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Data Sheet

# CeramicSpeed Insulate

*CERAMICSPEED*

# The obvious choice for modern electrical motors

Innovations in material science are changing a lot of industries these years. Ceramic materials are proving stronger and much more durable than e.g. steel – and this impacts your industry, too.

## CeramicSpeed Insulate

Hybrid ball bearings are the future for manufacturers of electrical motors. The demand for stronger, more durable and longer-lasting bearings for electrical motors is on the rise – and in many applications, conventional steel balls in motor bearings simply won't cut it.

## Non-conductive balls

CeramicSpeed Insulate ball bearings are custom made for electrical motors and your guarantee against damage caused by stray currents. The ceramic balls used for this product series are non-conductive and have an insulating ability of 15 kV per mm - higher than that of atmospheric air.

## 4 to 8 times longer life than steel

Hybrid ball bearings are proven to last 4 to 8 times longer than steel bearings – in some cases even longer. This eliminates frequent replacements, production stops or unforeseen breakdowns due to bearing failure.

## Tech Stuff

CeramicSpeed hybrid ball bearings are fitted with premium-quality ceramic ( $\text{Si}_3\text{N}_4$ ) balls, which are twice as hard and four times smoother than steel. A much lower friction coefficient reduces bearing temperatures and hence reduces power consumption in the motor.

## Who we are

CeramicSpeed is a dedicated and leading supplier of hybrid ball bearings. With a strong presence in the European market, we are rapidly becoming the industry's most trusted supplier of advanced bearing solutions. Constantly at the forefront of technological development and innovation, we offer the widest range of premium bearings.

### Why choose hybrid bearings?

- Much less frequent repairs and retrofits of bearings.
- Higher motor efficiency driven by a 48% reduction in bearing friction losses.
- Improved warranty and better competitive power
- No electrical erosion due to stray currents - ceramic ball bearings are non-conductive.
- Capable of operating under extreme temperature conditions