## Data Sheet CeramicSpeed HighTemp



# Bearings for high-temperature environments

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 HighTemp

Hybrid ball bearings are the future for high-temperature applications. The demand for stronger, more durable and longer-lasting bearings for hightemperature applications is on the rise.

#### **Ceramic balls and low coefficient**

The HighTemp series is designed for use in operating environments where the temperature reaches up to 260 °C, or even as high as 350 °C. Ceramic balls have a low coefficient of thermal expansion – only a quarter of that of steel balls - and don't micro-weld to the races.

These properties mean that CeramicSpeed HighTemp bearings can be used with a lower degree of play than other high temperature bearings, improving their function at high RPM. Ceramic balls also create a lower degree of wear on the races. When used in combination with high-quality lubricants, these bearings provide you with a solution which has an extremely long lifetime in high temperature operating environments.

#### Tech stuff

CeramicSpeed hybrid ball bearings are fitted with premium-quality ceramic  $(Si_3N_4)$  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.

We offer the broadest range of premium bearings in the world, constantly at the forefront of innovation and technological development.

### Why choose hybrid bearings?

- 4 to 8 times longer bearing life
- High thermal stability
- No damage under extreme temperature changes

- Extremely resistant to corrosion and foreign particles
- Can operate at temperatures of up to 350 °C
- Lower energy consumption

