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Energy Efficient Geared Motors

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Energy Efficient Geared Motors

Bauer Gear Motor - profile

Innovation since 1927

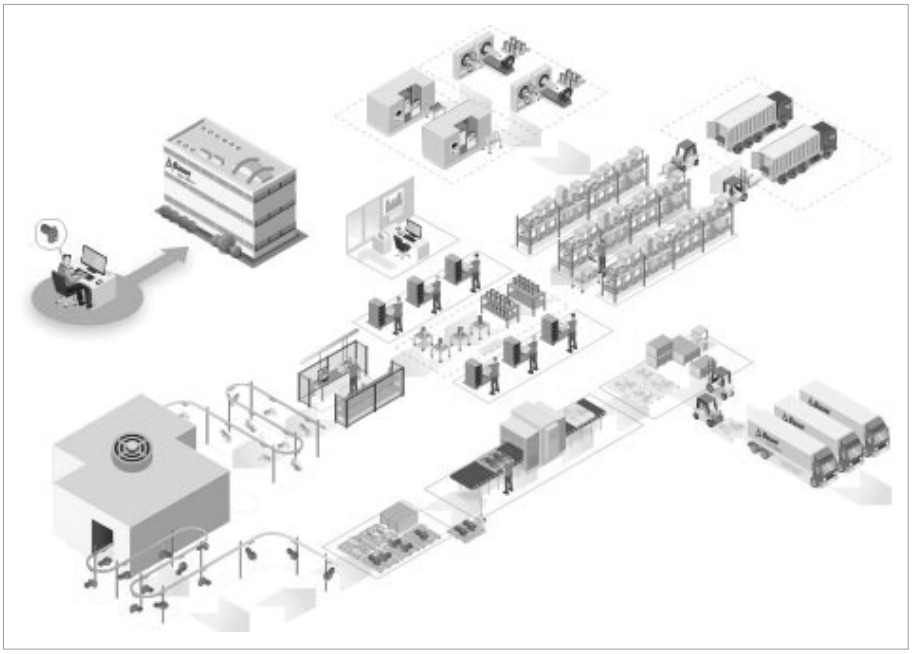
During its 90-year history, Bauer Gear Motor has developed to become the preferred international provider of high-quality and extremely reliable geared motors. A great deal of knowledge has been accrued over the decades, and this has continually been built upon and shared. Bauer has pioneered many new geared motor solutions and will continue to do so in the future. Our engineers develop technically-advanced solutions that feature energy-efficient motors paired with optimal gearboxes so that we can offer our customers the lowest possible operating costs. It is not without reason that the Bauer brand has become world famous; this is because our geared motor solutions are the driving power in drive technology.

Competent and customer-focused

We see ourselves as the value adding partner for individual drive technology solutions along the entire customer value chain **... Uncomplicated ... Competent ... Enduring**. With our global sales and expertise, we are there to support you side by side- right from the design of your drive. Our employees will ensure that you have the optimum geared motor solution for your application

Our quick response time to requests ensures that you receive the required offer within 24 hours. After your order has arrived, we check your order details and you will receive a confirmation of the order within 24 hours. This means that you will have the details for your own production planning process by the following day.

As we concentrate our production in regional factories, we are also able to deliver customised solutions from the factory reliably and directly, with an extremely short delivery period.



Closer to the customer‘s needs thanks to greater flexibility

Orders are processed immediately and passed on to our production team. By reducing set-up times, we are able to start producing the order specific parts right away. This is synchronised with assembly, ensuring that the parts are available according to just-in-time principles.

The entire manufacturing processes starting from the production of the motor, the mechanical geared motor parts and the electrical components, are perfectly coordinated to ensure greater process reliability and availability. This means that a high delivery reliability of over 95% can be achieved, while maintaining Bauer‘s high quality.

The product range

Energy Efficient Geared Motors

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Helical Geared Motors

- Power range from 0.03 kW to 75 kW
- 13 gear sizes for torques ranging from 20 Nm to 18500 Nm
- New attachment possibilities with low design height
- High efficiency through 2-stage base design
- High protection rating of IP65 as standard

Shaft Mounted Geared Motors

- Power range from 0.03 kW to 75 kW
- 10 gear sizes for torques ranging from 90 Nm to 18500 Nm
- Gearbox housing with integral torque arm
- High efficiency through 2-stage base design
- High protection rating of IP65 as standard

Bevel Geared Motors

- Power range from 0.03 kW to 75 kW
- 10 gearbox sizes for torques ranging from 80 Nm to 18500 Nm
- Right angle with universal, space-saving mounting options
- High efficiency through 2-stage base design
- High protection rating of IP65 as standard

