



## PREMIUM AGRICULTURAL BEARINGS



Serving The Farming Community For Over 55 Years

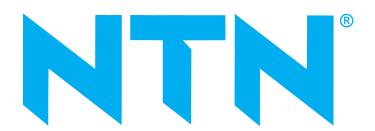




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### What Does The Program Have To Offer?

### **AGRICULTURAL APPLICATIONS**

# **BCA**<sup>®</sup>

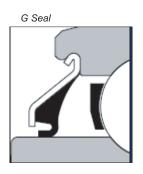
#### **HISTORY**

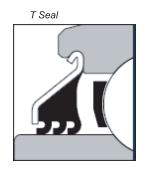
NTN-BCA has been committed to quality bearing manufacturing for over 100 years. It was founded in 1898 in Lancaster, PA as the Star Ball Retainer Company and merged with the Bretz Company in 1910 to form the Bearing Corporation of America (BCA). After acquiring BCA in 1996, NTN's goal has been to reinforce the innovative developent and manufacturing of bearing products.

- BALL BEARINGS
- DISC HARROW BEARINGS
- INSERT BEARINGS
- MOUNTED UNITS
- 2-BOLT and 4-BOLT FLANGE UNITS
  - OEM PREFERRED
  - **■** BROAD APPLICATION COVERAGE
  - **MULTIPLE CONFIGURATIONS**
  - TRADITION OF QUALITY
  - **COMMITMENT TO SERVICE**
  - MAXIMIZE PRODUCTIVITY

## **Premium Agricultural SEAL DESIGNS**

New Generation BCA Vanguard <sup>®</sup>Seals





- More lip interference with thicker inboard and outboard lips to ensure the highest resistance to contamination
- Closer clearance between the trash guard and the inner ring O.D. for increased durability
- Thicker corrosion-resistant shield for maximum strength, rigidity, and wear resistance

An Array Of Environmentally
Friendly Products To Fulfill Your Every Need.



## The Preferred Bearing

#### **OEM PREFERRED**

NTN-BCA is a major supplier of bearings to all original agricultural machinery manufacturers (OEM) in the United States. These OEM manufacturers have performed many rigorous field and laboratory tests, proving the superior performance of NTN bearings. Continually improving manufacturing technologies and designs, NTN meets the demanding performance standards of OEM manufacturers who service the farming community.

- SUPERIOR PERFORMANCE
- REDUCED MAINTENANCE REQUIREMENTS
- MINIMIZED DOWNTIME

NTN bearings offer dependability. Each bearing has been manufactured to the highest engineering specifications, using the finest quality materials. Molded seals are designed for optimum performance under highly contaminated environments, and raceways have been honed for smooth operation and longer life. Each bearing also comes lubricated with the optimum grease type and fill. With a global network of over 700 engineers and research laboratories, NTN customers receive unparalleled support for their demanding bearing applications.

#### **BROAD APPLICATION COVERAGE**

No matter what agricultural equipment you are using, if it has a rotating component, NTN has a bearing for it! You'll find bearings for disc harrows, planters, mowers, rakes, combines, and cotton pickers/strippers, as well as all types of balers, tillage, seeding and forage harvester equipment. Bearings for other agricultural equipment like silo unloaders and grain elevators are also available. Need a bearing not featured in our program? No problem. With one of the largest product lines of any bearing manufacturer, chances are NTN has what you need in its industrial product offering.

### TRADITION OF QUALITY

NTN has a hard-earned reputation for its exceptionally high-quality product. Earned through an ongoing commitment to developing and manufacturing the finest in ball and roller bearings for the OEM and replacement bearing markets, NTN stands for reliability. NTN was the first bearing manufacturer to receive the prestigious Deming Award for outstanding quality control.

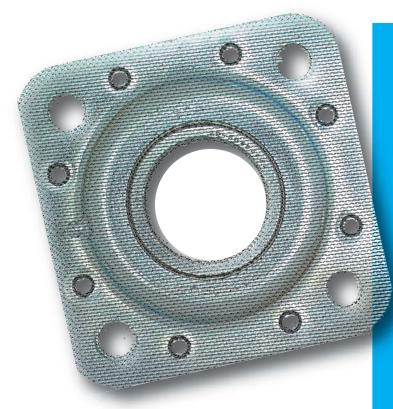
#### **COMMITMENT TO SERVICE**

NTN's focus is equally devoted to customer service - authorized NTN distributors have access to engineering support and our 24-hour 'Round the Clock' emergency ordering service. You no longer have to decide between getting the product you need or getting the support you want. With NTN you can have it all.





