

Torque Data For Cast Stainless Steel Gate Valve

FIG. NO.	Item	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	
GATE 150#	1	Stem Dia. (Inch / ACME)	1/2-10ACME-2G-LH	9/16-10ACME-2G-LH	5/8-8ACME-2G-LH	5/8-8ACME-2G-LH	5/8-8ACME-2G-LH	5/8-8ACME-2G-LH	5/8-8ACME-2G-LH	3/4-6ACME-2G-LH	7/8-6ACME-2G-LH	1-5ACME-2G-LH
	2	Pitch (in)	0.100	0.100	0.125	0.125	0.125	0.125	0.125	0.167	0.167	0.200
	3	Lead (in)	0.100	0.100	0.125	0.125	0.125	0.125	0.125	0.167	0.167	0.200
	4	Torque (lbf-in)	50	56	67	70	75	85	98	142	216	385
	5	No. of Turns	7.09	7.87	8.82	11.65	14.17	18.27	23.31	20.55	26.93	28.15
	6	Total Thrust F (lbf)	1024.30	1054.67	1097.19	1151.86	1218.68	1388.77	1607.46	1874.74	2555.09	3929.83
GATE 300#	1	Stem Dia. (Inch / ACME)	1/2-10ACME-2G-LH	9/16-10ACME-2G-LH	5/8-8ACME-2G-LH	5/8-8ACME-2G-LH	3/4-6ACME-2G-LH	3/4-6ACME-2G-LH	3/4-6ACME-2G-LH	7/8-6ACME-2G-LH	1-5ACME-2G-LH	1 1/4-5ACME-2G-LH
	2	Pitch (in)	0.100	0.100	0.125	0.125	0.167	0.167	0.167	0.167	0.200	0.200
	3	Lead (in)	0.100	0.100	0.125	0.125	0.167	0.167	0.167	0.167	0.200	0.200
	4	Torque (lbf-in)	52	61	77	86	119	153	196	278	545	911
	5	No. of Turns	7.09	7.87	8.82	11.65	10.63	13.70	17.48	20.55	22.44	27.36
	6	Total Thrust F (lbf)	1063.62	1143.14	1254.47	1397.91	1572.56	2017.88	2590.43	3290.22	5571.50	7861.73
GATE 600#	1	Stem Dia. (Inch / ACME)						3/4-6ACME-2G-LH	7/8-6ACME-2G-LH	1-5ACME-2G-LH	1 1/8-5ACME-2G-LH	1 3/8-4ACME-2G-LH
	2	Pitch (in)						0.167	0.167	0.200	0.200	0.250
	3	Lead (in)						0.167	0.167	0.200	0.200	0.250
	4	Torque (lbf-in)						278	427	706	1184	2150
	5	No. of Turns						14.70	17.64	17.45	22.65	22.56
	6	Total Thrust F (lbf)						3671.92	5046.76	7211.42	11074.40	16361.70

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FIG. NO.	Item	6"	8"	10"	12"	14"	16"	18"	20"	24"	
GATE 150#	1	Stem Dia. (Inch / ACME)	1-5ACME-2G-LH	1 1/8-5ACME-2G-LH	1 1/4-5ACME-2G-LH	1 3/8-4ACME-2G-LH	1 5/8-4ACME-2G-LH	1 3/4-4ACME-2G-LH	1 7/8-0.25P-0.5L-ACME-2G-LH	2-0.25P-0.5L-ACME-2G-LH	2 1/4-0.3333P-0.6666L-ACME-2G-LH
	2	Pitch (in)	0.200	0.200	0.200	0.250	0.250	0.250	0.250	0.250	0.333
	3	Lead (in)	0.200	0.200	0.200	0.250	0.250	0.250	0.500	0.500	0.667
	4	Torque (lbf-in)	489	825	1300	2036	3070	4179	6890	8795	15239
	5	No. of Turns	33.07	43.11	53.54	50.87	55.91	64.41	36.30	40.08	36.44
	6	Total Thrust F (lbf)	4998.95	7720.35	11219.30	15495.80	20549.83	26381.41	32990.54	40377.21	58483.18
GATE 300#	1	Stem Dia. (Inch / ACME)	1 1/4-5ACME-2G-LH	1 3/8-4ACME-2G-LH	1 1/2-4ACME-2G-LH	1 5/8-4ACME-2G-LH	1 3/4-4ACME-2G-LH	1 7/8-0.25P-0.5L-ACME-2G-LH	2-0.25P-0.5L-ACME-2G-LH	2 1/8-0.25P-0.5L-ACME-2G-LH	2 1/2-0.3333P-0.6666L-ACME-2G-LH
	2	Pitch (in)	0.200	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.333
	3	Lead (in)	0.200	0.250	0.250	0.250	0.250	0.500	0.500	0.500	0.667
	4	Torque (lbf-in)	1236	2337	3783	5698	8138	13919	18285	23652	41513
	5	No. of Turns	32.87	34.17	42.99	51.02	55.91	32.20	36.30	40.08	36.44
	6	Total Thrust F (lbf)	10660.88	17786.02	26946.90	38143.54	51375.92	66644.07	83947.96	104287.60	149074.15
GATE 600#	1	Stem Dia. (Inch / ACME)	1 1/2-4ACME-2G-LH	1 5/8-4ACME-2G-LH	1 7/8-0.25P-0.5L-ACME-2G-LH	2-0.25P-0.5L-ACME-2G-LH					
	2	Pitch (in)	0.250	0.250	0.250	0.250					
	3	Lead (in)	0.250	0.250	0.500	0.500					
	4	Torque (lbf-in)	3140	5379	11248	16835					
	5	No. of Turns	26.72	34.60	21.16	25.12					
	6	Total Thrust F (lbf)	22366.46	36008.52	53857.00	77289.15					

