

## Gold Ball and RPB Roller Bearings

**SEALMASTER**



SealMaster Gold® ball bearings and RPB Series mounted roller bearings provide a host of unique and patented features that contribute to increased uptime through better sealing performance and improved lubrication.

SealMaster Gold bearings operate as part of a unique system with features that work together to retain grease and help keep out contamination. By engineering the industry's widest race, SealMaster has laid the groundwork for the rest of the Gold ball bearing features. The wide outer

race accommodates a heavy duty labyrinth seal, allowing for the unique land riding ball retainer and room for the dimple and lock pin to stabilize the insert. This maintains a direct line of lubrication flowing into the bearing cavity.

SealMaster RPB Series features rugged split cast-iron housings and cartridge inserts. The inserts are field replaceable, therefore simplifying mounting and maintaining maximum uptime. The bearing cartridge is

designed to compensate for +/- 3 degrees static misalignment. The patented, felt lined seals, mounted between the races, act like a filter, and the rotating flinger helps repel contamination buildup on the seals. While the seals help prevent contaminants from entering the bearing – the positive lubrication system allows direct grease flow into the bearing.

  
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## Gold Mounted Ball Bearings

### Industry's widest outer race

Provides significant surface area to absorb shock loads – also creates large, internal grease chamber to hold extra grease and extend bearing life.



**Patented felt labyrinth seal** Includes a protective metal flinger that directs contamination away from sealing surfaces. The felt design provides a tight labyrinth seal that retains grease and acts as a filter to help exclude foreign materials. This design results in less drag and reduced heat compared to rubber contact seals. Alternate seals are available.



### Unique land riding metal ball retainer

Minimizes friction and provides maximum grease capacity and circulation. Retainer is designed to "float" on the ground extension (or lands) of the outer ring while spacing the balls precisely for even load distribution. This minimizes wear on both balls and retainer, while maximizing stability, especially important in applications involving vibration, shock loading or high operating speeds. Land riding brass retainers for high temperature applications (+200° F) also available.



### Exclusive locking pin and dimple system

Prevents outer race rotation, allows a full  $\pm 2^\circ$  misalignment and allows for direct lubrication flow into the bearing chamber. Unique to Sealmaster Gold bearings.

Sealmaster bearing engineers welcome the opportunity to customize the Gold bearing line for your unique application needs. For more information, email [sealmaster.engineering@emerson-ept.com](mailto:sealmaster.engineering@emerson-ept.com)

### Additional Features:

- Rugged, cast iron housing absorbs shock loads and distributes force
- 52100 high quality bearing steel on inner and outer races resists shock loading and carries high metal fatigue life ratings for increased reliability
- Vacuum degassed steel better withstands subsurface fatigue and subsequent metal fatigue failures
- Black oxide corrosion resistant races are chemically primed for better lubrication retention and corrosion resistance
- Zone hardened inner race provides exceptional control of setscrew holding power – ground and honed raceways provide longer life, quieter operation
- Extra wide inner race for greater surface contact with the shaft for stability and wide load distribution
- Diamond faceted, precision ground setscrews at 120° provide superior shaft holding power with less race distortion
- Permanent metal nameplate with unit number and shaft size for easy identification

## RPB Series Mounted Roller Bearings



### Heavy-Duty Tapered Roller Bearings

Allow for combined radial and thrust loads

### One-Piece, Self-Aligning Cartridge

- Self-aligning insert compensates for up to  $\pm 3^\circ$  of static misalignment
- Innovative design helps maintain proper rolling element contact with the races when misaligned



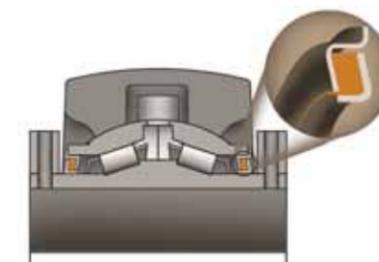
### Durable Cast-Iron Split Housing

- Housing base remains fixed and aligned with the shaft – quick insert replacement
- Standard RPB units are interchangeable with industry Type E mounting dimensions
- RPBXT bearings are interchangeable with SAF style four-bolt pillow block and are shaft ready for easier and faster installation



### Direct Lubrication System

helps prevent seal damage by venting pressure from over greasing. Bearing grease flow has a shorter path than competitive spherical roller bearing units



### Patented Felt Lined Flinger Seal

- Filters out contaminants in dry, dusty, dirty conditions
- Mounted between the races – not subject to misalignment distortion
- Contact seal available for wet, moist conditions