Worm Geared Motors

- Power range from 0.03 kW to 5.5 kW
- 8 gearbox sizes for torques ranging from 25 Nm to 1000 Nm
- Hollow shaft version available from 25 Nm
- Heavy duty worm gearing for a long service life
- High protection rating of IP65 as standard

Monorail Geared Motor Drives

- Torque rating from 30 Nm to 680 Nm
- Radial force up to 25,000 N
- Gearboxes with a wide range of mounting options
- High protection rating of IP65 as standard
- Improved efficiency
- low energy consumption - ideal for travel drives
- Reverse motion of gearbox possible with released brake

AsepticDRIVE

- Motor without cooling ribs and fan
- Available with helical, shaft-mounted, bevel and worm gearboxes
- Motor winding with thermistors and ISO class F as standard
- IP67 and IP69K protection ratings with alkali and acid-resistant coating as standard.
- Motor connection through standard, round stainless steel connector

CleanDRIVE

- Motor without cooling ribs and fan
- Available with helical, shaft-mounted, bevel and worm gearboxes
- Motor winding with thermistors and ISO class F as standard
- Motor connection through a standard terminal box or stainless steel cable gland

HiflexDRIVE

BK04 gearbox

- Torque	80 Nm
- Gear reductions	7.25 – 63.33

BK08 gearbox

- Torque	200 Nm
- Gear reductions	4.44 - 102.5

BK17 gearbox

- Torque	330 Nm
- Gear reductions	4.54 - 108.6

Motors

- Output power	0.12 kW ... 3.0 kW
- Efficiency classes	no rating and IE1 to IE4
- Enclosure	IP65 (standard) IP67 / IP69K (optional)

Energy-efficient motor solutions

Mains Supply

■ IE1 asynchronous technology	0.12 kW – 45 kW
■ IE2 asynchronous technology	0.12 kW – 45 kW
■ IE3 asynchronous technology	0.12 kW – 45 kW
■ IE4 asynchronous technology	0.55 kW – 4 kW

Inverter Duty

■ IE3 PMSM-technology	1.5 kW – 15 kW
■ IE4 PMSM-technology	0.55 kW – 11 kW

Energy-efficient motor solutions for explosion hazard areas

The S series in permanent magnet synchronous motors (PMSMs) offers variable-speed geared motors in efficiency class IE4 for use in explosion hazard areas[1].

■ Design torque M_N:	5 Nm – 48 Nm
■ Rated power P_N:	0.75 kW – 15 kW
■ Increased safety for zone 1	II 2 G Ex e IIC T1 - T3 Gb
■ Dust explosion protection – Zone 21	II 2 D Ex tb IIIC T 160°C ... 120° Db

[1] Individual motor designs can show lower efficiency classes than IE4 at rated torque.

EtaK2.0 Decentral Solutions

- PMSM enabled
- Integrated safety technology and field bus communication according to specific needs
- Modular structure minimises spare parts stock
- Energy savings of up to 30 % possible under partial load conditions
- Suited to extremely harsh environments thanks to IP65 enclosure rating
- 200 % overload current (3 s)
- Sensorless vector control
- CANopen, Profibus, Profinet, EtherCAT, EtherNet/IP and AS-Interface
- STO safety function

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Submersible Solutions

- **Special sealing concepts** for maximum leakage protection
- **Reinforced bearings** for higher strength and longer service life
- **Shafts** available on request in V4A steel or coating
- **Motor Connection**
  - Standard with cast terminal box
  - Optional with special plug connection
- **Additional features**:
  - Special design for continuous submersible operation
  - Electronic leakage detection available on request
  - Brakes available in IP68 design
  - Water depths of 5m (deeper on request)
- **Corrosion category Im2** based on DIN ISO 12944-5

Customised geared motor solutions for all applications

- Special applications
- Special adaptations
- Special environments
- Series production

Based on our modular, geared motor programme, we offer specific solutions for applications in all key markets such as, for example, food & beverage, energy, wastewater, concrete, metals and material handling in applications such as washdown conveyor systems, rolling mills, monorail systems and overhead conveyors, sludge thickeners, cranes, fans and blowers and turbines. Our aim is to provide our customers with products tailored to their needs. At the same time, we take care to ensure that a geared motor solution will prove to be especially profitable throughout its entire life cycle.

We already equip our geared motors with highly efficient permanent magnet motors to achieve low life cycle costs because low energy consumption will be particularly important in the future. We are very confident that we are once again pioneers in this sector

Learn more about Bauer Gear Motor, its products and philosophy at www.bauergears.com.