

### Table of contents

<b>1</b>	<b>General</b>	<b>15</b>
	<b>Advantages of Bauer-Geared Motors</b> .....	<b>17</b>
	Bauer Gearmotors .....	17
	Bauer Gearboxes .....	17
	Bauer Motors .....	17
	Bauer Brakes .....	17
<b>2</b>	<b>Product Description</b>	<b>19</b>
	<b>Selection of geared motors</b> .....	<b>21</b>
	Installed positions of geared motors .....	21
	Notes on safety .....	21
	Guards for rotating parts .....	21
	Touch protection .....	21
	Operating noise .....	21
	Painting and corrosion protection.....	21
	<b>Modular system overview</b> .....	<b>22</b>
<b>3</b>	<b>Type Designations</b>	<b>25</b>
	<b>Significance of type designation</b> .....	<b>27</b>
	<b>BG-series helical-geared motor</b> .....	<b>28</b>
	<b>BF-series shaft-mounted geared motor</b> .....	<b>29</b>
	<b>BK-series bevel-geared motor</b> .....	<b>30</b>
	<b>BS-series worm-geared motor</b> .....	<b>31</b>
	<b>Versions and options</b> .....	<b>32</b>
	BG and BF series .....	32
	BK and BS series .....	32
	<b>General construction</b> .....	<b>33</b>
	Three-phase motor .....	33
	Motor protection .....	33
	Brake rectifier in motor terminal box .....	33
	Plug connector .....	33
	Heavy-duty fan .....	33
	Protective cover .....	33
	CleanDrive .....	33
	<b>Supplement types</b> .....	<b>34</b>
	Brake .....	34
	Reverse rotation block .....	34
	Digital and analogue encoder .....	34
	Second shaft end .....	34
	Forced ventilation .....	34
	Overall design .....	34
<b>4</b>	<b>Gear Motor Selection</b>	<b>35</b>
	<b>Selection of geared motors</b> .....	<b>37</b>
	<b>Drive configuration</b> .....	<b>38</b>
	Drive configuration General .....	38
	Required data for drive configuration .....	38
	Determining the motor power .....	39
	Determining the required torque .....	39
	Determining the gear reduction ratio .....	39
	Determining the factor of inertia .....	39
	<b>Drive configuration</b> .....	<b>40</b>
	Determining the shock load .....	40
	Determining the minimum service factor $f_{Bmin}$ .....	40
	Brake specification .....	40
	Torque–speed characteristic .....	41
	<b>Motor configuration</b> .....	<b>42</b>
	Dynamic power .....	42
	Static power .....	42
	Total power $P_G$ .....	42
	Motor selection .....	43
	IE2 .....	43
	IE1 .....	43

