

Sumitomo Drive Technologies
Always on the Move

Cyclo® HBB



► Parallel Shaft Helical Gearbox with Cyclo® Reducer Input

Cyclo[®] HBB Helical Buddybox

Parallel Shaft Helical Gearbox with Cyclo[®] Reducer Input

► Flexible configurations

- Shaft Options:
hollow
- Mounting Options:
flange
face

Double output seals prevent lubricant leaks and protect from contamination

Patented keyless, steel Taper-Grip[®] bushing allows for quick and easy mounting and removal. Installs from either side

Patented universal housing design

Utilizes all Cyclo[®] input modifications: C-Face input, integral gearmotor, brakemotor or servomotor

Cyclo[®] input provides high overload capacity, exceptional reliability and long service life

Cyclo[®] Quality and Reliability, Shaft Mount Design

- High performance steel gearing components deliver **85-90% efficiency**



Product Description

Sumitomo's Cyclo® Helical Buddybox (Cyclo® HBB) speed reducers and gearmotors provide **innovative shaft mounted drive solutions for demanding services**. The Cyclo® HBB combines the quiet, efficient and reliable performance of the Cyclo® technology input with the **rugged helical gear output**. The **modular design** provides a compact, efficient product and the most flexible range of output speed and torque combinations available. Sumitomo's patented Taper Grip® bushing system enhances the Cyclo® HBB value by offering a simple shaft-mounting device that provides **self-aligning, backlash-free torque transmission** to the driven shaft. The Cyclo® HBB design is flexible and easily adapts to CEMA Screw Conveyor Drive applications with a modular conversion kit.

Features & Benefits

- **Cycloidal speed reduction technology**
 - ~ Quiet, efficient and reliable operation with high torque density and compact size
- **Modular design**
 - ~ Interchangeable cast iron housings in foot, flanged or face mount configurations
- **Double output seals**
 - ~ Virtually leak-free operation and optimal protection from lubrication contamination
- **Taper Grip® Bushing**
 - ~ Simple, steel, keyless shaft mounting system resists fretting and eases unit installation and removal from driven shaft
- **CEMA Screw Conveyor Drive option**
 - ~ Quick and simple conversion for Cyclo® HBB units to fit CEMA standard dimensions

Specifications

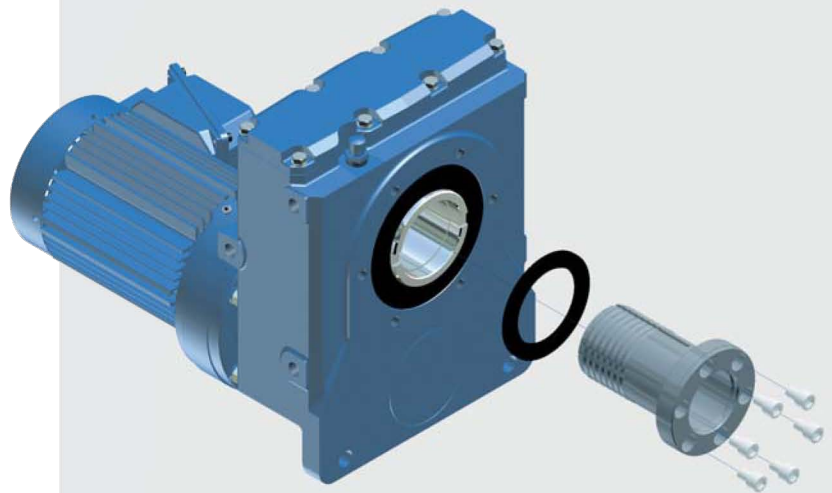
Ratios:	11:1 up to 26,000:1 and greater
Torque Capacity:	Up to 75,800 in. lbs.
HP:	1/8 to 40
Mounting:	Hollow Shaft, Foot, Flange, Face
Options:	Integral Motor, C-Face
Motor Standards:	NEMA, IEC, JIS, UL, CSA, CE

► Keyless, steel Taper-Grip® bushing makes mounting of hollow shaft units easy and economical

The Sumitomo **Taper-Grip®** bushing is a keyless, torque transmission device integrated into the shaft mounted, offset parallel Cyclo® HBB reducer and gearmotor product lines.

The **unique, patented design** has a number of benefits :

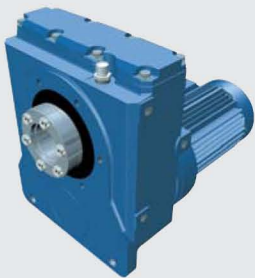
- Easy mounting and removal of the unit to and from the driven shaft
- Standard bore sizes require no shaft preparation such as a keyway, undercut, or keeper plate
- Backlash free torque transmission
- Works with standard shafting, no special tolerances required
- Automatic shaft center alignment
- Resistant to fretting and corrosion
- Multiple stock bore sizes for quick delivery.



► Applications

- Material Handling
- Conveyors
- Baggage Handling
- Shredders
- Belt Filter Press
- Mixer/Blender
- Rolling Mill Table
- Screw Conveyors
- Elevators
- Hoist Drives
- Climber Screens
- Food Processing

► **Product Range**
Standard Motor
and Reducer
Combinations



Single Reduction Ratios Ratios 11 — 417

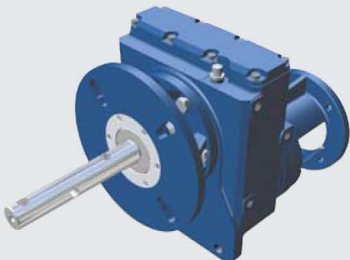
Combinations with 1750 RPM motor

Ratio	11	18	21	28	39	46	53	60	74	88	102	123	151	179	207	249	305	417																																																																																																																																																																																																																																																																																																																																																					
Output Speed RPM (60 Hz)	159	97.2	83.3	62.5	44.9	38	33	29.2	23.6	19.9	17.2	14.2	11.6	9.8	8.45	7.03	5.74	4.20																																																																																																																																																																																																																																																																																																																																																					
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Double Reduction Ratios 364 — 4365

Combinations with 1750 RPM motor

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Output Speed RPM (60 Hz)	4.81	4.13	3.5	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.894	0.77	0.684	0.595	0.499	0.401																																																																																																																																																																																											
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Available with
CEMA Screw Conveyor
Drive option

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