## **HEAVY DUTY DISC BEARINGS**



These NTN-BCA integral assemblies are designed specifically for the most severe tillage applications. The FD integral bearing/housing design provides a "bolt-in-place" unit for factory or field installation.

All the benefits of high-performance Heavy Duty Disc Bearings securely installed into a rugged corrosion-resistant housing.

## YEARS OF FIELD EXPERIENCE

### MAXIMUM INTEGRITY

- Heavy gauge case-hardened and zinc-plated stampings encapsulate the bearing and are assembled with eight cold formed rivets to prevent contamination from entering the unit
- Two nitrile o-rings are installed within the cavity to exclude contaminants and provide a grease seal to ensure lubricant feeds directly into the bearing
- Grease fitting is permanently retained in the stamping, allowing easy lubrication and protection from the environment

## M DYNAMIC ALIGNMENT

• Spherical bearing OD allows misalignment relative to the housing

## MAXIMUM SEAL EFFECTIVENESS

- Sealed on both sides with rugged triple lip nitrile rubber seals
- Crimped to outer ring grooves for ultimate seal security
- Seals bonded to heavy gauge trash guard shields

## M BROAD PRODUCT LINE COVERAGE

 Available in a variety of bore options including: square, round, and round with locking collar

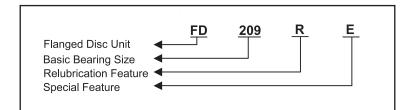
## MISALIGNMENT TOLERANT

- Flexible nylon retainer
- C3 internal clearance
- Ability to support both axial and radial loads



## **FD Series**

### **FLANGED DISC UNITS**



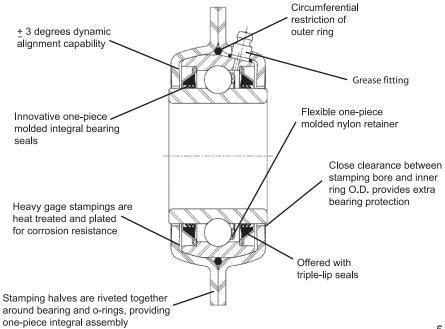
#### PART NUMBER INTERCHANGE

BCA P/N	Fafnir* P/N	Shaft Size	Shaft Shape
FD209RE	DHU 1.1/2R-209	1 1/2"	Round
FD209RJ	Premium DHU491A	1 3/4"	Round
FD209RJH	DHU491A	1 3/4"	Round
FD209RK	DHU 1.1/4S-209	1 1/4"	Square
FD209RM	DHU 1.1/8S-209	1 1/8"	Square
FD211RBA	DHU 2.3/16R-211	2 3/16"	Round
FD211REA	DHU 1.3/4R-211	1 3/4"	Round
FD211RJA	-	1 15/16"	Round
FD211RM	DHU 1.1/2S-211	1 1/2"	Square

\* Fafnir is a registered trademark of the Timken Company

NOTE:

FD209RJ is interchangeable with FD209RP/Case ST491A







## **RUBBER MOUNTED DISC BEARINGS**



NTN-BCA CDS assemblies are designed specifically for tillage applications with high shock loads. The CDS units are comprised of an integral bearing and a rubber grommet housing that absorbs impact loads.

## YEARS OF FIELD EXPERIENCE

## **DYNAMIC ALIGNMENT**

 Spherical bearing OD allows misalignment relative to the housing

## SPECIAL DIMENSIONAL ATTRIBUTES

 These units are compatible with a variety of equipment designs

## M BROAD PRODUCT LINE COVERAGE

- Available in a variety of bore options including: square, round, and round with locking collar
- RUBBER GROMMET HOUSING ABSORBS IMPACT LOADS FROM UNEVEN FIELDS

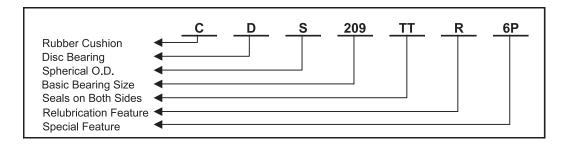
## MAXIMUM SEAL EFFECTIVENESS

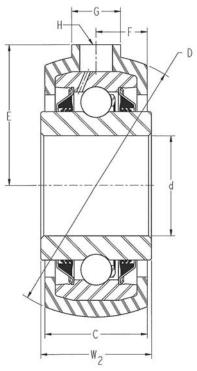
- Sealed on both sides with rugged triple lip nitrile rubber seals
- Crimped to outer ring grooves for ultimate seal security
- Seals bonded to heavy gauge trash guard shields



