

SKF bottom bracket unit



Discover the unique features of the new SKF bottom bracket unit.

SKF - The knowledge engineering company

SKF is the leading global supplier of products, customer solutions and services in the bearings, seals and lubrications industry. Being in the business since 1907 and still a major global player, SKF has the knowledge and experience needed in the market.

SKF bearings are designed to fulfil the requirements of different type of bikers. All SKF bearings are of high quality level. We at SKF know that robustness, protection, low friction and comfort are important for every biking performance.

SKF bottom brackets- Made in Germany!

Bicycles components are caught in crossfire of high influences. Punishing rides on long stretches of asphalt or rough terrain, plus all the impacts through rain, fine dust or mud ask for components that offer reliability, durability and all-round-performance. And that is why SKF has developed a new generation of bottom brackets - a new generation, which sets new standards.

With bearings that are too small to carry the stress resulting from the chain pull and seals that do not keep water and dirt out safely, the life expectancy of most standard bottom brackets would be less than 2 years of intense use. So it was decided that the SKF bottom brackets should be designed to last the life of a bike: 10 years or 100.000 km.

The bearing concept

SKF developed a solution for the highly stressed bearings with the use of rollers instead of balls on the chain side. Because of the chain pull the force applying on the chain side is up to seven times higher than on the other side. So, what is more logical than exchanging the heavy loaded set of balls on the chain side



for a roller set? Roller bearings can carry these higher forces much better than ball bearings. With this simple but nevertheless revolutionary idea, we have created the strongest and most durable bearing ever.

Going for low weight is always an option for bicycle parts, as the power input is usually limited. On the other hand, the stiffness of all drive train parts is especially critical for loss free transmission. That is



why we decided to make our spindles as stiff as possible. This could be achieved by maximizing the spindle diameter and the distance between the bearings. Naturally the whole design was subject to an intense optimisation process, in which the stiffness and the strength of the spindles could be brought to unmatched performance.



The SKF bottom bracket unit is made of a one-piece shell that supports the bearings much better than thin rings. It does not only provide an ideal, stable environment for the bearing, but also protects against water, dirt and mud from inside the frame.

The axial sealing

To provide increased sealing performance and long-time durability of the bottom bracket unit, SKF has developed a special axial seal - a patented design derived from the hub units in automotive applications. The seal consists of two lips: the axial sealing lip and the grease retaining lip. The internal grease retaining lip is placed directly to the roller and ball set and keeps the grease inside the bearing. The axial sealing lip is placed outwards to the stopring and protects the bearing against water, dirt and dust from



outside. This allows the bottom bracket unit to operate smooth and low frictional.

Furthermore, the use of stainless steel permanently prevents against axle and bearing corrosion. The SKF bottom brackets are greased with a special high performance lubricant that makes the bottom bracket maintenance free. There is no need to re-grease or maintain the SKF bottom brackets! This special SKF bearing grease offers an optimal lubrication for high loads and additionally supports the fast starting and quiet and smooth running of the bearings.

The product range

With the new product-line SKF offers an absolutely unique solution for mountain and road bikers that ask for a truly reliable BB-set.

While the main focus for mountain bikes lies in the ISIS-drive bottom brackets, there is also a full line of bottom brackets for road and trekking bikes with square ISO and JIS spindles

The SKF bottom brackets are available in different types that differ in optic and corrosion resistance. While top 600 series models are entirely made of stainless steel for spindle, shell, rollers and balls, the basic 300 models build up our CroMoly series, but comes with exactly the same revolutionary bearing design, axial seals, one-piece shell and oversized spindle like the more expensive 600 series.



Sales Arguments

From the **economical point of view** there are some serious advantages regarding the new SKF bottom brackets to be considered:

- Ÿ Value added product due to unique product features
 - Ÿ The unique patented roller-and-ball bearing design is able to withstand the stress of bicycle use.
 - Ÿ Their large volume spindles offer unsurpassed strength and stiffness.
 - Ÿ The worldwide-patented SKF axial seal offers superior sealing, providing perfect protection against water and dirt.
 - Ÿ The use of stainless steel permanently prevents against axle and bearing corrosion.
- Ÿ Reduced assembly cost and less trouble with the tolerances in the bottom bracket shells (especially in welded aluminium frames). The one-piece shells provide by far the most easy and safe assembly.
- Ÿ No maintenance: There is no need to maintain the SKF bottom brackets thanks to the axial sealing and the special high-performance lubricants. The integrated bearings are greased for lifetime and never have to be adjusted!
- Ÿ Improved price-quality ratio.
- Ÿ Free choice of crank sets from different makers.
- Ÿ Significant reduction of cost for warranty claims (2 years legal warranty in the EU).

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