



MOTOR MOUNTING INSTRUCTION

1

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

2

a Remove motor key
b Insert balance key, if necessary

3

Check motor shaft size and insert bushing if necessary

Correct Installation

When installing the bushing, be sure to align the collet gap perpendicular to set screw

4

Set at vertical position, tighten the mounting bolts (including washer) in 1~4 order with wrench to 5% specified torque (see table 3)

5

Tighten the set collar bolt with torque wrench to specified torque (see table 4)

6

Tighten the mounting bolts in 1~4 order with torque wrench to specified torque (see table 3)

7

Put back the screw plug

For more information, please visit our website: www.apexdyna.nl

**MOTOR MOUNTING INSTRUCTION****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 diameter	Bolt size	Width across flats	Tightening torque	
		[mm]			[mm]	[mm]
PE050 PG040 PN023 PB060	1-stage	≤ 12	M6 x 1P x 8L	3	5.6	50
	2-stage	≤ 12	M6 x 1P x 8L	3	5.6	50
PE070 PG060 PN034 PB090	1-stage	≤ 16	M8 x 1.25P x 10L	4	9.5	85
	2-stage	≤ 16	M8 x 1.25P x 10L	4	9.5	85
PE090 PG080 (A) PN042 PB115	1-stage	≤ 24	M10 x 1.5P x 12L	5	23	205
	2-stage	≤ 24	M10 x 1.5P x 12L	5	23	205
PE120 PG120 (A) PN056 PB142	1-stage	≤ 32	M12 x 1.75P x 16L	6	45	400
	2-stage	≤ 32	M12 x 1.75P x 16L	6	45	400
PE155 PG160 PN075	1-stage	≤ 38	M16 x 2P x 8L	8	78	693
	2-stage	≤ 38	M16 x 2P x 8L	8	78	693

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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High Precision Planetary Gearboxes