

# Fafnir® 6200 Series Electric Motor Ball Bearings

**TIMKEN**  
Where You Turn

**High-precision ball bearings volume-produced to the strictest electric-motor quality standards.**

Timken® Fafnir® 6200 Series ball bearings offer a world-class combination of high-performance features in a high-volume value package. The high-precision design features super-finished raceways and tightly controlled geometries which produce a quiet operation, approaching machine tool standards.

## 6200 Series Bearing Benefits

**Value package** – Outstanding performance at a world-competitive, high-volume price.

**High precision** – Tightly held internal tolerances provide true tracking and outstanding roundness, approaching ABEC 5 levels.

**High speed** – Combination of surface finish and tight tolerances permits operating speeds (under proper lubrication conditions) up to 20000 RPM and beyond.

**Micro-smooth finish** – Super-finishing achieves raceway smoothness of machine tool quality.

**Quiet running** – Significant noise and vibration reduction over competitive bearings.

**Competitive load capacity** – Design satisfies all market load requirements.

**Total quality** – Automated in-process gauging of all components backed by complete final inspection assures a quality product.

**Advanced manufacturing** – World-class technology supported by maximum automation maintains high precision at very high volumes.

**Design variations** – Available configurations include various seal, shield, and lubricant options.

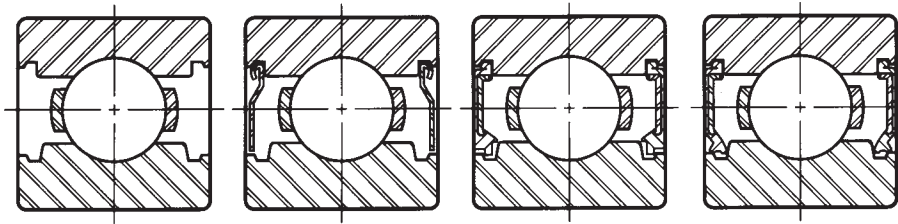


*Timken® Fafnir® 6200 Series ball bearings provide a unique value package of high-performance features supported by world-class technology.*

### Applications

- *Electric motors*
- *Automotive accessories*
  - Air pumps*
  - Alternators*
  - Distributors*
  - Idler pulleys*
  - Fan clutches*
- *Pumps*
- *Consumer durables*
  - Appliances*
  - Electric tools*
  - Hand tools*
  - Air tools*
- *Business machines*

*Extensive laboratory testing confirms the Fafnir 6200 Series ball bearing's outstanding performance characteristics.*



Bearing number	Bore		Outside diameter		Width		Fillet radius	Weight	Static load rating	Extended dynamic load rating
	Tolerance +0.000 mm +0.0000 in. to minus		Tolerance +0.000 mm +0.0000 in. to minus		Tolerance +0.000 mm +0.0000 in. to minus					
	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	kg lbs.	N lbs.	N lbs.
6200	10 0.3937	0.008 0.0003	30 1.1811	0.009 0.00035	9 0.3543	0.12 0.0047	0.6 0.0024	0.027 0.06	2650 600	6550 1500
6201	12 0.4724	0.008 0.0003	32 1.2598	0.011 0.00045	10 0.3937	0.12 0.0047	0.6 0.0024	0.036 0.08	3000 680	7500 1700
6202	15 0.5906	0.008 0.0003	35 1.3780	0.011 0.00045	11 0.4331	0.12 0.0047	0.6 0.0024	0.041 0.09	3450 780	8650 1930
6203	17 0.6693	0.008 0.0003	40 1.5748	0.011 0.00045	12 0.4724	0.12 0.0047	0.6 0.0024	0.064 0.14	4400 1000	10600 2360

### Bearing Design

All Fafnir 6200 Series ball bearings offer a world-class package of features that provides an outstanding level of performance for electric-motor-type applications. Precise internal geometry and tight tolerances permit true-running operation with a high speed capability beyond 20000 RPM under proper lubrication conditions. The raceway micro-finish reduces vibration and noise significantly.

This Conrad-type, deep-groove bearing design incorporates a complement of precision balls and a stamped retainer. A variety of seal and shield configurations are available, as well as standard, heavy, and light-drag seals. All standard greases are available.

- Outstanding value in a high-volume production design
- Delivers electric-motor-quality performance levels
- Sealed, shielded, or open configurations and combinations available

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