

GE 45 ESRadial spherical plain bearing, requiring maintenance, metric sizes



Radial spherical plain bearing, requiring maintenance, 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. 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
- Suitable for heavy static, alternating or impact loads

Overview

Dimensions

Bore diameter	45 mm
Outside diameter	68 mm
Width, inner ring	32 mm
Width, outer ring	25 mm

Performance

Basic dynamic load rating	127 kN
Basic static load rating	640 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	Without
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	Without



Dimensions

d	45 mm	Bore diameter
D	68 mm	Outside diameter
B	32 mm	Width
C	25 mm	Width outer ring
α	7 °	Angle of tilt
d_k	60 mm	Raceway diameter inner ring
b	4.6 mm	Width annular lubrication groove at outer ring
b_1	4.8 mm	Width annular lubrication groove at inner ring
M	3 mm	Diameter lubrication hole (outer ring)
r_1	min. 0.6 mm	Chamfer dimension bore
r_2	min. 1 mm	Chamfer dimension outer ring

Abutment dimensions

d_a	min. 49.4 mm	Abutment diameter shaft
d_a	max. 50.8 mm	Abutment diameter shaft
D_a	min. 57 mm	Abutment diameter housing
D_a	max. 63.6 mm	Abutment diameter housing
r_a	max. 0.6 mm	Fillet radius shaft



r_b max. 1 mm

Fillet radius housing

Calculation data

Basic dynamic load rating	C	127 kN
Basic static load rating	C_0	640 kN
Specific dynamic load factor	K	100 N/mm ²
Specific static load factor	K_0	500 N/mm ²
Material constant	K_M	330

Mass

Mass plain bearing	0.46 kg
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