

SYJ 70 TF



Pillow block ball bearing unit with extended inner ring and set screw locking, cast iron, Japanese standards

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 suitable for applications with both constant and alternating directions of rotation. It has an inner ring extended on both sides and is locked onto the shaft by tightening a set screw on the inner ring, making it easy to mount.

- Strong
- Ready to mount
- Designed for a constant and alternating rotation
- Lubricated and sealed bearing
- Quick locking onto the shaft
- Cost-effective

Dimensions

Bearing width, total	2.752 in
Centre distance between bolt holes	8.268 in
Centre height (pillow block)	3.126 in
Housing overall width	2.835 in
Shaft diameter	2.756 in

Performance

Basic dynamic load rating	14 028 lbf
Basic static load rating	10 116 lbf
Limiting speed	2 800 r/min
Note	Limiting speed with shaft tolerance h6

Properties

Bore type	Cylindrical
Coating	Without
Fastening bolt hole type	Plain
Grease fitting	With
Housing type	Pillow block
Lubricant	Grease
Material, bearing	Bearing steel
Material, housing	Cast iron
Number of bolt holes for fasteners	2
Relubrication hole	With

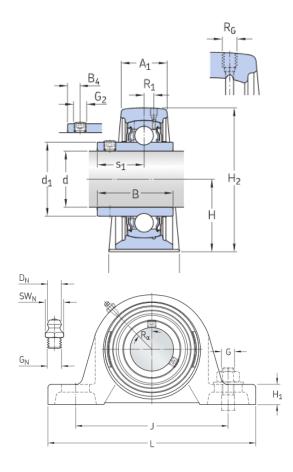


Retaining feature, inner ring	Set screws
Rubber seating ring	Without
Sealing type	Contact, standard
Sealing, bearing	Seal and flinger on both sides
Sealing, unit	Without



Technical Specification

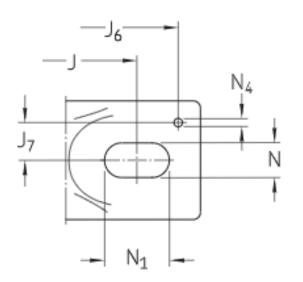
Compliance with standard	JIS
Purpose specific	For material handling applications
Material, housing	Cast iron
Sealing, bearing	Seal and flinger on both sides
Sealing type, bearing	Contact, standard
Sealing, unit	Without
Coating	Without



Dimensions

Bore diameter	2.756 in	d
Shoulder diameter of inner ring	≈ 3.427 in	d_1
Base width	2.835 in	А
Top width	1.811 in	A ₁
Width of inner ring	2.752 in	В
Distance from locking device side face to thread centre	0.472 in	B ₄
Height of spherical seat centre	3.126 in	Н
Foot height	1.063 in	H_1
Overall height	6.122 in	H ₂
Distance between attachment bolts	8.268 in	J
Distance between attachment bolts	max. 8.465 in	J
Distance between attachment bolts	min. 8.071 in	J
Overall length	10.472 in	L
Diameter of attachment bolt hole	0.984 in	Ν
Length of attachment bolt hole	1.181 in	N_1
Distance from locking device side face to raceway centre	1.563 in	s ₁





Threaded hole

R _C 1/4-28 UNF	Housing thread for the grease fitting
R ₁ 0.236 in	Axial position of the housing thread
R _a 45 °	Angular position of the housing thread

Grease fitting

D ₁ 0.256 in	Diameter of head sphere of grease fitting
S\ 0.276 in	Hexagonal key size for the grease fitting
G _↑ 1/4-28 SAE-LT	Thread of grease fitting

Dowel pins

J ₆ 9.685 in	Distance of dowel pins
J ₇ 1.024 in	Axial offset of dowel pins
N ₄ 0.157 in	Recommended diameter for dowel pins

Calculation data

Basic dynamic load rating	С	14 028 lbf
Basic static load rating	C _O	10 116 lbf
Fatigue load limit	P _u	418 lbf
Limiting speed		2 800 r/min
		Limiting speed with shaft tolerance h6

Mass

Mass bearing unit	13.669 lb
-------------------	-----------

Mounting information

Set screw	G ₂	M10x1
Hexagonal key size for set screw		0.197 in



Recommended tightening torque for set screw		146.037 lbf-in
Recommended diameter for attachment bolts, mm	G	19.99 mm
Recommended diameter for attachment bolts, inch	G	0.75 in

Included products

Housing	SYJ 514
Bearing	YAR 214-2F



Terms and conditions

By accessing and using this website / app owned and published by AB SKF (publ.) (556007-3495 · Gothenburg) ("SKF"), you agree to the following terms and conditions:

Warranty Disclaimer and Limitation of Liability

Although every care has been taken to assure the accuracy of the information on this website / app, SKF provides this information "AS IS" and DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. You acknowledge that your use of this website / app is at your sole risk, that you assume full responsibility for all costs associated with use of this website / app, and that SKF shall not be liable for any direct, incidental, consequential, or indirect damages of any kind arising out of your access to, or use of the information or software made available on this website / app. Any warranties and representations in this website / app for SKF products or services that you purchase or use will be subject to the agreed upon terms and conditions in the contract for such product or service. Further, for non-SKF websites / apps that are referenced in our website / app or where a hyperlink appears, SKF makes no warranties concerning the accuracy or reliability of the information in these websites / apps and assumes no responsibility for material created or published by third parties contained therein. In addition, SKF does not warrant that this website / app or these other linked websites / apps are free from viruses or other harmful elements.

Copyright

Copyright in this website / app copyright of the information and software made available on this website / app rest with SKF or its licensors. All rights are reserved. All licensed material will reference the licensor that has granted SKF the right to use the material. The information and software made available on this website / app may not be reproduced, duplicated, copied, transferred, distributed, stored, modified, downloaded or otherwise exploited for any commercial use without the prior written approval of SKF. However, it may be reproduced, stored and downloaded for use by individuals without prior written approval of SKF. Under no circumstances may this information or software be supplied to third parties.

This website /app includes certain images used under license from Shutterstock, Inc.

Trademarks and Patents

All trademarks, brand names, and corporate logos displayed on the website / app are the property of SKF or its licensors, and may not be used in any way without prior written approval by SKF. All licensed trademarks published on this website / app reference the licensor that has granted SKF the right to use the trademark. Access to this website / app does not grant to the user any license under any patents owned by or licensed to SKF.

Changes

SKF reserves the right to make changes or additions to this website / app at any time.