RegalRexnord™

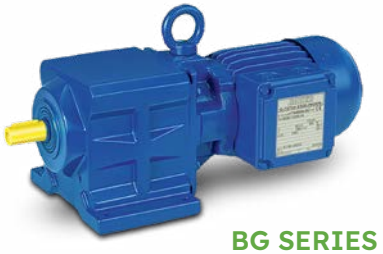
# PRODUCT OVERVIEW

## DRIVE SOLUTIONS WITH BAUER GEARED MOTORS

BAUER GEAR MOTOR™

# STANDARD GEARED MOTORS

## HELICAL-GEARED MOTORS



BG SERIES

Compact and economical inline helical geared motors for long lifetime under arduous conditions.

- Motor power from 0.03 kW to 75 kW
- 13 gearbox sizes for torques from 20 Nm to 18500 Nm
- New attachment possibilities with low design height
- High efficiency through 2 stage base design
- High enclosure IP65 as standard

## PARALLEL SHAFT GEARED MOTORS

BF SERIES

Shaft-mounted geared motors with integrated torque arm are easily integrated and economically applied.

- Motor power from 0.03 kW to 75 kW
- 10 gearbox sizes for torques from 90 Nm to 18500 Nm
- Gearbox housing with integral torque arm
- High efficiency through 2 stage base design
- High enclosure IP65 as standard

## BEVEL-GEARED MOTORS

BK SERIES

Power-dense, right-angle, bevel -geared motors ensure the highest efficiency especially when used with frequency inverters.

- Motor power from 0.03 kW to 75 kW
- 10 gearbox sizes for torques from 80 Nm to 18500 Nm
- Right angle gearbox with universal attachment possibilities
- High efficiency through 2 stage base design
- High enclosure IP65 as standard

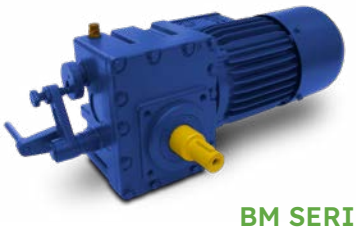
## WORM-GEARED MOTORS

BS SERIES

Economical, right-angle, worm-geared motors install easily in the tightest applications.

- Motor power from 0.03 kW to 5.5 kW
- 8 gearbox sizes for torques from 25 Nm to 1000 Nm
- Hollow shaft version already available from 25 Nm
- High loadable worm gearing for long lifetime
- High enclosure IP65 as standard

## MONORAIL GEARED MOTORS



BM SERIES

A complete range of geared motors for light and heavy load monorail applications.

- Torques from 30 Nm to 680 Nm
- Radial force up to 25000 N
- Flexible mounting on the running gear
- Enclosure IP65 as standard
- Improved efficiency – lower energy consumption – ideal as travelling drives
- Reverse motion of the gearbox is possible with the brake engaged and clutch released

## HiflexDRIVE

STANDARD DESIGN

The HiflexDrive consists of three gear sizes BK04, BK08 and BK17.

- **Gearbox BK04** [3]
  Torque [1] 80 Nm
  Ratios [2] 7,25 - 63,33
- **Gearbox BK08**
  Torque [1] 200 Nm
  Ratios [2] 4,44 - 102,5
- **Gearbox BK17**
  Torque [1] 330 Nm
  Ratios [2] 4,54 - 108,6
- **Motors**
  Power rating [2] 0,18 kW ... 6,3 kW
  Eff. Classes w/o, IE1 through IE5
  Mains supply 110 V ... 690 V, 50/60 Hz
  Enclosure IP65 (Standard)

[1] Torque is dependent on ratio
[2] Ratio and power is dependent on the motor size
[3] On request

# DECENTRAL GEARED MOTOR SOLUTIONS

## COMPACT GEARED MOTOR SOLUTION WITH ETAK2.0

- **Adapted motor windings** matched to VFD for optimised efficiency
- **Optimised motor parameters** over the entire speed and torque range
- **Motor and VFD combinations surpass** IES 2 system efficiency class according to EN 50598-2 and IEC 61800-9-2
- **All necessary options** integrated very compactly, including safety functions

