Naval ball valves, maximum allowed operating torques

DN-size [1]		Torque [2] [Nm]					Max. pressure class [3]
Reduced Bore	Full Bore						
DN 10/15	DN 10	9	10	12	13	15	PN 40
DN 20	DN 15	10	12	15	16	18	
DN 25	DN 20	15	17	19	21	24	
DN 32	DN 25	21	23	25	27	30	
DN 40	DN 32	34	36	39	43	43	
DN 50	DN 40	42	45	50	55	60	
DN 65	DN 50	60	63	68	75		PN 25
DN 80	DN 65	80	85	98	110		
DN 100	DN 80	110	125	150	250		
DN 125	DN 100	150	200	270	390		
DN 150	DN 125	280	350	520	750		
DN 200	DN 150	300	600	900	1200		
DN 250	DN 200	800	1300	1900	2500		
DN 300	DN 250	2000	2500	3000	4000		
DN 350	DN 300	1000	2200	2800	4000		
DN 400	DN 350	1500	3000	4500	6500		
DN 500	DN 400	2000	6000	9000	12000		
DN 600	DN 500	2000	6000	9000	12000		
DN700	DN600	2500	7500	11250	15000	18000	PN 40
DN800	DN700	3900	11650	17500	23350	28000	
	DN800	5200	15650	23400	31250	37500	
		0	10	16	25	40	
		Pressure difference [4] [bar]					

1) DN-size of the valve
2) Max. torque needed to open/close the valve
3) Max. pressure class of the valve available
4) Pressure difference across the valve Δp:

where

Δp = p1 – p2,
p1 = pressure before the valve
p2 = pressure after the valve