



CbN  
Inline Helical



OtN  
Helical Bevel



IRA  
Worm + Helical Worm

# PE GEARMOTORS & SPEED REDUCERS

Browning® PE Gearmotors and Speed Reducers combine a premium efficiency TEFC AC motor with a rugged, flexible and energy efficient power train, offering both OEMs and End Users the best value for their money. Combining Premium Efficiency + Inverter Duty into one, allows every customer the opportunity to reduce stock and have the right motor/gear combination on hand for immediate use for a wide variety of applications.

		PRODUCT TYPES		
DETAIL	SPECIFICS	CbN 3000	OtN 3000	IRA
Capacity	Inch Pounds	134,000	120,000	3,500
Ratios Available	Nominal	0.80 to 10,000:1	3.55 to 10,000:1	7.1 to 354:1
Gear Type	Form	Helical	Helical-Bevel	Worm & Worm Helical
Gear Efficiency	Per Reduction Stage	98%	98%	Varies by Ratio
Input Options	Gearmotor	✓	✓	✓
	C-face	✓	✓	✓
	Input Shaft	✓	✓	—
	Scoop Mount	✓	✓	—
	Top Mount	✓	✓	—
Output Shaft	Relative To Input	In-Line	Right Angle	Right Angle
Gear Output Options	Foot Mount	✓	✓	✓
	Face Mount	✓	✓	—
	Flange Mount	✓	✓	✓
	Single Solid Shaft	✓	✓	✓
	Double Solid Shaft	—	✓	✓
	Hollow Shaft	—	✓	—
Gearmotor Motor Options	Taper Bushed	—	✓	—
	TEFC 3 Phase	.33 to 50 HP	.33 to 50 HP	.33 to 5 HP
	CORROGARD® 3 Phase	.33 to 50 HP	.33 to 50 HP	.33 to 5 HP
	Explosionproof 3 Phase	.33 to 5 HP	.33 to 5 HP	.33 to 5 HP
	TEFC 1 Phase	.33 to 5 HP	.33 to 5 HP	.33 to 5 HP
Motor Efficiency 3 Phase 60 Hz	Premium	TEFC and CORROGARD® (.33 HP and larger) All Explosionproof (≥ 1 HP) Option for TEFC and CORROGARD® (Frac. HP)		
	High			
Inverter Duty Motor Designs	TEFC and CORROGARD®	Std. Feature in Premium Efficiency		
	Explosionproof	Option for .33 to 5 HP		

✓ This design is an available option

# BROWNING® GEARMOTORS & SPEED REDUCERS

## PE GEARMOTORS LEAD EFFICIENCIES IN NORTH AMERICA

Reference	Full Load NEMA Nom. Efficiency % / HP @ 1750 RPM															
	1/3	1/2	3/4	1	1.5	2	3	5	7.5	10	15	20	25	30	40	50
Browning 6/16	75	80	80	87.5	87.5	87.5	89.5	89.5	91.7	91.7	92.4	93	93	93.6	94.1	94.5
Canada 6/17	n/a	n/a	n/a	85.5	86.5	86.5	89.5	89.5	91.7	91.7	92.4	93	93	93.6	94.1	94.5
USA 6/16	n/a	n/a	n/a	85.5	86.5	86.5	89.5	89.5	91.7	91.7	92.4	93	93	93.6	94.1	94.5

