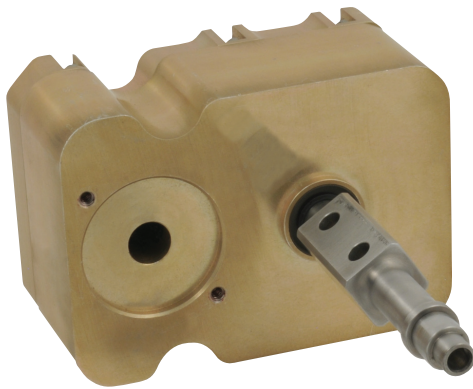


## BVR™ Aerospace Gearboxes and Gear Assemblies

Precision gearing solutions for motion control, featuring:

- Proven airborne performance
- High torque-volume ratio
- Large choice of configurations
- Low backlash and backdriving torque

## Accurate fine-pitch geartrains engineered for high-efficiency motion transmission



BVR gear products are precisely engineered to offer high power transfer in small packages, ideal for direct-drive applications in aerospace, where performance per unit of weight and volume is critical.

Our engineering strategy follows a modular approach, based on our huge library of designs proven in demanding flight environments for decades. Our advanced manufacturing capabilities translate into tighter tolerances, better surface finishes, and more efficient transmission. We ship products with AGMA Quality 12 gears and offer optional superfinishing.

If you need something other than one of our off-the-shelf modules, we work with you to configure and fine tune a manufacturable, cost-effective solution, from a single gear to a complex transmission.

Typical engineering services include:

- Load and stress analysis
- Life expectancy analysis
- Speed and torque evaluation
- Accuracy and tolerance calculations (AGMA ratings)
- Materials, heat-treatment, and finish recommendations

### Configurations

Typical performance and mechanical specs include:

- Input speeds up to 70,000 rpm
- Diametrical pitch up to 200
- Multiple output shafts
- Multiple output speeds
- Gears up to AGMA Quality 12
- Sizes: 0.375-4.0 inches diameter (9.5-101.6 mm)
- Materials: ferrous and non-ferrous metals; non-metallic options
- Heat treatment to appropriate spec
- Superfinishing available

Gearing geometry includes:

- Bevel
- Helical
- Simple and compound planetary
- Differentials
- Spur: in-line and parallel
- Anti-backlash
- Face gears
- Right angle

### Auxiliary Components

- Toothed clutches
- Slip clutches
- No-backs and overriding clutches
- Brakes, friction or toothed
- Rotary position sensors, analog or digital

For more information about BVR aerospace gear products, call us at 815-874-2471 or email [bvr.sales@esterline.com](mailto:bvr.sales@esterline.com).

Esterline  
3358-60 Publishers Drive  
Rockford, IL 61109  
815-874-2471  
[www.esterline.com](http://www.esterline.com)