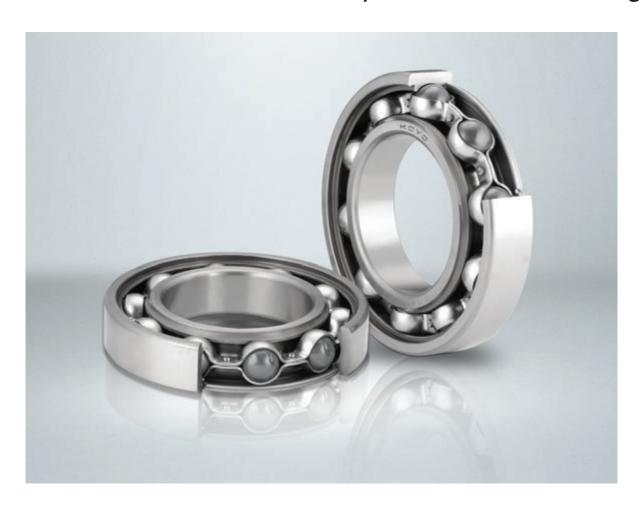
# 3NC Hybrid-Ceramic Ball Bearings

## **Suited For A Wide Range Of Extreme Applications**

Where High Temperatures, High Speeds, Or Stray Electric Currents Threaten The Viability Of Steel Ball Bearings



Bearings used in generators are subject to electric pitting - a phenomenon where the surface melts locally because sparks are generated as the electricity passes through the ultra-thin oil layer and into the bearing while rotating.

According to the Institute of Electrical and Electronics Engineers (IEEE) over half of all electric motor failures are bearing related, and electric pitting is a main cause of damage that leads to reduced bearing service life.



## Koyo 3NC Hybrid-Ceramic Ball Bearing Part Numbers



### 6200 Series

3NC6203ZZ 3NC6204ZZ 3NC6205ZZ 3NC6206ZZ 3NC6207ZZ

3NC6208ZZ 3NC6209ZZ 3NC6210ZZ 3NC6211ZZ

3NC6212ZZ 3NC6213ZZ 3NC6214ZZ

3NC6215ZZ 3NC6216ZZ 3NC6217ZZ

3NC6218ZZ 3NC6219ZZ

3NC6220ZZ 3NC6221ZZ

3NC6222ZZ

3NC6224ZZ 3NC6226ZZ

**3NC6228ZZ**3NC6230ZZ

3NC6232

3NC6234ZZ FY 3NC6236-1ZZ FY

#### 6300 Series

3NC6305ZZ 3NC6306ZZ

3NC6307ZZ 3NC6308ZZ

3NC6309ZZ 3NC6310ZZ

3NC6311ZZ

3NC6312ZZ 3NC6313ZZ

3NC6313ZZ 3NC6314ZZ

3NC6315ZZ

3NC6316ZZ

3NC6317ZZ

3NC6318ZZ

3NC6319ZZ 3NC6320ZZ

3NC6321ZZ

3NC6322ZZ3NCH6322ZZX

3NC6324ZZ

**3NC6326-2** 

**3NCH6326-2** 

**→ 3NCH6328** 

\* 3NCH6330CS \* 3NCH6332-2CS





Koyo's 3NC Hybrid Ceramic Ball Bearings are filled with Exxon Polyrex<sup>®</sup> EM Grease

Items with "ZZ" have two metal shields

Compared to steel balls, ceramic balls are lighter, smoother, harder, and resistant to both corrosion and electrical currents

- Lower operating temperatures (up to as much as 40%) resulting in longer grease life.
- Lower rotational torque than steel ball bearings which means less energy is required to rotate the bearing.
- Eliminates electric arcing or fluting by insulating the bearing from stray currents.
- Reduces down time and maintenance resulting from traditional steel ball bearing failure.
- Dimensionally interchangeable with current electric motor bearing.
- No additional machining required.
- No special modifications or handling required for installation.



