FY 55 WFSquare flanged ball bearing unit with eccentric locking, cast iron housing, ISO

Square flanged ball bearing unit with eccentric locking, cast iron housing, ISO

These square flanged ball bearing units are compliant with ISO standards. They consist of an insert bearing, with an extended inner ring and eccentric locking, and are intended primarily for use in applications where the direction of rotation is constant. The bearing is mounted in a cast iron housing, which can be bolted to a machine wall or frame. Ball bearing units can accommodate moderate initial misalignment, but normally do not permit axial displacement.

- Resist high levels of contamination
- Designed for high temperatures and speeds
- Accommodate relatively heavy loads
- Cost-effective

Overview

Dimensions

Shaft diameter	55 mm
Housing overall width	47.5 mm
Width, total	74.6 mm
Centre distance between bolt holes	130 mm
Bearing width, total	71.4 mm

Performance

Basic dynamic load rating	43.6 kN
Basic static load rating	29 kN
Limiting speed	3 600 r/min
Note	Limiting speed with shaft tolerance h6

Properties

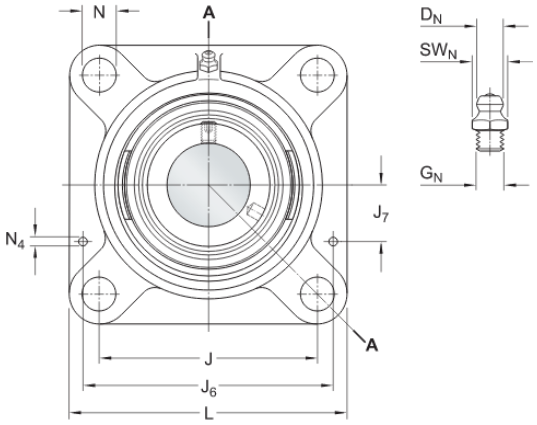
Housing type	Flanged
Flanged housing type	Square
Number of bolt holes for fasteners	4
Fastening bolt hole type	Plain
Retaining feature, inner ring	Eccentric collar
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Cast iron

Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal 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, For air 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

NOT FOUND



Dimensions

d	55 mm	Bore diameter
d_1	≈ 69.06 mm	Outer diameter of inner ring
d_2	74.5 mm	Outside diameter of locking ring
A	47.5 mm	Overall width
A_1	16 mm	Flange width
A_3	3.2 mm	Depth of centring recess
A_5	37.5 mm	Standout of end cover
B	55.6 mm	Width of inner ring
B_1	71.4 mm	Overall bearing width
B_4	7.9 mm	Distance from locking device side face to thread centre
D_{b1}	122 mm	Top external diameter
D_{b2}	134 mm	Base external diameter
D_c	150.8 mm	Diameter of housing centering recess
J	130	Distance between attachment bolts

	mm	
L	162 mm	Overall length
N	18 mm	Diameter of attachment bolt hole
s_1	43.6 mm	Distance from locking device side face to raceway centre
T	74.6 mm	Overall unit width

Threaded hole

R_G	1/4-28 UNF	Housing thread for grease fitting
R_1	32 mm	Axial position of the housing thread

Grease fitting

D_N	6.5 mm	Diameter of head sphere of grease fitting
SW	7 mm	Hexagonal key size for the grease fitting
G_N	1/4-28 SAE-LT	Thread of grease fitting

Dowel pins

J_6	148 mm	Distance of dowel pins
J_7	45 mm	Axial offset of dowel pins
N_4	4 mm	Recommended diameter for dowel pins

Calculation data

Basic dynamic load rating	C	43.6 kN
Basic static load rating	C_0	29 kN
Fatigue load limit	P_u	1.25 kN
Limiting speed		3 600 r/min
		Limiting speed with shaft tolerance h6

Mass

Mass bearing unit		3.55 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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