

# SKFY-bearing units with composite housings

Lightweight, cost-effective and relubrication-free



# Reduce total cost of ownership with SKF composite housings

SKFY-bearing units with composite housings are part of SKF's extensive line of cost-effective mounted products. These lightweight, ready-to-mount units are particularly well-suited for applications with relatively high speeds, moderate loads and where reliability and minimal maintenance are key factors.

Weight of SKF composite housing vs

SKF cast iron housing



The radial breaking loads of SKF composite housings are greater than the basic static load rating for the SKF Y-bearings that fit to them.

NOTE: For more information on SKF composite housing performance, contact your SKF representative.

### A superior housing

SKF composite housings are made from a glass fibre reinforced polyamide material. These lightweight housings resist a variety of chemicals and diluted acids.

For durability, mechanical strength and thermal stability, SKFY-bearing units with composite housings are reinforced with a steel coil moulded around the bearing bore and zinc coated steel liners in the mounting bolt holes. Consequently, the radial breaking load is far greater than the basic static load rating of the SKFY-bearing that can be fitted into it.



### **Relubrication-free units**

The sealed Y-bearing is pre-lubricated for the life of the bearing with a lithium/ calcium base grease. This long lasting, water-resistant grease combined with the highly effective integral seals and high performance design of appropriately selected SKF Y-bearing units can provide long, reliable service life without the costs and environmental issues of relubrication.

## Sealing solutions, bearing designs and materials

Assembled, ready-to-mount, SKF Y-bearing units with composite housings are available fitted with standard Y-bearings that feature either of two standard sealing solutions (-> table 1).

SKF composite housings can, however, be assembled with all appropriately sized SKFY-bearing designs. This includes all shaft location methods. all material options (e.g. zinc-coated and stainless steel bearings) and all seal options. Seal options can range from non-contact shields for high-speed, industrial fans in relatively clean environments to the patented SKF 5-lip seals used in highly contaminated environments, such as agricultural applications. In these cases, SKF composite housings and SKFY-bearings need to be ordered separately and assembled together.

Additional information about seals, bearing designs and materials can be found in the SKF publications, *Y-bearings and Y-bearing units* (**PUB 13728 EN**) and *Rolling bearings* catalogue (**PUB 10000**). Y-bearings with highly effective integral seals and filled with long lasting, high quality, water resistant lithium/calcium based grease offer ~ long service life without relubrication.

The standard inner ring, extended on both sides, uses the grub (set) screw locking method. Other locking methods are available on request.

Dimensionally interchangable with cast iron housings that conform to ISO 3228.

Composite material is up to 75% lighter than cast iron. Good resistance to chemicals and diluted acids. The spherical outside surface of the bearing and matching housing bore accommodate initial misalignment up to 5°.

> Moulded in steel coil provides additional mechanical strength and thermal stability.

with cast iron unitsExcellent UV resistance

Housing highlights

temperatures

Lightweight

Excellent corrosion resistance

• Dimensionally interchangeable

• Tolerant of high and low

- Paintable
- Recyclable
- Available with end covers

 Mounting bolt holes reinforced with corrosion resistant Cr<sup>6+</sup> free zinc coated steel inserts for mechanical strength and thermal stability.

			Table 1
Housing / bearing combinations available as ready-to-mount units			
			$\diamond$
Y-bearings	Plummer block	Square flanged	Oval flanged
	SYK 5(00)	FYK 5(00)	FYTBK 5(00)
YAR 2-2F	<b>SYK TF</b>	<b>FYK TF</b>	<b>FYTBK TF</b>
	20–40 mm	20–40 mm	20–35 mm
YAR 2-2RF	<b>SYK TR</b>	<b>FYK TR</b>	<b>FYTBK TR</b>
	20–40 mm	20–40 mm	20–35 mm

SKF composite housings can be assembled with all appropriately sized SKFY-bearing designs, shaft location methods, materials and seal options, including those with inch dimensioned bore (3/4 in – 1 1/2 in). They must, however, be ordered separately and assembled together.

#### **Standard seal options** Other options available on request



2F seal



Heavy duty 2RF seal







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