



Trusted Difference At Every Turn™



BEARING SOLUTIONS FOR INDUSTRIAL ELECTRICAL APPLICATIONS



- Smooth and quiet PEER Bearings
- Improve machine operating efficiency
 - Minimize power loss & reduce energy costs

- Longer PEER Bearing service life
- Increases machinery uptime and productivity
 - Lowers machine maintenance costs

Globally interchangeable PEER designs

- Allow drop in replacement for OEM and rebuilders
- Eliminates machine re-design cost



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Deep Groove Ball Bearings for the Industrial Electrical Industry

PEER Bearing has expanded the size range manufacturing capability of single row deep groove ball bearings for the global industrial electrical market. The product portfolio now includes larger bore deep groove ball bearings with bore size up to 200mm, intended for use in higher HP electrical applications. This new offering complements PEER's existing fractional and low HP bearing solutions offer. All bearings are manufactured at PEER's ISO/TS16949 and ISO 14001 certified facilities which allows us to support OEM design and development globally. Rely on PEER's expanded range of electric motor bearing solutions to meet your most demanding performance expectations and keep your electrical applications running quiet.

PRODUCT FEATURES AND BENEFITS

Optimized raceway geometry and surface finish

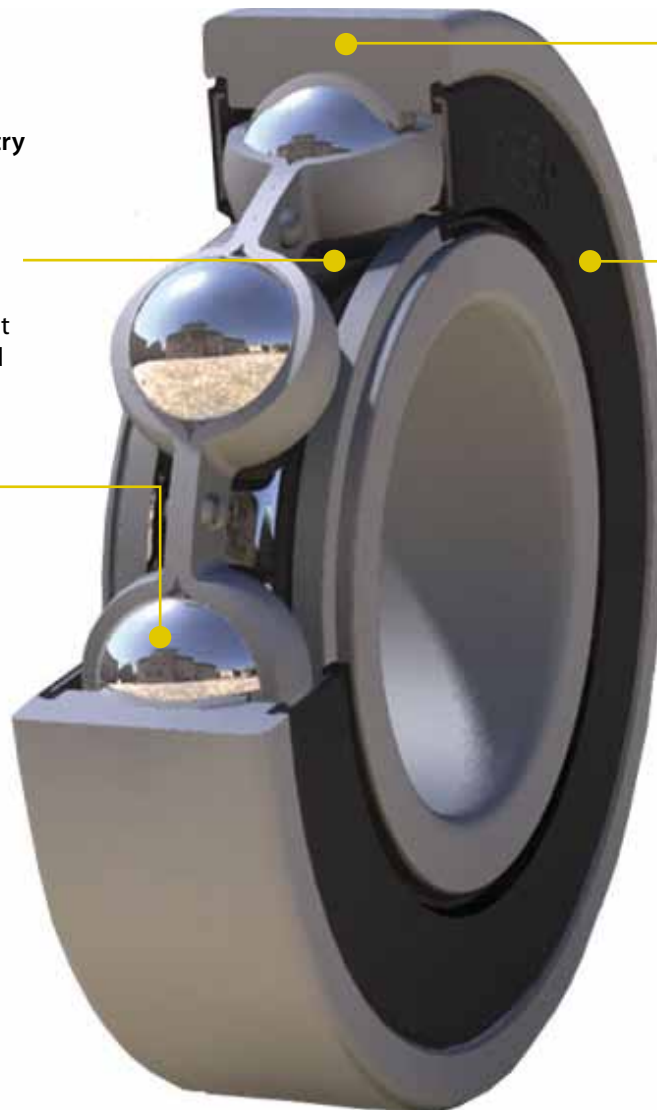
- Reduces vibration and bearing noise for quiet & efficient operation.
- Promotes lubrication effect so bearing runs cooler and extends service life.

High precision grade 10 balls

- Reduces vibration and bearing noise for quiet operation.

High precision accuracy and manufacturing consistency

- Eliminates vibration and bearing noise for quiet & efficient electrical operation.



High quality through hardened bearing steel

- Improves bearing fatigue life and extends service life.

Multiple seal options

- Provides supplemental protection against environmental contamination (dust, sand, moisture) extending service life.
- Promotes grease retention in the bearing cavity for longer service life.