EtaK2.0

## MOTOR COMBINATIONS

### PERMANENT MAGNET SYNCHRONOUS MOTORS (PMSM)

| $P_N$ [kW] | Type | $n_N$ [rpm] | $P_{VFD}$ [kW] |
|---|---|---|---|
| 0.55 | S08MA4 | 3000 | 0,55 |
| 0.55 | S08MA4 | 1500 | 0,55 |
| 0.75 | S08MA4 | 3000 | 0,75 |
| 0.75 | S08MA4 | 1500 | 0,75 |
| 1.1 | S08MA4 | 3000 | 1,1 |
| 1.1 | S08LA4 | 1500 | 1,1 |
| 1.5 | S08MA4 | 3000 | 1,5 |
| 1.5 | S08LA4 | 1500 | 1,5 |
| 1.5 | S09SA4 | 1500 | 1,5 |
| 2.2 | S08MA4 | 3000 | 2,2 |
| 2.2 | S08LA4 | 3000 | 2,2 |
| 2.2 | S09SA4 | 1500 | 2,2 |
| 2.2 | S09XA4 | 1500 | 2,2 |
| 3 | S08LA4 | 3000 | 3 |
| 3 | S09XA4 | 1500 | 3 |
| 3 | S11SA6 | 1500 | 3 |
| 4 | S09SA4 | 3000 | 4 |
| 4 | S11SA6 | 1500 | 4 |
| 4 | S11MA6 | 1500 | 4 |
| 5.5 | S09XA4 | 3000 | 5,5 |
| 5.5 | S11MA6 | 1500 | 5,5 |
| 5.5 | S11LA6 | 1500 | 5,5 |
| 7.5 | S11SA6 | 3000 | 7,5 |
| 7.5 | S11MA6 | 3000 | 7,5 |
| 7.5 | S11LA6 | 1500 | 7,5 |

### ASYNCHRONOUS MOTORS (ASM)

| | | Base frequency 50 Hz Motor: 350 V/50 Hz/Y | | Base frequency 87 Hz Motor: 202 V/50 Hz/D | |
|---|---|---|---|---|---|
| $P_N$ 50Hz [kW] | Typ | $P_{FU}$ [kW] | $I_N$ [A] | $P_{FU}$ [kW] | $I_N$ [A] |
| 0.12 | DHE06LA4 | 0.37 | 1.3 | 0.37 | 1.3 |
| 0.18 | DHE06LA4 | 0.37 | 1.3 | 0.37 | 1.3 |
| 0.25 | DHE07LA4 | 0.37 | 1.3 | 0.55 | 1.8 |
| 0.37 | DHE08MA4 | 0.37 | 1.3 | 0.75 | 2.4 |
| 0.55 | DHE08LA4 | 0.55 | 1.8 | 1.1 | 3.2 |
| 0.75 | DHE08XA4 | 0.75 | 2.4 | 1.5 | 3.9 |
| 1.1 | DHE09LA4 | 1.1 | 3.2 | 2.2 | 5.6 |
| 1.5 | DHE09XA4 | 1.5 | 3.9 | 3 | 7.3 |
| 2.2 | DHE09XB4 | 2.2 | 5.6 | 4 | 9.5 |
| 3 | DHE11MA4 | 3 | 7.3 | 5.5 | 13 |
| 4 | DHE11LA4 | 4 | 9.5 | 7.5 | 16.5 |
| 5.5 | DHE11LB4 | 5.5 | 13 | - | - |
| 7.5 | DHE13LA4 | 7.5 | 16.5 | - | - |

The motor combinations listed here are subject to change. Please contact our staff for more information.

# FOOD & BEVERAGE SOLUTIONS

## HiflexDRIVE

### ASEPTIC DESIGN

Compact and space saving geared motors fullfil the highest hygiene standards through their smooth and water repellent coating.

- FDA conform Aseptic coating
- Acid and alkali resistant coating (pH 2 through pH 12)
- Rounded edges and corners
- Motor without cooling ribs and fan
- Flexible connection technology
- High enclosure IP67/IP69K

## HiflexDRIVE

### STAINLESS STEEL DESIGN

The stainless steel housing provides these geared motors with the highest mechanical resilience in washdown applications.

