



With over 1,000 motors, gearmotors and controls in stock, it's likely that we have a Bodine product that is a perfect fit for your application. But if you don't find what you need in our catalog, our advanced design tools and flexible manufacturing process makes it possible for us to cost effectively design and manufacture a very wide range of custom products.

We've been building motors for nearly one hundred years, so you can rely on us to understand your requirements. Let us put our experience to work for you.

Custom Solutions



Low-profile "HG" gearmotor for high torque in tight spaces (up to 1000 lb-in). Applications: conveyors, ice machines, and machine tools. Gearhead available with AC, DC, or BLDC motors.



Low-cost "3480" BLDC motors and gearmotors for high-volume OEM applications. Matched-system BLDC controls available. Applications: Medical and laboratory equipment, blowers, and paper handling.



Type "34B/FV" BLDC motors and gearmotors with built-in custom speed controls. Easy operation and connections, PWM speed signal, 24-36 VDC, 5 VDC logic signal, and tach pulse output.

Bodine Custom Solutions

Let us design a specialized OEM motor-gearmotor-control package that is the *perfect* system for your application.

Controls:

When you use our built-to-order or stock controls, you'll get the best performance from your Bodine motors. A variety of enclosures, cables and interfaces are available for our AC, DC and Brushless products. For more information about our custom controls, see pages 22 and 102.

Cables

Choose from specially designed cables, connectors, and terminals, as well as custom terminal boxes, watertight strain relieves (PG fittings), and color-coded or labeled motor leads.

Add-On Options

Brakes and encoders mount to the end-shield. Or for economical 30PPR feedback we will supply internal encoders. Depending on the duty cycle, cooling fans can be added or omitted from most designs. And who says it must be black? Almost all Bodine products can be supplied either unpainted or with custom paint. We also offer special nameplates with your logo or part numbers.

Windings

Bodine stocks motors and gearmotors with all the typical voltage and frequency ratings for North American and International markets. Other ratings include inverter duty, intermittent duty, dual voltage, and dual frequency ratings with voltages ranging from 12VDC to 575VAC. We also offer custom winding designs for OEM application requirements and thermal overload protectors with manual and automatic reset.

Rotor/Armature

We offer an array of specially balanced, high-speed rotors and armatures and high-grade ball bearings. Ask about special bearings for high radial and axial load requirements.



In our nearly 100 years of developing and designing motion control solutions, we not only know how to engineer an infinite variety of designs but very well may be tooled to build it.

If you get us involved early in the design or re-design process, we'll assist you in defining your requirements. We'll design a high value added, yet affordable, product specifically to meet your exact needs.

CHALLENGE US! That's what Bodine Electric is all about.

Mounting

Custom flange-, foot-, or base-mount designs are available. All motor and gearmotor designs can be provided with metric shafts, metric mounting holes and other metric features (terminal blocks, cables, nameplates, etc).

Gearing

Choose from a large selection of gears and gear ratios. Bodine gears provide high torque, quiet operation and long life. And because we make your prototypes in-house, you'll see your designs faster.

