



# GE 20 ES-2RS Radial spherical plain bearing, requiring maintenance, sealed, metric sizes

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Radial spherical plain bearings are designed to accommodate radial and combined radial and axial loads, and also misalignment. This specific design includes a steel/steel sliding contact surface combination and a double-lip contact seal on both sides. The bearings require maintenance and can be relubricated via lubrication holes and an annular groove in both rings.

- Designed for radial and combined radial and axial loads
- Long service life
- Minimal maintenance
- Suitable for heavy static, alternating or impact loads

## Overview

### Dimensions

Bore diameter	20 mm
Outside diameter	35 mm
Width, inner ring	16 mm
Width, outer ring	12 mm

### Performance

Basic dynamic load rating	30 kN
Basic static load rating	146 kN

### Properties

Sliding contact surface combination	Steel/steel, standard
Material, inner ring	Bearing steel
Material, outer ring	Bearing steel
Maintenance	Relubrication required
Radial internal clearance	CN
Sealing	Seal on both sides
Sealing type	Double-lip
Relubrication feature	With

## Technical Specification

Maintenance	Relubrication required
Sliding contact surface combination	Steel/steel, standard
Material, inner ring	Bearing steel
Material, outer ring	Bearing steel
Sealing	Seal on both sides
Sealing type	Double-lip



### Dimensions

d	20 mm	Bore diameter
D	35 mm	Outside diameter
B	16 mm	Width
C	12 mm	Width outer ring
$\alpha$	9 °	Angle of tilt
$d_k$	29 mm	Raceway diameter inner ring
b	3.1 mm	Width annular lubrication groove at outer ring
$b_1$	3.2 mm	Width annular lubrication groove at inner ring
M	2 mm	Diameter lubrication hole (outer ring)
$r_1$	min. 0.3 mm	Chamfer dimension bore
$r_2$	min. 0.3 mm	Chamfer dimension outer ring

### Abutment dimensions

$d_a$	min. 22.1 mm	Abutment diameter shaft
$d_a$	max. 24.2 mm	Abutment diameter shaft
$D_a$	min. 30.9 mm	Abutment diameter housing
$D_a$	max. 33.2 mm	Abutment diameter housing



$r_a$	max. 0.3 mm	Fillet radius shaft
$r_b$	max. 0.3 mm	Fillet radius housing

## Calculation data

Basic dynamic load rating	C	30 kN
Basic static load rating	$C_0$	146 kN
Specific dynamic load factor	K	100 N/mm <sup>2</sup>
Specific static load factor	$K_0$	500 N/mm <sup>2</sup>
Material constant	$K_M$	330

## Mass

Mass plain bearing	0.065 kg
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