# Energy Efficient Geared Motors

## Table of contents

No-load cycle rate $Z_0$ .....	44
Load factor $K_L$ .....	44
<b>Radial and axial forces on the output shaft .....</b>	<b>45</b>
Radial and axial forces on the output shaft .....	45
Maximum allowable radial force at force application point X .....	45
Bearing load limit .....	45
Shaft strength .....	46
Helical gear unit BG series .....	46
Shaft-mounted gear unit BF series .....	47
Bevel gear unit BK series .....	48
Worm gear unit BS series .....	48
Transmission components .....	49
Factor $f_z$ for the type of transmission component .....	49
Axial force .....	49
<b>Sizing based on efficiency .....</b>	<b>50</b>
Drive configuration based on efficiency .....	50
Savings potential Motor: $\eta_{motor}$ .....	50
Calculation of the efficiency under partial load .....	50
Gear efficiency $\eta_{gear}$ .....	51
System efficiency $\eta_{system}$ .....	51
<b>Shock loads of machinery .....</b>	<b>52</b>
<b>5 Gearboxes &amp; Lubrication .....</b>	<b>55</b>
<b>Standard mounting positions .....</b>	<b>57</b>
<b>Position of the terminal box .....</b>	<b>59</b>
Position of the terminal box and the cable entry points (BG and BF) .....	59
Position of the terminal box and the cable entry points (BK and BS) .....	60
<b>Gearboxes .....</b>	<b>61</b>
Radial and axial forces at the output shaft .....	61
Dimensions and fits of output shafts and keyways .....	61
Installing transmission elements .....	61
Gear with solid shaft .....	61
Gear with hollow shaft .....	61
Shrink disc coupling .....	61
Torque restraint .....	62
Notes for installing shaft mount gears with hollow shaft and keyway .....	62
Gear ventilation .....	62
Output shaft seals .....	62
<b>Lubricants .....</b>	<b>63</b>
Lubricant quantities .....	64
Lubricant quantities, BG-series gears .....	65
Lubricant quantities, BG20-01R .....	66
Lubricant quantities, BF-series gears .....	67
Lubricant quantities, BK-series gears .....	68
Lubricant quantities, BS-series gears .....	69
Lubricant quantities, pre-stage gears (Z) .....	70
Lubrication quantity for intermediate gear .....	71
<b>Threaded plugs.....</b>	<b>72</b>
Position of threaded plugs.....	72
-BG-series gears.....	72
-BG-20-01R .....	73
-BF-series gears .....	74
-BK-series gears .....	75
-BS-series gears .....	76
-pre-stage gears (Z) .....	77
-in the System Cover Design with Standard Geared Motor .....	78
-in the System Cover Design with foreign motor or gear design with input shaft .....	79
-in the System Cover Design with pre-stage Z .....	80
<b>6 BG-series helical-geared motors - Selection .....</b>	<b>81</b>
<b>Description of helical-geared units.....</b>	<b>83</b>
Sizes .....	83
Bauer service factors ( $f_b$ ) for helical-geared motors.....	83
Continuous operation without switching frequency $Z \leq 1/h$ .....	83
Switching duty .....	83
Bauer service factor .....	83
Explanation of shock classification .....	84

Key to abbreviations .....	84
Selection tables, helical-gear motors .....	84
<b>Selection helical-gear motors DSE - IE1 .....</b>	<b>85</b>
<b>Selection helical-gear motors DHE - IE2 .....</b>	<b>127</b>
<b>Selection helical-gear motors DPE - IE3 .....</b>	<b>172</b>
<b>7 BF-series shaft-mounted geared motors - Selection .....</b>	<b>217</b>
<b>Description of shaft-mounted gear units .....</b>	<b>219</b>
Sizes .....	219
Bauer service factors ( $f_b$ ) for shaft-mounted geared motors .....	219
Continuous operation without switching frequency $Z \leq 1/h$ .....	219
Switching duty .....	219
Bauer service factor .....	219
Explanation of shock classification .....	219
Key to abbreviations .....	220
Selection tables, shaft-mounted geared motors .....	220
<b>Selection - shaft-mounted geared motors DSE - IE1 .....</b>	<b>221</b>
<b>Selection - shaft-mounted geared motors DHE - IE2.....</b>	<b>253</b>
<b>Selection - shaft-mounted geared motors DPE - IE3.....</b>	<b>287</b>
<b>8 BK-series bevel-gear motors - Selection .....</b>	<b>321</b>
<b>Description of bevel-gear units .....</b>	<b>323</b>
Sizes .....	323
Bauer service factors ( $f_b$ ) for bevel-gear motors .....	323
Continuous operation without switching frequency $Z \leq 1/h$ .....	323
Switching duty .....	323
Bauer Service factor .....	323
Explanation of shock classification .....	324
Key to abbreviations .....	324
Selection tables, bevel-gear motors .....	324
<b>Selection - bevel gear motors DSE - IE1 .....</b>	<b>325</b>
<b>Selection - bevel gear motors DHE - IE2.....</b>	<b>353</b>
<b>Selection - bevel gear motors DPE - IE3 .....</b>	<b>383</b>
<b>9 BS-series worm-gear motors - Selection .....</b>	<b>413</b>
<b>Description of worm-gear units.....</b>	<b>415</b>
Sizes .....	415
Efficiency .....	415
Bauer service factors ( $f_b$ ) for worm-gear motors .....	415
Continuous operation without switching frequency $Z \leq 1/h$ .....	415
Switching duty .....	416
Ambient temperature .....	416
Bauer service factor .....	416
Explanation of shock classification .....	416
Key to abbreviations .....	417
Selection tables, worm-gear motors .....	417
<b>Selection - worm-gear motors DSE - IE1 .....</b>	<b>418</b>
<b>Selection - worm-gear motors DHE - IE2.....</b>	<b>437</b>
<b>Selection - worm-gear motors DPE - IE3.....</b>	<b>456</b>
<b>10 BG-series helical-gear motors - Dimensions .....</b>	<b>475</b>
<b>Dimension - Standard.....</b>	<b>477</b>
BG04.....	477
BG05.....	478
BG06.....	479
BG10-BG10Z .....	480
BG10X-BG10XZ .....	482
BG15.....	485
BG20-BG20Z .....	486
BG30-BG30Z .....	488
BG40-BG40Z .....	490
BG50-BG50Z .....	492
BG60-BG60Z .....	494
BG70-BG70Z .....	496
BG80-BG80Z .....	498
BG90-BG90Z .....	500

