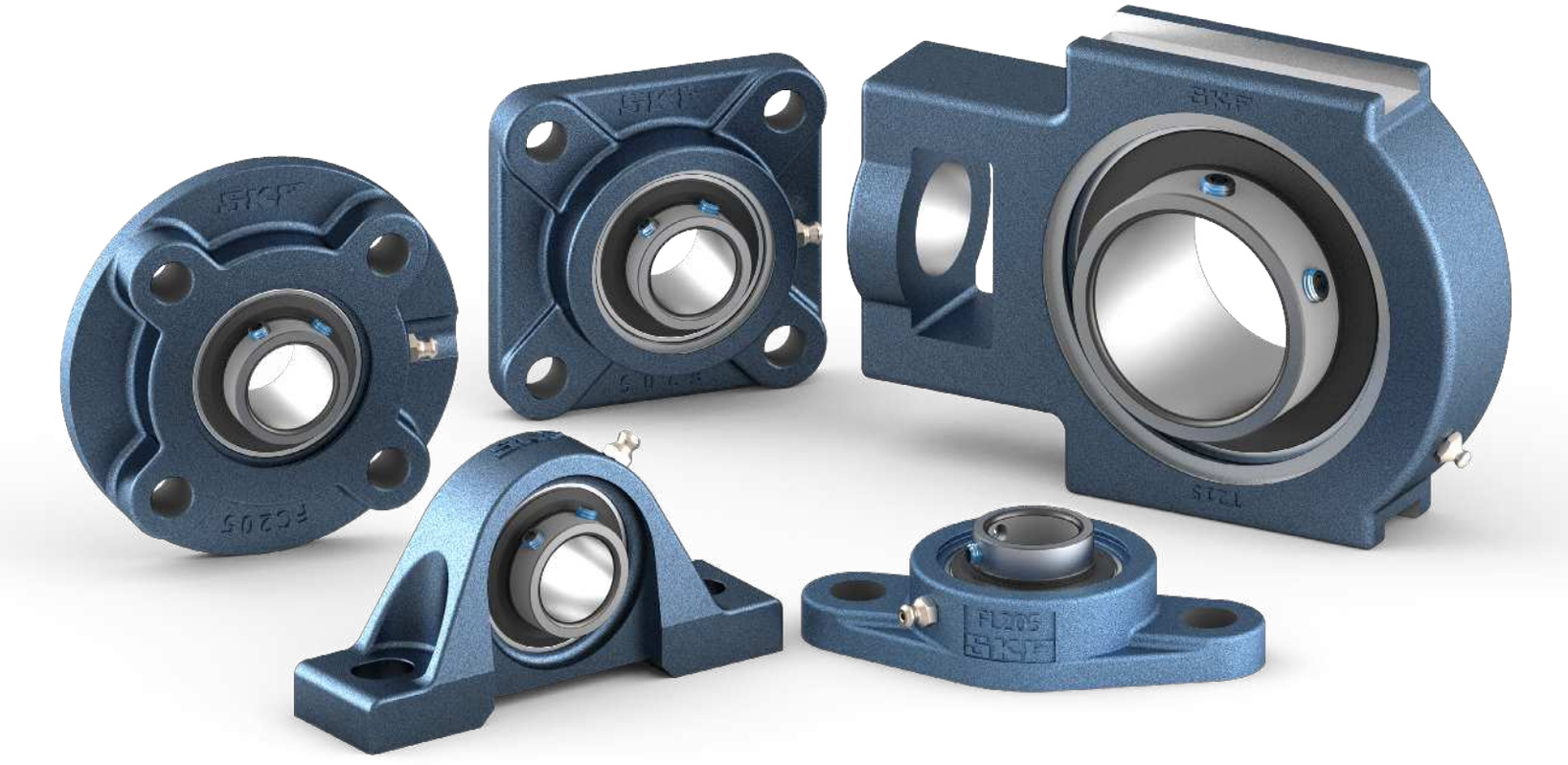
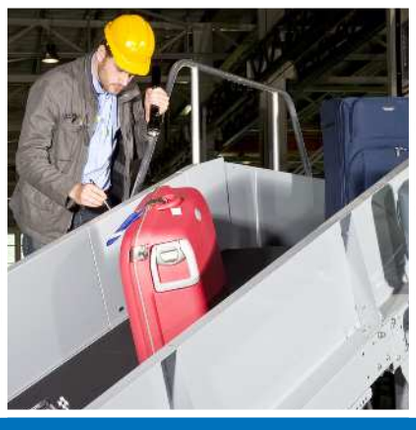
SKF insert bearing units
UC range





