

GEARBOX

The pioneers...

Thank you for Purchase Elimo make Gearbox.
Please read this Operation manual Carefully before installing your Gearbox.
And always keep this manual where it is readily accessible.

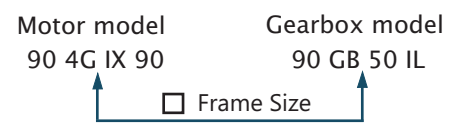
1. Verifying the Product Name and Accessories

Gearbox comes with following accessories for mounting the motor and gearbox on equipment

Screws for mounting, Hexagon nuts, Washers 4 pcs. each
Key 1 pc.

Check the model names of the motor and gearbox. Gearboxes and motors will fit together only if they are of the same frame size

(First digit of Motor model is same as first digit of Gearbox Model)



Key and Key slot Dimensions (Unit = mm)

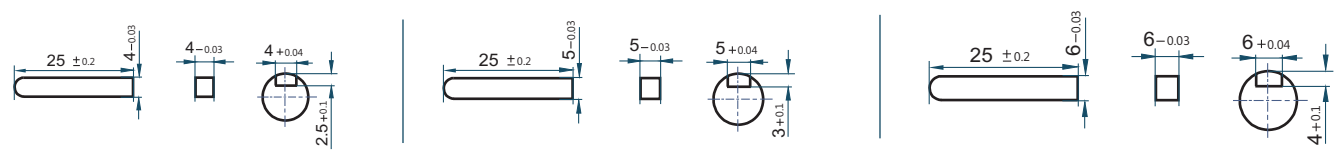
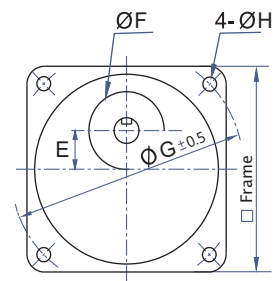
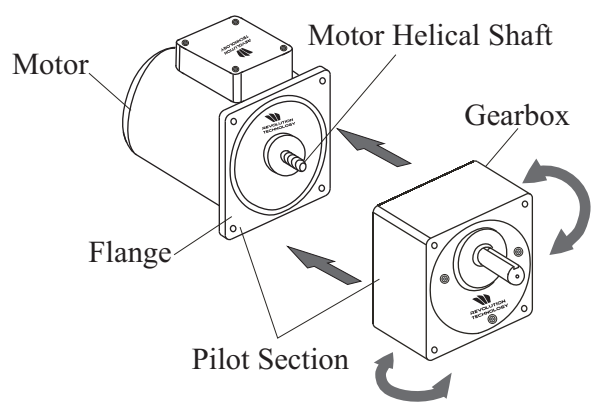


Table 1. Size of Screws & Installation Hole Dimensions for Mounting

Gearbox Model	Mounting Screw Sizes		Installation Hole Dimensions			
	Thread Size x Length (mm)	Type	E	ØF	ØG	ØH
80 GB 3~240 IL	M5 X 65	Hexagon Socket Head cap Screw	15	34	94	5.5
90 GB 3~240 IL	M6 X 90		18	34	104	6.5
104 GB 3~240 IL	M8 X 110		20	44	120	8.5



2. Assembly



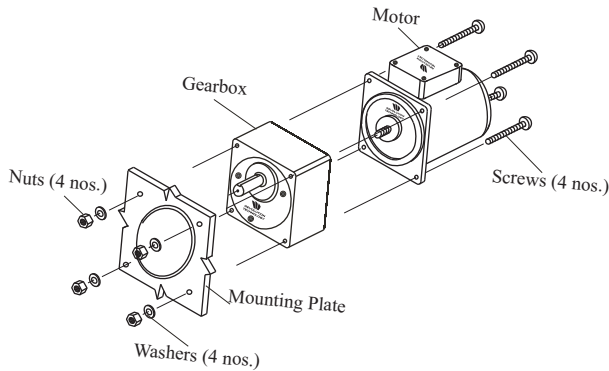
Align the gearbox and motor as shown in figure, engage the pinion section of the gear gently by turning the gearbox slightly in both directions until the gearbox and motor fits flush together.

Notice:
Forcing the motor and gearbox together during assembling or permitting contamination of foreign matter inside the gearbox will cause excess noise and/or shorten life of the gearbox.

