



MOUNTING INSTRUCTION

1

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

2

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

3

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

4

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

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

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 | 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] |
| ABR042 AFR042 AER050 AFXR042 | 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 |
| ABR060 AFR060 AER070 AFXR060 ANR023 ANR023B | 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 |
| ABR090 AFR075 AER090 AFXR075 ANR034 ANR034B | 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 |
| ABR115 AFR100 AER120 AFXR100 | 1 stage | ≤ 32 | M6 x 1P x 16L | 5 | 17 | 151 |
| | 2 stage | ≤ 19 | M5 x 0.8P x 14L | 4 | 9.8 | 87 |
| ABR142 AFR140 AER155 AFXR140 | 1 stage | ≤ 38 | M8 x 1.25P x 20L | 6 | 41 | 364 |
| | 2 stage | ≤ 32 | M6 x 1P x 16L | 5 | 17 | 151 |
| ABR180 AFR180 AER205 AFXR180 | 1 stage | ≤ 48 | M10 x 1.5P x 25L | 8 | 80 | 709 |
| | 2 stage | ≤ 38 | M8 x 1.25P x 20L | 6 | 41 | 364 |
| ABR220 AFR220 AER235 | 1 stage | ≤ 55 | M12 x 1.75P x 30L | 10 | 139 | 1232 |
| | 2 stage | ≤ 48 | M10 x 1.5P x 25L | 8 | 80 | 709 |
| ABR060A AFR060A AFXR060A ANR023A ANR023C | 2 stage | ≤ 14 | M4 x 0.7P x 12L | 3 | 4.9 | 44 |
| ABR090A AFR075A AFXR075A ANR034A ANR034C | 2 stage | ≤ 19 | M5 x 0.8P x 14L | 4 | 9.8 | 87 |
| ABR115A AFR100A AFXR100A | 2 stage | ≤ 32 | M6 x 1P x 16L | 5 | 17 | 151 |
| ABR142A AFR140A AFXR140A | 2 stage | ≤ 38 | M8 x 1.25P x 20L | 6 | 41 | 364 |

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



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