

# TECHNICAL DATA / VALVE TORQUE DATA

NOTE: WE RECOMMEND TO ADD 20%~25% SAFETY FACTORS FOR VALVE SERVICE CONDITION OR APPLICATION IF CUSTOMER WISH TO MOUNT AN ACTULATOR.

FIGURE:TC-01TK  
OPERATING TORQUE

VALVE SIZE	1000/800WOG	
	N-m	Lbf-in
1/4"	2.94	26.04
3/8"	2.94	26.04
1/2"	3.92	34.72
3/4"	4.90	43.40
1"	7.36	65.10
1 1/4"	9.81	86.80
1 1/2"	17.65	156.24
2"	24.52	217.00

FIGURE:TC-2000  
OPERATING TORQUE

VALVE SIZE	1500/2000WOG	
	N-m	Lbf-in
1/4"	4.9	43.40
3/8"	4.9	43.40
1/2"	5.9	52.08
3/4"	8.8	78.12
1"	14.7	130.20
1 1/4"	19.6	173.60
1 1/2"	34.3	303.80
2"	39.2	347.20

FIGURE:TC-6000/6100 (FS)  
OPERATING TORQUE

VALVE SIZE	150#	
	N-m	Lbf-in
1"	8.0	70.80
1 1/2"	12.5	110.60
2"	24.0	212.40
2 1/2"	34.0	300.90
3"	59.0	522.20
4"	79.0	699.15
6"	137.0	1212.45

FIGURE:TC-WL、TC-WT  
OPERATING TORQUE

VALVE SIZE	1000 WOG	
	N-m	Lbf-in
1/4"	3.92	34.72
3/8"	3.92	34.72
1/2"	7.91	70.00
3/4"	11.87	105.00
1"	15.48	137.00
1 1/4"	26.00	230.00
1 1/2"	35.60	315.00
2"	68.93	608.00

FIGURE:TC-02T、TC-02TM、  
TC-02X、TC-03T/B/S、  
TC-03K/03KC  
OPERATING TORQUE

VALVE SIZE	1000WOG	
	N-m	Lbf-in
1/4"	3.0	26.55
3/8"	3.0	26.55
1/2"	4.5	39.83
3/4"	8.5	75.23
1"	11.0	97.35
1 1/4"	15.0	132.75
1 1/2"	24.0	212.40
2"	32.0	283.20
2 1/2"	45.0	398.25
3"	65.0	575.25
4"	100.0	885.00

FIGURE:TC-3000T/B/S  
OPERATING TORQUE

VALVE SIZE	1000WOG	
	N-m	Lbf-in
1/2"	4.50	39.83
3/4"	8.50	75.23
1"	11.00	97.36
1 1/4"	19.00	168.17
1 1/2"	24.00	212.42
2"	32.00	283.23
2 1/2"	70.00	619.57
3"	120.00	1062.12
4"	130.00	1150.63

FIGURE:TC-0802A-150#  
TC-5000/5100 (FS)  
OPERATING TORQUE

VALVE SIZE	150#	
	N-m	Lbf-in
1/2"	6.4	53.10
3/4"	8.0	70.80
1"	10.0	88.50
1 1/4"	12.5	110.60
1 1/2"	24.0	212.40
2"	30.0	265.50
2 1/2"	35.0	309.75
3"	60.0	531.00
4"	127.5	1128.40
5"	150.0	1327.50
6"	210.0	1858.50
8"	400.0	3540.00
10"	843.4	7464.80
12"	1529.9	13540.80

FIGURE:TC-7000 (FS)  
OPERATING TORQUE

VALVE SIZE	150#	
	N-m	Lbf-in
1"	11.00	97.35
1 1/2"	26.40	233.64
2"	33.00	292.05
3"	66.00	584.10
4"	112.20	992.97

