



PN Gold™ Mounted Ball Bearings





PN Gold Mounted Ball Bearings



PN Gold[™] – Extended Bearing Life for Highly Corrosive Environments

Reinforcing our commitment to designing bearings that meet the needs of unique applications, Emerson Power Transmission introduces the Sealmaster® PN Gold bearing. As part of the complete CRES line of corrosion resistant products, the PN Gold bearing features a high phosphorus, electroless nickel coated steel insert and a patented, multiple lip high performance seal (HPS). Specifically engineered for industries with corrosive, washdown environments such as food and beverage, pharmaceuticals and chemical processing, the PN Gold mounted ball bearing provides outstanding performance in demanding corrosive environments.



440 Stainless Steel

Thin Dense

Zinc Coated

144

Nickel Teflon Coated

Chrome Coated

5% Salt Fog Test Results (144 Hours)

100

Time in Hours

35 +

30

25

20

10 ·

Area Rusted %

PN Gold Inserts

- High phosphorous, electroless nickel plated 52100 steel races for exceptional corrosion resistance (see chart at right)
- Patented, high performance, HPS seal extends bearing life with improved protection of internal raceways and ball elements
- Sealmaster exclusive, wide outer race design provides extra grease capacity for extended performance
- Sealmaster exclusive pin and dimple system provides direct lubrication path and +/-2° of misalignment
- USDA/FDA-compliant, H1 food grade, Sealmaster GoldPlex-FG™ grease
- Wide operating temperature range (-9°F to 350°F) suitable for a variety of applications
- 300 series stainless steel set screws at 120° positioning
- Unique metal land riding retainer allows 360° grease flow around rolling element for improved lubricant circulation
- Zone hardened inner races for longer life and quieter operation

Bearing Salt Fog Results (144 hours)

Tested per ASTM B117, a salt fog test is performed by placing bearing parts in a salt fog chamber. The chamber is filled with a highly corrosive, salt solution and heated to 100°F. After 144 hours, the parts are removed and results are compared. See photos below.



Sealmaster High Phosphorus Nickel



440C Stainless Steel



Zinc Coated



Thin Dense Chrome Coated



Nickel Teflon Coated



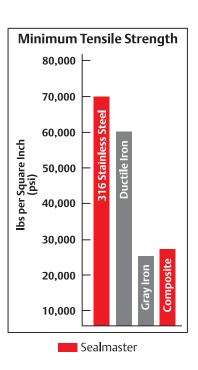
PN Gold Housing and Seals

Investment Cast Stainless Steel Housings

- Passivated 316 stainless steel delivers highest amount of corrosion resistance currently available for stainless steel bearing housings
- Two times the tensile strength of commonly used, gray cast iron
- Solid construction with low surface porosity, machined base for a smooth, easy to clean surface with minimal gaps and no fillings allowing fewer places for bacteria to grow
- Specialized, laser engraved identification system provides permanent brand and nomenclature marking for easy reordering without creating entrapment points for contamination



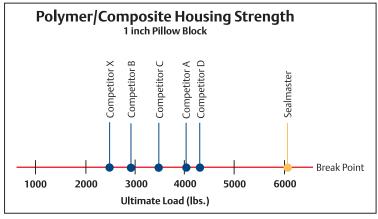




High Strength Reinforced Composite Housing

- High strength, reinforced composite material delivers high load capacity (see chart at bottom)
- Stainless steel ferrules for increased strength around bolt holes
- Solid construction, machined base for smooth, easy to clean surface with minimal gaps and no fillings, allowing fewer places for bacteria to grow
- Specialized, laser engraved identification system provides permanent brand and nomenclature marking for easy reordering without creating entrapment points for contamination

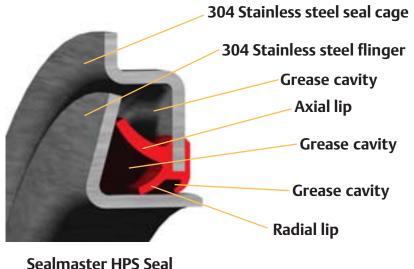






Sealmaster Patented HPS Seal for Superior Protection

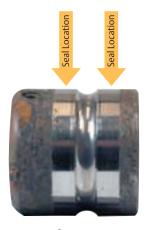
- Sealmaster HPS seal design provides multi directional sealing for proven performance in contaminated environments
- 304 stainless steel shell protects from incoming contaminants and provides a wear resistant contact surface for all three seal lips
- Stainless steel, rotating flinger directs contaminants away from the bearing
- Highly durable, FKM seal lip material provides chemical resistance and withstands high temperatures



