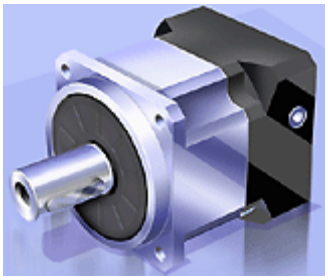
XD-Indexer Gear Box Selection Guide

The GBX servo gearbox family is designed for direct connection to the ORMEC servomotors used with the XD-Indexer. They are high precision, low backlash servo gearboxes for industrial motion control applications.

The GBX-AB-Series and the cost effective GBX-AE-Series are helical planetary gearboxes. They are designed for continuous (S1) or cyclic (S5) duty operation. Both the GBX-AB and GBX-AE families have inline shafts and right angle models.



The AB-Series are the standard option.

The AE-Series are the cost-effective option.

Gear Box Features

- ❒ Five Year Warranty
- ❒ Stainless steel construction
- ❒ Mount in any position: Synthetic gear grease
- ❒ 7 Frame sizes: from 42mm – 235 mm
- ❒ Other models available for drop-in replacement of competitor products
- ❒ Output torque: 14 Nm - 2000 Nm (124 in-lb – 17,700 in-lb)
- ❒ High Input speeds up to 10,000 RPM (depending on application)
- ❒ Easy mount: Standard metric or NEMA frames with simple mounting adapters
- ❒ Low noise: 56 dB - 74 dB, depending on model

Fundamental Planetary Design

The power is transmitted from the motor to sun gear. The sun gear drives three planet gears, which are contained within an internal toothed ring gear. The planet gears are mounted on the planet carrier with double wall supports. The planet carrier is part output shaft. When the sun gear rotates, it drives the three planet gears inside the ring gear, and as the planet gears rotate automatically the output shaft rotates

Due to load sharing into multiple tooth contacts, the planetary gearbox (gear heads) provides the highest torque and stiffness for a given envelope. The other significant advantages are simple and efficient lubrication and a balanced system at high speeds. The balanced planetary kinematics and the associated load sharing make planetary-type gearboxes ideal for servo applications.

For further information call ORMEC Sales at 585 385-3520 or email sales@ormec.com

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