Hybrid Cylindrical Roller Bearing
Reliably stopping the passage of current – Maximum operational safety

Product features
- Ceramic rolling elements Si₃N₄
- Rings made of rolling bearing steel
- Brass cage
- Same dimensions as standard bearings
- X-life quality

Technical advantages
- Extreme protection against the passage of current, even with alternating currents
- A low rolling element mass leads to lower centrifugal forces and thus to
  → less friction
  → less heat
  → reduced load for the lubricant
  → rating life that is increased by a factor of 2 – 3 for the grease
- Better dry-running properties

Comparison of the CO₂-emission of a standard bearing and a hybrid cylindrical roller bearing in the drive of a high-speed train during an operation period of one year (approx. 600,000 km/year)

-20 kg CO₂
HYBRID CYLINDRICAL ROLLER BEARING

Customer benefits
• Extreme protection against the passage of current → long rating life
• No coating that could be damaged due to improper handling → maximum operational safety
• Production and inspection requirements met for bearings in traction motors: suffix „F1“ → meeting the very highest standards of quality
• Interchangeable with standard bearings → upgradable
• Increased maintenance intervals due to longer rating life of the grease → reducing your maintenance costs
• Environmental impact in the application improved due to the lack of friction → CO₂ reduction

Types available
• HCNU1008 – HCNU1020
  Bore diameter from 40 mm to 100 mm
• HCNU208 – HCNU215
  Bore diameter from 40 mm to 75 mm
• Other types are available on request

Applications
• Rail vehicles (wheelset and traction motors)
• Power Transmission (direct current and alternating current motors)
• Wind energy (generators)