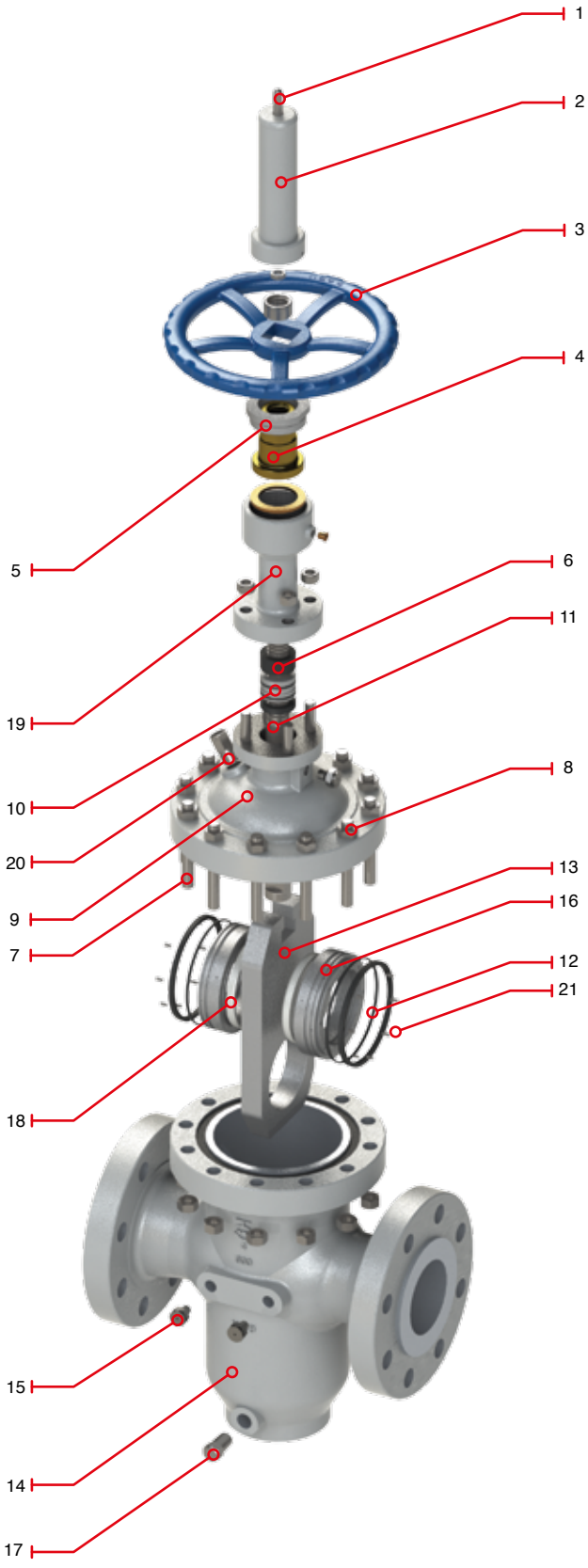


SLAB GATE VALVES, CLASS 600
(HANDWHEEL OPERATED)

DESIGN FEATURES:

- Design in accordance with API-6D
- Rising stem
- Flange dimensions as per ASME B16.5
- For valves 26" and larger, flange dimensions as per ASME B16.47 Series A
- End to end dimensions as per API-6D table 2 and figure 2 (valves not listed in this table as per ASME B16.10)
- WE dimensions as per ASME B31.4 and/or ASME B31.8 and tapered as per ASME B16.25 figure 1
- Full opening
- Size from 2" to 24" Handwheel operated as standard

FIGURE No.	OPERATION	TYPE ON ENDS
6912	Handwheel	RF
6913	Handwheel	RTJ
6914	Handwheel	WE



