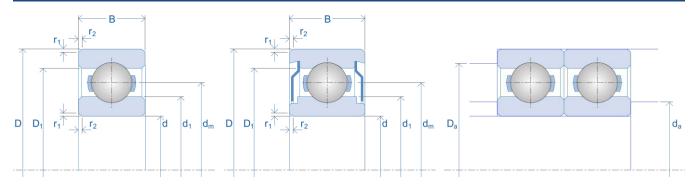


Data Sheet High Precision Ball Bearings





Part Number	HY 6005
Bearing Series	Radial
Hybrid (Si₃N₄ Balls)	Yes

Geometrical Data

Number of Balls	Z [Qty.]	10
Bearing Weight	m [kg]	0.080

Bearing Load Ratings¹

Dynamic Radial Load Rating	C [N]	10,400
Static Radial Load Rating Steel Balls	C ₀ [N]	6,250
Static Radial Load Rating Si ₃ N ₄ balls	C _{0 HY} [N]	4,400

Bearing RPM Ratings²

Speed Value with Oil Lubrication	n _{oil} [1/min]	47,813
Speed Value with Grease Lubrication	n _{grease} [1/min]	38,250

Bearing Dimensions

Bore Diameter	d [mm]	25
Outer Diameter	D [mm]	47
Bearing Width	B [mm]	12
Pitch Circle	d _m [mm]	36.0
Ball Diameter	D _w [mm]	6.35
OD Inner Ring	d ₁ [mm]	32.2
ID Outer Ring	D ₁ [mm]	40.0
Chamfer	r _{1,2} [mm]	0.6

Mating Part Dimensions

Abutment Diameter Inner Ring	d _a min. [mm]	30.0
Abutment Diameter Outer Ring	D _a max. [mm]	42.0
Chamfer Associated Component	ra max. [mm]	0.6

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.