Sealmaster HPS Seal (U.S. Patent Number 6,817,769)

Proven Seal Performance

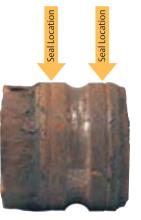
The illustrations below show the relative performance of seals in a wet contamination test. Complete bearings with seals on both sides are sprayed continuously with a 5% salt solution at 100°F. The bearings operate continuously at 500 RPM for 3 hours and idle for 1 hour. This cyclical condition test is complete after 480 hours.



Sealmaster High Phosphorus Nickel



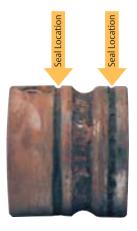
440C Stainless Steel with Single Lip Rubber Seal



Zinc Coated with Single Lip Rubber Seal



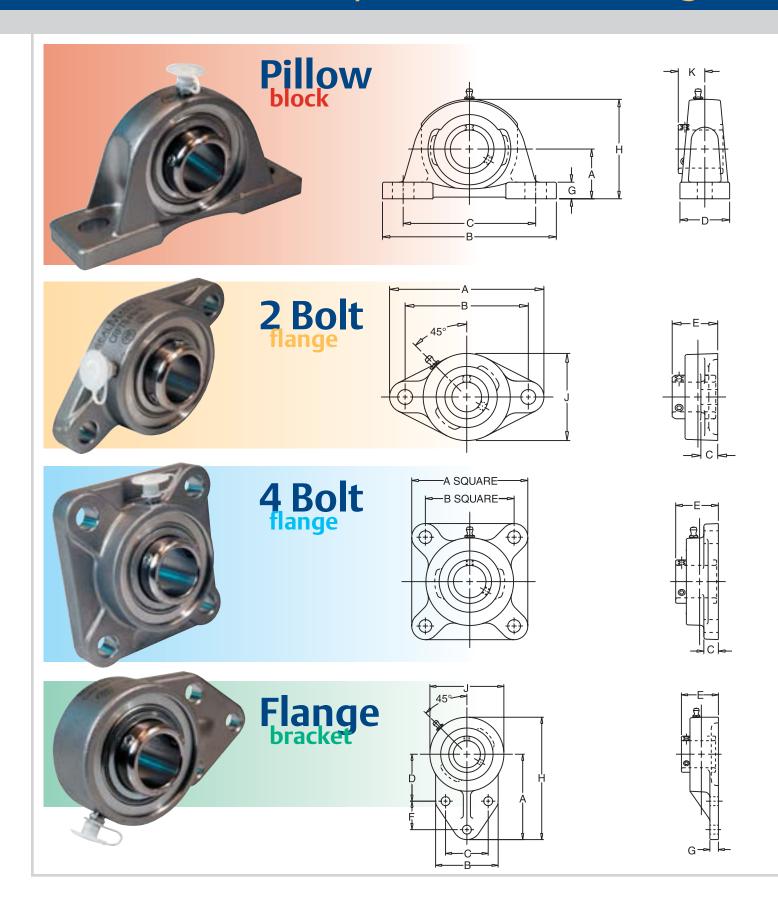
Thin Dense Chrome Coated with Single Lip Rubber Seal