Premium polyurea thickened grease

- Mobil PolyrexEM™
- Smooth running for quiet operation.
- Excellent high & low temperature capability extends service life.
- Superior water washout maintains lubricity when exposed to moisture.

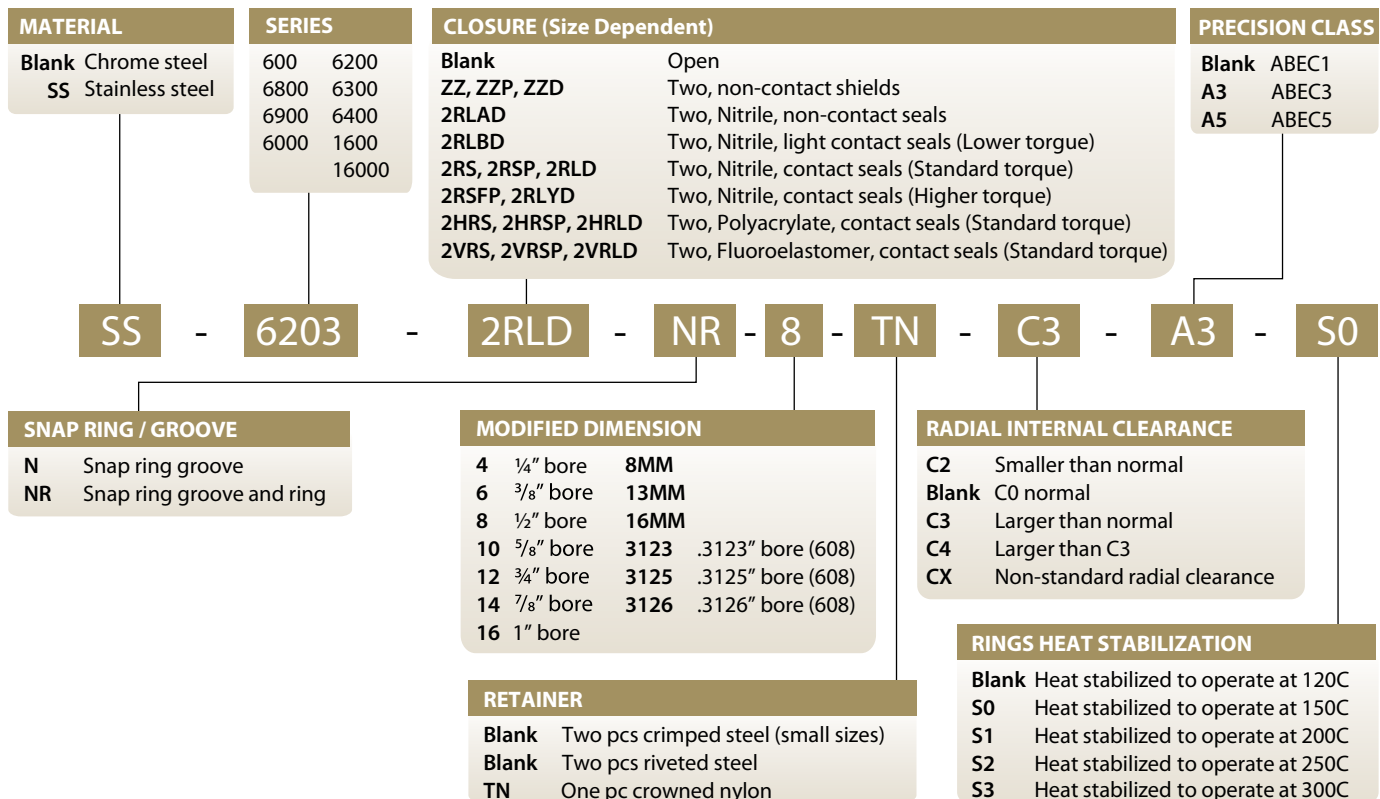
DEEP GROOVE BALL BEARING PRODUCT CAPABILITIES