Regular Bill of Materials

No.	Description	Standard Material
1	Indicator Rod	SS 410
2	Stem Protector	CS
3	Handwheel	A197
4	Stem Nut	ASTM A439 D2
5	Thrust Bearing	AISI 1035
6	Stem Packing	Graphite
7	Bolt	ASTM A193 Gr. B7M
8	Nut	ASTM A194 Gr. 2HM
9	Bonnet	ASTM A216 Gr. WCB
10	O-Ring Packing Seat	Viton
11	Stem	ASTM A276 Gr. 410
12	O-Ring	Viton
13	Gate	ASTM A515 Gr. 70 + ENP or ASTM A105N+ ENP
14	Body	ASTM A216 Gr. WCB
15	Sealant Fitting	Cs + Zn
16	Seat	ASTM A105N + ENP
17	Drain Plug	Cs + Zn
18	Seat insert	RPTFE or Nylon
19	Yoke	ASTM A216 Gr. WCB
20	Vent	Cs + Zn
21	Spring	Inconel X-750

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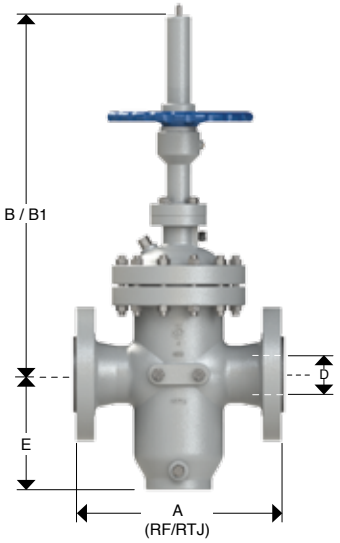

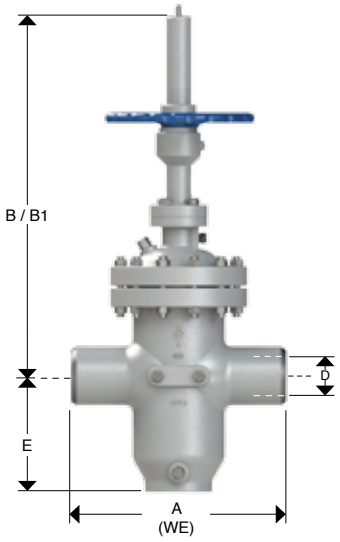

Dimensions

NOM SIZE	in	2"	3"	4"	6"	8"	10"	12"	14"
OPERATION		HW	HW	HW	HW	HW	HW	HW	HW
D	in	1.93	2.91	3.94	5.91	7.91	9.92	11.93	13.15
	mm	49	74	100	150	201	252	303	334
A / RF	in	11.50	14.02	17.01	22.01	25.98	30.98	32.99	35.00
	mm	292	356	432	559	660	787	838	889
A / RTJ	in	11.61	14.13	17.13	22.13	26.14	31.14	33.11	35.12
	mm	295	359	435	562	664	791	841	892
A / WE	in	11.50	14.02	17.01	22.01	25.98	30.98	32.99	35.00
	mm	292	356	432	559	660	787	838	889
B	in	20.67	25.47	30.24	40.08	47.44	59.06	69.96	73.62
	mm	525	647	768	1018	1205	1500	1777	1870
B1	in	23.46	29.41	35.08	46.97	56.38	70.47	83.54	88.19
	mm	596	747	891	1193	1432	1790	2122	2240
E	in	5.83	7.76	9.29	12.80	16.34	19.69	23.82	25.87
	mm	148	197	236	325	415	500	605	657
* F	in	-	-	-	-	-	-	53.39	55.98
	mm	-	-	-	-	-	-	1356	1422
Weight RF	lbs	121.22	187.34	330.60	639.16	991.80	1542.80	2314.20	2975.40
	kg	55	85	150	290	450	700	1050	1350
Weight WE	lbs	105.46	162.99	287.62	556.07	862.87	1342.24	2013.35	2588.60
	kg	47.85	73.95	130.5	252.3	391.5	609	913.5	1174.5

B = Close Position B1 = Open Position * For Gear operated valves if required by customer

SLAB GATE VALVES, CLASS 600
(GEAR OPERATED)

