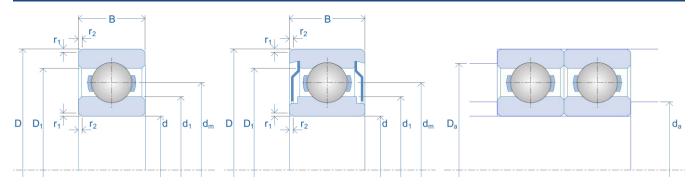


Data Sheet High Precision Ball Bearings





Part Number	6003
Bearing Series	Radial
Hybrid (Si ₃ N ₄ Balls)	No

Geometrical Data

Number of Balls	Z [Qty.]	10
Bearing Weight	m [kg]	0.039

Bearing Load Ratings¹

Dynamic Radial Load Rating	C [N]	5,700
Static Radial Load Rating Steel Balls	C ₀ [N]	3,050
Static Radial Load Rating Si ₃ N ₄ balls	C _{0 HY} [N]	2,130

Bearing RPM Ratings²

Speed Value with Oil Lubrication	n _{oil} [1/min]	54,000
Speed Value with Grease Lubrication	n _{grease} [1/min]	43,200

Bearing Dimensions

Bore Diameter	d [mm]	17
Outer Diameter	D [mm]	35
Bearing Width	B [mm]	10
Pitch Circle	d _m [mm]	26.0
Ball Diameter	D _w [mm]	4.762
OD Inner Ring	d ₁ [mm]	22.6
ID Outer Ring	D ₁ [mm]	29.4
Chamfer	r _{1,2} [mm]	0.3

Mating Part Dimensions

Abutment Diameter Inner Ring	d _a min. [mm]	20.0
Abutment Diameter Outer Ring	D _a max. [mm]	31.5
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.