## **CDS Series**

### **RUBBER MOUNTED DISC HARROW BEARINGS**





BCA P/N	Bore	Inner Ring Width	Housing Width	Housing O.D.	Housing Relube Hole Radius	Relube Hole Center Distance	Housing Relube Hole Width	Housing Relube Hole Diameter
	d	$W_2$	С	D	E	F	G	Н
	(Dimensions in Inches)							
CDS209TTR6P	1.530 RD	1.6875	1.560	4.000	2.160	0.780	0.750	0.500
CDS209TTR6PB	1.770 RD	1.6875	1.560	4.000	2.160	0.780	0.750	0.500
CDS211TTR23	1.780 RD	2.1250	1.760	4.438	2.375	0.880	0.750	0.500
CDS211TTR23A	1.531 SQ	2.1250	1.760	4.438	2.375	0.880	0.750	0.500





## **HEX BORE BEARINGS**



NTN-BCA Hex Bore Bearings are a popular selection in moderately-loaded, low-speed agricultural applications.

Hex Bore Bearings eliminate the need for locking devices and simplify installation.

## YEARS OF FIELD EXPERIENCE

## MAXIMUM SEAL EFFECTIVENESS

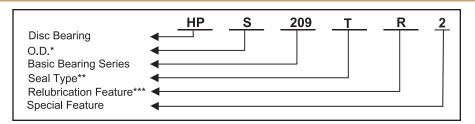
- Sealed on both sides with rugged triple lip nitrile rubber seals
- Crimped to outer ring grooves for ultimate seal security
- Seals bonded to heavy gauge trash guard shields

## **MISALIGNMENT TOLERANT**

- Flexible nylon retainer
- C3 internal clearance
- Ability to support both axial and radial loads
- AVAILABLE WITH SPHERICAL OR CYLINDRICAL OUTER RING
- ✓ AVAILABLE IN RE-LUBRICATABLE AND NON-RE-LUBRICATABLE
- AVAILABLE IN NUMEROUS HEX BORE SIZES
  - From 11/16" ~ 2 1/2"



## **HPC Series - HPS Series**

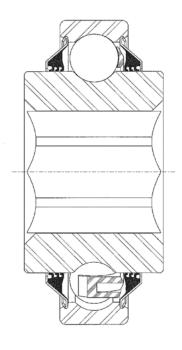


- \* C = Cylindrical, S = Spherical
- \*\* T = Triple-lip, G = Single-lip, V = Double-lip Seals \*\*\* R = Re-lubricatable; blank = Non-re-lubricatable

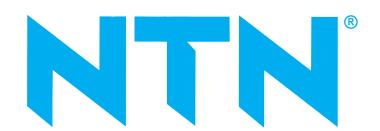
#### PART NUMBER INTERCHANGE

BCA P/N	Fafnir* P/N	Shaft Size	Shaft Shape
HPC011GP	204KRR2	11/16"	Hex
HPC014GP	205KRR2	7/8"	Hex
HEC014VP	-	7/8"	Hex
HPC100GP	206KRR6	1"	Hex
HPC100TP	206KPP3	1"	Hex
HPC100TPD	206KPPB5	1"	Hex
HPC100TR	G206KPP4	1"	Hex
HPC103TP2	-	1 1/4"	Hex
HPC103TPA	-	1 1/4"	Hex
HPC104TPA	W208PP21	1 1/4"	Hex

BCA P/N	Fafnir* P/N	Shaft Size	Shaft Shape
HPS014GP	205KRRB2	7/8"	Hex
HPS100GP	206KRRB6	1"	Hex
HPS100TPD	-	1"	Hex
HPS102GP	207KRRB9	1 1/8"	Hex
HPS102GPE	207KRRB12	1 1/8"	Hex
HPS102GR	G207KPPB2	1 1/8"	Hex
HPS102TR	-	1 1/8"	Hex
HPS103GP2	207KPP3	1 1/4"	Hex
HPS103GP2A	103GP2A -		Hex
HPS103TP2	207KPPB3	1 1/4"	Hex
HPS104TR	R GW208PPB22 1 1/4" He		Hex
HPS106GP	-	1 3/8"	Hex
HPS108GPB	-	1 1/2"	Hex - OR width 0.8661"
HPS108GPH	209KRRB2	1 1/2"	Hex - OR width 0.7480"



