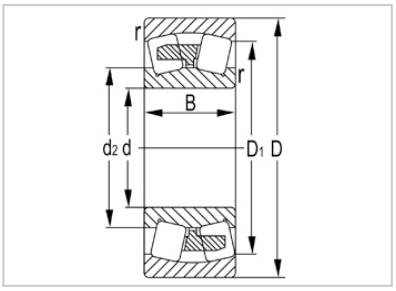
Spherical Roller Bearing

22200 Series-22209K





Designation	22209K
Principal Dimensions(mm)	
d	45
D	85
B	23
rs min	1.1
Basic Load Ratings(KN)	
Dynamic(Cr)	82.5
Static(Cor)	95
Limited Speed(rpm)	
Grease	3800
Oil	5900
Weight	
(kg)	0.572

Spherical roller bearings have two rows of rollers, a common sphered outer ring raceway and two inner ring raceways inclined at an angle to the bearing axis . The centre point of the sphere in the outer ring raceway is at the bearing axis. Therefore, these bearings are self-aligning and insensitive to misalignment of the shaft relative to the housing, which can be caused, for example, by shaft deflection. Spherical roller bearings are designed to accommodate heavy radial loads, as well as heavy axial loads in both directions.

Symmetrical rollers

Symmetrical rollers self-adjust, providing optimal load distribution along the roller length. This keeps stresses low under all load conditions and extends bearing service life.

Roller tolerances

The rollers in an spherical roller bearing are manufactured to extremely tight dimension and form tolerances. Each roller is practically identical in size and shape to the other rollers in the set. This optimizes load distribution over the rollers to maximize bearing service life.

Special roller profile

The roller profile determines the stress distribution in the roller/raceway contact area. The special

profile distributes loads more evenly along the rollers and prevents stress peaks at the roller ends to extend bearing service life .

Self-guiding rollers and a floating guide ring between the two rows of rollers

Self-guiding rollers reduce friction and frictional heat. A floating guide ring guides unloaded rollers so that they enter the load zone in the optimal position.

Luoyang Auto Bearing Co.,Ltd-Tel:0598-3607100-Email:moore@lyautobearing.com-http://www.auto-bearing.com