Bore Size:	3mm to 200mm
Outer Diameter:	up to 300mm
Closures:	Open Non-contact metallic shields Non-contact seals Contact seals
Ring Material:	52100 chrome steel 440C stainless steel
Seal Material:	Nitrile (Buna-N) Polyacrylic (Hycar®) Fluoroelastomer (Viton®)
Retainer:	Riveted steel, Crimped steel, Crowned steel, Crowned nylon
Precision Class:	ABEC1, ABEC3, ABEC5
Radial Internal Clearance:	C2, C0, C3, C4, CX
Lubrication:	Quiet, Low or high temperature, Food grade, Low or high viscosity
Heat Stabilization:	S0, S1, S2, S3



DGBB Series	Unit	PEER Manufacturing Range Capability	Open	Shielded	Sealed
600	Metric	604 to 629	√	√	√
6800	Metric	6800 to 6815	√	√	√
6900	Metric	6900 to 6915	√	√	√
6000	Metric	6000 to 6038	√	√	√
6200	Metric	6200 to 6232	√	√	√
6300	Metric	6300 to 6328	√	√	√
6400	Metric	6400 to 6420	√	N/A	N/A
16000	Metric	16000 to 16032	√	N/A	N/A
R	Inch	R2 to R24	√	√	√
1600	Inch	1601 to 1658	√	√	√

PEER BEARING PART NUMBER NOMENCLATURE



High-Precision Measurement of Ball Bearing Vibrations and Noise are Key

In electrical applications, low noise and vibration are primary considerations in bearing design. To achieve low noise and vibration, PEER controls precision, accuracy and finish of rolling surfaces. PEER's designation for bearings that meet these strict requirements is Electric Motor Quality (EMQ).

PEER EMQ bearings are 100% noise tested on state-of-the-art anderson meter equipment (fig. 1) to meet electrical OEM requirements. Used to detect vibrations from bearing imperfections, the anderson meter displays vibration levels over three frequency ranges as well as amplified audibly.

Figure 2 represents anderson meter data comparing PEER against 2 major manufacturers using 6316 size ball bearings. The data shows PEER with lower vibration levels over all 3 frequency bands. Low vibration values are desirable for smooth bearing operation, low noise and long service life in industrial electrical applications.



Figure 1: Anderson meter testing equipment.