Gearboxes

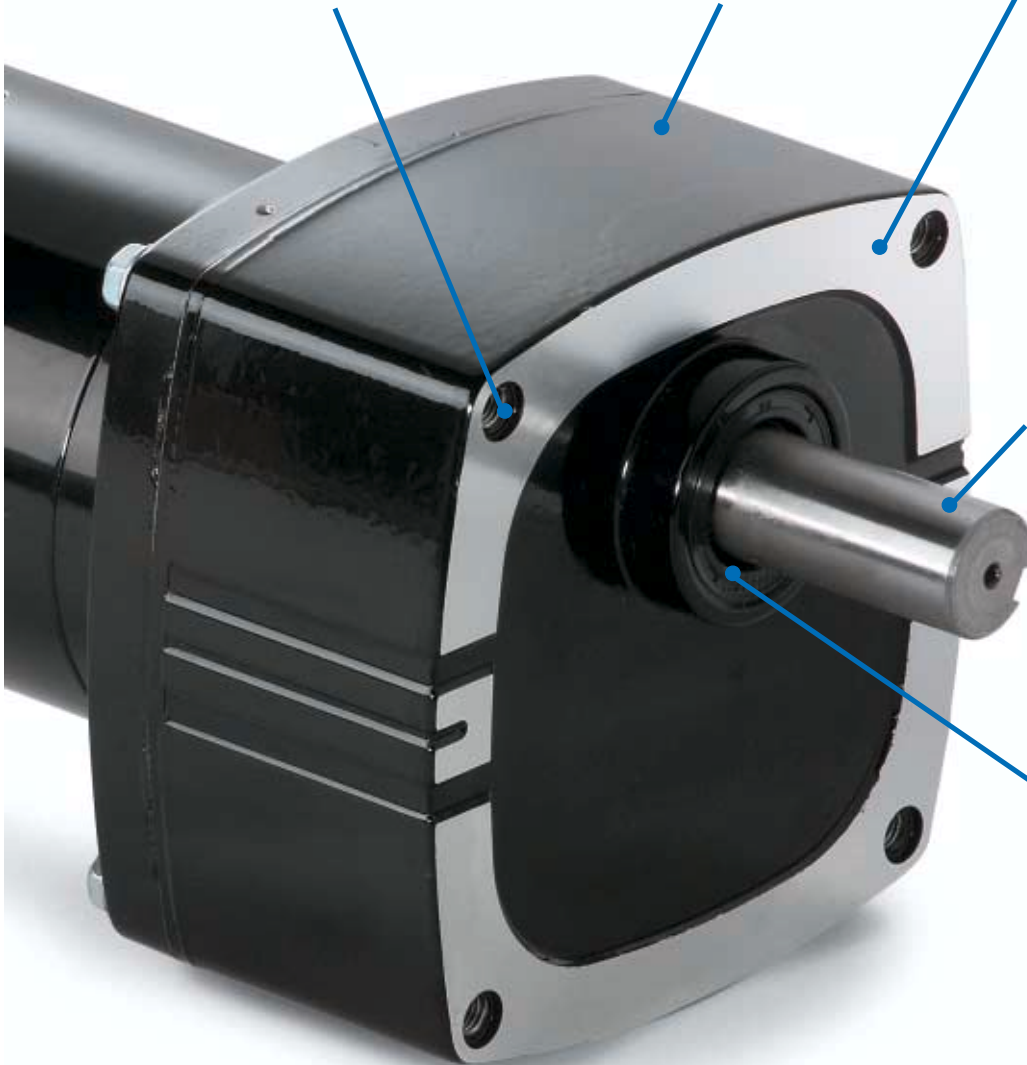
Our parallel shaft or right angle, leak-free, integral, unvented gearhousings provide highest torque and the smallest possible package. Wide temperature-range synthetic lubricants are available, as are custom-placed vent-holes for non-standard mounting positions. We will even customize the gearhousing for high-volume OEM applications.

Output Shaft

Choose the material, the shape, the length and the diameter... Bodine driveshafts can be made just about any way you want. Here are just some of the options: steel, stainless steel, hardened, or fatigue proof materials; flats, slots, keyways, hex, double flats, cross-holes, retaining rings, and center holes. Many built-to-order hollow shafts, right-angle gearhead designs are available.

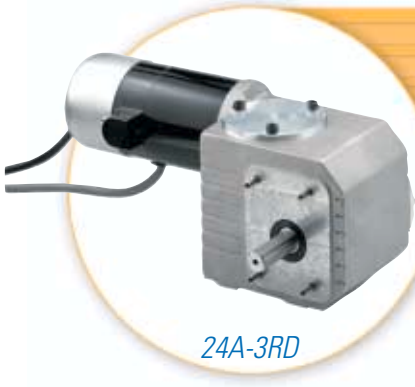
Seals

Tough environments demand tough seals. Our products already meet the highest leak protection requirements in the industry: most Bodine gearheads are built with double helix, lip-type seals on motor and drive shafts and hardened seal journals for zero leakage. But if you demand even more protection, call us. We'll build it.



