

Table 1 Tightening Torque Recommended for Motor Mounting Bolt

| Bolt Size | Width Across Flats | Strength 8.8 Tightening Torque | | Strength 10.9 Tightening Torque | | Strength 12.9 Tightening Torque | |
|-------------|--------------------|--------------------------------|----------|---------------------------------|----------|---------------------------------|----------|
| | [mm] | [Nm] | [In-lbs] | [Nm] | [In-lbs] | [Nm] | [In-lbs] |
| M3 x 0.5P | 2.5 | 1.3 | 12 | 1.8 | 16 | 2.1 | 19 |
| M4 x 0.7P | 3 | 3 | 27 | 4.1 | 37 | 4.9 | 44 |
| M5 x 0.8P | 4 | 6.1 | 55 | 8.2 | 73 | 9.8 | 87 |
| M6 x 1P | 5 | 11 | 98 | 14 | 124 | 17 | 151 |
| M8 x 1.25P | 6 | 25 | 222 | 34 | 302 | 41 | 364 |
| M10 x 1.5P | 8 | 49 | 434 | 67 | 594 | 80 | 709 |
| M12 x 1.75P | 10 | 85 | 753 | 116 | 1028 | 139 | 1232 |
| M14 x 2P | 12 | 137 | 1214 | 186 | 1648 | 223 | 1976 |
| M16 x 2P | 14 | 210 | 1860 | 286 | 2534 | 343 | 3038 |

Table 2 Tightening Torque Recommended for Set Collar Bolt

| Gearbox Size | | Motor Shaft Dia. | Bolt Size | Width Across Flats | Tightening Torque | |
|-------------------------|---------|------------------|-------------------|--------------------|-------------------|----------|
| | | [mm] | [mm] | [mm] | [Nm] | [In-lbs] |
| AB042 AF042 AE050 | 1 stage | ≤11 | M3 x 0.5P x 8L | 2.5 | 2.1 | 19 |
| | 2 stage | ≤11 | M3 x 0.5P x 8L | 2.5 | 2.1 | 19 |
| AB060 AF060 AE070 | 1 stage | ≤14 | M4 x 0.7P x 12L | 3 | 4.9 | 44 |
| | 2 stage | ≤11 | M3 x 0.5P x 8L | 2.5 | 2.1 | 19 |
| AB090 AF075 AE090 | 1 stage | ≤19 | M5 x 0.8P x 14L | 4 | 9.8 | 87 |
| | 2 stage | ≤14 | M4 x 0.7P x 12L | 3 | 4.9 | 44 |
| AB115 AF100 AE120 | 1 stage | ≤32 | M6 x 1P x 16L | 5 | 17 | 151 |
| | 2 stage | ≤19 | M5 x 0.8P x 14L | 4 | 9.8 | 87 |
| AB142 AF140 AE155 | 1 stage | ≤38 | M8 x 1.25P x 20L | 6 | 41 | 364 |
| | 2 stage | ≤32 | M6 x 1P x 16L | 5 | 17 | 151 |
| AB180 AF180 AE205 | 1 stage | ≤48 | M10 x 1.5P x 25L | 8 | 80 | 709 |
| | 2 stage | ≤38 | M8 x 1.25P x 20L | 6 | 41 | 364 |
| AB220 AF220 AE235 | 1 stage | ≤55 | M12 x 1.75P x 30L | 10 | 139 | 1232 |
| | 2 stage | ≤48 | M10 x 1.5P x 25L | 8 | 80 | 709 |

Note: Holding torques must be bigger than values shown above. Bolts can be tightened up to 20% higher for increased holding torques.