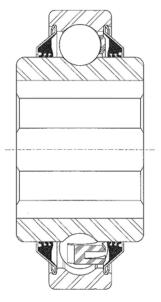
<sup>\*</sup> Fafnir is a registered trademark of the Timken Company





## **SQUARE & ROUND BORE BEARINGS**

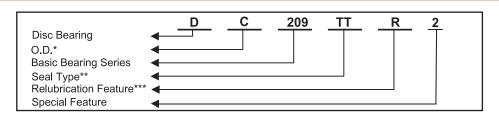




- **YEARS OF FIELD EXPERIENCE**
- MIMPACT RESISTANT
- MAXIMUM SEAL EFFECTIVENESS
  - Sealed on both sides with rugged triple lip nitrile rubber seals
  - Crimped into outer ring grooves for ultimate seal security
  - Seals bonded to heavy gauge trash guard shields
- MISALIGNMENT TOLERANT
  - Flexible nylon retainer
  - C3 internal clearance
  - Ability to support both axial and radial loads
- AVAILABLE IN RE-LUBRICATABLE AND NON-RE-LUBRICATABLE
- **✓** AVAILABLE WITH ROUND OR SQUARE BORES
  - Square bores 7/8" ~ 2 1/2"
  - Round bores up to 3 1/8"



## **DC Series**

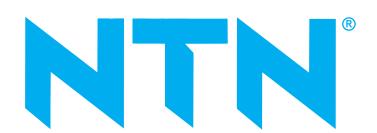


- \* C = Cylindrical, S = Spherical \*\* TT = Triple-lip Seals
- \*\*\*R = Re-lubricatable; blank = Non-re-lubricatable

#### PART NUMBER INTERCHANGE

BCA P/N	Fafnir* P/N	Shaft Size	Shaft Shape
DC208TT	W208K3	1 1/8"	Square
DC208TT10	W208PP10	W208PP10 1.5000"	
DC208TT5	W208PP5	1 1/8"	Square
DC208TT6	W208PP6	1"	Square
DC208TT8	W208PP8	1 1/8"	Square
DC208TTR17	GW208PP17	1 1/8"	Square
DC209TTR10	-	1.7700"	Round
DC209TTR8	GW209PP8	1 1/4"	Square
DC210TT2	W210PP2	1.9380"	Round
DC210TT4	W210PP4	1 1/8"	Square
DC210TTR4	GW210PP4	1 1/8"	Square
DC211TT2	W211PP2	2.1880"	Round
DC211TT3	W211PP3	1 1/2"	Square
DC211TT5	W211PP5 1 1/2"		Square
DC211TTR2	<b>R2</b> GW211PP2 2.1880"		Round
DC211TTR21	GW211PP37	1.7800"	Round
DC211TTR3	GW211PP3	1 1/2"	Square
DC211TTR3E	GW211PP17	1 1/2"	Square
DC211TTR4	GW211PP4	1 1/2"	Square
DC212TTR	-	1 3/4"	Square
DC214TTR2	GW214PP2	2.7559"	Round
DC214TTR3	-	2.6881"	Round
DC216TTR2	GW216PP2	2 1/4"	Square

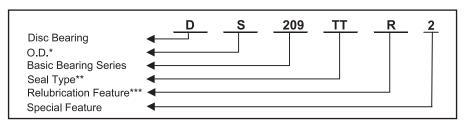
<sup>\*</sup> Fafnir is a registered trademark of the Timken Company





## **SQUARE & ROUND BORE BEARINGS**

## **DS Series**



- \* C = Cylindrical, S = Spherical
- \*\* TT = Triple-lip Seals
- \*\*\* R = Re-lubricatable; blank = Non-re-lubricatable

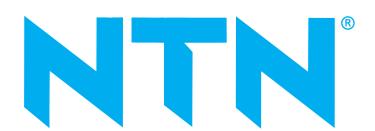


- YEARS OF FIELD EXPERIENCE
- MPACT RESISTANT
- MAXIMUM SEAL EFFECTIVENESS
  - Sealed on both sides with rugged triple lip nitrile rubber seals
  - Crimped into outer ring grooves for ultimate seal security
  - Seals bonded to heavy gauge trash guard shields
- **MISALIGNMENT TOLERANT** 
  - Flexible nylon retainer
  - C3 internal clearance
  - Ability to support both axial and radial loads
- AVAILABLE IN RE-LUBRICATABLE AND NON-RE-LUBRICATABLE
- **AVAILABLE WITH ROUND OR HEX BORES** 
  - Square bores 7/8" ~ 2 1/2"
  - Round bores up to 3 1/8"