- Stainless steel housing
- Highest mechanical resilience
- Rounded edges and corners
- Motor without cooling ribs and fan
- Flexible connection technology
- IP67/IP69K

## AsepticDRIVE

Geared motors for all applications with high cleaning intensity or ambient conditions such as dust, fluff etc.

- Motor without fan and cooling ribs
- Motor power
  DA08 - DA11 0,25 kW - 2,2 kW
  SA08 - SA09 0,55 kW - 3 kW
- Available with helical, parallel shaft, bevel and worm gears
- Motor winding in Iso Class F with thermistors as standard
- Enclosure IP67 and IP69K with acid and alkali resistant coating as standard
- Motor connection through standard stainless steel plug connector

## CleanDRIVE

Geared motors in enclosure IP66 and IP67 with acid and alkali resistant coating as standard.

- Motor without fan and cooling ribs
- Motor power
  DA05 - DA09 0,06 kW - 1,1 kW
  SA08 - SA09 0,55 kW - 3 kW
- Motor winding in Iso Class F with thermistors as standard
- Motor connection through standard terminal box or stainless steel cable gland

## SURFACE PROTECTION

Maximum corrosion protection for motors that are exposed to extreme environmental conditions.

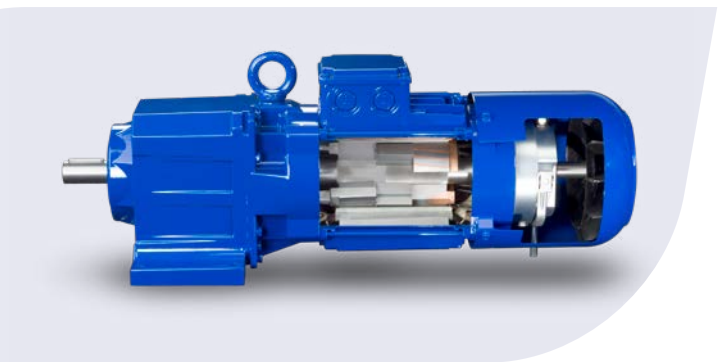
| | |
|---|---|
| Standard | • Indoor areas |
| C1 | • Indoor areas<br>• Very low environmental pollution |
| C2 | • Outdoor areas<br>• Low environmental pollution |
| C3 | • Indoor and outdoor areas<br>• Medium environmental pollution (Production area with low humidity and air pollution) |
| C4 | • Indoor and outdoor areas<br>• Very high environmental pollution (Production area with high humidity and air pollution) |
| C5-I | • Outdoor areas<br>• Very high environmental pollution<br>• In aggressive atmospheres |
| C5-M | • Coast and Offshore areas with high salt concentration |
| IM2 | • Brackish water |