Nickel Teflon Coated with Single Lip Rubber Seal



PN Gold Dimensions/Stainless Steel Housing





PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	А	В	C MAX	C MIN	D	G	Н	К	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRPS-PN12	CRPS-12	3/4	1 5/16	5	4 1/8	3 3/8	1 1/2	1/2	2 9/16	23/32	3/8	SEO-12	SEC-12	N/A
CRPS-PN16	CRPS-16	1	1 7/16	5 1/2	4 1/2	3 3/4	1 1/2	1/2	2 13/16	13/16	3/8	SEO-16	SEC-16	N/A
CRPS-PN19	CRPS-19	1 3/16	1 11/16	6 1/2	5 1/16	4 7/16	1 7/8	9/16	3 3/8	7/8	1/2	SEO-19	SEC-19	N/A
CRPS-PN20R	CRPS-20R	1 1/4R	1 11/16	6 1/2	5 1/16	4 7/16	1 7/8	9/16	3 3/8	7/8	1/2	SEO-20R	SEC-19	N/A
CRPS-PN20	CRPS-20	1 1/4	1 7/8	6 9/16	5 5/16	4 11/16	1 7/8	5/8	3 3/4	1	1/2	SEO-20	SEC-23	N/A
CRPS-PN23	CRPS-23	1 7/16	1 7/8	6 9/16	5 5/16	4 11/16	1 7/8	5/8	3 3/4	1	1/2	SEO-23	SEC-23	N/A
CRPS-PN24	CRPS-24	1 1/2	1 15/16	7 1/4	5 7/8	4 7/8	2 1/8	11/16	3 15/16	1 3/16	1/2	SEO-24	SEC-24	N/A
CRPS-PN27	CRPS-27	1 11/16	2 1/8	7 1/2	6 1/16	5 7/16	2 1/8	11/16	4 1/4	1 3/16	1/2	SEO-27	SEC-27	N/A
CRPS-PN31	CRPS-31	1 15/16	2 1/4	8 1/8	6 1/2	6	2 3/8	3/4	4 9/16	1 9/32	5/8	SEO-31	SEC-31	N/A
CRPS-PN32R	CRPS-32R	2R	2 1/4	8 1/8	6 1/2	6	2 3/8	3/4	4 9/16	1 9/32	5/8	N/A	SEC-31	N/A
CRPS-PN32	CRPS-32	2	2 1/2	8 5/8	7	6 1/2	2 3/8	3/4	5	1 5/16	5/8	SEO-35	SEC-35	N/A
CRPS-PN35	CRPS-35	2 3/16	2 1/2	8 5/8	7	6 1/2	2 3/8	3/4	5	1 5/16	5/8	SEO-35	SEC-35	N/A
CRPS-PN39	CRPS-39	2 7/16	2 3/4	9 1/2	7 5/8	6 7/8	2 3/4	7/8	5 9/16	1 9/16	5/8	SEO-39	SEC-39	N/A

^{*} Accessories sold separately.

PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	Α	В	С	E	J	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRFTS-PN12	BFT-12	3/4	4 13/32	3 17/32	7/16	1 9/32	2 1/2	3/8	SEO-12	SEC-12	2BSS-12
CRFTS-PN16	BFT-16	1	4 7/8	3 57/64	17/32	1 7/16	2 3/4	7/16	SEO-16	SEC-16	2BSS-16
CRFTS-PN19	BFT-19	1 3/16	5 9/16	4 19/32	17/32	1 9/16	3 1/4	7/16	SEO-19	SEC-19	2BSS-19
CRFTS-PN20R	BFT-20R	1 1/4R	5 9/16	4 19/32	17/32	1 9/16	3 1/4	7/16	SEO-20R	SEC-19	2BSS-20R
CRFTS-PN20	BFT-20	1 1/4	6 1/8	5 1/8	9/16	1 3/4	3 3/4	1/2	SEO-20	SEC-23	2BSS-20
CRFTS-PN23	BFT-23	1 7/16	6 1/8	5 1/8	9/16	1 3/4	3 3/4	1/2	SEO-23	SEC-23	2BSS-23
CRFTS-PN24	BFT-24	1 1/2	6 3/4	5 21/32	9/16	2 1/64	4 1/8	1/2	SEO-24	SEC-24	2BSS-24
CRFTS-PN27	BFT-27	1 11/16	7 1/16	5 27/32	9/16	2 3/64	4 3/8	9/16	SEO-27	SEC-27	2BSS-27
CRFTS-PN31	BFT-31	1 15/16	7 7/16	6 3/16	9/16	2 5/32	4 9/16	9/16	SEO-31	SEC-31	2BSS-31
CRFTS-PN35	BFT-35	2 3/16	8 1/2	7 1/4	13/16	2 5/16	5 1/4	5/8	SEO-35	SEC-35	2BSS-35

^{*} Accessories sold separately.

PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	A	В	С	E	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRFS-PN12	BF-12	3/4	3 3/8	2 1/2	7/16	1 9/32	3/8	SEO-12	SEC-12	4BSS-12
CRFS-PN16	BF-16	1	3 3/4	2 3/4	17/32	1 7/16	7/16	SEO-16	SEC-16	4BSS-16
CRFS-PN19	BF-19	1 3/16	4 1/4	3 1/4	17/32	1 9/16	7/16	SEO-19	SEC-19	4BSS-19
CRFS-PN20R	BF-20R	1 1/4R	4 1/4	3 1/4	17/32	1 9/16	7/16	SEO-20R	SEC-19	4BSS-20R
CRFS-PN20	BF-20	1 1/4	4 5/8	3 5/8	9/16	1 3/4	1/2	SEO-20	SEC-23	4BSS-20
CRFS-PN23	BF-23	1 7/16	4 5/8	3 5/8	9/16	1 3/4	1/2	SEO-23	SEC-23	4BSS-23
CRFS-PN24	BF-24	1 1/2	5 1/8	4	9/16	2 1/64	1/2	SEO-24	SEC-24	4BSS-24
CRFS-PN27	BF-27	1 11/16	5 3/8	4 1/8	9/16	2 3/64	9/16	SEO-27	SEC-27	4BSS-27
CRFS-PN31	BF-31	1 15/16	5 5/8	4 3/8	9/16	2 5/32	9/16	SEO-31	SEC-31	4BSS-31
CRFS-PN32	BF-32	2	6 3/8	5 1/8	13/16	2 5/16	5/8	SEO-35	SEC-35	4BSS-32
CRFS-PN35	BF-35	2 3/16	6 3/8	5 1/8	13/16	2 5/16	5/8	SEO-35	SEC-35	4BSS-35
CRFS-PN39	BF-39	2 7/16	6 7/8	5 5/8	13/16	2 25/32	5/8	SEO-39	SEC-39	4BSS-39

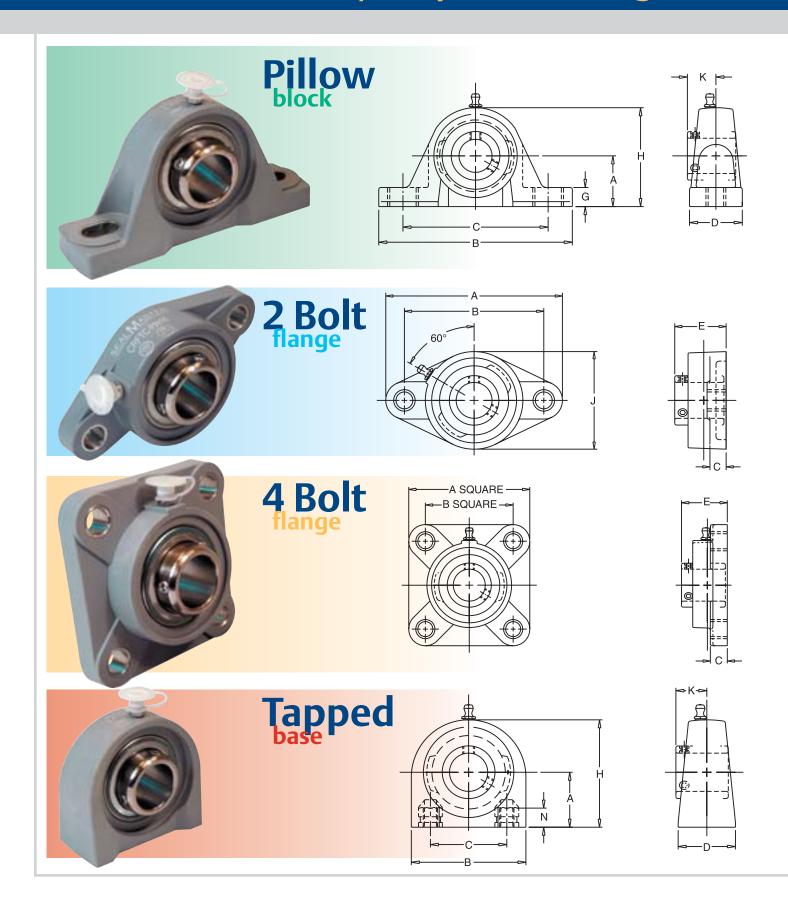
^{*} Accessories sold separately.

PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	А	В	С	D	E	F	G	Н	J	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRFBS-PN10	CRFBS-10	5/8	3	2 3/8	1 1/2	1 11/16	1 11/32	7/8	5/16	4 1/4	2 1/2	3/8	SEO-12	SEC-12	N/A
CRFBS-PN12	CRFBS-12	3/4	3	2 3/8	1 1/2	1 11/16	1 11/32	7/8	5/16	4 1/4	2 1/2	3/8	SEO-12	SEC-12	N/A
CRFBS-PN16	CRFBS-16	1	3 3/8	2 1/2	1 5/8	1 13/16	1 1/2	1 1/8	3/8	4 3/4	2 3/4	3/8	SEO-16	SEC-16	N/A
CRFBS-PN19	CRFBS-19	1 3/16	3 3/4	2 3/4	1 7/8	2 1/16	1 5/8	1 1/4	3/8	5 3/8	3 1/4	3/8	SEO-19	SEC-19	N/A
CRFBS-PN20R	CRFBS-20R	1 1/4R	3 3/4	2 3/4	1 7/8	2 1/16	1 5/8	1 1/4	3/8	5 3/8	3 1/4	3/8	SEO-20R	SEC-19	N/A
CRFBS-PN20	CRFBS-20	1 1/4	4 1/4	3 1/4	2	2 3/8	1 7/8	1 1/4	1/2	6 1/8	3 3/4	1/2	SEO-20	SEC-23	N/A
CRFBS-23	CRFBS-23	1 7/16	4 1/4	3 1/4	2	2 3/8	1 7/8	1 1/4	1/2	6 1/8	3 3/4	1/2	SEO-23	SEC-23	N/A

 $^{^{\}ast}$ Accessories sold separately.



PN Gold Dimensions/Composite Housing





PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	А	В	C MAX	C MIN	D	G	Н	К	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRPC-PN12	CRPC-12	3/4	1 5/16	5	4 1/8	3 3/8	1 1/2	35/64	2 35/64	23/32	3/8	SEO-12	SEC-12	N/A
CRPC-PN16	CRPC-16	1	1 7/16	5 1/2	4 1/2	3 3/4	1 1/2	35/64	2 13/16	13/16	3/8	SEO-16	SEC-16	N/A
CRPC-PN19	CRPC-19	1 3/16	1 11/16	6 1/2	5 1/16	4 7/16	1 7/8	11/16	3 21/64	7/8	1/2	SEO-19	SEC-19	N/A
CRPC-PN20R	CRPC-20R	1 1/4R	1 11/16	6 1/2	5 1/16	4 7/16	1 7/8	11/16	3 21/64	7/8	1/2	SEO-20R	SEC-19	N/A
CRPC-PN20	CRPC-20	1 1/4	1 7/8	6 9/16	5 5/16	4 11/16	1 7/8	11/16	3 3/4	1	1/2	SEO-20	SEC-23	N/A
CRPC-PN23	CRPC-23	1 7/16	1 7/8	6 9/16	5 5/16	4 11/16	1 7/8	11/16	3 3/4	1	1/2	SEO-23	SEC-23	N/A
CRPC-PN24	CRPC-24	1 1/2	1 15/16	7 1/4	5 11/16	5 1/16	2 1/8	11/16	4 1/64	1 3/16	1/2	SEO-24	SEC-24	N/A

^{*} Accessories sold separately.

PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	Α	В	С	E	J	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRFTC-PN12	CRFTC-12	3/4	4 15/32	3 17/32	7/16	1 9/32	2 29/64	3/8	SEO-12	SEC-12	2BSS-12
CRFTC-PN16	CRFTC-16	1	4 15/16	3 57/64	17/32	1 7/16	2 23/32	7/16	SEO-16	SEC-16	2BSS-16
CRFTC-PN19	CRFTC-19	1 3/16	5 11/16	4 19/32	17/32	1 9/16	3 17/64	7/16	SEO-19	SEC-19	2BSS-19
CRFTC-PN20R	CRFTC-20R	1 1/4R	5 11/16	4 19/32	17/32	1 9/16	3 17/64	7/16	SEO-20R	SEC-19	2BSS-20R
CRFTC-PN20	CRFTC-20	1 1/4	6 21/64	5 1/8	9/16	1 3/4	3 23/32	1/2	SEO-20	SEC-23	2BSS-20
CRFTC-PN23	CRFTC-23	1 7/16	6 21/64	5 1/8	9/16	1 3/4	3 23/32	1/2	SEO-23	SEC-23	2BSS-23
CRFTC-PN24	CRFTC-24	1 1/2	6 29/32	5 21/32	9/16	2 1/64	4 7/64	1/2	SEO-24	SEC-24	2BSS-24

^{*} Accessories sold separately.

PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	А	В	С	E	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRFC-PN12	CRFC-12	3/4	3 7/16	2 1/2	7/16	1 9/32	3/8	SEO-12	SEC-12	4BSS-12
CRFC-PN16	CRFC-16	1	3 51/64	2 3/4	17/32	1 7/16	7/16	SEO-16	SEC-16	4BSS-16
CRFC-PN19	CRFC-19	1 3/16	4 11/32	3 1/4	17/32	1 9/16	7/16	SEO-19	SEC-19	4BSS-19
CRFC-PN20R	CRFC-20R	1 1/4R	4 11/32	3 1/4	17/32	1 9/16	7/16	SEO-20R	SEC-19	4BSS-20R
CRFC-PN20	CRFC-20	1 1/4	4 53/64	3 5/8	9/16	1 3/4	1/2	SEO-20	SEC-23	4BSS-20
CRFC-PN23	CRFC-23	1 7/16	4 53/64	3 5/8	9/16	1 3/4	1/2	SEO-23	SEC-23	4BSS-23
CRFC-PN24	CRFC-24	1 1/2	5 1/4	4	9/16	2 1/64	1/2	SEO-24	SEC-24	4BSS-24

^{*} Accessories sold separately.

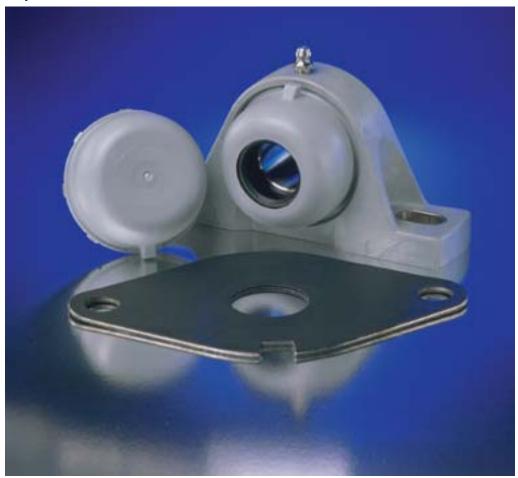
PN GOLD DESCRIPTION	OLD DESCRIPTION	SHAFT SIZE	А	В	С	D	Н	К	N	BOLT SIZE	OPEN CAP*	CLOSED CAP*	BACKSIDE SHIELD*
CRTBC-PN12	CRTBC-12	3/4	1 5/16	3 1/8	2	1 1/2	2 9/16	23/32	1/2	3/8-16	SEO-12	SEC-12	N/A
CRTBC-PN16	CRTBC-16	1	1 7/16	3	2	1 1/2	2 13/16	13/16	1/2	3/8-16	SEO-16	SEC-16	N/A
CRTBC-PN19	CRTBC-19	1 3/16	1 11/16	4	3	1 1/2	3 3/8	7/8	5/8	7/16-14	SEO-19	SEC-19	N/A
CRTBC-PN20R	CRTBC-20R	1 1/4R	1 11/16	4	3	1 1/2	3 3/8	7/8	5/8	7/16-14	SEO-20R	SEC-19	N/A
CRTBC-PN20	CRTBC-20	1 1/4	1 7/8	4 1/4	3 1/4	1 7/8	3 3/4	1	3/4	1/2-13	SEO-20	SEC-23	N/A
CRTBC-PN23	CRTBC-23	1 7/16	1 7/8	4 1/4	3 1/4	1 7/8	3 3/4	1	3/4	1/2-13	SEO-23	SEC-23	N/A
CRTBC-PN24	CRTBC-24	1 1/2	1 15/16	4 5/8	3 1/2	1 7/8	3 15/16	1 3/16	3/4	1/2-13	SEO-24	SEC-24	N/A

