



**ULTAGE™**



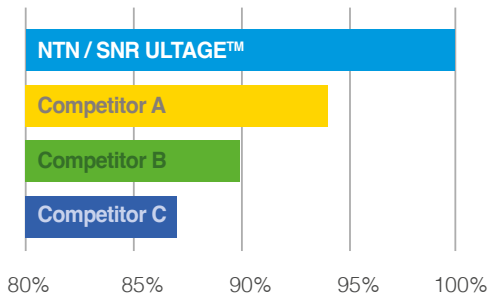
# Spherical roller bearings

An unrivalled extensive product range

**Spherical roller bearings** are engineered to **offer excellent resistance to high temperatures and loads**, meaning that they are capable of withstanding the harshest applications. They are a popular choice for absorbing misalignments, impacts and vibrations, as well as operating in polluted environments.

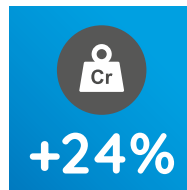
## Less downtime, more profit!

Market Dynamic load (%)



Study realized in 2021, based on the 3 main European market players

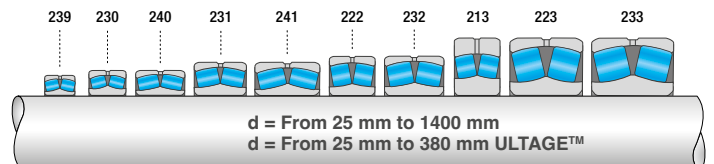
Load capacity



Service life



Speed limits



## ULTAGE™ EM design - massive brass cage

### No floating guiding ring nor fixed central rib

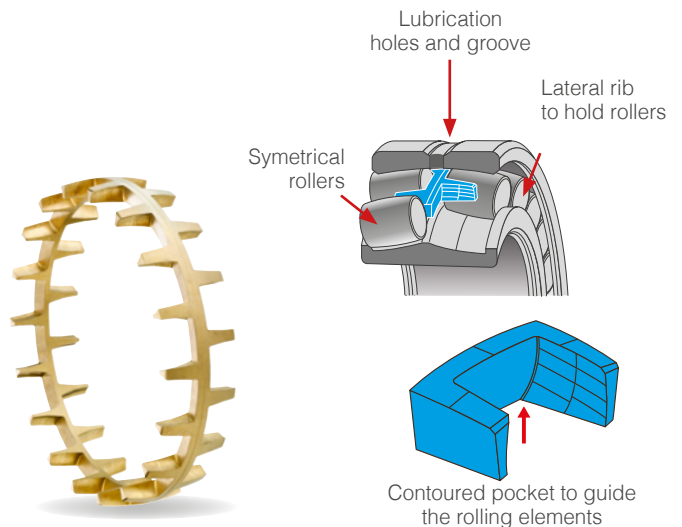
- Improved lubrication
- Decreased friction
- Reduced operating temperature

### Enveloping cage centered on rollers

- Excellent rollers stability under heavy load
- Reduction of heat generation
- No seizure risk linked to thermal expansion

### Single piece brass cage

- Excellent resistance to shock and vibration
- Self-lubricating property, decreasing friction with rollers
- Increased speed
- Optimised curvature ratio
- Reduced contact pressure
- Longer service life
- Lower maintenance costs



\*NTN also offers other cages in its spherical offer: steel and polyamide (the last one upon request)



## Dedicated products EF800 series for high-vibration applications

The **EF800 series** is equipped with a solid brass cage and is particularly recommended for use in heavy-duty applications and vibration systems (shaker screens, crushers, grinders...).

### Bénéfices

- Increased service life
- Wider maintenance intervals
- Greater operational profitability

**Optimize the efficiency of your screens!**

## Characteristics

### Massive brass cage

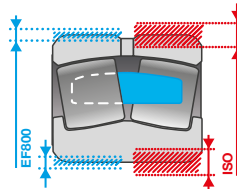
- ULTAGE™ bearing with symmetrical rollers and machined brass alloy one-piece cage centred on the rolling elements.
- No floating guide ring or fixed central shoulder section to avoid any risk of a cage/ring seizure in the event of thermal expansion. The self-lubricating properties of the material help to limit heat build-up at high speeds.

### Specific dimensional tolerances

- Specific tolerances for the outer diameter and bore: reduced for the outer diameters and for cylindrical / tapered bores compared with the tolerance ranges of the standard series, guaranteeing a perfect fit of the ring.

### Reduced internal radial clearance

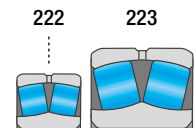
- The C4 internal clearance of the EF800 series is reduced to 2/3 of the standard C4 internal clearance in order to obtain improved running properties during operation.



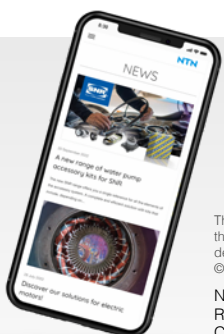
Jeu	22320*		Clearance in microns												
	Min	Max	130	135	140	145	150	155	160	165	170	175	180	185	
C4	135	180													
EF800	150	180													

\*Cylindrical bore

EF800 series = C4 with reduced tolerance



**48 par numbers available**  
**d = from 40 mm to 200 mm**  
 Further dimensions are possible upon request



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NTN Europe - 1 rue des Usines - 74000 Anancy  
 RCS ANNECY B 325 821 072 - Code APE 2815Z -  
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[www.ntn-europe.com](http://www.ntn-europe.com)



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