# ENERGY EFFICIENCY SOLUTIONS

## ENERGY SAVING GEARED MOTORS

| $P_N$ [kW] | IE1 [ASM] | IE2 [ASM] | IE3 [ASM] | IE4 [ASM] |
|---|---|---|---|---|
| 0.03 | D04LA4 | | | |
| 0.04 | D04LA4 | | | |
| 0.06 | D04LA4 | | | |
| | D06LA4 | | | |
| 0.09 | D04LA4 | | | |
| | D06LA4 | | | |
| 0.11 | D04LA4 | | | |
| 0.12 | DSE04LA4 | DHE05LA4 | DPE05LA4 | |
| | | DHE06LA4 | DPE06LA4 | |
| 0.18 | DSE05LA4 | DHE05LA4 | DPE07LA4 | |
| | | DHE06LA4 | | |
| 0.25 | DSE06LA4 | DHE07LA4 | DPE08MA4 | |
| 0.37 | DSE07LA4 | DHE08MA4 | DPE08LA4 | |
| 0.55 | DSE08MA4 | DHE08LA4 | DPE08XA4 | DPE08XB4 |
| 0.75 | DSE08LA4 | DHE08XA4 | DPE08XB4 | DPE09XA4 |
| | | | DPE09LA4 | |
| 1.1 | DSE08XA4 | DHE09LA4 | DPE09XA4 | DPE09XB4 |
| | | | DPE09XB4 | |
| 1.5 | DSE09LA4 | DHE09XA4 | DPE09XB4 | DPE09XB4C |
| 2.2 | DSE09XA4 | DHE09XA4C | DPE09XB4C | DPE11LA4 |
| | | | DPE11MA4 | |
| | | | DPE11LB4 | |
| 3 | DSE11SA4 | DHE11MA4 | DPE11LA4 | DPE11LB4 |
| | | | DPE11LB4 | |
| 4 | DSE11MA4 | DHE11LA4 | DPE11LB4 | DPE11LB4C |
| | | | DPE13MA4 | |
| 5.5 | DSE11LA4 | DHE11LA4C | DPE11LB4C | |
| | | | DPE13LA4 | |
| | | | DPE13XA4 | |
| 7.5 | DSE13MA4 | DHE13LA4 | DPE13XA4 | |
| 9.5 | DSE13LA4 | DHE16MB4 | DPE16LB4 | |
| 11 | DSE16MB4 | DHE16LB4 | DPE16LB4 | |
| 15 | DSE16LB4 | DHE16XB4 | DPE16XB4 | |
| 18.5 | DSE16XB4 | DHE18LB4 | DPE18LB4 | |
| 22 | DSE18LB4 | DHE18XB4 | DPE18XB4 | |
| 30 | DSE18XB4 | | DPE20XA4 | |
| 37 | | | DPE22MA4 | |

| $P_N$ [kW] | IE1 [PMSM] | IE2 [PMSM] | IE3 [PMSM] | IE4 [PMSM] | IE5 [PMSM] |
|---|---|---|---|---|---|
| 0.12 | | | | S4E04SA4-1 | |
| 0.157 | | SHE04SA4-1 | | | |
| 0.2 | | | | | S5E04SA4-1 |
| | | | | | S5E06MA4 |
| 0.25 | | | | S4E06MA4 | S5E04SA4-1 |
| 0.315 | | | | S4E04SA4-1 | |
| 0.37 | SSE06MA4 | | | S4E06LA4 | |
| 0.4 | | | | | S5E06MA4 |
| 0.55 | SSE06LA4 | | | | S5E06MA4 |
| 0.75 | | | SPE06MA4 | | S5E06LA4 |
| 0.78 | | | | S4E08MA4 | |
| 1.1 | | | SPE08LA4 | S4E06LA4 | |
| 1.55 | SSE08LA4 | | | S4E09SA4 | S5E08MA4 |
| 2.2 | | SHE09SA4 | | S4E08MA4 | S5E08LA4 |
| | | | | | S5E09XA4 |
| 3 | | | | S4E11SA6 | |
| 3.1 | | | SPE08LA4 | | |
| | | | SPE09XA4 | | |
| 4 | | | SPE11SA6 | S4E09SA4 | |
| 4.2 | | | | | S5E11MA6 |
| 5.5 | | | | S4E11SA6 | S5E09XA4 |
| | | | | S4E11MA6 | S5E11LA6 |
| 6.3 | | | | | S5E09XA4 |
| 7.5 | | | SPE11LA6 | S4E11SA6 | S5E11MA6 |
| 9.5 | | | | | S5E11MA6 |
| | | | | | S5E11LA6 |
| 11 | | | | S4E11MA6 | S5E11LA6 |
| 15 | | | | | S5E11LA6 |



### MOTOR-TECHNOLOGIES
### IE1• IE2 • IE3 • IE4 • IE5

| IE-Class \ kW | 0.12 | 0.18 | 0.25 | 0.37 | 0.55 | 0.75 | 1.1 | 1.5 | 2.2 | 3 | 4 | 5.5 | 7.5 | 9.5 | 11 | 15 | 18.5 | 22 | 30 | 37 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IE1 Asynchronous | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| IE2 Asynchronous | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| IE3 Asynchronous | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| IE4 Asynchronous | | | | | ● | ● | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | |
| IE3 PMSM | | | | | | ● | ● | | | ● | ● | | ● | | | | | | | |
| IE4 PMSM | ● | | ● | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | ● | | | | | |
| IE5 | | ● | ● | ● | ● | ● | | ● | ● | | ● | ● | ● | ● | ● | ● | | | | |