Custom Solution: Double Reduction DC Gearmotor

Up to 150 lb-in. continuous



Bodine Electric Company's new **24A-3RD** gearmotor brings back a double worm gearhead to our product line. This type of gearing makes very high gear ratios possible for low-speed applications.

The high gear ratios also achieve a high torque multiplication, resulting in a high output from the relatively low input of our small 24A motor.

The new **24A-3RD** gearhousing casting was designed for mounting flexibility as well. It can be machined for face-mounting at the driveshaft side, or on the side opposite the driveshaft, or on the base. The gearmotor can be supplied with a driveshaft on either side, or on both sides.

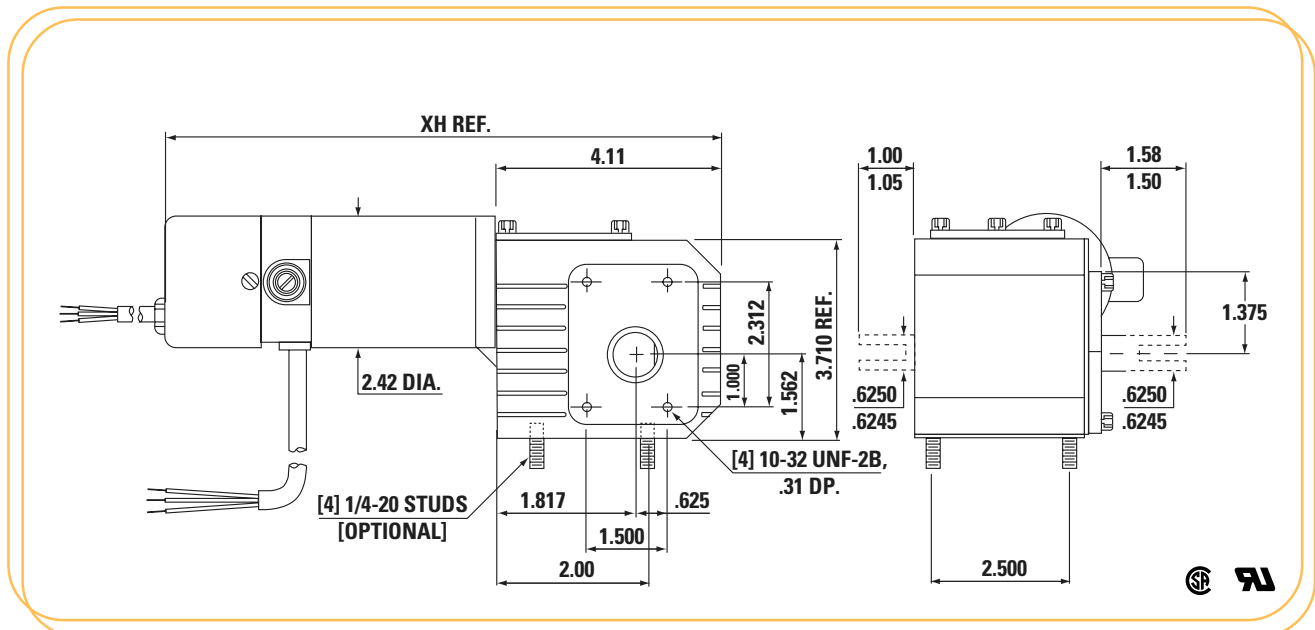
A special integrated encoder can be specified on the 24A motor as just one of many possible custom options. The encoder is currently available as a two-channel device with resolutions of 2, 4, 8, or 30 pulses/revolution.