Torque Data For Cast Stainless Steel Globe Valve

FIG. NO.	Item	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
GLOBE 150#	1	Stem Dia. (Inch / ACME)	7/16-12ACME-2G-LH	7/16-12ACME-2G-LH	7/16-12ACME-2G-LH	9/16-10ACME-2G-LH	5/8-8ACME-2G-LH	3/4-6ACME-2G-LH
	2	Pitch (in)	0.083	0.083	0.083	0.100	0.125	0.167
	3	Lead (in)	0.083	0.083	0.083	0.100	0.125	0.167
	4	Torque (lbf-in)	46	50	56	92	140	193
	5	No. of Turns	6.05	7.46	8.79	8.27	6.61	4.91
	6	Total Thrust F (lbf)	1080.99	1182.24	1323.98	1728.95	2295.91	2552.39
GLOBE 300#	1	Stem Dia. (Inch / ACME)	1/2-10ACME-2G-LH	1/2-10ACME-2G-LH	5/8-8ACME-2G-LH	3/4-6ACME-2G-LH	3/4-6ACME-2G-LH	7/8-6ACME-2G-LH
	2	Pitch (in)	0.100	0.100	0.125	0.167	0.167	0.167
	3	Lead (in)	0.100	0.100	0.125	0.167	0.167	0.167
	4	Torque (lbf-in)	59	72	113	220	332	428
	5	No. of Turns	5.04	5.24	5.91	4.64	4.90	4.94
	6	Total Thrust F (lbf)	1212.06	1477.13	1848.23	2908.52	4392.92	5064.44
GLOBE 600#	1	Stem Dia. (Inch / ACME)					7/8-6ACME-2G-LH	1-5ACME-2G-LH
	2	Pitch (in)					0.167	0.200
	3	Lead (in)					0.167	0.200
	4	Torque (lbf-in)					732	1053
	5	No. of Turns					4.86	4.30
	6	Total Thrust F (lbf)					8651.74	10759.84

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FIG. NO.	Item	3"	4"	5"	6"	8"	10"	12"	
GLOBE 150#	1	Stem Dia. (Inch / ACME) 7/8-6ACME-2G-LH	1-5ACME-2G-LH	1 1/4-5ACME-2G-LH	1 1/4-5ACME-2G-LH	1 1/2-4ACME-2G-LH	1 3/4-4ACME-2G-LH	2-4ACME-2G-LH	
	2	Pitch (in)	0.167	0.200	0.200	0.200	0.250	0.250	
	3	Lead (in)	0.167	0.200	0.200	0.200	0.250	0.250	
	4	Torque (lbf-in)	274	536	894	1210	2442	4187	6625
	5	No. of Turns	6.38	6.30	8.43	9.45	10.87	12.76	14.02
	6	Total Thrust F (lbf)	3235.44	5474.11	7709.55	10441.76	17396.46	26338.22	37267.03
GLOBE 300#	1	Stem Dia. (Inch / ACME) 1-5ACME-2G-LH	1 1/4-5ACME-2G-LH	1 1/2-4ACME-2G-LH	1 3/4-4ACME-2G-LH	2-4ACME-2G-LH	2 1/4-3ACME-2G-LH	2 5/8-3ACME-2G-LH	
	2	Pitch (in)	0.200	0.200	0.250	0.250	0.250	0.333	0.333
	3	Lead (in)	0.200	0.200	0.250	0.250	0.250	0.333	0.333
	4	Torque (lbf-in)	671	1380	2493	3946	7608	13905	22498
	5	No. of Turns	5.33	6.31	6.74	7.56	11.02	9.57	10.51
	6	Total Thrust F (lbf)	6852.79	11904.95	17757.74	24911.15	43119.82	67530.97	96144.59
GLOBE 600#	1	Stem Dia. (Inch / ACME) 1 1/8-5ACME-2G-LH	1 1/4-5ACME-2G-LH	1 5/8-4ACME-2G-LH	1 7/8-4ACME-2G-LH	2 1/2-3ACME-2G-LH	3 1/4-2ACME-2G-LH	3 3/8-2ACME-2G-LH	
	2	Pitch (in)	0.200	0.200	0.250	0.250	0.333	0.500	0.500
	3	Lead (in)	0.200	0.200	0.250	0.250	0.333	0.500	0.500
	4	Torque (lbf-in)	1565	2791	5528	8756	20118	41400	60440
	5	No. of Turns	5.35	6.40	6.84	7.80	8.22	6.38	7.14
	6	Total Thrust F (lbf)	14636.96	24077.06	37001.96	52298.38	90124.91	138086.03	194949.25