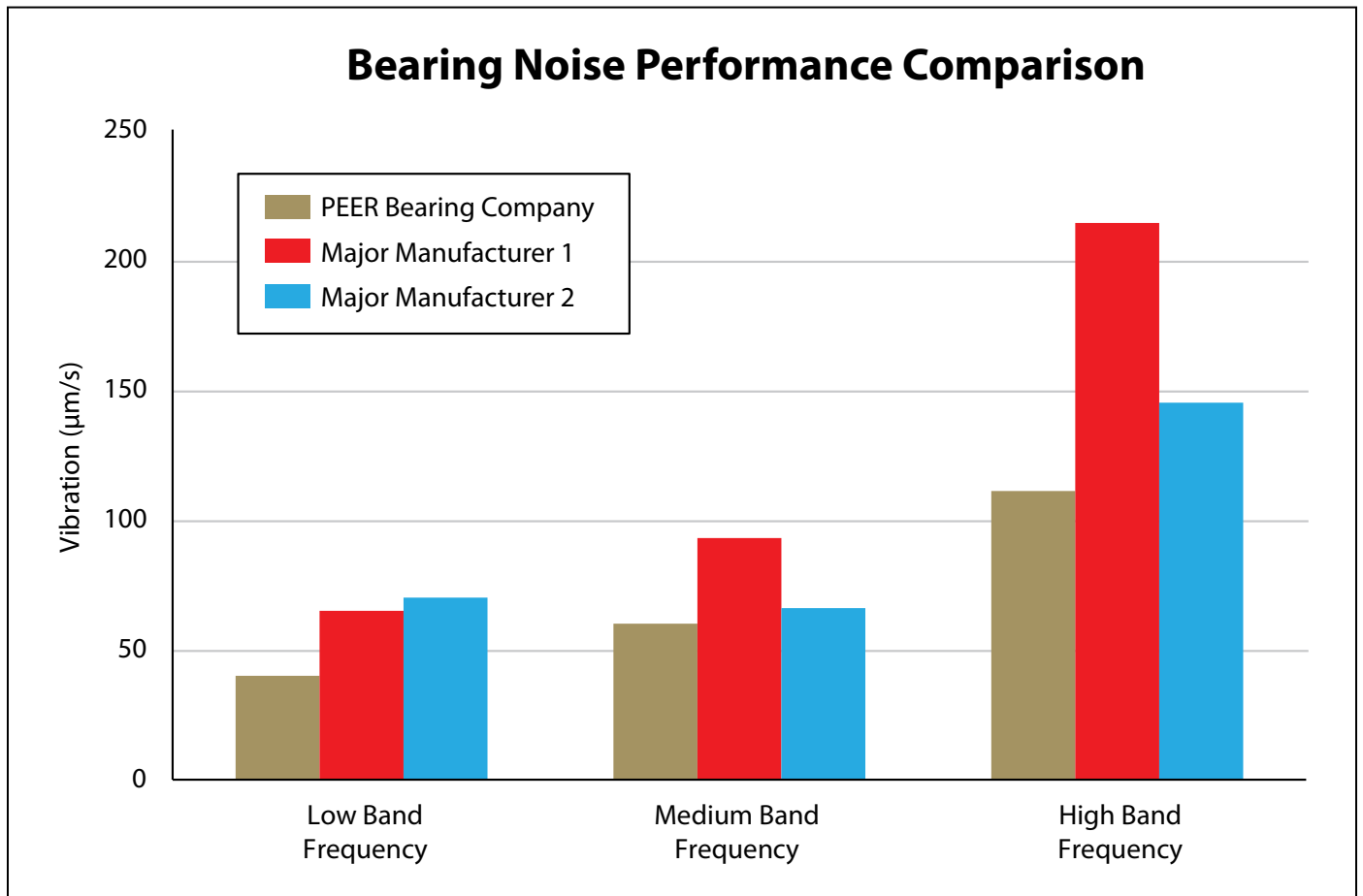


Figure 2: 6316 noise test data results (Anderson meter testing comparing PEER Bearing versus 2 major manufacturers).

Bearing Closures

To meet varying operating and environmental conditions, PEER offers a wide range of bearing closure options. Non-contact shields and non-contact seals are used in torque sensitive applications. Contact seals are used to protect from light external contaminants and promote bearing grease retention. For extreme conditions such as higher temp or caustic environments, alternative seal materials such as Polyacrylate (Hycar®) or Fluoroelastomer (Viton®) are available.



NON-CONTACT SHIELDED NON-CONTACT SEALED LIGHT CONTACT SEALED CONTACT SEALED

Bearing Seals (Heavy Contamination)

Properly designed bearing seals offer performance advantages when used in contaminated electrical applications. PEER offers alternative seal solutions engineered to provide superior contamination exclusion from dust, dirt and water. Typical applications include mid to high horsepower motors.



2RLYD 2RSFP

Ceramic Balls

Ceramic balls offer performance advantages when used in electric motor applications with electric current. Typical applications include variable speed electric motors with high conductivity and generators.



Lubrication (Greases)

Specifying the appropriate grease can be the difference between bearing success or damage. PEER stocks our bearings with electric motor quality grease (Mobil PolyrexEM) or we can select based on the application requirements.

PEER CODE	GREASE	APPLICATION USE
L151	Mobil PolyrexEM	PEER standard
L06	Mobil Beacon 325	Lower temperature
L21	Kyodo Yushi Multemp SRL	Miniature, higher speed
L67	Chevron FM ALC EP2	Food grade (FDA approved)
L157	Kyodo Yushi Multemp SB-M	Miniature, higher temperature

Contact PEER Application Engineering to select a bearing solution to meet your performance requirements.

ABOUT PEER



- ▲ Full line of agricultural, radial, mounted unit ball bearings and tapered roller bearings
- ▲ Valued bearing solutions for lawn & garden, agricultural, industrial transmission, material handling, fluid, electrical, HVAC, off-highway and on-highway applications
- ▲ Global application engineering support
- ▲ TS-16949 certified manufacturing facilities
- ▲ Dedicated Research and Development center
- ▲ Testing capabilities include: fatigue life, noise/vibration, mud slurry and salt spray testing
- ▲ Flexible manufacturing to allow for low to high volume production
- ▲ Customer service excellence



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