



## BEARING SOLUTIONS for electric motor

Electric motor consumes approximately 70% of the electrical energy used in the industry. Reducing energy usage and helping environment are the main focus for electrical motor manufacturers. To save energy and operational cost, NBC has developed number of bearing solutions for electric motor manufacturers. Our expertise guarantees ultimate design, product and testing to meet customer specific requirements for energy efficient motors.

### Major operational challenges

- High starting torque
- Noise
- Wide temperature range
- Contamination
- Relubrication challenges
- Current leakage in VFD

### Bearings requirements

- |                           |                       |
|---------------------------|-----------------------|
| ◦ Low noise               | ◦ Control clearance   |
| ◦ Low running torque      | ◦ Effective sealing   |
| ◦ Protection from current | ◦ Special grade balls |
| ◦ Wide temperature grease | ◦ Enhance life        |

### Features and benefits

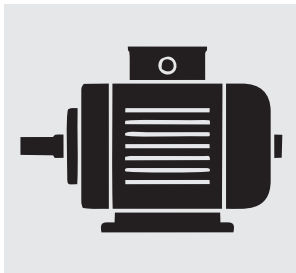
- **EM Bearing for low noise application.** Bearings are with special grease, optimum clearance and special grade balls
- **Special low torque seals** provide extreme protection against contamination
- **InsuOhm Bearing for Electirc insulation.** Coating ensures protection from current even in moist environment and also protects from heat and chemicals
- **Superior accuracies and surface finish** for lower operating temperature
- **Special cage design** for specific applications or on demand



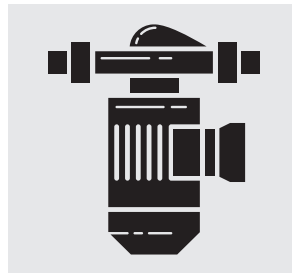
## Bearing applications

- Fractional motors
- General purpose motors
- High speed motors
- Mill motors
- Variable drive
- Severe duty motors

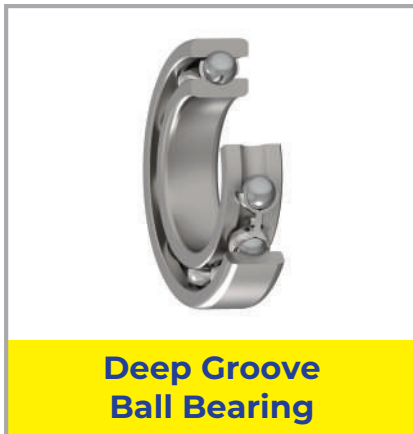
The bearings are designed for low friction and noise with effective sealing. These bearings are tested to ensure low levels of noise and vibration.



**HORIZONTAL  
ELECTRIC MOTOR**



**VERTICAL  
ELECTRIC MOTOR**



**Deep Groove  
Ball Bearing**



**Single Row Angular  
Contact Ball Bearing**



**Cylindrical  
Roller Bearing**



**Taper  
Roller Bearing**



**Double Row Angular  
Contact Ball Bearing**

