

Rolling bearings

Plain bearings

Linear technology

FAG

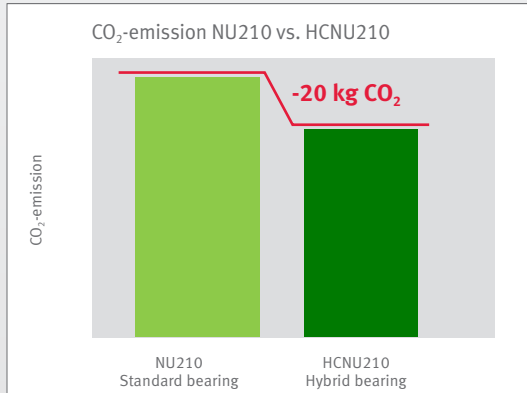
Hybrid Cylindrical Roller Bearing



SCHAEFFLER

HYBRID CYLINDRICAL ROLLER BEARING

Reliably stopping the passage of current – Maximum operational safety



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)

Ceramic rolling elements Si_3N_4

Brass cage

Outer ring

Inner ring



Product features

- Ceramic rolling elements Si_3N_4
- 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

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)