SKF UC range, designed for JIS* equipment

You need a robust and reliable insert bearing unit solution, one that's easy to install, simple to order and improves productivity. SKF now offers a product that matches your operational and application requirements.

At SKF, we have developed a range of insert bearing units, called "UC range", designed to be interchangeable with JIS* equipment. These SKF UC bearing units are designed with a set screw locking feature, to operate in environments where systemic vibrations are characteristic application conditions.

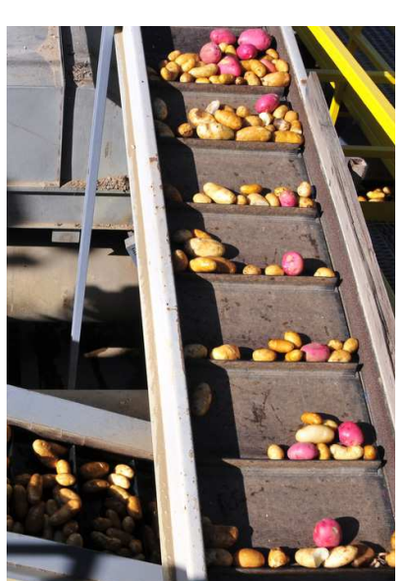
* JIS: Japanese Industrial Standards

Easy to order, easy to replace

You want a solution that makes your life easy –A solution with the same boundary dimensions, housing configurations and part numbers as many other products available today on the market.

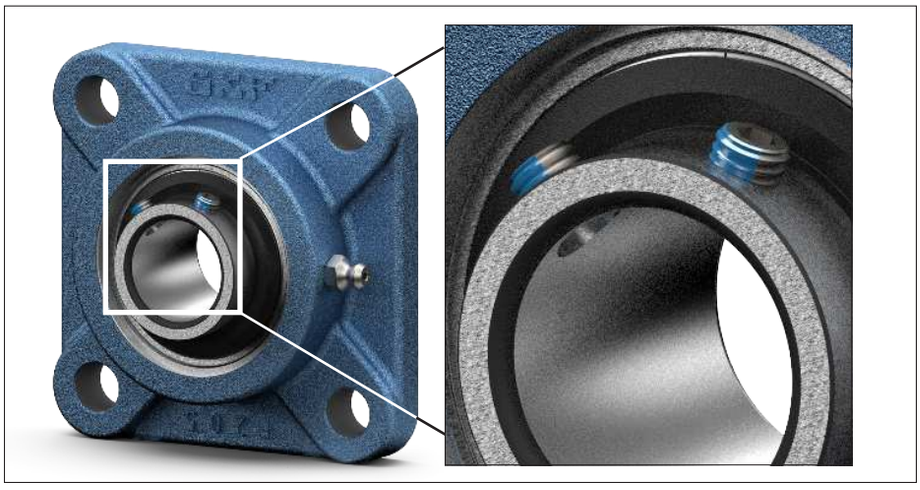
The SKF insert bearing units - UC range achieves this and more. It's an interchangeable solution with JIS* housings available today on the market with an enhanced locking design insert bearing that helps provide more productive, more reliable, and smoother running rotating equipment.