# Energy Efficient Geared Motors

## Table of contents

BG100-BG100Z .....	502
<b>Dimension - Tandem Gearbox .....</b>	<b>505</b>
BG06G04 .....	505
BG10G06 .....	506
BG10XG06 .....	508
BG20G06 .....	510
BG30G06 .....	512
BG40G10 .....	514
BG50G10 .....	516
BG60G20 .....	518
BG70G20 .....	520
BG80G40 .....	522
BG90G50 .....	524
BG100G50 .....	526
<b>11 BF-series shaft-mounted geared motors - Dimensions .....</b>	<b>529</b>
<b>Dimension - Standard .....</b>	<b>530</b>
BF06 .....	530
BF10-BF10Z .....	532
BF20-BF20Z .....	534
BF30-BF30Z .....	536
BF40-BF40Z .....	538
BF50-BF50Z .....	540
BF60-BF60Z .....	542
BF70-BF70Z .....	544
BF80-BF80Z .....	546
BF90-BF90Z .....	548
<b>Dimension - Tandem Gearbox .....</b>	<b>550</b>
BF10G06 .....	550
BF20G06 .....	552
BF30G06 .....	554
BF40G10 .....	556
BF50G10 .....	558
BF60G20 .....	560
BF70G20 .....	562
BF80G40 .....	564
BF90G50 .....	566
<b>Additional Dimension Sheet .....</b>	<b>569</b>
Splined shaft .....	569
Shrink disc coupling (SSV) .....	570
Shrink disc coupling with (SSV) cover .....	571
Tapped Holes Side (H) → Shaft Cover .....	572
Rubber buffer for torque restraint .....	573
Assembly tools for hollow shaft and keyway .....	574
Assembly tools for shaft mounted gears with splined shaft .....	576
Shaft Cap (VK) .....	578
Shaft Cover (VD) .....	579
<b>12 BK-series bevel-geared motors - Dimensions .....</b>	<b>581</b>
<b>Dimension - Standard .....</b>	<b>582</b>
BK06 .....	582
BK08 .....	584
BK10-BK10Z .....	586
BK17 .....	588
BK20-BK20Z .....	590
BK30-BK30Z .....	592
BK40-BK40Z .....	594
BK50-BK50Z .....	596
BK60-BK60Z .....	598
BK70-BK70Z .....	600
BK80-BK80Z .....	602
BK90-BK90Z .....	604
<b>Dimension - Tandem Gearbox .....</b>	<b>606</b>
BK10G06 .....	606
BK20G06 .....	608
BK30G06 .....	610
BK40G10 .....	612