FIGURE:TC-0612/0612C、  
TC-0612M/0612MC  
OPERATING TORQUE

VALVE SIZE	1500/2000WOG	
	N-m	Lbf-in
1/4"	4.90	43.40
3/8"	4.90	43.40
1/2"	4.90	43.40
3/4"	5.90	52.08
1"	8.80	78.12
1 1/4"	14.70	130.20
1 1/2"	19.60	173.60
2"	34.30	303.80
2 1/2"	49.00	434.00
3"	58.80	520.80

FIGURE:TC-4000/4100 (FS)  
OPERATING TORQUE

VALVE SIZE	1500/2000 WOG	
	N-m	Lbf-in
1/2"	5.88	52.08
3/4"	8.80	78.12
1"	14.70	130.20
1 1/4"	19.60	173.60
1 1/2"	39.23	347.20
2"	49.04	434.00

FIGURE:TC-0802A-300#  
OPERATING TORQUE

VALVE SIZE	300#	
	N-m	Lbf-in
1/2"	9.3	82.46
3/4"	10.8	95.48
1"	13.7	121.52
1 1/4"	19.6	173.60
1 1/2"	36.3	321.16
2"	39.2	347.20
2 1/2"	42.2	373.24
3"	84.3	746.48
4"	138.3	1223.88
5"	255.0	2256.80
6"	407.3	3604.00
8"	495.3	4383.40

FIGURE:TC-WLT-DM  
TC-WTT-DM  
OPERATING TORQUE

VALVE SIZE	1000 WOG	
	N-m	Lbf-in
1/4"	7.4	65.49
3/8"	7.4	65.49
1/2"	7.4	65.49
3/4"	14.8	130.98
1"	19.4	171.69
1 1/4"	25.4	224.79
1 1/2"	35.0	309.75
2"	85.0	752.25

FIGURE:TC-3000TC、  
TC-3000TE  
OPERATING TORQUE

VALVE SIZE	1000WOG	
	N-m	Lbf-in
1/2"	4.50	39.83
3/4"	10.70	94.70
1"	23.50	208.30
1 1/2"	31.80	281.30
2"	53.90	477.40
2 1/2"	78.50	694.40
3"	112.80	998.20
4"	148.00	1309.80

FIGURE:TC-WLF、TC-WTF  
OPERATING TORQUE

VALVE SIZE	150#	
	N-m	Lbf-in
2"?	158.2	1400
2 1/2"??	282.5	2500
3"	237.3	2100
4"?	316.4	2800
6"	904.0	8000

FIGURE:TC-0712M  
OPERATING TORQUE

VALVE SIZE	1500/2000WOG	
	N-m	Lbf-in
1/4"	3.09	27.34
3/8"	3.09	27.34
1/2"	4.12	36.46
3/4"	4.90	45.57
1"	7.72	68.36
1 1/4"	10.3	91.14
1 1/2"	18.54	164.05
2"	25.74	227.85
2 1/2"	30.89	273.42
3"	36.04	318.99

FIGURE:TC-3000TC(ME-PTFE)、  
TC-3000TE(ME-PTFE)  
OPERATING TORQUE

VALVE SIZE	1000WOG	
	N-m	Lbf-in
1/2"	4.75	42.0
3/4"	11.30	100.0
1"	24.90	220.0
1 1/2"	35.00	310.0
2"	59.30	525.0
2 1/2"	86.50	765.0
3"	135.60	1200.0
4"	146.90	1300.0

FIGURE:TC-9000  
OPERATING TORQUE

VALVE SIZE	1000 WOG	
	N-m	Lbf-in
1/2"	3.96	35.00
3/4"	4.52	40.00
1"	9.04	80.00
1 1/4"	14.13	125.00
1 1/2"	20.34	180.00
2"	24.86	220.00

FIGURE:TC-5300/5400-300#  
OPERATING TORQUE

VALVE SIZE	300#	
	N-m	Lbf-in
1/2"	7.0	62.0
3/4"	11.0	97.4
1"	14.0	124.0
1 1/4"	25.0	221.3
1 1/2"	44.0	389.4
2"	54.0	477.9
2 1/2"	80.0	708.0
3"	108.0	955.8
4"	147.0	1301.0
6"	565.0	5000.0
8"	791.0	7000.0

