Worm Gear Reducers

Aluminum

Worm gear reducer GN 3975 can transmit high torque despite their very compact dimensions. They can readily be used for a multitude of applications, such as incline adjustments or to change the direction of shaft rotation.

The numerous fastening holes allow for simple mounting in any orientation or position. The parallel keys can take any angular positions.

Depending on the gear ratio, there may be no static self-braking between the worm screw and worm wheel, meaning that the worm wheel can be turned out of a resting state by a torque coming from the output end.

see also...
• Bevel Gear Boxes GN 3971 → page QVX

Information

• Housing
  - Aluminum
  - Sealed to prevent dust entry
  - Anodized, natural color
  - Aluminum

• Worm screw, steel

• Worm wheel, brass

• Ball bearing
  - Steel
  - Sealed (sealing disks 2RS)

• Temperature range:
  -4 °F to +140 °F (-20 °C to +60 °C)

• Keyway WN / DIN 6885 → page XYZ / QVX

• ISO Fundamental Tolerances → page QVX

• RoHS compliant

Specification

Table:

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<thead>
<tr>
<th>m₁</th>
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How to order

GN 3975-20-A-12-23-AN

1. Center distance m₁
2. Type
3. Diameter d₁
4. Gear ratio i
5. Finish

Dimensions in: millimeters - inches

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See also...
• Bevel Gear Boxes GN 3971 → page QVX

How to order

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2. Type
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2712 | WARNING: Cancer and Reproductive Harm — www.P65Warnings.ca.gov

www.jwwinco.com | phone: 1-800-877-8351
GN 3975 Worm Gear Reducers continued

Dimensions in: millimeters - inches

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*Usable thread depth: min. 1.6 x d₄ / d₈

**Input side speed, **at axial force = 0, ***at radial force = 0

Mechanical features

Circumferential backlash at the drive shaft 1° ± 0.5°

Shaft direction of rotation Any

Worm wheel set design Left-hand

Life expectancy (guideline) 1,000 hours under full load at a rotational speed of 500 rpm, assuming the gear box is operating for 20% of every 5 minutes (1 minute of operation + 4 minutes break) at an ambient temperature of 68 °F (20 °C)

Maintenance Permanent lubrication with grease, maintenance-free

Assembly instructions

Do not exert any forces onto the housing or into the bearings during assembly. Use of the threaded holes d₈ in the shaft is recommended. The use of a corresponding coupling is recommended to compensate for manufacturing-related shaft offsets and runout tolerances as well as for damping vibrations and shocks.