### PART NUMBER INTERCHANGE

BCA P/N	Fafnir* P/N	Shaft Size	Shaft Shape
DS208TT12	-	1 1/8"	Square
DS208TT12A	W208PPB12	1 1/8"	Square
DS208TT13	W208PPB13	7/8"	Square
DS208TT2A	W208PPB23	1.5005"	Round
DS208TT5	W208PPB5	1 1/8"	Square
DS208TT6	W208PPB6	1"	Square
DS208TT7	W208PPB7	1.1880"	Round
DS208TT8	W208PPB8	1 1/8"	Square
DS208TT9	W208PPB9	1"	Square
DS208TTR5	GW208PPB5	1 1/8"	Square
DS208TTR8	GW208PPB8	1 1/8"	Square
DS209TT2	W209PPB2	1.7717"	Round
DS209TT4	W209PPB4	1.5300"	Round
DS209TT5	W209PPB8	1 1/4"	Square
DS209TT6	W209PPB6	1.5300"	Round
DS209TTR10	GW209PPB11	1.7780"	Round
DS209TTR11B	-	1.7700"	Round
DS209TTR15	-	1 1/8"	Square
DS209TTR2	GW209PPB2	1.7717"	Round
DS209TTR4	GW209PPB4	1.5300"	Round
DS209TTR5	GW209PPB5	1 1/4"	Square
DS209TTR6JA	-	1.7700"	Round
DS209TTR6P	-	1.5300"	Round
DS209TTR6PA	-	1.7700"	Round
DS209TTR8	GW209PPB8	1 1/4"	Square
DS210TT2	W210PPB2	1.9380"	Round
DS210TT4	W210PPB4	1 1/8"	Square
DS210TT5	W210PPB5	1.7850"	Round
DS210TTR2	GW210PPB2	1.9380"	Round
DS210TTR4	GW210PPB4	1 1/8"	Square
DS210TTR5R	GW210PPB5	1.7850"	Round
DS211TT2	W211PPB2	2.1880"	Round
DS211TT3	W211PPB3	1 1/2"	Square
DS211TT4	W211PPB4	2.1880"	Round
DS211TT6	W211PPB6	1 1/2"	Square
DS211TTR13	GW211PPB13	1.7850"	Round
DS211TTR14	GW211PPB14	2.0150"	Round
DS211TTR2	GW211PPB2	2.1880"	Round
DS211TTR21A	-	1.7800"	Round
DS211TTR23	- 1.7800"		Round
DS211TTR3	GW211PPB3 1 1/2"		Square
DS211TTR8R	-	2.1880"	Round
DS214TTR3	- CW1214DDD5	1.9381"	Round
DS214TTR5 DS216TTR2	GW1214PPB5	2.7559"	Round
DSZIOLIKZ	_	2 1/4"	Square





## **BEARING UNITS**

Bearing Insert Housing Size

Bore Diameter Suffix

## **ULTRA-CLASS Series**

1.1/4



ULTRA-CLASS represents feature rich bearing units with electric motor quality inserts. All wide inner ring inserts are black oxide coated to resist corrosion.

#### HOUSING INSERT MATRIX

HOUSINGS ➤  ∀ INSERTS	þ		0
A-UC2	UCP UCPL	UCFU	UCFLU
A-UCX	UCPX	UCFUX	UCFLUX
A-UEL2	UELP UELPL	UELFU	UELFLU
A-AR2	ARP ARPL	ARFU	ARFLU
A-IEL2	JELP JELPL	JELFU	JELFLU

# ✓ INNOVATIVE DESIGN

## M HEAVY DUTY HOUSING WITH SOLID BASE

 A rugged solid base housing can take more abuse, dampens vibrations, and provides protection against over-tightening of bolts

## **W** RUBBER LIP SEAL WITH FLINGER

 Flinger combined with a full contact molded rubber seal provides superior protection against contamination

## **PERMANENT METALLIC NAME PLATE**

 Units have a metallic name plate showing the complete unit part number, making it easier for stocking on the shelf and identification of parts for replacement

## BALL POINT SET SCREW - NTN Exclusive

 Ball point set screw is an exclusive NTN design that is superior to cup point set screws

## **▼** ELECTRIC MOTOR QUALITY INSERTS

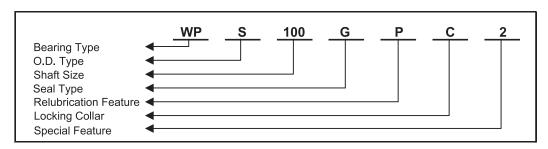
 Insert bearing raceways are super finished and have tighter run out tolerances



