



Part Number	<b>HY 6003</b>	
Bearing Series	Radial	
Hybrid (Si <sub>3</sub> N <sub>4</sub> Balls)	Yes	

**Geometrical Data**

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

**Bearing Load Ratings<sup>1</sup>**

Dynamic Radial Load Rating	C [N]	5,700
Static Radial Load Rating Steel Balls	C <sub>0</sub> [N]	3,050
Static Radial Load Rating Si <sub>3</sub> N <sub>4</sub> balls	C <sub>0HY</sub> [N]	2,130

**Bearing RPM Ratings<sup>2</sup>**

Speed Value with Oil Lubrication	n <sub>oil</sub> [1/min]	67,500
Speed Value with Grease Lubrication	n <sub>grease</sub> [1/min]	54,000

**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.

**Bearing Dimensions**

Bore Diameter	d [mm]	17
Outer Diameter	D [mm]	35
Bearing Width	B [mm]	10
Pitch Circle	d <sub>m</sub> [mm]	26.0
Ball Diameter	D <sub>w</sub> [mm]	4.762
OD Inner Ring	d <sub>1</sub> [mm]	22.6
ID Outer Ring	D <sub>1</sub> [mm]	29.4
Chamfer	r <sub>1,2</sub> [mm]	0.3

**Mating Part Dimensions**

Abutment Diameter Inner Ring	d <sub>a</sub> min. [mm]	20.0
Abutment Diameter Outer Ring	D <sub>a</sub> max. [mm]	31.5
Chamfer Associated Component	r <sub>a</sub> max. [mm]	0.3