



MOTOR MOUNTING INSTRUCTIONS

1

MOTOR APEX

Double-check the motor and gearbox size.
Clean the mounting surface.

2

APEX

Remove the plug on the adapter plate.
Rotate the set collar till the bolt is line up.

3

MOTOR

a. Remove motor key.
b. Insert balance key.

4

APEX

Check motor shaft size and insert bushing if necessary.

Correct installation.
When installing on **flatted shafts**, be sure to align the collet gap over the flat and the set collar bolt perpendicular to the flat.

5

MOTOR APEX

Set at vertical position. Tighten the mounting bolts (including washer) in 1~4 order with wrench to 5% specified torque. (See Table 1)

6

Tighten the set collar bolt with torque wrench to specified torque. (See Table 2)

7

MOTOR

Tighten the mounting bolts in 1~4 order with torque wrench to specified torque. (See Table 1)

8

Tighten back the screw plug.

Table 1 Tightening Torque Recommended for Motor Mounting Bolt

| Bolt Size | Width Across Flats [mm] | Strength 8.8 Tightening Torque | | Strength 10.9 Tightening Torque | | Strength 12.9 Tightening Torque | |
|-------------|----------------------------|-----------------------------------|----------|------------------------------------|----------|------------------------------------|----------|
| | | [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. [mm] | Bolt Size [mm] | Width Across Flats [mm] | Tightening Torque | |
|----------------|--------------------------|-------------------|----------------------------|-------------------|----------|
| | | | | [Nm] | [In-lbs] |
| AB042 AF042 | 1 stage | ≤11 | M3 x 0.5P x 8L | 2.5 | 2.1 19 |
| AE050 | 2 stage | ≤11 | M3 x 0.5P x 8L | 2.5 | 2.1 19 |
| AB060 AF060 | 1 stage | ≤14 | M4 x 0.7P x 12L | 3 | 4.9 44 |
| AE070 | 2 stage | ≤11 | M3 x 0.5P x 8L | 2.5 | 2.1 19 |
| AB090 AF075 | 1 stage | ≤19 | M5 x 0.8P x 14L | 4 | 9.8 87 |
| AE090 | 2 stage | ≤14 | M4 x 0.7P x 12L | 3 | 4.9 44 |
| AB115 AF100 | 1 stage | ≤32 | M6 x 1P x 16L | 5 | 17 151 |
| AE120 | 2 stage | ≤19 | M5 x 0.8P x 14L | 4 | 9.8 87 |
| AB142 AF140 | 1 stage | ≤38 | M8 x 1.25P x 20L | 6 | 41 364 |
| AE155 | 2 stage | ≤32 | M6 x 1P x 16L | 5 | 17 151 |
| AB180 AF180 | 1 stage | ≤48 | M10 x 1.5P x 25L | 8 | 80 709 |
| AE205 | 2 stage | ≤38 | M8 x 1.25P x 20L | 6 | 41 364 |
| AB220 AF220 | 1 stage | ≤55 | M12 x 1.75P x 30L | 10 | 139 1232 |
| AE235 | 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.