

SKF Y-bearing units



Although the Y-bearing unit concept was introduced to the market many decades ago, progress in manufacturing techniques and the development of new materials have enabled SKF Y-bearing units to maintain their worldwide lead in terms of versatility and value for money.

The range of SKF Y-bearing units offer the performance features and the ease of fitting asked for by today's designers; together with the product availability and convenience demanded by today's bearing purchasers.

The basic features of the Y-bearing unit remain the same:

- Enhanced range wider choice
- Quick and easy installation

- Superior seal options for longer life
- Minimum maintenance
- Metric or imperial option

The Y-bearing unit contains a sealed, single row deep groove ball bearing with a convex sphered outside diameter and locking device on the inner ring, supported in a housing with a corresponding concave sphered seating. The housings are made either of cast iron, pressed steel or a composite polyamide (Y-TECH).

The sphered seating surfaces enable initial errors of alignment between the shaft and housing to be compensated for. But, the units do not permit axial displacement and are therefore unsuitable for



non-locating bearing arrangements. The bearings and housings are normally supplied complete, but may also be ordered as separate components.

Y-bearing units with cast iron housings

Features

- 12mm (1/2") to 100mm (4") bore diameter
- -30°C to +110°C operating temperature
- One piece housing
- End covers optional
- Relubrication facility





Housing design options

- Plummer (pillow) block unit with 2 attachment holes
- Plummer (pillow) block unit with short base containing 2 attachment holes
- Square flanged unit with 4 attachment holes
- Round flanged unit with 4 attachment holes
- Oval flanged unit with 2 attachment holes
- Take-up units

Y-bearing units with pressed steel housings

Features

- 12mm (5/8[°]) to 50mm (1-15/16[°]) bore diameter
- Passivated zinc plated
- Light duty applications
- Two piece housing
- Sealed for life

Housing design options

- Plummer (pillow) block unit with 2 attachment holes
- Round flanged unit with 3 attachment holes
- Triangular flanged unit with 3 attachment holes
- Oval flanged unit with 2 attachment holes



Y-TECH bearing units (composite polyamide)

Features

- 20mm (3/4") to 40mm (1-9/16") bore diameter
- -30°C to +110°C operating temperature
- Lightweight and strong
- Maintenance free and lubricated for life
- Interchangeable with cast iron units
- Resistant to most chemicals
- One piece composite housing
- Corrosion resistant, easy to clean
- Heavy duty seals as standard
- End covers optional

Housing design options

- Plummer (pillow) block unit with 2 attachment holes
- Square flanged unit with 4 attachment holes
- Oval flanged unit with 2 attachment holes



Y-bearings (insert bearing)



Options

- Grub (set) screw locking
- Stainless steel with grub screw locking
- Eccentric locking collar
- Adapter sleeve
- Extended inner ring on standard adapter sleeve
- Standard inner ring
- Extended standard inner ring

Seals

Options

Super agri seal

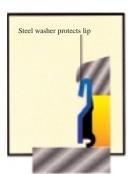
- Highly efficient protection in normal applications
- Pressed steel shields with vulcanised lip seals

Super agri seal plus plain flinger

• Superior sealing at no extra cost

Super agri seal plus rubberised flinger

- Six part sealing system maximum effectiveness
- Out-performs standard tri-ply alternatives
- Operates effectively at lower running temperatures and at all speeds
- Extended seal life seal lips grease lubricated
- Fitted as standard on all Y-TECH units







Super agri seal

+ plain flinger



2RF Super agri seal + rubberised flinger

Extreme temperature Y-bearing units

Features

- -150°C to +350°C operating temperature
- 20mm (3/4") to 60mm (2-7/16") bore diameter
- Lubricated for life
- Cast iron housing with special galvanised coating
- Choice of two bearing inserts normal $(-40^{\circ}\text{C to} + 250^{\circ}\text{C})$ or extreme (-150°C) to $+350^{\circ}$ C) operating conditions



- Plummer (pillow) block unit with 2 attachment holes
- Square flanged unit with 4 attachment holes
- Oval flanged unit with 2 attachment holes

Typical Y-bearing unit applications









Agricultural machinery

- Combine harvesters
- Harvesters (peas, tomatoes, etc.)
- Mowing machines
- Round balers/forage presses
- Disc harrows
- Grape pickers
- Manure spreaders
- Sugar beet harvesters/processors



Conveyor systems

- Airport luggage systems
- Cement and concrete industry
- Quarries and mines
- Ceramic and pottery industry



Food processing

- Bakery plants
- Packaging machines
- Canning plants
- Bottling plants
- Fans and blowers
- Sludge and waste water treatment plants





SKF (U.K.) Limited Sundon Park Road, Luton Bedfordshire LU3 3BL Tel: 01582 490049 Fax: 01582 848091 E-mail: marketing.uk@skf.com www.skf.co.uk







© Copyright SKF 2002

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.



A wide choice

The right bearing is often governed by one or more criteria such as initial cost, maintenance requirements, or resistance to the given environmental conditions. Throughout the course of development of the Y-bearing unit and Y-TECH ranges, many variants have been added to satisfy the market demand.

The following are some of the main optional features included in today's product range:

- Heavy duty seals to protect against solid and liquid contamination
- **Rubberised flingers** for conditions of extreme contamination by dust
- **Grub screw inner ring fixing** for either constant or variable direction of rotation
- Eccentric locking collar for fixed direction or rotation
- Zinc plated insert corrosion resistance at low cost
- Stainless steel bearing virtually complete corrosion protection
- **Pressed steel housing** where cost is more important than load considerations
- White colour finish super clean appearance
- **Y-TECH (composite polyamide)** lightweight, strong, corrosion resistant and maintenance-free