

RAJEEV & COMPANY 103/3, DEWARWADI VILLAGE, CHANDGAD TALUK, KOLHAPUR DIST., MAHARASTRA	BREAKAWAY TORQUE VALUES KAVAATA BALL VALVES	DOC NO: RC/MKTG/02-01 ISSUE DATE: 16.10.2010
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FORGED CARBON STEEL (REDUCED BORE)

	SIZE				
	15FB	20RB	25RB	40RB	50RB
TORQUE N-m	2	2.35	3.15	9.32	15.7

INVESTMENT CAST 3 PIECE DESIGN (FULL BORE)
 FLANGED/ SCREWED/ SOCKET WELD ENDS

	SIZE					
	15FB	20FB	25FB	40FB	50FB	80FB
TORQUE N-m	2.35	3.15	12	18	27	80

INVESTMENT CAST 3 WAY BALL VALVES (FULL BORE)
 FLANGED

	SIZE			
	40FB	50FB	80FB	100FB
TORQUE N-m	25	35	90	120

Note:

1. The above torque values are for valves with PTFE seats.
2. Multiply the values by approximately 1.5 to arrive at values for GFT seats.
3. Please use the appropriate media and service factors given below to arrive at actuator size

Media Factors*	Multiplier
Clean, particle free, non lubricating (water, alcohol etc)	1
Clean, particle free, lubricating (oils, hydraulics etc)	0.8
Slurries, heavily corroded and contaminated systems	2
Gas or saturated steam, clean and wet	1
Gas or superheated steam, clean and dry	1.3
Gas, dirty unfiltered	1.5

Service Factors*	Multiplier
Simple on and off	1
Throttling	1.2
Positioner Control	1.5
Once per day Operations	1.2
Once every two days or a "Plant Critical" operation	1.5

Design Factors*	Multiplier
Spring Return Actuator	0.8
All other Actuators	1

Torque Determination Example*:

Breakaway Torque X Design Factor X Media Factor X Service Factor = Sizing Torque

* Source: Sharpe Valves EB-2001 Rev 11/06 Page 8