



# Motor mounting instruction AFR series

**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 lines up.

**3**

a. Remove the motor key  
b. Insert balance key if necessary

**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 flat	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 diameter	Bolt size	Width across flats	Tightening torque	
		[mm]	[mm]	[mm]	[Nm]	[In-lbs]
AFR042	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
AFR060	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
AFR060A	2-Stage	≤ 14	M4 x 0.7P x 12L	3	4.9	44
AFR075	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
AFR075A	2-Stage	≤ 19	M5 x 0.8P x 14L	4	9.8	87
AFR100	1-Stage	≤ 32	M6 x 1P x 16L	5	17	151
	2-Stage	≤ 19	M5 x 0.8P x 14L	4	9.8	87
AFR100A	2-Stage	≤ 32	M6 x 1P x 16L	5	17	151
AFR140	1-Stage	≤ 38	M8 x 1.25P x 20L	6	41	364
	2-Stage	≤ 32	M6 x 1P x 16L	5	17	151
AFR140A	2-Stage	≤ 38	M8 x 1.25P x 20L	6	41	364
AFR180	1-Stage	≤ 48	M10 x 1.5P x 25L	8	80	709
	2-Stage	≤ 38	M8 x 1.25P x 20L	6	41	364
AFR220	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:** Bolts can be tightened up to 20% higher for increased holding torques

**Apex Dynamics BV**

Churchillaan 101  
5705 BK Helmond  
The Netherlands

Tel. : +31 (0)492 509 995  
E-mail: sales@apexdyna.nl  
Web : www.apexdyna.nl