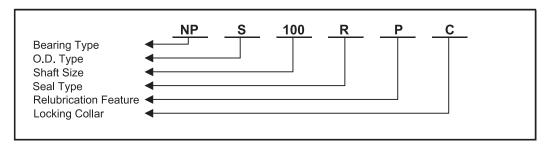
## **BEARING UNIT INSERTS**

## **WPC/WPS & NPC/NPS Series**

#### WPC/WPS - WIDE INNER RING ADAPTER BEARINGS



#### NPC/NPS - NARROW INNER RING ADAPTER BEARINGS



#### **Bearing Type**

WP=Adapter bearings with wide inner ring and locking collar NP=Adapter bearings with narrow inner ring and locking collar

#### **OD Type**

S = Spherical OD C = Cylindrical OD

#### **Shaft Size**

100 = 1<sup>st</sup> digit is in inches, and 2<sup>nd</sup> number is 1/16" ex. 100 = 1" 104 = 1.1/4" 014 = 14/16 = 7/8"

#### Seal Type

G = Vanguard™ single lip seals V= Vanguard™ double lip seals T = Vanguard™ triple lip seals R = Vanguard™ single lip seals

#### **Re-lube Feature**

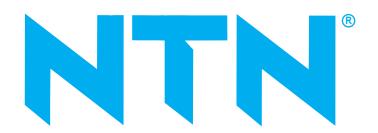
P = Non-relubricatable R = Relubricatable

#### Locking collar

C = Comes with locking collar

#### **Special Feature**

2 = Special feature





## **SPECIAL RADIAL BALL BEARINGS**

## **Part Number Interchange**

BCA P/N	Fafnir* P/N	Special Features	
203FFA	-	Basic 203FF with Inch Dimensions	
203RRAR10	BB203KRR2	Special Bore and Width	
204BAR	-	Basic 204AR with Seal on One Side	
204BBAR	P204RR6	Special 3/4 Bore, Double Sealed with Special Seal	
204BBE	204RR8	Special .6260 Bore, Double Sealed	
204FREN	204PY3	Special 204 with Wide I.R., Double Sealed	
204GGB	1012KRRB3	Special Self Aligning Adapter Bearing	
204TJN	-	Special Disc Bearing with one Triple Lip Seal	
204TTM	-	Special Adapter Bearing with 2-Set Screws for; TNT-3/4-RA	
205FFW	-	Special Seals, Nylon Retainer	
205RHN	205KR3	Special 3/4 Bore with R Type Seal	
205RRA	-	Special 3/4 Bore with Extended I.R.	
205RRU	-	Special Bore with Wide I.R.	
205RTAN	205RVA	Special Bore with Wide I.R., T Seal on One Side	
205TNJ	205KP6	Special Bore with Wide I.R., T Seal on One Side	
205TNK	-	Special Bore with Wide I.R., T Seal on One Side	
205TTB	205PP9	Special Bore with Wide I.R., Two T Seals	
205TTH	205PPB7	Special Bore with Wide I.R., Two T Seals	
205TTP	205PP12	Special Bore with Wide I.R., Two T Seals	
205VVA	-	Special Bore, O.D. and Width, Nylon Retainer	
206FFB	-	Special Seals, Nylon Retainer	
206GGBN	-	Special Bore with Wide I.R. and Spherical O.D., Two G Seals	
206RRMN	-	Special .7580 Bore and Two R Seals	
206RTQ	-	Special Bore and Width with One R and T Seal	
206TTA	-	Special 1.0100 Bore with Wide I.R. and Spherical O.D., Two Seals	
206TTU	-	Basic 206TTA, with Re-lube feature	
8445C3	-	Single Seal, C3	
8505	205KL	Single Seal	
8506/2A	206KL	Single Seal	
87506	206KLD	Seal and Shield	
88016/2AS	202KLL3	Basic 88016	
88107BGG	207KRR14	Basic 88107 with 1.2525 Bore and "G" Seals	
88128GG	P208KRR4	Basic 88128A with Two "G" Seals	
88502A	202KLL4	Basic 88502 with .5512 Bore and .035 Bore Corners	
88506/2AS	206NPP2	Basic 88506	
88508/2AS	208KRR2	Basic 88508	
8984YY	203KRR3	Basic 8984 with "Y" Seals	



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