Speed (rpm)	Torque (lb-in.)	V	Current (Amps)	HP	Gear Ratio	Length XH (in.)	Weight (lbs.)	Product Type
1.6	75	90	.25	1/50	1350:1	9.50	7.90	24A2BEPM-3RD
2.5	150	90	.55	1/22	1400:1	9.50	7.90	24A2BEPM-3RD
6.0	150	90	.75	1/15	600:1	10.25	8.40	24A4BEPM-3RD
7.0	75	90	.45	1/30	300:1	9.50	7.90	24A2BEPM-3RD

Note: this product is not currently stocked and is built per each customer's specifications. Ratings and dimensions shown are for reference only.

24A-3RD Gearmotor shown with optional mounting studs on gearhead base



Custom Solution: Parallel Shaft DC Gearmotors

Up to 1,050 lb-in. continuous

Bodine Electric Company's new **42A-CG** gearmotor has a maximum continuous output rating of 1050 lb-in, more than double the rating of the largest gearmotor previously available from Bodine. The gearmotor is ideal for applications that require tremendous torque from a small package.

The power behind the new gearmotor is Bodine's venerable **42A** DC motor, which features Class F insulation on the armature windings to withstand high operating temperatures without sacrificing long life. Bodine's unique constant force spring design on the brush holders provides longer brush life than any other design on the market.

The new **CG** gear reducer unleashes the full potential of Bodine's **42A** motor. The **42A-CG** combination produces up to 1,050 lb-in torque. The 3-stage gearing cluster of selectively hardened helical gears is permanently lubricated with synthetic grease. The unvented gear reducer can be mounted in virtually any position, by means of its integral face-mounting flange, with no lubricant leakage. A huge 1-1/8" diameter driveshaft, with keyway, delivers the tremendous output torque to the load. Like all Bodine products, the 42A-CG will last longer in a demanding application than any comparable product.

