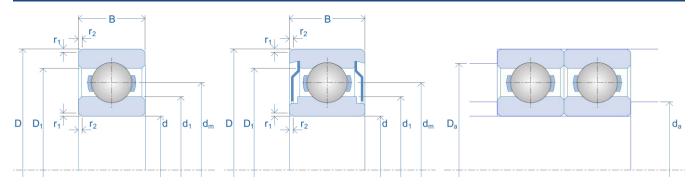


Data Sheet High Precision Ball Bearings





Part Number	609
Bearing Series	Radial
Hybrid (Si₃N₄ Balls)	No

Geometrical Data

Number of Balls	Z [Qty.]	8
Bearing Weight	m [kg]	0.023

Bearing Load Ratings¹

Dynamic Radial Load Rating	C [N]	3,300
Static Radial Load Rating Steel Balls	C ₀ [N]	1,390
Static Radial Load Rating Si ₃ N ₄ balls	C _{0 HY} [N]	980

Bearing RPM Ratings²

Speed Value with Oil Lubrication	n _{oil} [1/min]	83,250
Speed Value with Grease Lubrication	n _{grease} [1/min]	66,600

Bearing Dimensions

Bore Diameter	d [mm]	9
Outer Diameter	D [mm]	24
Bearing Width	B [mm]	7
Pitch Circle	d _m [mm]	16.7
Ball Diameter	D _w [mm]	3.969
OD Inner Ring	d ₁ [mm]	13.4
ID Outer Ring	D ₁ [mm]	19.9
Chamfer	r _{1,2} [mm]	0.3

Mating Part Dimensions

Abutment Diameter Inner Ring	d _a min. [mm]	11.5
Abutment Diameter Outer Ring	D _a max. [mm]	21.0
Chamfer Associated Component	ra max. [mm]	0.3

Notes:

- 1. The stated load ratings are given for a single bearing with grease lubrication. If specific applications differ, please consult GMN USA engineers.
- 2. Speed ratings are for phenolic outer land guided cage (TA). Please consult the full GMN Bearing catalog or GMN USA engineers for speed ratings of different cages.