

208WDN

maximum capacity ball bearings



Technical sheet of 208WDN

What are the Benefits of choosing 208WDN bearings?

- **Versatile Load Bearing:** Capable of simultaneously withstanding radial and bidirectional axial loads, suitable for high-speed and ultra-high-speed applications.
- **Low Friction and Long Life:** Optimized contact between the raceway and steel balls results in an extremely low coefficient of friction, minimal heat generation, and a long service life.
- **High Speed Capability:** Due to high operational precision, it allows for very high maximum speeds.
- **Low Maintenance Costs:** Can be designed with dust covers or sealing rings for lifetime lubrication, requiring no routine maintenance.
- **Rigid and Quiet Operation:** Provides a certain level of rotational stiffness while maintaining low operating noise and vibration levels.

| | | |
|-------------------|--------------------------------------|------------------------------------|
| Type : | Single row deep groove ball bearings | |
| Model : | 208WDN | |
| Main demensions : | 40 mm × 80 mm × 18 mm | Bore Dia × Outside Dia × Width Dia |
| M kg: | 0.39 | Mass |
| HS Code : | 8482102000 | Bearing customs code |
| d mm: | 40 | inner ring diameter |
| D mm: | 80 | Outer ring diameter |
| B(T) mm: | 18 | Overall Width |

| | | |
|---------------------------|--------|----------------------------|
| Cr kN: | 45.83 | Radial dynamic load rating |
| C_{0r} kN: | 28.254 | Radial static load rating |
| Grease r/min: | 4053 | Reference speed |
| Oil r/min: | 4880 | Limiting speed |

Detailed parameters and installation dimensions:

| | |
|--|---|
| Part Number | 208WDN |
| Rows NO. | One |
| Tolerance class | P0 (ABEC-1) |
| Inner Ring Radius - R | 1.1 mm 0.0433 inch |
| Outer Ring Radius - r | 1.1 mm 0.0433 inch |
| Cage | Stamping steel cage |
| Series | LIGHT 200W SERIES |
| Inner Ring Backing Dia. - d _a | 43.9 mm 1.7283 inch |
| Outer Ring Backing Dia. - D _a | 72.9 mm 2.8701 inch |
| Design Units | Metric |
| Temperature - T(min) | -30 °C |
| Temperature - T(max) | 120 °C |
| Load | radial |
| Radial Dynamic Capacity - C _e | 45830 N 10302 lbf |
| Radial Static Capacity - C _{0r} | 28254 N 6351 lbf |
| Ring Material | GCr15SiMn |
| Shield and seal | D = one shield |
| Speed ratings (grease) - n _B | 4053 min ⁻¹ |
| Speed ratings (oil) - n _G | 4880 min ⁻¹ |
| Features | W = maximum capacity, filling slot type |
| Interchangeable | FAFNIR 208WDN |
| Bore type | Cylindrical bore |
| Dimension Inside - d φ | 40 mm 1.5748 inch |
| Dimension Outside - D φ | 80 mm 3.1496 inch |
| Dimension Width - B | 18 mm 0.7087 inch |
| Bearing Type | maximum capacity ball bearings |
| Ball Material | GCr15SiMn |

What are the applications of the 208WDN bearing?

- **Motors/Electrical Appliances:** Used in motors and home appliances. Ensures smooth high-speed operation and low noise.
- **Automotive Industry:** Used in generators and gearboxes. Suitable for medium loads and offers high reliability.
- **General Machinery:** Used in pumps, fans, and speed reducers. Low friction, maintenance-free, and long service life.

Tradebearing(TBS): <https://en.tradebearings.com/>

Email: admin@tradebearings.com

Whatsapp/Mob.: +86 15906428604