



Selection of PM Motors

■ Selection of Gear, Pulley etc.

It is general practice to provide motor shafts along with gears and pulleys attached. In accordance with customer demands, we prepare and attach gears, pulleys, and other necessary parts, before delivery. Of course we are able to provide shafts without these parts attached, but this requires that the customer carry out assembly. In such a case, the customer must ensure that a strong external force is not applied to the motor.

The following explains the gears, pulleys, etc., which we normally use. Please note that we can also provide products that are not listed below. In the case that such products are indeed required, please do not hesitate to contact us for further details. After assessment, we will be able to inform you if it is possible to meet the necessary specifications or not.

1) Gears

Machined gears

These gears are machined using brass and aluminum, and accuracy is generally to JGMA standard 4, although JGMA 2 is also possible. If special teeth profiles are required, a charge will be made for the initial costs of the hob.

Plastic mold gears

These gears are suitable when large production volumes are required, but it is necessary to pay the cost of the mold. Also, if the motor size is larger than PM35, it is necessary to consider whether the metal sleeve is to be insert molded, or knurl processing is to be carried out on the shaft. Consideration must also be given to torque generated and service environment when making settings.

Sintered gears

These gears are suitable when large production volumes are required, but it is necessary to pay the cost of the powder mold. Almost all materials are iron and accuracy is generally to JGMA standard 4, although JGMA 2 is also possible.

2) Pulleys

Machined pulleys

The one without the flange that a brass material and an aluminum material were manufactured can be offered low-cost as well as a gear manufacturing. Still, in case of you need the flange, the one becomes considerably expensive in the one design (A flange is installed a calking the main body of pulley.), while we can install the flange low-cost by you use the other press flange that we have prepared the standard type and the main body of pulley and the flange is pressed fit in shaft. Moreover, when a maker has opened a tooth form, we can prepare and manufacture a hob, while has not opened one, it becomes considerably expensive because you purchase it from a specified maker.

Plastic mold pulleys

These pulleys are suitable when large production volumes are required, but it is necessary to pay the cost of the mold. Also, if the motor size exceeds PM35, it is necessary to consider whether the metal sleeve is to be insert molded, or knurl processing is to be carried out on the shaft. Consideration must also be given to torque generated and service environment when making settings. It is not possible to carry out integrated fabrication of both flanges, so the flange on one side has to be fixed mechanically or otherwise.

Sintered pulleys

These pulleys are suitable when large production volumes are required, but it is necessary to pay the cost of the powder mold. Almost all materials are iron. Teeth shape and flange dimension is same as plastic mold pulley.