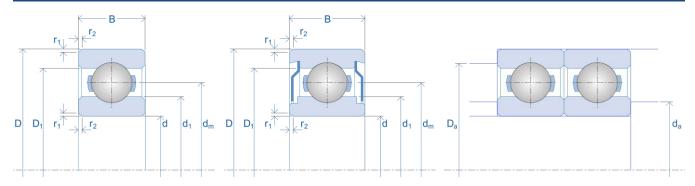


# Data Sheet High Precision Ball Bearings





Part Number	HY 6205
Bearing Series	Radial
Hybrid (Si₃N₄ 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>0 HY</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	ra 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.