



Manual Valve Technical Information

Torque Requirements

TORQUE REQUIRED TO CLOSE MANUAL VALVES IN FT.LB (RUBBER SLEEVES)

Torque is defined by Red Valve as the rotational force required to overcome the resistance of Valve Sleeve and line pressure to close the Sleeve.

Torque ÷ 1/2 handwheel radius = force required at rim of handwheel to turn.

Turns to Close	Valve Size	Working Pressure (psi)						
		10	25	50	75	100	125	150
8	1"	7	7	5	8	8	8	9
9	1.5"	11	11	12	12	13	13	13
10	2"	18	19	20	21	22	24	25
11	2.5"	23	24	26	28	30	31	33
13	3"	28	30	32	35	37	40	42
11	4"	46	50	55	61	66	72	77
14	5"	59	64	72	81	90	98	107
13	6"	90	100	116	131	147	163	179
17	8"	141	160	192	224	256	288	320
Bevel Gear Actuator Recommended	22	180	210	260	311	370	411	421
	26	221	264	337	409	481	553	577
	30	229	275	352	428	505	620	710
	34	291	361	477	594	710	833	961
	38	336	425	574	724	865	1027	1190
	42	383	494	680	841	1041	1242	1442
	50	475	744	1018	1357	1696	2036	2375