

B8M (class 1) TORQUE VALUES

at 45% of yield (30,000)

| FRICTION FACTOR 505 lubricant | % OF YIELD | STD. DIA. | STD. AREA | in/lbs. | ft/lbs |
|---|-------------------|------------------|------------------|----------------|---------------|
| 0.100 | 13500 | 1 | 0.606 | 818.1 | 68.2 |
| 0.100 | 13500 | 1 1/8 | 0.790 | 1199.8 | 100.0 |
| 0.100 | 13500 | 1 3/8 | 1.233 | 2288.8 | 190.7 |
| 0.100 | 13500 | 1 1/2 | 1.492 | 3021.3 | 251.8 |
| 0.100 | 13500 | 1 1/4 | 1.000 | 1687.5 | 140.6 |
| 0.100 | 13500 | 1 7/8 | 2.410 | 6100.3 | 508.4 |
| 0.100 | 13500 | 1 1/2 | 1.492 | 3021.3 | 251.8 |
| 0.100 | 13500 | 1 5/8 | 1.780 | 3904.9 | 325.4 |
| 0.100 | 13500 | 1 3/4 | 2.080 | 4914.0 | 409.5 |
| 0.100 | 13500 | 2 | 2.770 | 7479.0 | 623.3 |

| FRICTION FACTOR | % OF YIELD | STD. DIA. | STD. AREA | in/lbs. | ft/lbs |
|------------------------|-------------------|------------------|------------------|----------------|---------------|
| 0.136 | 13500 | 1 | 0.606 | 1112.6 | 92.7 |
| 0.136 | 13500 | 1 1/8 | 0.790 | 1631.7 | 136.0 |
| 0.136 | 13500 | 1 3/8 | 1.233 | 3112.7 | 259.4 |
| 0.136 | 13500 | 1 1/2 | 1.492 | 4109.0 | 342.4 |
| 0.136 | 13500 | 1 1/4 | 1.000 | 2295.0 | 191.3 |
| 0.136 | 13500 | 1 7/8 | 2.410 | 8296.4 | 691.4 |
| 0.136 | 13500 | 1 1/2 | 1.492 | 4109.0 | 342.4 |
| 0.136 | 13500 | 1 5/8 | 1.780 | 5310.6 | 442.6 |
| 0.136 | 13500 | 1 3/4 | 2.080 | 6683.0 | 556.9 |
| 0.136 | 13500 | 2 | 2.770 | 10171.4 | 847.6 |

| FRICTION FACTOR 506 lubricant | % OF YIELD | STD. DIA. | STD. AREA | in/lbs. | ft/lbs |
|---|-------------------|------------------|------------------|----------------|---------------|
| 0.110 | 13500 | 1 | 0.606 | 899.9 | 75.0 |
| 0.110 | 13500 | 1 1/8 | 0.790 | 1319.8 | 110.0 |
| 0.110 | 13500 | 1 3/8 | 1.233 | 2517.6 | 209.8 |
| 0.110 | 13500 | 1 1/2 | 1.492 | 3323.4 | 277.0 |
| 0.110 | 13500 | 1 1/4 | 1.000 | 1856.3 | 154.7 |
| 0.110 | 13500 | 1 7/8 | 2.410 | 6710.3 | 559.2 |
| 0.110 | 13500 | 1 1/2 | 1.492 | 3323.4 | 277.0 |
| 0.110 | 13500 | 1 5/8 | 1.780 | 4295.4 | 357.9 |
| 0.110 | 13500 | 1 3/4 | 2.080 | 5405.4 | 450.5 |
| 0.110 | 13500 | 2 | 2.770 | 8226.9 | 685.6 |

friction factor x % of yield x bolt diameter x bolt area = in/lbs

$$\text{in/lbs} / 12 = \text{ft/lbs}$$