

P2BT 100-TF

Short base pillow block ball bearing unit with extended inner ring and set screw locking, cast iron, North American standards

Short base pillow (plummer) block ball bearing units consist of an insert bearing mounted in a cast iron housing. This variant has threads for attachment bolts and 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

Bearing width, total	1.343 in
Centre distance between bolt holes	2 in
Centre height (pillow block)	1.437 in
Housing overall width	1.5 in
Shaft diameter	1 in

Performance

Basic dynamic load rating	3 147 lbf
Basic static load rating	1 754 lbf
Limiting speed	7 000 r/min
Note	Limiting speed with shaft tolerance

Properties

Bore type	Cylindrical
Coating	Without
Fastening bolt hole type	Threaded
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

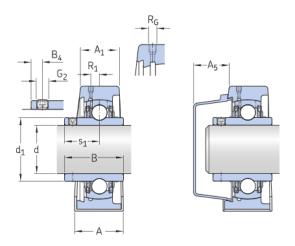


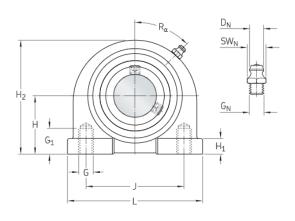
Retaining feature, inner ring	Set screws
Rubber seating ring	Without
Sealing type	Contact, standard
Sealing, bearing	Seal and flinger on both sides
Sealing, unit	Optional end cover



Technical Specification

Compliance with standard	North American standard
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	1 in	Bore diameter
d_1	≈ 1.328 in	Shoulder diameter of inner ring
Α	1.5 in	Base width
A ₁	0.839 in	Top width
A ₅	0.709 in	Standout of end cover
В	1.343 in	Width of inner ring
B ₄	0.197 in	Distance from locking device side face to thread centre
Н	1.437 in	Height of spherical seat centre
H ₁	0.469 in	Foot height
H ₂	2.811 in	Overall height
J	2 in	Distance between attachment bolts
L	3 in	Overall length
s ₁	0.78 in	Distance from locking device side face to raceway centre



Threaded hole

R _C 1/8-27 NPT	Housing thread for the grease fitting
R ₁ 0.012 in	Axial position of the housing thread
R _a 45 °	Angular position of the housing thread

Grease fitting

D ₁ 0.259 in	Diameter of head sphere of grease fitting
S\ 0.438 in	Hexagonal key size for the grease fitting
G _N 1/8-27 NPT	Thread of grease fitting

Calculation data

Basic dynamic load rating	С	3 147 lbf
Basic static load rating	C_0	1 754 lbf
Fatigue load limit	P_{u}	75 lbf
Limiting speed		7 000 r/min
		Limiting speed with shaft tolerance h6

Mass

Mass bearing unit	1.477 lb
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Mounting information

Thread for attachment bolts	G	3/8-16 UNC
Thread length	G_1	0.5 in
Set screw	G_2	1/4-28 UNF
Hexagonal key size for set screw		0.125 in
Recommended tightening torque for set screw		35.403 lbf-in

Included products



Housing P2BT 505
Bearing YAR 205-100-2F

Associated products

End cover ECY 205



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