Naval ball valves, maximum allowed operating torques

DN-size 1)		Torque 2) [Nm]			
Reduced bore	Full bore				
DN10-15	DN10	9	12	13	15
DN20	DN15	12	15	16	18
DN25	DN20	16	19	21	24
DN32	DN25	22	25	27	30
DN40	DN32	35	39	43	47
DN50	DN40	45	50	55	60
DN65	DN50	60	68	75	-
DN80	DN65	80	98	110	-
DN100	DN80	110	150	200	-
DN125	DN100	150	270	390	-
DN150	DN125	280	520	750	-
DN200	DN150	460	820	1220	-
DN250	DN200	1120	2050	3000	-
DN300	DN250	2400	4400	6300	-
DN350	DN300	3500	5000	6800	-
DN400	DN350	3700	5500	8000	-
DN500	DN400	6000	9000	12000	-
DN600	DN500	7000	11400	16200	-
		0-7	16	25	40
		Pressure difference 3) [bar]			

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

where
Δp = p1 - p2
p1 = pressure before the valve
p2 = pressure after the valve