○ = in planning

# EX SOLUTIONS

## EXPLOSION-PROOF GEARED MOTORS

### GEARED MOTORS SUITABLE FOR USE IN EXPLOSIVE AREAS:

**GAS** **Zones 1, 2**
**DUST** **Zones 21, 22**

| | | | |
|---|---|---|---|
| DXE | Zone 1 | II 2 G Ex eb IIC T3 Gb | 0.12 … 11 kW |
| SXE | Zone 1 | II 2 G Ex eb IIC T3 Gb | 0.55 … 15 kW |
| DXN | Zone 2 | II 3 G Ex ec IIC T3 Gc | 0.03 … 15 kW |
| DXC | Zone 21 | II 2 D Ex tb IIIC T160°C IP66 Db | 0.03 … 22 kW |
| DXC | Zone 21 | II 2 D Ex tb IIIC T120°C IP66 Db | 0.03 … 22 kW |
| SXC | Zone 21 | II 2 D Ex tb IIIC T120°C…160°C IP66 Db | |
| DXS | Zone 22 | II 3 D Ex tc IIIC T120°C…160°C IP65 Dc | 0.03 … 22 kW |
| DXE | Zone 1/21 | II 2 G Ex eb IIC T3 Gb | |
| | | II 2 D Ex tb IIIC T120°C…160°C IP66 Db | 0.12 … 11 kW |
| SXE | Zone 1/21 | II 2 G Ex eb IIC T3 Gb | |
| | | II 2 D Ex tb IIIC T120°C…160°C IP66 Db | 0.55 … 15 kW |
| DXS | Zone 2/22 | II 3 G Ex ec IIC T3 Gc | |
| | | II 3 D Ex tc IIIC T120°C…160°C IP65 Dc | 0.03 … 22 kW |

### SERIES S IN IE5* FOR EXPLOSION HAZARDOUS AREAS

| | |
|---|---|
| Design torque $M_N$: | 5 Nm – 48 Nm |
| Rated power $P_N$: | 0,75 kW – 15 kW |
| Protection type:<br>Increased Safety Zone 1<br>II 2 G Ex eb IIC T1 - T3 Gb | S.XE.08MA4<br>S.XE.08LA4<br>S.XE.09SA4<br>S.XE.09XA4<br>S.XE.11SA6<br>S.XE.11MA6<br>S.XE.11LA6 |
| Dust explosion protection Zone 21<br>II 2 D Ex tb IIIC T 160°C … 120° Db | S.XC.08MA4<br>S.XC.08LA4<br>S.XC.09SA4<br>S.XC.09XA4<br>S.XC.11SA6<br>S.XC.11MA6<br>S.XC.11LA6 |


*Individual motor designs can show lower efficiency levels as IE5 at the nominal operating point.

# WATER/WASTEWATER SOLUTIONS

## IP68 GEARED MOTORS FOR SUBMERSIBLE OPERATION

IP68 geared motors are most suitable where it is required to convey or transport foul, waste, river or rain water, and all types of sludge-containing waters in communal or industrial areas. They are frequently used in agitators for mixing, homogenising, etc. or in extremely wet areas or completely submersed under water.

- Special design for continuous submersible operation
- Gear housing and motor are completely waterproof
- Maximum leakage protection
- Special seals available for the output shaft
- Electronic leakage detection is available as an option for early recognition of errors
- Energy-saving asynchronous and permanent magnet motors up to IE5
- IP68 motors with brake available
- Gear motor can be operated at constant power in air or in a medium
- Fully cast cable to ensure maximum level of sealing
- Usable down to water depths of 5 m (greater depths also possible)
- Special coating allows extreme underwater conditions (coating resistant against many aggressive chemicals)
- Optionally also available with plug version of the cable
- Power classes: 0.37 – 11 kW (in Ex version on request)
- Use in potentially explosive atmospheres possible (e.g. Atex Zone 1)

# BAUER GEAR MOTOR™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