

SKF Food Line Y-bearing units

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SKF Food Line Y-bearing units

To meet the requirements of the food, beverage and pharmaceutical processing industries, SKF has developed a special range of Y-bearing units.

The housings for SKF Food Line Y-bearing units are made of three different materials:

- Composite with dedicated rugged design
- Cast stainless steel for heavy-duty applications
- Zinc-coated cast iron for a cost-effective solution

The units are equipped with Y-bearings made of stainless steel (YAR 2-2RF/HV series) or of high quality, carbon chromium steel with zinc coated inner and outer rings (YAR 2-2RF/VE495 series). The bearing inner rings are extended on both sides and are locked on the shaft with grub screws.

The sealing arrangement, proven to be highly effective during washdowns, consists of a stainless steel supported, grease filled, multi-lip FDA approved synthetic rubber contacting and labyrinth seal with a stainless steel flinger. (→ **fig. 1**).

The SKF Food Line Y-bearing units are pre-lubricated for life with a non-toxic food-grade grease, based on a PAO oil and an aluminium-complex soap as a thickener (food industry approved NSF H1).

Designs

SKF Food Line Y-bearing units with composite housings

Strong, lightweight, chemical resistant

Capable of resisting citric acids, cooking fats and most food and beverage processing chemicals, composite SKF Food Line Y-bearing housings are made from a thermoplastic material that is lighter than cast iron housings. The housing's spherical bore accommodates the insert bearing's spherical outer surface, enabling the unit to compensate for initial misalignment.

Other performance advantages include:

- High fracture strength – dedicated rugged design contributes to its fracture strength. Radial breaking load is far greater than the static load rating of the bearing. SKF Food Line Y-bearing units are estimated to have the highest fracture strength of any composite unit on the market.
- Flush mounting – A polyamide filled housing base or a solid base allow the units to seat flush with the mounting surface. This surface-to-surface mounting eliminates gaps where contaminants could potentially collect.
- Stability – Stainless steel bolt-hole inserts provide added strength and stability to each housing foot.

Housing designs

SKF Food Line Y-bearing unit composite housings are available in the following designs (→ **fig. 2**):

- plummer block
- two- and four-bolt flange (oval or square shape)
- tapped base
- three-bolt bracket flange
- take-up

Fig. 1

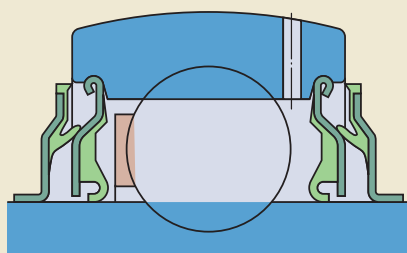


Fig. 2



Bearing designs

SKF Food Line Y-bearing units with composite housings are available with Y-bearings made of stainless steel (YAR 2-2RF/HV series) or of high quality carbon chromium steel with zinc coated inner and outer rings (YAR 2-2RF/VE495 series).

SKF Food Line Y-bearing units with stainless steel housings**Extreme strength and toughness**

For extremely challenging food and beverage applications requiring superior durability and chemical resistance, housings cast from AISI 300 stainless steel may be the best solution.

Strength – Y-bearing housings are designed for applications where very heavy loads or shock loads are possible.

Safety – In applications where housing failure could result in injury, the safety factor inherent in cast steel is an advantage.

Chemical resistance – Compared to composite and zinc coated cast iron housings, cast stainless steel offers a higher level of resistance to aggressive washdown chemicals. Cast stainless housings are not affected by strong concentrations of chlorine, hydrogen peroxide or other chemicals.

Smooth surfaces – The smooth surfaces of cast SKF stainless steel housings make them easier to clean. The bases are machined flat with no recesses to trap debris and bacteria, and the exposed surfaces have no unnecessary crevices or pockets.

Housing designs

Stainless steel SKF Food Line Y-bearing housings are available in the following designs (→ **fig. 2**):

- plummer block
- two- and four-bolt flange (oval or square shape)
- tapped base

Bearing designs

SKF Food Line Y-bearing units with stainless steel housings are available with Y-bearings made of stainless steel (YAR 2-2RF/HV series).

SKF Food Line Y-bearing units with coated cast iron housings**Strong and corrosion resistant**

Strength, durability and long-term corrosion resistance make coated cast iron SKF housings an ideal choice for red meat, pork and poultry processing applications.

The heavy-duty cast iron is protected with a CrVI-free zinc coating on all housing surfaces for long-term corrosion resistance. The zinc coating eliminates the flaking problems associated with nickel plated products.

Chemical resistance – These zinc coated housings are resistant to the majority of common washdown solutions.

Housing designs

Coated cast iron SKF FL Y-bearing housings are available in the following designs:

- plummer blocks
- two- or four-bolt flange (oval or square shape)
- tapped base

Bearing designs

SKF Food Line Y-bearing units with coated cast iron housings are available with Y-bearings made of high quality carbon chromium steel with zinc coated inner and outer rings (YAR 2-2RF/VE495 series).

End covers**Secure fit, operator safety**

To enhance worker safety, SKF recommends using end covers in any situation where a shaft protrudes from a housing and is not otherwise safely and adequately guarded. Special End Covers, types ECW and ECL, are available for all SKF Food Line Y-bearing units and must be ordered separately.

Detailed information about SKF end covers can be found in the publication *SKF Food Line Y-bearing units – a maintenance-free solution for wet, abrasive and contaminating environments* or in the product information available online at skf.com/bearings.

