



# GE 45 ES-2RS

# Radial spherical plain bearing, requiring maintenance, sealed, metric sizes

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	1.772 in
Outside diameter	2.677 in
Width, outer ring	0.984 in

#### Performance

Basic dynamic load rating	28 551 lbf
Basic static load rating	143 878 lbf

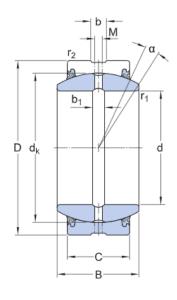
#### **Properties**

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



# 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



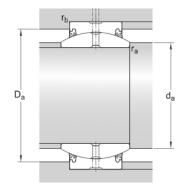
## Dimensions

d	1.772 in	Bore diameter
D	2.677 in	Outside diameter
В	1.26 in	Width
С	0.984 in	Width outer ring
α	7 °	Angle of tilt
$d_k$	2.362 in	Raceway diameter inner ring
b	0.181 in	Width annular lubrication groove at outer ring
b <sub>1</sub>	0.189 in	Width annular lubrication groove at inner ring
M	0.118 in	Diameter lubrication hole (outer ring)
$r_1$	min. 0.024 in	Chamfer dimension bore
r <sub>2</sub>	min. 0.039 in	Chamfer dimension outer ring

## Abutment dimensions

d <sub>a</sub> min. 1.945 in	Abutment diameter shaft
d <sub>a</sub> max. 2 in	Abutment diameter shaft
D <sub>a</sub> min. 2.402 in	Abutment diameter housing
D <sub>a</sub> max. 2.504 in	Abutment diameter housing





$r_a$	max. 0.024	in	Fillet radius shaft
r <sub>b</sub>	max. 0.039	in	Fillet radius housing

# Calculation data

Basic dynamic load rating	С	28 551 lbf
Basic static load rating	$C_0$	143 878 lbf
Specific dynamic load factor	K	14 503.774 psi
Specific static load factor	K <sub>0</sub>	72 518.869 psi
Material constant	$K_{M}$	330

## Mass

Mass plain bearing	1.014 lb
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