

BIKE & E-BIKE The trusted partner that leads the way



Ride with piece of mind

Frame pivot

► For a durable and smooth articulation

High resistance to low

oscillations, as well as heavy

loads and shock loads in a

contaminated environment

Wheel hub

Opt for performance and reliability

NTN, world leader in bearings and major player in mobility, designs, develops and industrialises top-quality, high-performance products.

NTN is a long-standing partner of the cycle industry, and its team of committed enthusiasts is ready to help you to meet your technical and sporting challenges! and our wide range of products, we offer the most appropriate solutions adapted to the requirements of each application. Headset High rigidity and high resistance to oscillations and vibrations, as well as to water and pollution ► For reliable and precise guidance Wheel hub Ultra-low torque and optimum sealing

Invisible but indispensable, there are almost twenty bearings that equip

the bikes that keep cyclists in motion.

Thanks to our bearings expertise

Contact us

Bottom bracket Compact, and superior protection against the elements ▶ To ensure robustness and velocity

High resistance to external aggression, low torque in a miniature footprint

Pedals

For ultra-light weight and improved durability

► To guarantee fluidity and longevity

Our bike offer

Ball bearings

Ball bearings are used in the vast majority of cycle applications. They are particularly appreciated for their high **load capacity**, **compactness** and **low torque**.

Deep groove ball bearings

6700, 6800, 6900 series: thin section

6000 serie: standard 600 serie: miniature

 Angular contact ball bearings, full complement for headsets

The excellent performance and exceptional reliability of **NTN** bearings are the result of a combination of features adapted to each application:

Sealing

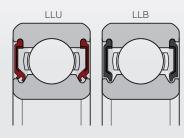
For positions most exposed to mud, dust and water, our bearings benefit from a proven **sealing** system that **guarantees long life** without compromising fluidity.

Our wide range of high-tech seals offers the best **compromise** between **sealing and friction torque** on the bike market.

Examples:

V-shaped micro-grooves on the inner ring for a labyrinth effect together with:

- **LLU contact seals** (double-lip) for total tightness
- **LLB non contact seals** (single lip) for ultra-low drag torque



Lubrication

Wide range of greases:

- Resistant to oxidation and water
- Resistant to shocks and oscillations
- · Very low coefficient of friction
- All offering excellent protection against wear and corrosion

NTN solid grease technology

NTN oil-saturated polymer material is a long life lubrication solution. It protects against the entry of contaminants and moisture, eliminates leaks and withstands washing, oscillation and vibration. It is an asset for headsets and frame pivots.

Note: different filling volumes are available to best meet your specifications.

NTN quality

100% guaranteed, from design to manufacture:

- High level of steel cleanliness (100 Cr6 or stainless steel)
- Optimisation of internal geometry and contact surfaces
- High-precision balls of outstanding quality (Grade 10)
- Exact dimensions and tolerances manufactured







E-bike solutions

For several years now, we have also been supporting the growth of electrification in the bicycle sector, a major asset for the soft mobility in the cities of tomorrow.



Our offer

- A wide range of top-quality bearings, both ball and needle rollers, providing unparalleled reliability and longevity
- **Passionate** experts working by your side right from the earliest design stages
- Proven simulation tools to optimise the dimensioning of your motor architectures and meet your performance requirements
- **Tailor-made solutions** including composite materials and optimised surface treatments

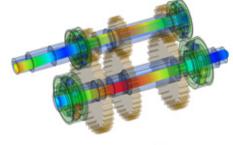


Precise and contactless solutions:

- to measure pedaling speed and detect the direction of rotation
- to measure the angular position of the rotor of electric motors

Measurements are made using robust magnetic sensors based on our ASB $^{\odot}$ (Active Sensor Bearing) technology. This solution has become the world standard for wheel speed measurement in the automotive sector.











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