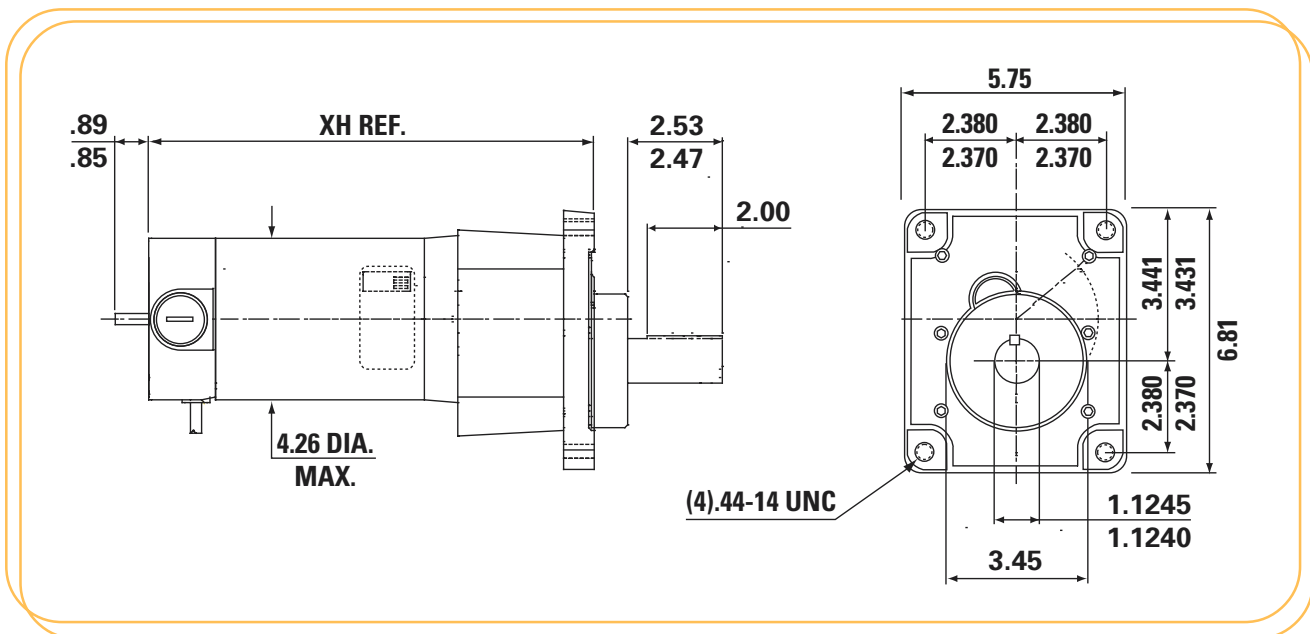


42A-CG



Speed (rpm)	Torque (lb-in.)	V	Current (Amps)	HP	Gear Ratio	Length XH (in.)	Weight (lbs.)	Product Type
38	700	90	4.8	1/2	72:1	11.78	TBD	42A7BEPM-CG

Note: this product is not currently stocked and is built per each customer's specifications. Ratings and dimensions shown are for reference only.



Hollow Shaft Gearmotors

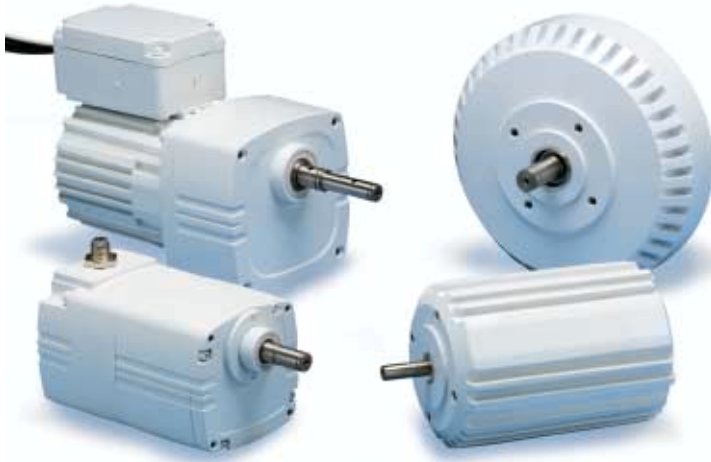
Simplify your design with our wide selection of hollow shaft AC, DC, or BLDC gearmotors. Available with left-hand or right-hand face or flange mounts, made to your application requirements. The gearmotor can connect directly to the driven load, eliminating expensive shaft couplings or mounting hardware. The standard face mounting or optional mounting flanges (shown) make installation easy and quick. Most of our right-angle gearmotors are available as built-to-order, hollow shaft versions. Mounting and shaft configurations and dimensions can be viewed at www.Bodine-Electric.com.



Shown above: 42R6-6SG, 230VAC, 3/8HP inverter duty gearmotor with round 1" I.D. bore, set screws, keyway and special mounting flange. The 6SG gearhead is available with gear ratios of 80:1 (575 lb-in.); 63:1 (383 lb-in.); 48:1 (350 lb-in.); 17:1 (150 lb-in.) and 9:1 (140 lb-in.).



Liqui-Duty™ Motors and Gearmotors



Our new built-to-order Liqui-Duty™ motors and gearmotors are custom engineered to meet unusual environmental challenges. While Liqui-Duty™ modifications vary from application to application, they include items such as: sealed bearings, specially sealed motor and gear housings, stainless steel shafts, special paint, cords, connectors, food-grade lubricants and many other customer-specified components. Bodine matched speed controls are also available.

Custom Controls

Bodine understands that one size doesn't fit all. If our standard control enclosure doesn't suit an application, we design a custom one. We can put a different style switch, or knob, or fuse holder on the panel. We have created custom screen printed graphics. With our in-house electronics engineering capability, we can even create custom printed circuit boards for different voltage levels, or speed ranges, or higher output power. And we can tailor analog or digital interfaces to make our controls compatible with other devices.

