



# Bevel Geared Motor Series BK

Three phase bevel mounted geared motors  
for driving machines and equipment of all types

## High efficiency!

Drive solutions from 0.03 kW to 75 kW



### Gearbox

- Torque: 80 Nm ... 18,500 Nm
- Ratios:
  - two-stage: 3.67 - 108.60
  - three-stage: 7.29 - 175.70
- Versatile installation possibilities
- Completely enclosed and dust-tight
- Protection against water jets
- Lubrication change first
  - after 15,000 hrs (mineral oil)
  - after 25,000 hrs (synthetic oil)
- Low noise gearing

### Motors

- Power: 0.03 kW ... 75 kW
- Mains supply: 110 V ... 690 V, 50/60 Hz
- Enclosure: IP 54 (standard only for D..04 and D..05)  
IP 65 (standard)  
IP 66 - IP 68 (optional)
- Connection: Standard with CAGE CLAMP®

### Options

- Connecting with plug connectors
- With integrated inverter up to 7.5 kW
- IE3 up to 75 kW with ASM
- IE4 up to 11 kW with PMSM

### Brakes

- Enclosure IP 65 (Standard)  
IP 66 and IP 68 (optional)
- Performance and application optimised brake range
- Maintenance friendly design

### Standards

- |              |              |
|--------------|--------------|
| • ATEX       | • INMETRO    |
| • CCC        | • ISO14001   |
| • CE marking | • ISO9001    |
| • CSA        | • OHSAS18001 |
| • EAC        | • UL         |

### General

- Corrosion protection: C1 ... C5, IM2 based on DIN EN ISO 12944-5



## Bevel Geared Geared Motor Series BK

### High efficiency!

**Bauer Gear Motor supplies modern drive solutions for all industry sectors in which material must be moved.**

#### 1 Design

- As standard in 2-stage design, as from BK60 3-stage.
- Higher ratios available through attachment of a purpose built pre-stage or pre-connected gearbox.
- Many installation possibilities - foot or flange with single or double shaft end, hollow shaft with key or shrink disc design with torque arm - make these angular gear boxes an ideal space saving drive element.
- Symetric housing design of the 2-stage gearboxes gives the user many further installation possibilities.

#### 2 Housing

- State-of-the-art gearbox housing designed for operation under harsh conditions.
- Compact closed housing is ideal for preventing lubricant loss and dirt build-up.
- High tensile cast housing.
- Vibration-free housing, noise absorbent and resistant against chemical effects.
- The housing is machined in a single clamping process.
- Stator housings with casing and cooling fins are manufactured in one casting and ensure efficient heat dissipation.
- Motor housings, bearing covers and terminal boxes made of corrosion resistant aluminium die casting.

#### 3 Gear wheels

- Gear wheels made of high tensile and case hardened steel.
- Highly wear resistant through flank hardness of 60-62 HRC.
- Impervious to shock.
- Tooth flanks shaved, hobbled or ground.
- Strong, non-flexible pinion shafts and bearings guarantee exact tooth meshing.

#### 4 Stator winding

- The stator winding is manufactured from high quality enamelled copper wire with state-of-the-art three layer insulation in the groove and winding head.
- The stator winding is impregnated with a damp-proof and tropical safe resin.
- The electrical design of the motor is adapted to the gearbox.

#### 5 Rotor

- Aluminium die cast cage rotor ensures a high reliability at high starting torques and low starting currents.
- Pull-up torques are mostly avoided.

#### 6 Terminal box

- Spacious terminal box also completely sealed against dust and water spray.
- A large measure on safety through CAGE CLAMP® connection technology on the winding ends and motor connection.
- Handy terminals allow easy connection.

#### 7 CAGE CLAMP®

- CAGE CLAMP® connection technology as standard.
- Optional with conventional terminal board