BK50G10 .....	614
BK60G20 .....	616
BK70G20 .....	618
BK80G40 .....	620
BK90G50 .....	622
<b>Additional Dimension Sheet .....</b>	<b>625</b>
Splined shaft .....	625
Shrink disc couplings (SSV) .....	626
Shrink Disk Connection with Cover (SSV) .....	627
Rubber buffer for torque restraint .....	628
Position of the torque arm .....	629
Foot with tapped holes .....	630
Foot plate with clearance holes .....	631
Assembly tools for hollow shaft and keyway .....	632
Assembly tools for splined shaft .....	634
Shaft Cap (VK) .....	636
Shaft Cover (VD) .....	637
<b>13 BS-series worm-gear motors - Dimensions .....</b>	<b>639</b>
<b>Dimension - Standard .....</b>	<b>640</b>
BS02 .....	640
BS03 .....	642
BS04 .....	644
BS06 .....	646
BS10-BS10Z .....	648
BS20-BS20Z .....	650
BS30-BS30Z .....	652
BS40-BS40Z .....	654
<b>Dimension - Tandem Gearbox .....</b>	<b>656</b>
BS06G04 .....	656
BS10G06 .....	658
BS20G06 .....	660
BS30G06 .....	662
BS40G10 .....	664
<b>Additional Dimension Sheet .....</b>	<b>666</b>
Shrink disc couplings (SSV) .....	666
Shrink disc couplings with (SSV) cover .....	667
Rubber buffer for torque restraint .....	668
Position of the torque arm .....	669
Threaded foot .....	670
Foot plate, left .....	671
Assembly tools for hollow shaft and keyway .....	672
Shaft Cap (VK) .....	674
Shaft Cover (VD) .....	675
<b>14 Motors .....</b>	<b>677</b>
<b>General .....</b>	<b>679</b>
ErP Directive 2009/125/EC .....	679
Regulation (EU) 2019/1781 .....	680
Torques .....	682
Line voltages .....	682
Line frequencies .....	683
Rating plate .....	683
Terminal box .....	683
Motor connections .....	684
Terminal connections for single speed motors .....	685
Terminal connections for single speed motors with thermal motor protection .....	686
Terminal connections for pole changing motors in Dahlander connection ( $\Delta/YY$ or $Y/YY$ ) .....	687
Terminal connections for pole changing motors with two separate windings ( $Y/Y$ or $\Delta/\Delta$ ) .....	688
Plug-and-socket connection .....	689
Motor protection .....	690
Thermistors (PTC) .....	690
Thermostatic protection .....	691
KTY sensors .....	692
PT100 sensors .....	693
Insulation .....	694
IP – Protection classes .....	694