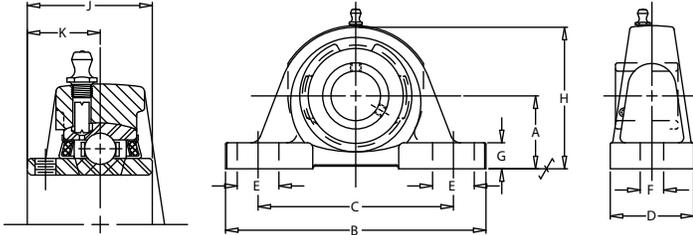


### Additional Features:

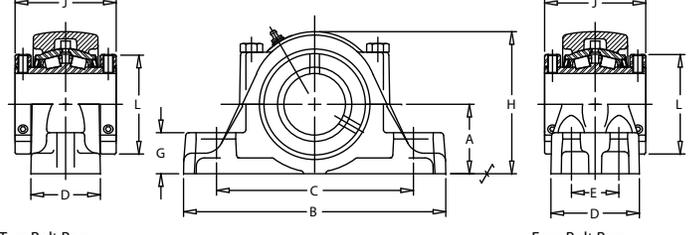
- Alignment pin helps prevent outer race rotation – a common problem in vibratory applications
- Select from two- and four-bolt pillow blocks in bore sizes from 1 3/16" to 5", flange units from 1 3/16" to 4 1/2" and piloted flanges from 1 3/16" to 5"
- Replaceable cartridge inserts from 1 3/16" to 5"
- Exclusive diamond faceted setscrews contribute to improved clamping and resistance to back out

Shaft Dia. (in)	Part Description	Dimensions in inches											Interchange	
		A	B	C		D	E	F	G	H	J	K	Bolt Size (in)	Dodge
				MIN.	MAX.									
1 7/16	MP-23	2 1/8	8	5	6 3/8	2 1/4	1 3/16	9/16	3/4	4 3/16	1 15/16	1 3/16	1/2	P2B-SCM-107
1 15/16	MP-31	2 1/2	9 1/2	5 15/16	7 9/16	2 7/8	1 7/16	11/16	7/8	5 3/32	2 3/16	1 5/16	5/8	PSB-SCM-115
2 3/16	MP-35	2 3/4	10 1/4	6 9/16	7 15/16	3 1/8	1 7/16	13/16	1 1/16	5 5/8	2 9/16	1 9/16	3/4	P2B-SCM-203
2 7/16	MP-39	3	11 1/4	7 1/8	8 7/8	3 1/4	1 5/8	13/16	1 1/16	6 1/4	2 3/4	1 11/16	3/4	P2B-SCM-207
2 15/16	MP-47	3 1/2	13	7 7/8	10 1/8	3 1/2	2	15/16	1 1/4	7 1/4	3 1/4	1 15/16	7/8	P2B-SCM-215
3 7/16	MP-55	4	15	9 5/8	12 5/8	4 3/8	2 3/8	15/16	1 5/16	8 1/4	3 25/32	2 7/32	7/8	P2B-SCM-307
3 15/16	MP-63	5	17	11 3/4	14 3/4	4 3/4	2 1/2	1 1/8	1 5/16	10	4 5/8	2 11/16	1	P2B-SCM-315

