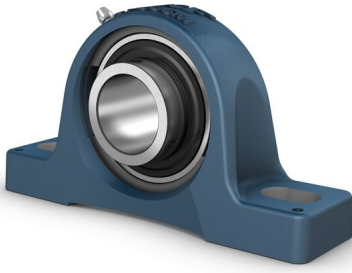


SY 50 TFPillow block ball bearing unit with extended inner ring and set screw locking, cast iron, ISO standards



standards

Pillow block ball bearing unit with extended inner ring and set screw locking, cast iron, ISO 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
- Lubricated and sealed bearing
- Quick locking onto the shaft
- Cost-effective

Overview

Dimensions

Shaft diameter	50 mm
Centre height (pillow block)	57.2 mm
Housing overall width	54 mm
Centre distance between bolt holes	157 mm
Bearing width, total	51.6 mm

Performance

Basic dynamic load rating	35.1 kN
Basic static load rating	23.2 kN
Limiting speed	4 000 r/min
Note	Limiting speed with shaft tolerance h6

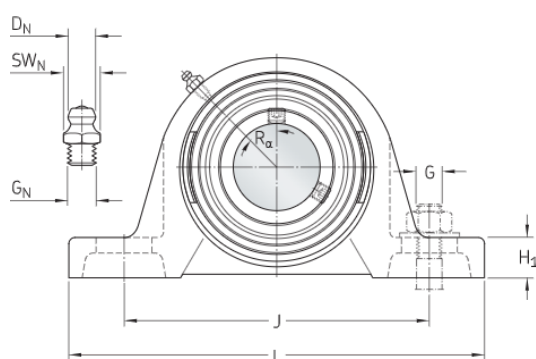
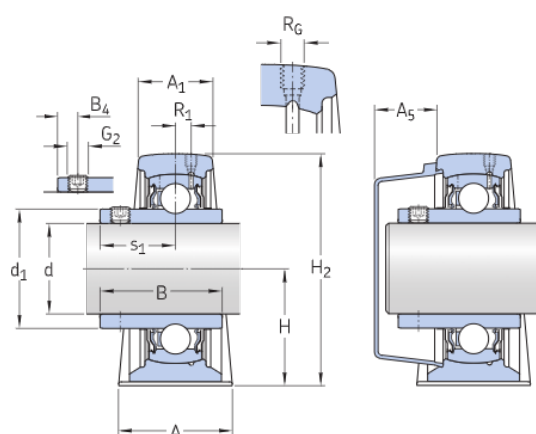
Properties

Housing type	Pillow block
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Cast iron

Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal and flinger on both sides
Sealing type	Contact, standard
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

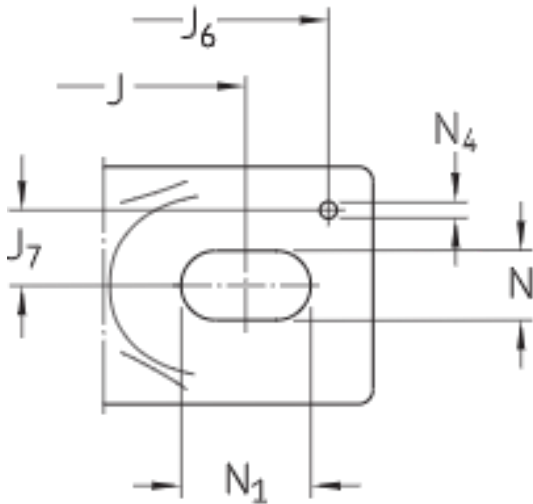
Technical Specification

Compliance with standard	ISO
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	Optional end cover
Coating	Without



Dimensions

d	50 mm	Bore diameter
d ₁	≈ 62.51 mm	Shoulder diameter of inner ring
A	54 mm	Base width
A ₁	34 mm	Top width
A ₅	33 mm	Standout of end cover
B	51.6 mm	Width of inner ring
B ₁	51.6 mm	Overall bearing width
B ₄	9 mm	Distance from locking device side face to thread centre
H	57.2 mm	Height of spherical seat centre
H ₁	22 mm	Foot height
H ₂	114 mm	Overall height
J	157 mm	Distance between attachment bolts
J	max. 165 mm	Distance between attachment bolts
J	min. 149 mm	Distance between attachment bolts
L	203 mm	Overall length
N	18 mm	Diameter of attachment bolt hole



N_1	26 mm	Length of attachment bolt hole
s_1	32.6 mm	Distance from locking device side face to raceway centre

Threaded hole

R_c	1/4-28 UNF	Housing thread for the grease fitting
R_1	4 mm	Axial position of the housing thread
R_c	45 °	Angular position of the housing thread

Grease fitting

D	6.5 mm	Diameter of head sphere of grease fitting
S_1	7 mm	Hexagonal key size for the grease fitting
G	1/4-28 SAE-LT	Thread of grease fitting

Dowel pins

J_6	187 mm	Distance of dowel pins
J_7	19 mm	Axial offset of dowel pins
N	4 mm	Recommended diameter for dowel pins

Calculation data

Basic dynamic load rating	C	35.1 kN
Basic static load rating	C_0	23.2 kN
Fatigue load limit	P_u	0.98 kN
Limiting speed		4 000 r/min
Limiting speed with shaft tolerance h6		

Mass

Mass bearing unit

2.65 kg

Mounting information

Set screw	G ₂	M10x1
Hexagonal key size for set screw		5 mm
Recommended tightening torque for set screw		16.5 N·m
Recommended diameter for attachment bolts, mm	G	16 mm
Recommended diameter for attachment bolts, inch	G	0.625 in

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