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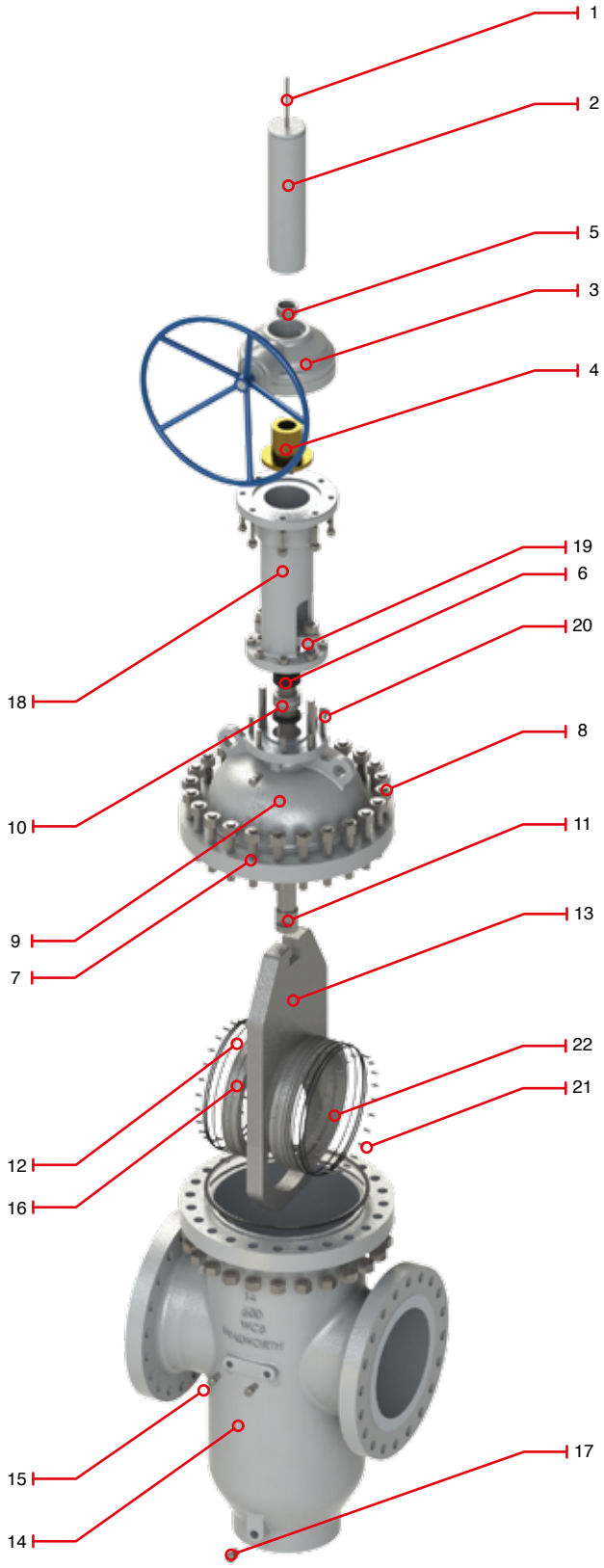
- Full opening
- Size from 26" to 48" Gear operated as standard

FIGURE No.	OPERATION	TYPE ON ENDS
6922	Gear Operator	RF
6923	Gear Operator	RTJ
6924	Gear Operator	WE



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No.	Description	Standard Material
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9	Bonnet	ASTM A216 Gr. WCB
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11	Stem	ASTM A276 Gr. 410
12	O-Ring	Viton
13	Gate	ASTM A515 Gr.70+ TCC or ASTM A105N+ TCC
14	Body	ASTM A216 Gr. WCB
15	Sealant Fitting	Cs + Zn
16	Seat	ASTM A105N + TCC
17	Drain Plug	Cs + Zn
18	Yoke	ASTM A216 Gr. WCB
19	Gland Flange	CS
20	Vent	Cs + Zn
21	Springs	Inconel X-750
22	Seat Insert	RPTFE or Nylon

