



Part Number	<b>HY 6205</b>	
Bearing Series	Radial	
Hybrid (Si <sub>3</sub> N <sub>4</sub> Balls)	Yes	

**Geometrical Data**

Number of Balls	Z [Qty.]	9
Bearing Weight	m [kg]	0.128

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

Dynamic Radial Load Rating	C [N]	15,200
Static Radial Load Rating Steel Balls	C <sub>0</sub> [N]	8,900
Static Radial Load Rating Si <sub>3</sub> N <sub>4</sub> balls	C <sub>0HY</sub> [N]	6,250

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

Speed Value with Oil Lubrication	n <sub>oil</sub> [1/min]	45,000
Speed Value with Grease Lubrication	n <sub>grease</sub> [1/min]	36,000

**Bearing Dimensions**

Bore Diameter	d [mm]	25
Outer Diameter	D [mm]	52
Bearing Width	B [mm]	15
Pitch Circle	d <sub>m</sub> [mm]	39.1
Ball Diameter	D <sub>w</sub> [mm]	7.938
OD Inner Ring	d <sub>1</sub> [mm]	34.0
ID Outer Ring	D <sub>1</sub> [mm]	44.0
Chamfer	r <sub>1,2</sub> [mm]	1.0

**Mating Part Dimensions**

Abutment Diameter Inner Ring	d <sub>a</sub> min. [mm]	31.0
Abutment Diameter Outer Ring	D <sub>a</sub> max. [mm]	46.0
Chamfer Associated Component	r <sub>a</sub> max. [mm]	1.0

**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.