### Gold Mounted Ball Bearing



### RPB Bearing



Shaft Dia. (in)	Part Description	Dimensions in inches										Base Bolt		Interchange		
		A	B	C		D	E	G	H	J	L	NO.	SIZE	Dodge	Renxord	Link-Belt
				MIN.	MAX.											
<b>TWO BOLT BASE</b>																
1 3/16	RPB-103-2	1.50	6.25	4.56	4.94	1.88	*	.88	3.12	2.75	2.25	2	1/2	P2B-E-103R	ZEP-2103	----
1 7/16	RPB-107-2	1.88	7.25	5.31	5.94	2.06	*	1.12	3.81	3.00	2.62	2	1/2	P2B-E-107R	ZEP-2107	EP-B22423H
1 1/2	RPB-108-2	2.12	7.75	5.56	6.44	2.31	*	1.25	4.38	3.38	2.88	2	1/2	P2B-E-108R	ZEP-2108	EP-B224B24H
1 11/16	RPB-111-2	2.12	7.75	5.56	6.44	2.31	*	1.25	4.38	3.38	2.88	2	1/2	P2B-E-111R	ZEP-2111	EP-B22427H
1 3/4	RPB-112-2	2.25	8.88	6.31	7.19	2.44	*	1.25	4.62	3.50	3.25	2	5/8	P2B-E-112R	ZEP-2112	EP-B224B28H
1 15/16	RPB-115-2	2.25	8.88	6.31	7.19	2.44	*	1.25	4.62	3.50	3.25	2	5/8	P2B-E-115R	ZEP-2115	EP-B22431H
2	RPB-200-2	2.25	8.88	6.31	7.19	2.44	*	1.25	4.62	3.50	3.25	2	5/8	P2B-E-200R	ZEP-2200	EP-B22432H
2 3/16	RPB-203-2	2.50	9.62	6.69	7.94	2.56	*	1.44	5.12	3.75	3.62	2	5/8	P2B-E-203R	ZEP-2203	EP-B22435H
2 7/16	RPB-207-2	2.75	10.38	6.94	8.69	2.75	*	1.62	5.62	4.00	3.94	2	5/8	P2B-E-207R	ZEP-2207	EP-B22439H
2 1/2	RPB-208-2	2.75	10.38	6.94	8.69	2.75	*	1.62	5.62	4.00	3.94	2	5/8	P2B-E-208R	ZEP-2208	EP-B22440H
2 3/4	RPB-212-2	3.12	11.75	8.06	9.69	3.00	*	1.75	6.38	4.50	4.71	2	3/4	P2B-E-212R	ZEP-2212	EP-B22444H
2 15/16	RPB-215-2	3.12	11.75	8.06	9.69	3.00	*	1.75	6.38	4.50	4.71	2	3/4	P2B-E-215R	ZEP-2215	EP-B22447H
3	RPB-300-2	3.12	11.75	8.06	9.69	3.00	*	1.75	6.38	4.50	4.71	2	3/4	P2B-E-300R	ZEP-2300	EP-B22448H
3 7/16	RPB-307-2	3.75	13.75	10.12	11.25	4.12	*	2.06	7.75	5.00	5.43	2	7/8	P2B-E-307R	ZEP-2307	EP-B22455H
3 1/2	RPB-308-2	3.75	13.75	10.12	11.25	4.12	*	2.06	7.75	5.00	5.43	2	7/8	P2B-E-308R	ZEP-2308	EP-B22456H
<b>FOUR BOLT BASE</b>																
2 7/16	RPB-207-4	2.75	10.38	7.75	8.75	3.50	1.88	1.62	5.62	4.00	3.94	4	5/8	P4B-E-207R	ZEP-2207-F	EP-B22439FH
2 1/2	RPB-208-4	2.75	10.38	7.75	8.75	3.50	1.88	1.62	5.62	4.00	3.94	4	5/8	P4B-E-208R	ZEP-2208-F	EP-B22440FH
2 3/4	RPB-212-4	3.12	11.75	8.75	10.00	3.75	2.12	1.75	6.38	4.50	4.71	4	5/8	P4B-E-212R	ZEP-2212-F	EP-B22444FH
2 15/16	RPB-215-4	3.12	11.75	8.75	10.00	3.75	2.12	1.75	6.38	4.50	4.71	4	5/8	P4B-E-215R	ZEP-2215-F	EP-B22447FH
3	RPB-300-4	3.12	11.75	8.75	10.00	3.75	2.12	1.75	6.38	4.50	4.71	4	5/8	P4B-E-300R	ZEP2300-F	EP-B22448FH
3 7/16	RPB-307-4	3.75	13.75	10.56	11.50	4.50	2.38	2.06	7.75	5.00	5.43	4	5/8	P4B-E-307R	ZEP-2307-F	EP-B22455FH
3 1/2	RPB-308-4	3.75	13.75	10.56	11.50	4.50	2.38	2.06	7.75	5.00	5.43	4	5/8	P4B-E-308R	ZEP2308-F	EP-B22456FH
3 15/16	RPB-315-4	4.25	15.25	11.00	13.00	4.50	2.25	2.44	8.62	6.25	5.93	4	3/4	P4B-E-315R	ZEP-2315-F	EP-B22463FH
4	RPB-400-4	4.25	15.25	11.00	13.00	4.50	2.25	2.44	8.62	6.25	5.93	4	3/4	P4B-E-400R	ZEP-2400-F	EP-B22464FH
4 7/16	RPB-407-4	4.75	16.50	11.75	13.88	4.62	2.50	2.75	9.62	6.75	6.50	4	3/4	P4B-E-407R	ZEP-2407-F	EP-B22471FH
4 1/2	RPB-408-4	4.75	16.50	11.75	13.88	4.62	2.50	2.75	9.62	6.75	6.50	4	3/4	P4B-E-408R	ZEP-2408-F	EP-B22472FH
4 15/16	RPB-415-4	5.50	18.50	13.50	15.88	5.12	2.75	3.12	11.00	7.25	7.31	4	7/8	P4B-E-415R	ZEP-2415-F	EP-B22479FH
5	RPB-500-4	5.50	18.50	13.50	15.88	5.12	2.75	3.12	11.00	7.25	7.31	4	7/8	P4B-E-500R	ZEP-2500-F	EP-B33480FH



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