Bevel Gearboxes

Features

1. Very strong
   The unit has high grade cast iron housing and uses tapered roller bearings.
2. Low noise and high efficiency
   The spiral bevel gears are made of case-hardened alloy steel.
3. Freedom of installing orientation
   The unit can be installed easily in any orientation. However, if you cannot use one of the standard orientations, please see page 407.
4. Maintenance-free
   High-grade oil is added to the casing before shipping.
5. Selective speed ratio
   Gear ratios of 1:1/1:2 are available to meet most applications.

Shaft Orientations and Orientation Codes

There are 24 permutations of shaft orientations and rotations, which are standardized for CBX Bevel Gearboxes. Please pay attention to the shaft orientations in addition to the catalog number when selecting the units.

Lubrication

A standard volume of lubricant is sealed at the factory before shipping.

Operating preconditions

See KBX (Page 408)

CBX Performance Chart

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<thead>
<tr>
<th>Speed Ratio</th>
<th>Specifications</th>
<th>Type</th>
<th>20</th>
<th>50</th>
<th>100</th>
<th>200</th>
<th>500</th>
<th>1000</th>
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<th>4000</th>
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CAUTION:

1. Be sure not to exceed the allowable values. Units with (1) (2) reduction ratio have the slower speed in the Y-axis.
2. The values in the table are on-effect values when using the factor 1. When the units are used under other conditions, refer to the Service Factor Tables 2 and 3. (Page 408)
3. Overloading load (O.L.L.) means the load applied to the middle of the overhang shaft, perpendicular to the axis. When using the units under other conditions, refer to the factors K1 and K2 described in Tables 2 and 3. (Page 408)
4. When the 1/2 speed ratio unit is used as a speed increaser (from the Y-axis to the X-axis), the X-axis torque becomes one half of the Y-axis torque shown in the table.
5. The Y-axis torque of CBX-T Type is the sum of the values on both right and left axes.
6. The Y-axis O.L.L. of CBX-T Type is the sum of the values on both right and left axes.
7. The allowable thrust load is half of O.L.L. value in each case.
CBX Bevel Gearboxes

L type

CBX-191L

CBX-192L

CBX-191T

CBX-192T

CBX-251L

CBX-252L

CBX-251T

CBX-252T

CBX-321L

CBX-322L

CBX-321T

CBX-322T

CBX-401L

CBX-402L

CBX-401T

CBX-402T

T type

CBX-191L

CBX-192L

CBX-191T

CBX-192T

CBX-251L

CBX-252L

CBX-251T

CBX-252T

CBX-321L

CBX-322L

CBX-321T

CBX-322T

CBX-401L

CBX-402L

CBX-401T

CBX-402T

Please place one of the orientation codes (A to P) from Page 404 on the box at the end of the catalog number.

Since these products are assembled to each customer's specifications, the delivery lead time is about 10 working days after placing an order. These units are not available from stock.

[ Caution ]

1. The key grooves in the X-axis and the Y-axis do not always coincide in phase with each other.
2. The tolerance of shaft diameter is J5 h6.
3. The key dimensions are per JS B 1301 - 1976 (Standard Grade).
4. The backlash angles are measured at the X-axis (Input Shaft).
5. Sides of the oil plugs are for the supply port → PF 1/2 and for the drain port → PT 1/4 (standard specifications.). We can accept as a special order units that are mounted on the ceiling or on a wall. Please let us know at the time or ordering.

Standard Specifications

Oil Plug PT/1/2 (Oil Supply Port)

Oil Plug PT/1/4 (Oil Drain)

Additional Oil Plug Locations

The mark "" indicates the possible positions for additional oil plug.

Staining on the surface containing the standard oil plug as A, go skilful foiling from the top on B, C, and D surfaces.

Please see our website for corrections on KHK Catalogs.