^{*} Accessories sold separately.



PN Gold Options

Optional Accessories



- Polymer end cap available in open and closed configurations easily installed and removed from housings
- Stainless steel backside shield for 2 and 4 bolt flanges protect insert seals from continuous splash — drain slot also reduces moisture buildup
- Stainless steel open and closed bolt on end caps available on select 2 bolt and 4 bolt stainless steel housed units – specify B for bolt on cap in nomenclature selection — consult EPT Customer Service for availability Example:

2 Bolt Flange; 1" Shaft Size

- CRBFTS-PN16 utilizes stainless "Bolt-on" End Cap
- CRFTS-PN16 utilizes polymer "Snap-on" End Cap





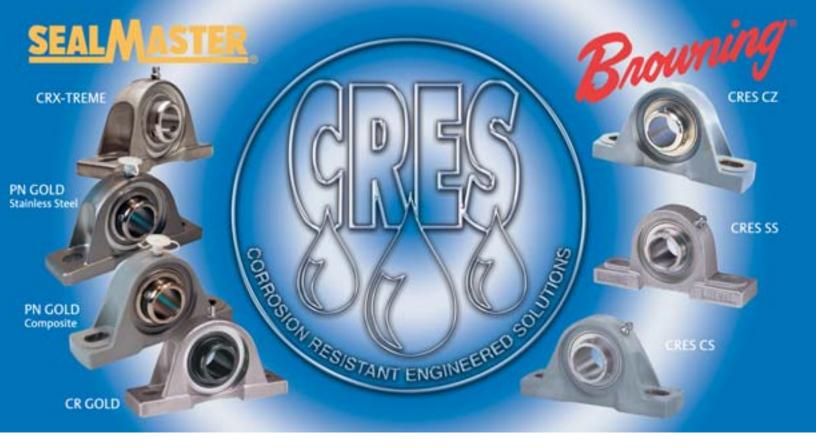
A Focus on Customer Support

From initial design to production and installation, Emerson Power Transmission creates the finest mounted bearings by paying attention to detail across the entire product creation life cycle. If you have an application that requires special design considerations or have additional technical requirements, contact Emerson Power Transmission Bearing Technical Customer Service at 219-465-2211.

Additional information available for:

- Chemical resistance
- Installation and maintenance instructions
- Load ratings
- Interchange information
- Component dimensional specification
 - O Grease fittings
 - O Set screw sizes
 - Misalignment capabilities





For ordering information, contact your authorized distributor or Emerson Power Transmission Customer Service at:

Emerson Power Transmission Telephone 1-800-626-2120 Fax 1-800-262-3292

For additional information contact Sealmaster Mounted Bearing Technical Service at (219) 465-2211 or email Sealmaster Application Engineers at sealmaster.engineering@emerson-ept.com.

www.emerson-ept.com

Connect Here To Be Part of Something Bigger

APPLICATION CONSIDERATIONS

The proper selection and application of power transmission products and components, including the related area of product safety, is the responsibility of the customer. Operating and performance requirements and potential associated issues will vary appreciably depending upon the use and application of such products and components. The scope of the technical and application information included in this publication is necessarily limited. Unusual operating environments and conditions, lubrication requirements, loading supports, and other factors can materially affect the application and operating results of the products and components and the customer should carefully review its requirements. Any technical advice or review furnished by Emerson Power Transmission Corporation and its divisions with respect to the use of products and components is given in good faith and without charge, and Emerson assumes no obligation or liability for the advice given, or results obtained, all such advice and review being given and accepted at customer's risk.

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