緯凡金屬股份有限公司 TRANSWORLD STEEL ENTERPRISE CO., LTD
412038 台中市大里區工業14路34號 T/ +886 4 2271 6107 F/ +886 4 2271 6127

Breakaway Torque

With Grease

Series R502-10		
SEAT	PTFE or TFM1600	
	Nm	In-Lbs
1/4”	7	58
3/8”	7	58
1/2"	7	58
3/4"	8	69
1"	14	127
1.1/4"	16	138
1.1/2"	25	219
2"	34	299
2.1/2"	52	461
3"	81	714

Remark:
1. 30% safety factor included.
2. Valve with grease to reduce torque.
3. The test is based on pressure 0 bar.
4. Test temperature is ambient.

TAWD 緯凡金屬股份有限公司 TRANSWORLD STEEL ENTERPRISE CO., LTD
412038 台中市大里區工業14路34號 T/ +886 4 2271 6107 F/ +886 4 2271 6127

Media and Service Factors

Media Factors	Multiplier
Clean, particle free, non-lubricatng (water, alcohol, etc)	1.00
Clean, particle free, lubricating (oils, hydraulic fluid, etc)	0.80
Slurries or heavily corroded, solvents and contaminated systems	2.00
Gas or saturated steam, clean and wet	1.00
Gas or superheated steam, clean and dry	1.30
Gas, dirty unfiltered e.g. natural gas, Chlorine	1.50

Service Factors	Multiplier
Simple On and Off Operations	1.00
Throttling	1.20
Positioner Control	1.50
Once per day Operations	1.20
Once every two days or a “Plant Critical” Operation	1.50

Torque Determination:

Basic Torque * Media Factor * Service Factor = Sizing Torque