What's more, no modification of your machine is needed. The dimensions meet most of the current UC designated bearing unit fitting requirements, enhancing interchangeability. And whatever product you need, with SKF you know it will be easy to obtain and straightforward to install.



Applications include

- Parcel and baggage handling conveyors
- Material handling conveyors
- Food process machinery
- Packaging equipment
- HVAC equipment
- Agriculture machinery
- Construction machinery
- Textile machinery
- Fitness equipment
- Escalators
- Metals industry



UP TO
16%
BETTER HOLDING POWER ON SHAFTS

Combining JIS* compatibility with SKF reliability

With over 100 years of experience, SKF understands machine and plant productivity and the need to deliver high rotating equipment performance.

The SKF UC range has been designed to provide reliable performance as well and reduce machine downtime. It includes specific features that can make the difference in your equipment.

An enhanced set screw locking system

One of the reasons for failure in a low speed, highly loaded conveyor applications is machine vibration loosening the locking systems.

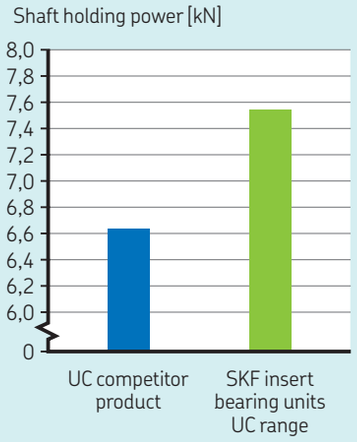
SKF has overcome this problem by using an enhanced set screw locking design. At its heart is a nylon patch that creates extra resistance to screw loosening. A simple, solution which eliminates the labour associated with the use of messy liquid locking compounds that have no removal or reinstallation options.

The locking device on the SKF UC range increases the axial holding power by up to 16% **(→ Diagram 1)**, so there is greater grip between the shaft and bearing. This is a big advantage for units operating in systemic vibrating applications, such as conveyors.

A solid base and solid feet for increased cleanliness and better bearing unit support

The solid base design of SKF insert bearing units – UC range provides a cleaner surface with less contaminant ingress for improved bearing unit support, especially the often heavily contaminated conveyor operating environment. A solid base design is now standard on our two bolt flanged housings as well as a solid feet on our pillow block housings **(→ fig. 1)**. This limits the opportunity for dirt to collect underneath the housing support – another step forward for better bearing unit hygiene.

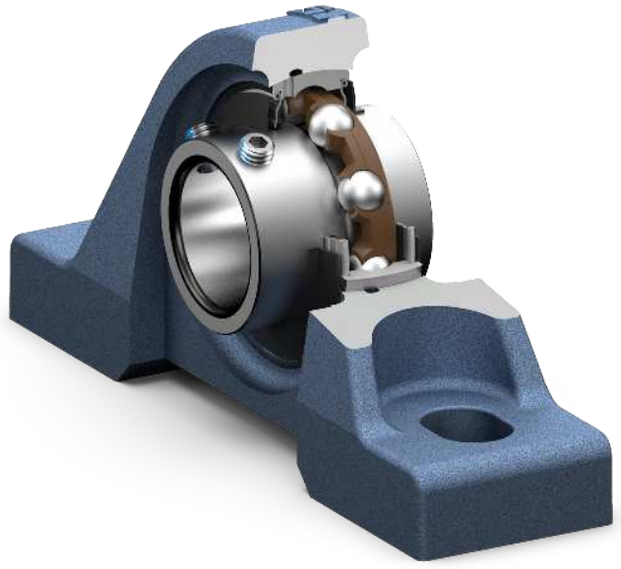
Diagram 1



Note: testing results based on two 1/4 in shaft set screws, individual results may vary depending on shaft material and hardness, and other factors.

Fig. 1

Please note that end covers are not included with the SKF insert bearing units and must be ordered separately.



Optional end covers for flanged and take-up housings

To comply with health and safety regulations, SKF UC bearing units with flanged and take-up housings are available with polypropylene end covers. SKF offers these end covers as high availability option.

