Flange Drive Adapter

Permissible load has been increased by mounting with a parallel shaft gearhead. Direct mounting of the rotation mechanism to wheels or rotary tables has been simplified, which helps reduce design time.

Greatly Increased Permissible Load

High permissible load is achieved by adopting a cross-roller bearing. Large increases to the permissible radial load and permissible axial load allow for the capability of handling of loads larger than with the gearhead alone.

<table>
<thead>
<tr>
<th>Flange Drive Adapter</th>
<th>Only Parallel Shaft Gearhead</th>
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</thead>
<tbody>
<tr>
<td>Permissible Radial Load</td>
<td>1500 N (337 lbs)</td>
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<tr>
<td>Permissible Axial Load</td>
<td>1000 N (225 lbs)</td>
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</tbody>
</table>

Torque, speed and rotation direction are the same as the attached parallel shaft gearhead.

Simplified Design

Thanks to the integration with cross-roller bearings, load attachment tables, etc., the time to arrange extra parts and mechanism design is reduced. Installation work is also simplified because they can be attached directly to the load shaft or directly to the enclosure.

Example) Unmanned Carrier

The motor’s power is transmitted via parallel key. Can be attached directly to the enclosure. Direct connection to tire (load shaft) is possible.

Heavy Object Rotation Applications Recommended for Driving Unmanned Carriers and Rotary Tables

The increased permissible load makes transportation of heavy objects possible for unmanned carriers and rotary tables.

Example) Unmanned Carrier  
Example) Rotary Table  
Example) Arm Drive
### Specifications

#### General Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Ambient Temperature</td>
<td>0°C ~ +50°C (+32°F ~ +122°F) (nonfreezing)</td>
</tr>
<tr>
<td>Degree of Protection</td>
<td>IP40</td>
</tr>
<tr>
<td>Rated Life</td>
<td>10,000 hours</td>
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</table>

#### Speed – Internal Load Characteristics (Reference values)

The internal load of the flange drive adapter can vary depending on the operating ambient temperature, increasing the load applied to the motor and gearhead. Select motor and gearhead carefully when using in low temperature environments.

Example) When using at 200 r/min at an ambient temperature of 0°C (32°F), add 1.6 N·m (14.16 lb-in) to the mechanism’s load torque and select the appropriate motor and gearhead.

**Note**

Data for the speed – internal load characteristics is based on Oriental Motor’s internal measurement conditions.

If conditions such as ambient temperature are changed, the characteristics may also change as a result.

Internal load decreases due to conformability, so do not use as holding force.

### Dimensions

**Unit = mm (in.)**

<table>
<thead>
<tr>
<th>Mass</th>
<th>1.6 kg (3.53 lb.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2D CAD A1805</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Example Diagram**

- Internal load vs. speed graph
- Cross sections A-A and B-B

**ORIENTAL MOTOR U.S.A. CORP.**

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