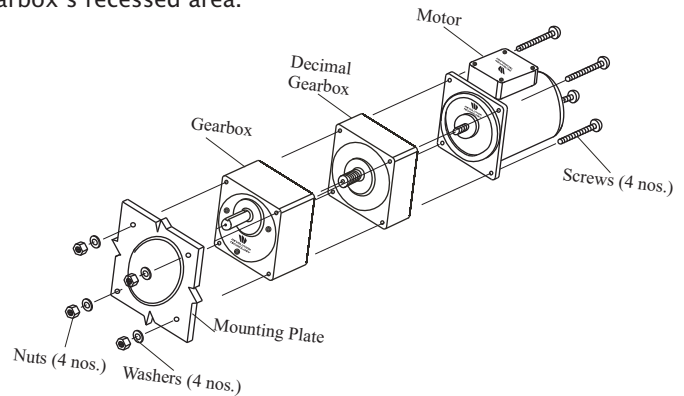


3. Installation of Motor With Gearbox

Use the screws provided with the gearbox and secure all parts so that there are no gaps between the motor flange face and the recessed area of the gearbox.

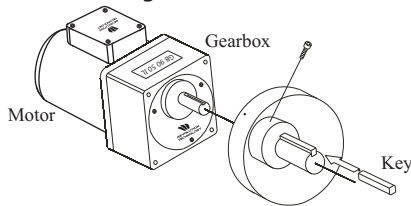


Use the screws provided with the decimal gearbox and secure all parts so that there are no gaps between the motor flange face and the recessed area of the decimal gearbox and between the decimal gearbox and the gearbox's recessed area.



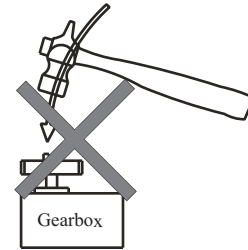
4. Attaching Load

The shaft of the gearbox has been machined to an outer diameter tolerance of h7 and is provided with a key slot for connecting the transmission parts. When connecting the transmission parts, ensure that the shaft and parts have a clearance fit, and secure with a screw to prevent the parts from wobbling.



NOTE :

Do not use excessive force or hammer the transmission parts onto the gearbox shaft as damage may occur.



5. Precautions for Operation

Use your gearmotor under ambient temperature of $-10 \sim 50^{\circ}\text{C}$ and 0- 85% humidity Do not use your gearmotor where it may be exposed to direct sunlight water and /or oil. Do not use your gearmotor in locations subject to severe vibration or shock, a large amount of dust, inflammable gas and or corrosive gas.

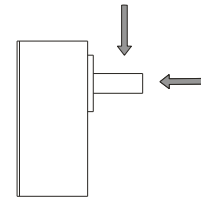
Direction of Rotation of the Gearbox Output Shaft.
With some gear ratios, the motor and gearbox output shaft rotates in opposite directions. The direction of rotation does not change if a decimal gearbox is connected.

Gearbox Models	Gearbox Ratio	
	Gear Ratio Same direction as motor	Opposit direction to motor
80 GB IL	3 ~ 18	25 ~ 36
	50 ~ 180	
90 GB IL	3 ~ 9	12.5 ~ 18
	25 ~ 36	50~180
104 GB IL	3 ~ 9	12.5 ~ 18
	25 ~ 36	50~180

Maximum Permissible Torque

Since the output torque of the gearbox increases proportionally with the reduction of speed, a high reduction ratio of the gearbox will result in an output torque that cannot be taken up by the physical construction of the gearbox. Use gearboxes within the maximum permissible torque set for each speed reduction ratio. For the values of the maximum permissible torque, please refer to catalogue. Also, be sure that shaft rotation is not stopped by an external force or load obstruction. The resulting shock

Permissible Overhung Load and Permissible Thrust Load.
"Overhung load" refers to load placed on the output shaft of the gearbox in a direction perpendicular to the shaft as shown in the figure. The "Thrust load" is a load applied in the axial direction of the output shaft. Since the overhung load and thrust load have a great influence on the life of the bearings and strength of the shaft, be careful not to exceed the maximum.



Gearbox Models	Gearbox Ratio	Maximum Permissible Torque in kg.cm	Permissible Overhung Load in Kg		Permissible Thrust Load in Kg
			10mm from the end of shaft	20mm from the end of shaft	
80 GB IL	3 ~ 18	80	10	15	5
	50 ~ 180		20	30	
90 GB IL	3 ~ 9	200	30	40	12
	25 ~ 180		40	60	
104 GB IL	3 ~ 9	350	50	50	18
	25 ~ 180		60	70	

Specifications subject to change without notice.