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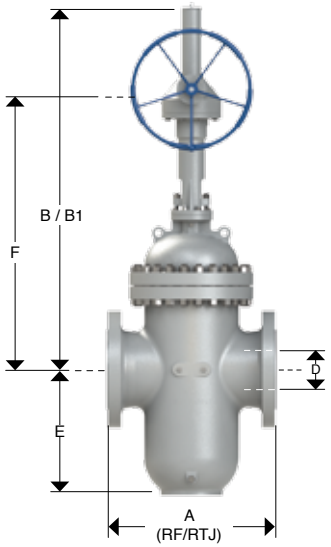

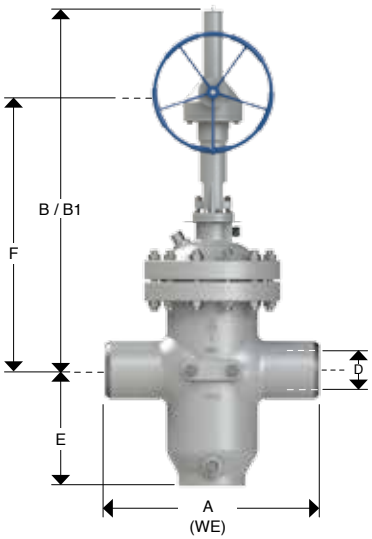

Dimensions

NOM SIZE	in	16"	18"	20"	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"	48"
OPERATION		GO	GO	GO	GO	GO	GO	GO	GO	GO	GO	GO	GO	GO	GO
D	in	15.16	17.17	19.17	23.19	24.92	26.93	28.94	30.67	32.68	34.41	36.42	38.43	40.16	45.91
	mm	385	436	487	589	633	684	735	779	830	874	925	976	1020	1166
A / RF	in	39.02	42.99	47.01	55.00	57.01	60.98	65.00	70.00	75.98	82.01	85.98	90.00	95.98	110.00
	mm	991	1092	1194	1397	1448	1549	1651	1524	1626	2083	2184	2286	2438	2794
A / RTJ	in	39.13	43.11	47.24	55.39	57.52	61.50	65.51	70.63	76.61	82.64	-	-	-	-
	mm	994	1095	1200	1407	1461	1562	1664	1553	1654	2099	-	-	-	-
A / WE	in	39.02	42.99	47.01	55.00	57.01	60.98	65.00	70.00	75.98	82.01	85.98	90.00	95.98	110.00
	mm	991	1092	1194	1397	1448	1549	1651	1524	1626	2083	2184	2286	2438	2794
B	in	84.45	92.56	100.20	113.39	119.69	128.35	135.83	146.46	157.48	168.50	173.23	178.74	190.16	206.50
	mm	2145	2351	2545	2880	3040	3260	3450	3660	3880	4280	4400	4540	4830	5245
B1	in	101.57	111.50	121.26	138.58	147.24	157.87	167.32	179.72	192.83	205.71	212.44	220.16	234.49	255.35
	mm	2580	2832	3080	3520	3740	4010	4250	4490	4765	5225	5396	5592	5956	6486
E	in	29.13	32.48	36.22	42.52	48.43	51.57	51.57	57.09	60.63	63.78	66.85	69.88	77.95	84.45
	mm	740	825	920	1080	1230	1310	1310	1450	1540	1620	1698	1775	1980	2145
F	in	64.88	71.34	76.57	85.55	89.29	95.39	101.02	110.08	118.82	127.87	130.63	133.54	141.97	153.62
	mm	1648	1812	1945	2173	2268	2423	2566	2672	2835	3248	3318	3392	3606	3902
Weight RF	lbs	4584.32	5510.00	7449.52	11747.32	15868.80	18734.00	22040.00	29754.00	34382.40	39672.00	46945.20	50251.20	56202.00	77558.76
	kg	2080	2500	3380	5330	7200	8500	10000	13500	15600	18000	21300	22800	25500	35190
Weight WE	lbs	3988.36	4793.70	6481.08	10220.17	13805.86	16298.58	19174.80	25885.98	29912.69	34514.64	40842.32	43718.54	48895.74	67476.12
	kg	1809.6	2175	2940.6	4637.1	6264	7395	8700	11745	13572	15660	18531	19836	22185	30615.3