# Energy Efficient Geared Motors

## Table of contents

Degrees of protection provided by enclosures for electrical equipment.....	694
Speed of output shaft .....	695
<b>Duty types as defined by EN 60034 .....</b>	<b>696</b>
General .....	696
Continuous running duty (S1) .....	696
Short-time duty (S2) .....	696
Intermittent periodic duty (S3) .....	697
Intermittent periodic duty with starting (S4) .....	698
Intermittent periodic duty with electric braking (S5) .....	699
Continuous-operation periodic duty (S6) .....	700
Continuous-operation periodic duty with electric braking (S7) .....	700
Continuous-operation periodic duty with relative load/speed changes (S8) .....	701
Duty with non-periodic load and speed variations (S9) .....	701
Duty with discreet constant loads and speeds (S10) .....	702
<b>Operation with frequency converter .....</b>	<b>703</b>
Notes on design .....	703
Increased torque with reduced duty factor .....	703
Increased torque with external fan .....	703
Energy-saving function .....	704
Regeneration .....	704
Notes on operation with other-make frequency inverters .....	704
<b>Technical data .....</b>	<b>705</b>
<b>Technical data of the 50 Hz motors.....</b>	<b>705</b>
4-pole IE1 motors for continuous operation S1, line frequency 50 Hz.....	705
4-pole IE2 motors for continuous operation S1, mains frequency 50 Hz.....	706
4-pole IE3 motors for continuous operation S1, mains frequency 50 Hz.....	707
4 pole motors for periodic duty S3/S6-75 %, Mains Frequency 50 Hz .....	708
4 pole motors for periodic duty S3/S6, Mains Frequency 50 Hz.....	709
4/2-pole $\Delta/YY$ motors for continuous running duty (S1) and 50 Hz mains frequency .....	710
8/4-pole $\Delta/YY$ motors for continuous running duty (S1) and 50 Hz mains frequency .....	711
8/2-pole $Y/Y$ motors for intermittent periodic duty S3 25/75 % and 50 Hz mains frequency.....	712
12/2-pole $Y/Y$ motors for intermittent periodic duty S3 25/75 % and 50 Hz mains frequency.....	713
<b>Technical data of the 60 Hz motors.....</b>	<b>714</b>
4-pole IE1 motors for continuous operation S1, mains frequency 60 Hz.....	714
4-pole IE2 motors for continuous operation S1, mains frequency 60 Hz.....	715
4-pole IE3 motors for continuous operation S1, mains frequency 60 Hz.....	716
4-pole motors for intermittent periodic duty (S3/S6 75 %) and 60 Hz mains frequency.....	717
4-pole motors for intermittent periodic duty (S3/S6) and 60 Hz mains frequency.....	718
4/2-pole motors $\Delta/YY$ for continuous operation S1, line frequency 60 Hz .....	719
8/4-pole motors $\Delta/YY$ for continuous operation S1, line frequency 60 Hz .....	720
8/2-pole $Y/Y$ motors for intermittent periodic duty S3 25/75 % and 60 Hz mains frequency.....	721
12/2-pole motors $Y/Y$ for intermittent periodic duty S3-25/75 %, line frequency 60 Hz .....	722
<b>Operation with frequency converter, 50 Hz.....</b>	<b>724</b>
IE1 Motor torques for frequency-converter range 5 Hz - 70 Hz, line frequency 50 Hz.....	724
IE1 Motor torques for frequency-converter range 5 Hz - 100 Hz, line frequency 50 Hz.....	725
IE2 Motor torques for frequency-converter range 5 Hz - 70 Hz, line frequency 50 Hz .....	726
IE2 Motor torques for frequency-converter range 5 Hz - 100 Hz, line frequency 50 Hz.....	727
IE3 Motor torques for frequency-converter range 5 Hz - 70 Hz, line frequency 50 Hz.....	728
IE3 Motor torques for frequency-converter range 5 Hz - 100 Hz, line frequency 50 Hz.....	729
<b>Operation with frequency converter, 60 Hz.....</b>	<b>730</b>
IE1 Motor torques for frequency-converter range 6 Hz - 84 Hz, line frequency 60 Hz.....	730
IE1 Motor torques for frequency-converter range 6 Hz - 120 Hz, line frequency 60 Hz.....	731
IE2 Motor torques for frequency-converter range 5 Hz - 80 Hz, line frequency 60 Hz.....	732
IE2 Motor torques for frequency-converter range 5 Hz - 120 Hz, line frequency 60 Hz.....	733
IE3 Motor torques for frequency-converter range 5 Hz - 80 Hz, line frequency 60 Hz.....	734
IE3 Motor torques for frequency-converter range 5 Hz - 120 Hz, line frequency 60 Hz.....	735
<b>15 Motor Mounted Components .....</b>	<b>737</b>
<b>Brake .....</b>	<b>739</b>
Functional description .....	739
Product description of type ES(X) spring-actuated brakes .....	739
Product description of type ZS(X) spring-actuated brakes .....	740
Brake selection and sizing .....	741
Electrical connection .....	744
Specifications of holding brakes with emergency stop capability .....	747
Specifications of working brakes .....	748
Connection .....	750

