Ceramic Ball Bearings for Fan Motors

Shaft voltage induced predominantly by operation of electric motors on variable frequency drives (adjustable speed drives) creates an environment where electrical discharge current can flow through the bearing. This intermittent current flow can create arc pits that damage the bearing's internal surfaces and lubrication, causing electrical erosion. A solution to this phenomenon is NSK deep-groove ball bearings with ceramic balls, called ceramic hybrid bearings. These specialty bearings offer protection from current flow through the bearing by using the exceptionally high electrical insulating properties of ceramic balls to create a high resistance barrier between the bearing's steel rings.

Product Features

- Extended service life, due to reduced wear and friction
- Electric erosion protection
- High productivity, due to new ceramic material

Benefits

- Improves the reliability of the application
- Maintains quiet running and increased noise life
- Prevents bearing damage from electric erosion
- Significant reduction of false brinelling damages (when compared to standard SiN material)

Condition Description

- Arduous Environments
- Low Noise

Industries

- Domestic Appliances