

KDN.JG100XP0

Four-point contact ball bearings with seals or shields can accommodate radial, axial and moment loads simultaneously. One bearing series is based on a single cross section which remains constant as the bore diameter increases, leading to significant space and weight savings. The integral sealing can significantly prolong bearing service life because it keeps lubricant in the bearings and contaminants out. The bearings are available with and inch boundary dimensions.



- Accommodate radial, axial and moment loads simultaneously
- Require considerably less axial space than two angular contact ball bearings
- Integral sealing prolongs bearing service life
- Thin cross section
- Lightweight
- Low friction
- High stiffness
- High running accuracy



Dimensions		
d	254 mm	Bore diameter
D	304.8 mm	Outside diameter
H	25.4 mm	Radial cross section
B	25.4 mm	Width
d ₁	≈ 272.847 mm	Shoulder diameter inner ring
d ₂	≈ 268.072 mm	Recess diameter inner ring
D ₁	≈ 285.953 mm	Shoulder diameter outer ring
D ₂	≈ 294.691 mm	Recess diameter outer ring
	12.7 mm	Ball diameter
	2.032 mm	Maximum radius of shaft or housing fillet

Calculation data

Dynamic load rating, Kaydon, radial direction	C_K	54 kN
Basic static load rating, radial direction	C_0	80.3 kN
Basic static load rating, axial direction	C_{0a}	201 kN
Basic dynamic load rating, moment	C_M	5.663 kN·m
Basic static load rating, moment	C_{0M}	11.222 kN·m
Starting torque max. no load		3.616 N·m
Limiting speed		175 r/min

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances, radial clearance and recommended fits:
 - Endurakote bearings: Class 1, Class 1, Class 3, Class 4
 - bearings: Class 1
 - other bearings: Class 1, Class 1, Class 3, Class 4, Class 6
- Materials