DC connection via terminals (K) .....	750
Standard rectifier (S) .....	751
Rectifier for electronic rapid shutdown (E) .....	752
Standard rectifier (M) .....	753
Brake connection, operation with frequency converter .....	755
Brake connection, pole-changing motors .....	755
Manual release (HA, HN) .....	755
Explosion protection .....	755
Back stop (RR, RL) .....	755
Second motor shaft extension (ZW, ZV) .....	756
Protective fan cowl (D) .....	756
Motor-independent fan (FV) .....	756
Technical Data Motor-independent fan .....	756
<b>Encoder System .....</b>	<b>757</b>
Shaft encoder (G) .....	757
<b>Incremental rotary encoder .....</b>	<b>758</b>
Functional description .....	758
Electrical specifications .....	758
Plug end view with male pin insert .....	758
Signal assignments .....	758
<b>Absolute rotary encoders .....</b>	<b>759</b>
Functional description .....	759
Profibus DP interface .....	759
SSI interface .....	760
<b>Modular Motorsystem .....</b>	<b>761</b>
Motor and encoder .....	761
Motor, brake and encoder .....	761
Motor and forced ventilation .....	761
<b>16 Motor Mounted Components - Dimensions .....</b>	<b>763</b>
<b>Dimensions .....</b>	<b>765</b>
Standard terminal box .....	765
Terminal box screwed on .....	766
Terminal box for plug-connector .....	767
Standard brake .....	768
"Heavy-Duty" - brake .....	769
Motor with back stop .....	770
Motor with second shaft end .....	771
Motors with brake and second shaft end .....	772
Motor with "heavy duty" brake and second shaft end .....	773
Motor with protective hood .....	774
Motor with independent fan .....	775
Motor with brake and independent fan .....	776
Motor with encoder with built-on independent fan .....	777
Motor with brake and encoder with built-on independent fan .....	778
Motor with encoder .....	779
Motor with "heavy duty" encoder .....	780
Motor with brake and encoder .....	781
Motor with "heavy duty" brake and encoder .....	782
Motor in IEC design .....	783
<b>17 BAUER global .....</b>	<b>785</b>
<b>North America .....</b>	<b>787</b>
<b>Latin America .....</b>	<b>788</b>
<b>Europe .....</b>	<b>789</b>
<b>Eastern Europe .....</b>	<b>792</b>
<b>Middle East &amp; Africa .....</b>	<b>793</b>
<b>APAC .....</b>	<b>794</b>
<b>China .....</b>	<b>795</b>

# Energy Efficient Geared Motors

## Bauer Gear Motor - profile

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### 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

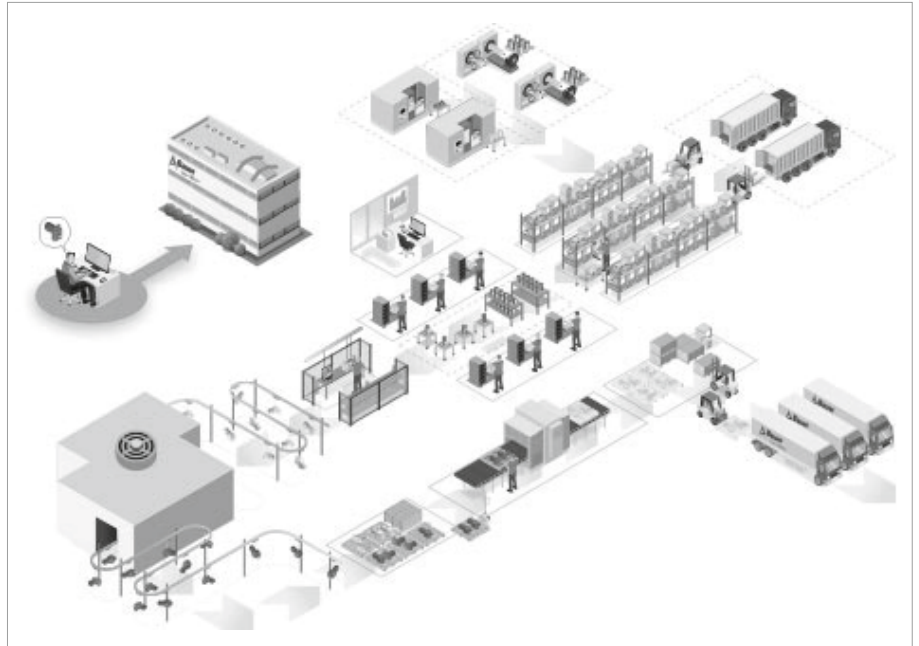
Our quick response time to requests ensures that you receive the required offer within 24 hours. After your order has arrived, we check your order details and you will receive a confirmation of the order within 24 hours. This means that you will have the details for your own production planning process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



# Energy Efficient Geared Motors

## Bauer Gear Motor - profile



### 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

## Bauer Gear Motor - profile

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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

# Energy Efficient Geared Motors

## Bauer Gear Motor - profile

### 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<sup>[1]</sup>.

- 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

<sup>[1]</sup> 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

# Energy Efficient Geared Motors

## Bauer Gear Motor - profile

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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](http://www.bauergears.com).