SKF high-quality grease

Poor lubrication accounts for over 36% of premature bearing failures. In fact, most low speed applications fail due to lubrication related issues, not necessarily due to bearing fatigue. Provided recommended maintenance intervals are followed, SKF high-quality grease helps bearings achieve expected service life as the SKF range of lubricants are designed to perform under real conditions **(→ Table 1)**.

Sealing system

The standard seal for SKF insert bearing units – UC range is the rugged integral seal protected with an additional flinger to help exclude contaminants. The integral seal consists of a pressed sheet steel washer with a sealing lip made of NBR bonded to its inner surface. The coated non-contact sheet steel washer forms a narrow gap with the cylindrical surface of the inner ring protecting the land-riding seal against contaminants. Enhancing the seal's effectiveness are externally applied coated flingers.

Other sealing solutions are available for extremely contaminated operating environments. Please contact the SKF application engineering service for more information.

Benefit from the SKF's global distribution network

Finding replacement parts can sometimes be a challenge. SKF is well positioned to bring you the right support and the right parts, no matter where your application is based. We have 17 000 distribution locations in over 130 countries around the globe.

Table 1

Lubricating greases

Technical specification	**Grease fills in** standard insert bearings standard insert bearing units
Thickener	Lithium-calcium soap
Base oil	Mineral oil
Colour	Yellowish brown
Temperature range [°C] (continuous operation)	–30 to +120[1)]
Kinematic viscosity [mm2/s]	190/15
Consistency (to NLGI scale)	2
Other	Long life grease

1) The temperature range for reliable operation in accordance with the SKF traffic light concept is between 10 and 120 °C.

The advantages for you at a glance

- Interchangeable with JIS* housings
- A more secure locking system in applications where systemic vibrations occur
- Widely available throughout SKF's global distribution network resulting in shorter lead times

* JIS: Japanese Industrial Standards

Designations

The complete designation for the SKF insert bearing units – UC range consists of:

- Prefixes, identifying insert bearing or housing series
- Figures, identifying the size
- Suffixes, identifying design and variants

More details about the basic designations and the supplementary designations can be obtained from the table **Designation system.**

Designation system

Examples:						
UCP 205	UC	P	2	05		
UCF 205-15	UC	F	2	05-15		
UCFL 204B	UC	FL	2	04	B	
T 215		T	2	15		
UC 312	UC		3	12		

Bearing series

UC Insert bearing, cylindrical bore with set screws

Housing type

P Pillow block unit
F Flanged unit, square 4-bolt flange
FL Flanged unit, oval 2-bolt flange
FC Flanged unit, round 4-bolt flange
FS Flanged unit, square piloted 4-bolt flange [2]
T Take-up unit for linear motion [1]
FB Flanged unit, 3-bolt flange [1]
PA Tapped base pillow block unit[1]
LP Pillow block unit, lower center height [2]
PH Pillow block unit, high center height [2]
IP Thick pillow block unit [2]
FA Take-up unit for swivel motion [2]
C Cartridge unit [2]
HA Hanger unit [2]

Dimension series

2 Normal series
3 Heavy duty series [1]

Bore diameter

For metric shaft
04 20 mm
15 75 mm

For inch shaft [1]
Two-digit number follows the basic metric bearing size and is separated from this by a hyphen; it is the number of sixteenths ($1/16$) of an inch
05-15 $15/16$ in = 23,813 mm

Suffixes

B Revise mounting bearing in housing
Z With inch threaded attaching holes when metric is the standard
J Pressed steel cage (omitted in size above 210 as pressed steel cage is standard feature)
AH Air handling execution
VZ811 With groove for mounting end cover (omitted in some flanged housing types as a standard design)

[1] Planned launch mid 2017. Contact your local SKF representative for more information.
[2] Planned launch mid 2018. Contact your local SKF representative for more information.

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