



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

## TU 20 FM

**Take-up cast iron unit with insert ball bearing, eccentric locking collar and narrow inner ring, ISO**

Take-up ball bearing units, consisting of an insert bearing based on a sealed deep groove ball bearing mounted in a grey cast iron housing. This variant is intended for use in applications where the direction of rotation is constant. It has an inner ring extended on one side, with an eccentric locking collar, enabling quick and easy mounting onto the shaft.

- Designed for rotation in one direction
- Quick and easy to mount onto the shaft
- Accommodate static initial misalignment
- Long service life
- Reduced noise and vibration levels

## Overview

### Dimensions

Shaft diameter	20 mm
Housing overall width	34 mm
Bearing width, total	30.5 mm

### Performance

Basic dynamic load rating	12.7 kN
Basic static load rating	6.55 kN
Limiting speed	8 500 r/min
Note	Limiting speed with shaft tolerance h6

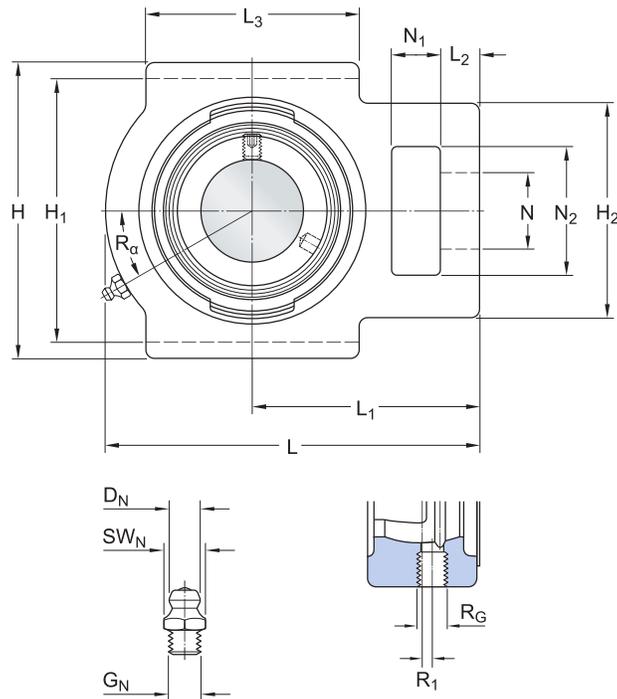
### Properties

Housing type	Take-up
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	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

### Logistics

Product net weight	0.897 kg
eClass code	23-05-08-02
UNSPSC code	31171536





## Dimensions

d	20 mm	Bore diameter
d <sub>1</sub>	≈ 28.2 mm	Shoulder diameter of inner ring
d <sub>2</sub>	32.4 mm	Outside diameter of locking ring
A	34 mm	Overall width
A <sub>1</sub>	13.5 mm	Width of piloting groove
A <sub>2</sub>	25 mm	Width of flange in which piloting grooves are provided
A <sub>5</sub>	18.5 mm	Standout of end cover
B <sub>1</sub>	30.5 mm	Overall bearing width
B <sub>4</sub>	4.75 mm	Distance from locking device side face to thread centre
H	92 mm	Overall height
H <sub>1</sub>	76 mm	Distance between bottoms of piloting grooves
H <sub>2</sub>	54 mm	Height of attachment end
L	97 mm	Overall length
L <sub>1</sub>	62 mm	Distance from attachment end face to centre line of spherical seat diameter
L <sub>2</sub>	10 mm	Length attachment end
L <sub>3</sub>	54 mm	Length of piloting groove

N	19 mm	Diameter of attachment bolt hole
N <sub>1</sub>	16 mm	Length of attachment slot
N <sub>2</sub>	32 mm	Height of attachment slot
s <sub>1</sub>	23.5 mm	Distance from locking device side face to raceway centre

## GREASE FITTING

D <sub>N</sub>	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 <sub>1</sub>	2.5 mm	Axial position of the housing thread
R <sub>α</sub>	30 °	Angular position of the housing thread

## Calculation data

Basic dynamic load rating	C	12.7 kN
Basic static load rating	C <sub>0</sub>	6.55 kN
Fatigue load limit	P <sub>u</sub>	0.28 kN
Limiting speed		8 500 r/min
		Limiting speed with shaft tolerance h6

## Mounting information

Set screw	G <sub>2</sub>	M6x0.75
Hexagonal key size for set screw		3 mm
Recommended tightening torque for set screw		4 N·m

## Tolerances and clearances

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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

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Take-up cast iron housing for insert bearing, ISO

[TU 504 M](#)

Insert bearing with an eccentric locking collar and narrow inner ring

[YET 204](#)

### Recommended product

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End cover for bearing units

[ECY 204](#)

## More Information

 <b>Product details</b>	 <b>Engineering information</b>	 <b>Tools</b>
<a href="#">Take-up units to ISO standards</a>	<a href="#"> Principles of ball bearing units selection and application - Download catalogue (4.9 MB)</a>	<a href="#">SKF Product select</a>
<a href="#">Take-up units to North American standards</a>		<a href="#">Bearing Frequency Calculator</a>
<a href="#">Take-up units to Japanese Industrial Standards (JIS)</a>	<a href="#">Principles of selecting mounted bearing solutions</a>	
<a href="#">Take-up units, not standardized (SKF Food Line)</a>	<a href="#">Bearing failure and how to prevent it</a>	
<a href="#">Permissible misalignment</a>		
<a href="#">Locating/non-locating support</a>		
<a href="#">Loads</a>		
<a href="#">Temperature limits</a>		
<a href="#">Permissible speed</a>		
<a href="#">Lubrication</a>		
<a href="#">Mounting and dismantling</a>		
<a href="#">Ordering information</a>		
<a href="#">Designation system</a>		



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