Meet or exceed highest efficiency specifications

### FEATURES

### BENEFITS

1	All 3 Phase <b>PE Gearmotors</b> (non-XP) use Premium Efficiency motor designs starting at .33 HP	<ul style="list-style-type: none"> <li>Meets or exceeds Efficiency Standards in North America</li> <li>Coupled with high efficiency gearing, they deliver maximum energy savings for End Users</li> </ul>
2	All 3 Phase <b>PE Gearmotors</b> (non-XP) are designed for Inverter Duty starting at .33 HP	<ul style="list-style-type: none"> <li>Designed for wide C/T speed ranges across HP's available</li> <li>Motor has 3 n/c Thermostats in windings</li> <li>Carries a <b>Three Year Motor Warranty</b></li> <li>Greatly simplifies initial and back-up inventories</li> </ul>
3	3 Phase <b>PE Gearmotors</b> (non-XP) are available with TEFC motors, TEFC Brake-motors and CORROGARD® motors, (all cast iron), and 50Hz for 380V IE3	<ul style="list-style-type: none"> <li>The right enclosure for a wide variety of environments, Industries, whether indoor or outdoors</li> <li>Rugged brake designs through 5 HP for higher duty cycles/long life</li> <li>50 Hz 380V IE3 meet European standards effective in Jan. 2017</li> </ul>
4	Gearmotor offering include TEFC single phase and Dual Label Explosionproof motors from .33 to 5 HP	<ul style="list-style-type: none"> <li>Explosionproof motors are CL I Grp D, CL II Grps F &amp; G, T3B Div. 1</li> <li>Explosionproof designs are Premium Efficiency ≥ 1 HP</li> <li>Explosionproof motors available for Inverter Duty</li> <li>Single phase high torque Capacitor Start 115/230V (230V @ 3 &amp; 5HP)</li> <li>Single phase motors are available with brakes</li> </ul>
5	All gearmotors utilize a unique "modular" connection between motor and gear	<ul style="list-style-type: none"> <li>Allows motor replacement on site without draining oil, disturbing gear-to-load connection</li> <li>User can easily upgrade older gearmotors designs using PE motor ends</li> <li>Requires only one motor to be stocked per HP/Voltage</li> </ul>
6	Synthetic hydrocarbon lubricant is the standard for every CbN and OtN 3000 reducers or gearmotors	<ul style="list-style-type: none"> <li>Allows for a wide ambient range with stable optimized viscosity</li> <li>Coupled with breather design supplied, maintenance is normally just monitoring oil level without any seasonal oil changing required.</li> </ul>
7	SMTF design taper bushing system with stabilizer ring is a standard option for OtN 3000 gearing.	<ul style="list-style-type: none"> <li>Output shaft designed to allow mounting with equipment shaft from either side of gear reducer</li> <li>Stabilizer bushing locking angle and use of stabilizer ring helps to eliminate fretting, making future removal quicker and easier</li> <li>Each gear frame can fit a range of shaft diameters utilizing the different bushings available from stock</li> </ul>

### Regal Power Transmission Solutions

Regal Beloit America, Inc.  
7120 New Buffington Road  
Florence, KY 41042

Customer Service: 800-626-2120  
Fax: 800-262-3292  
Application Engineering: 800-626-2093

www.RegalPTS.com



Innovative, self-locking, tapered shaft connection between motor and shaft

### Real Modularity

- Motor replacement easy – no fretting, no oil draining, no opening the gearcase
- Only **one** spare motor needed by users - per HP, phase/voltage, or any gear ratio

OR



Competitor gearmotor designs have the primary pinion located on the motor shaft.

### APPLICATION CONSIDERATIONS

The proper selection and application of power transmission products and components, including the related area of product safety, is the responsibility of the customer. Operating and performance requirements and potential associated issues will vary appreciably depending upon the use and application of such products and components. The scope of the technical and application information included in this publication is necessarily limited. Unusual operating environments and conditions, lubrication requirements, loading supports, and other factors can materially affect the application and operating results of the products and components and the customer should carefully review its requirements. Any technical advice or review furnished by Regal Beloit America, Inc. and/or its affiliates ("Regal") with respect to the use of products and components is given in good faith and without charge, and Regal assumes no obligation or liability for the advice given, or results obtained, all such advice and review being given and accepted at customer's risk.

For a copy of our Standard Terms and Conditions of Sale, please visit <http://www.regalbeloit.com> (please see link at bottom of page to "Standard Terms and Conditions of Sale"). These terms and conditions of sale, disclaimers and limitations of liability apply to any person who may buy, acquire or use a Regal product referred to herein, including any person who buys from a licensed distributor of these branded products.