

FAG



Axial Spherical Roller Bearings E1

**Higher cost-effectiveness and operational reliability
with X-life**

Higher cost-effectiveness and operational reliability with X-life

FAG axial spherical roller bearings of design E have proven themselves where very high axial loads occur and where shaft deflections or misalignments of bearing seats must be compensated. They operate reliably in the harshest of operating conditions.

For example in gearboxes, calenders, engines in marine applications and rudder engines, lifting gear, construction machinery and rolling mills.

Since the introduction of the axial spherical roller bearing E there have been new findings in bearing kinematics, manufacturing processes have improved and materials with improved performance are available.

These findings and opportunities were used in the development of the new E1 design of FAG axial spherical roller bearings according to the X-life concept.



The operating safety as well as the cost-efficiency of the bearings was increased further, due to the even higher axial load carrying capacity and lower bearing temperatures as well as improved safety against wear. The new FAG axial spherical roller bearings E1 in X-life quality provide a significantly

improved price/performance ratio. The E1 design will successively replace the standard E design axial spherical roller bearings.

- Higher machine availability
- New design possibilities
- More economical bearing supports due to downsizing
- Lower operating costs due to reduced energy consumption



The operating life has more than doubled under the same loads



Same operating life under significantly higher loads



Suitable for high speeds due to lower friction



Improved guidance and vibration characteristics due to very high running accuracy



Lower wear due to optimal lubricant film formation

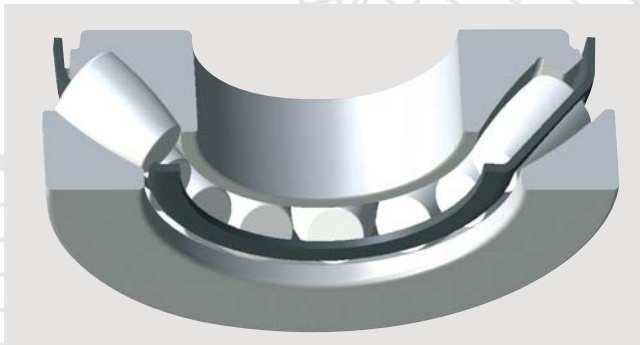


Lubricant is subjected to less strain due to lower bearing temperatures

Optimized contact geometry and bearing kinematics

The performance of the FAG axial spherical roller bearings E1 was increased by optimizing the contact geometry and the bearing kinematics. The load rating was increased by lengthening the rolling elements.

The improved surfaces of the rolling elements enable a lubricant film that is capable of supporting loads to be formed. The improved roller guidance in the cage enables the wear to be reduced and the operating life to be increased.



You will find more detailed information in our publication "FAG Axial Spherical Roller Bearings E1" (WL 43 184 EA)

Geometry that increases the load rating

- Longer rollers
- Rollers with larger diameter

Rolling contact capable of supporting high loads

- Longer roller contact
- Longer raceways
- Improved osculation conditions
- Additional profiling

Rib contact capable of supporting high loads

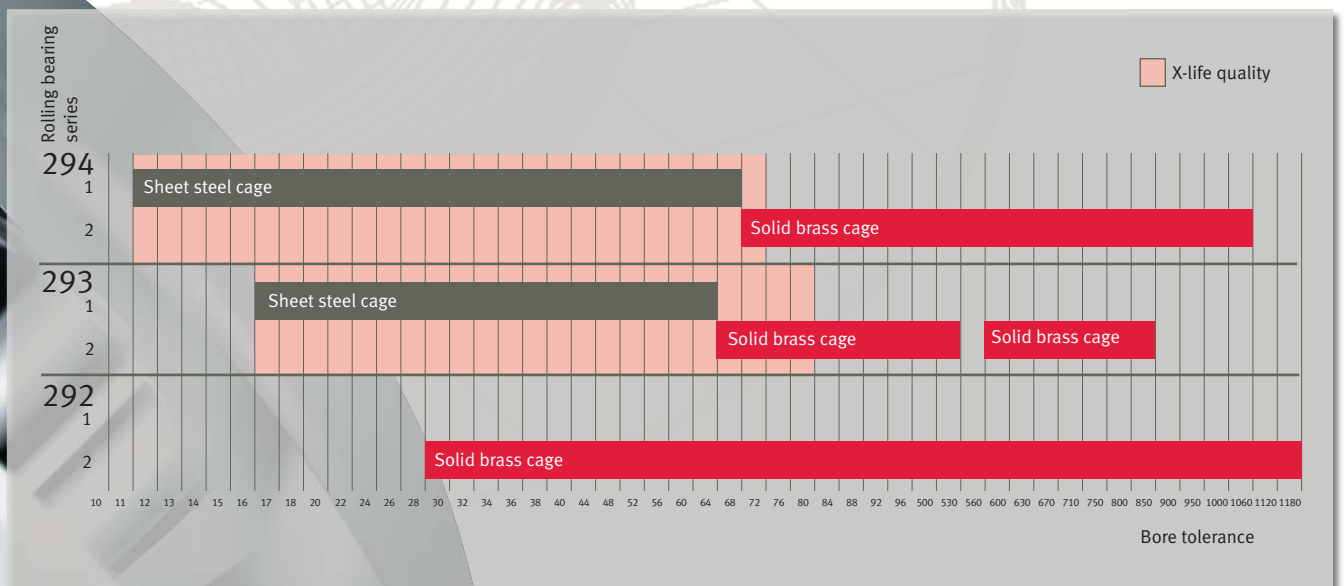
- Optimized osculation
- Precise rib geometry

Cage with improved rolling element guidance and lubricant support

- Favorable loading
- Favorable wear behavior
- Robust design

Increased precision as standard

- Reduced height tolerances
- Increased running accuracy



Welcome to the Future! Unmatched Engineering Excellence from INA & FAG



X-life – this is the new premium grade from INA and FAG, offering you new opportunities for success.

Benefit from the combined expertise of two brands with a worldwide reputation – in every area of application covering automotive, machine building and precision engineering. INA and FAG have combined their strengths to give a new dimension in quality:

X-life.
Higher cost-effectiveness.
Higher operational reliability.

What X-life offers

X-life offers excellent product quality that far exceeds previous standards.

Furthermore, X-life optimizes all the parameters that are decisive for a problem-free production cycle. This includes correct mounting and dismantling, maintenance intervals matched to the specific application and the selection of lubricants matched to operating conditions.

A further convincing advantage of X-life is product characteristics that fulfill your specific requirements and offer additional benefits: for example, particularly low-noise, maintenance-friendly or high load capacity system solutions.

Your X-life advantages at a glance

- Product characteristics far above the norm
- Lasting quality assurance and control
- Extremely high reliability
- Even greater security in planning and systems
- Optimum availability
- Smooth-running work processes
- Reduced energy consumption
- Very high cost-effectiveness
- Maximum possible level of service and support

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