

SYF 30 FM - Ball bearing units

Image may differ from product. See technical specification for details.

# SYF 30 FM

Short base pillow block ball bearing unit with narrow inner ring and eccentric locking collar, cast iron

Short base pillow (plummer) block ball bearing units consist of an insert bearing mounted in a cast iron housing that can be bolted to a support surface. This variant is intended for use in applications where the direction of rotation is constant. It has a narrow inner ring and is locked onto the shaft by an eccentric locking collar, making it easy to mount.

- Strong
- Narrow design
- Ready to mount
- Lubricated and sealed bearing
- Designed for rotation in one direction
- Accommodate static initial misalignment

## **Overview**

## **Dimensions**

Shaft diameter	30 mm
Centre height (pillow block)	42.9 mm
Housing overall width	40 mm
Centre distance between bolt holes	76.2 mm
Bearing width, total	35.7 mm

### Performance

Basic dynamic load rating	19.5 kN
Basic static load rating	11.2 kN
Limiting speed	6 300 r/min
Note	Limiting speed with shaft tolerance h6

# **Properties**

Housing type	Pillow block
Number of bolt holes for fasteners	2
Fastening bolt hole type	Threaded
Retaining feature, inner ring	Eccentric collar
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal on both sides
Sealing type	Contact, standard
Sealing, unit	Without
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

# Logistics

eClass code	23-05-08-02
UNSPSC code	31171536

# **Technical specification**

Compliance with standard	Not standardized
Purpose specific	For material handling applications
Material, housing	Cast iron
Sealing, bearing	Seal on both sides
Sealing type, bearing	Contact, standard
Sealing, unit	Without
Coating	Without

Dimensions - SYF 30 FM



## **Dimensions**

d	30 mm	Bore diameter
$d_1$	≈ 39.7 mm	Shoulder diameter of inner ring
d <sub>2</sub>	44.1 mm	Outside diameter of locking ring
А	40 mm	Base width
$A_1$	25 mm	Top width
B <sub>1</sub>	35.7 mm	Overall bearing width
B <sub>4</sub>	5.95 mm	Distance from locking device side face to thread centre
Н	42.9 mm	Height of spherical seat centre
H <sub>2</sub>	82 mm	Overall height
J	76.2 mm	Centre distance between bolt holes
L	98 mm	Overall length
$s_1$	26.7 mm	Distance from locking device side face to raceway centre

### **GREASE FITTING**

$D_N$	6.5 mm	Diameter of head sphere of grease fitting

SW <sub>N</sub>	7 mm	Hexagonal key size for the grease fitting
G <sub>N</sub>	1/4-28 SAE-LT	Thread of grease fitting

#### THREADED HOLE

R <sub>G</sub>	1/4-28 UNF	Housing thread for the grease fitting
$R_1$	3 mm	Axial position of the housing thread
$R_{\alpha}$	45 °	Angular position of the housing thread

### Calculation data

Basic dynamic load rating	С	19.5 kN
Basic static load rating	C <sub>0</sub>	11.2 kN
Fatigue load limit	Pu	0.475 kN
Limiting speed		6 300 r/min
		Limiting speed with shaft tolerance h6

## Mounting information

Thread for attachment bolts	G	M10
Thread length	$G_1$	15 mm
Set screw	G <sub>2</sub>	M8x1
Hexagonal key size for set screw		4 mm
Recommended tightening torque for set screw		6.5 N·m

#### Tolerances and clearances

## The values depend on the included bearing:

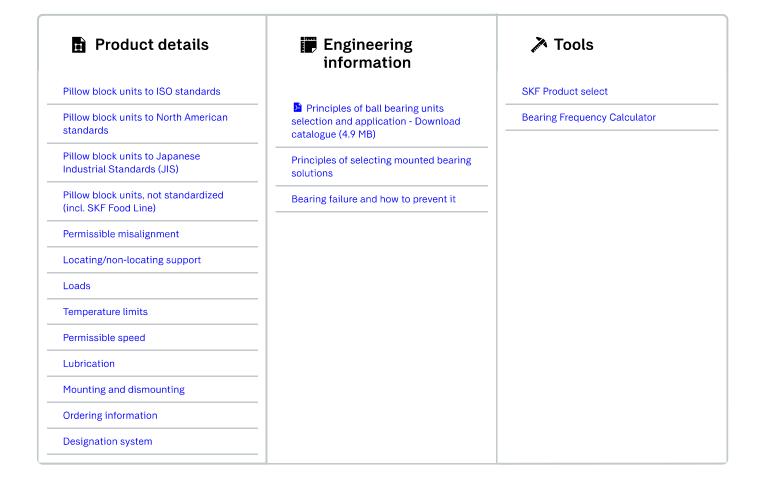
- Bore diameter tolerance → table 1
- Radial internal clearance → table 2
- Recommended fit → table 3
- Shaft tolerance → table 4

# Compatible products

## Component

Insert bearing with an eccentric locking collar and narrow inner ring	YET 206
Short base pillow block housing for insert bearings, cast iron	SYF 506

### **More Information**





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