

TANN Corrosion-Resistant Bearing Units



Stainless steel units
PBT Thermoplastic Housings
available in common inch and metric size

Stainless Steel Bearing Units

TANN range of bearings and units are widely and selectively vast to suit your every application. Most of different shapes bearings and mounted bearing units are available in stainless steel material.

Stainless steel housings are designed with solid bases/back and smooth surfaces to allow for complete and easy wash down. Stainless steel bearings are filed with FDA (approved for incidental food contact) water/wash resistant, odorless, tasteless Mobil grease FM102.

Stainless steel bearings are available in common inch and metric shaft sizes ranging from 1/2" to 1 1/2" and 20mm to 40mm.

Plastic Bearing Units

PBT Thermoplastic housings with Stainless steel bearings
or PBT Thermoplastic housings with Stainless/Zinc chromate bearings

TANN thermoplastic housings will cope with severe wash down conditions and the temperatures to 285° F and have a tensile strength of 17,300 PSI (ASTM D638). They are resistant to moisture absorption and have high mechanical properties. These units maintain excellent chemical resistant ratings even in contact with hydrochloric, sulfuric, nitric and acetic acids. In addition, they can resist most hydroxides and alcohols.

Stainless steel and Thermoplastic units are available from stocks :

- * Pillow blocks (P)
- * Tapered based pillow blocks (PAS)
- * Two-bolt flange bearing units (FT)
- * Three-bolt flange bearing units (FB)
- * Four-bolt flange bearing units (F)
- * Hanger type units (HA)
- * Take-up units (T)



Material Specifications Example

SS-UCP200 Series -

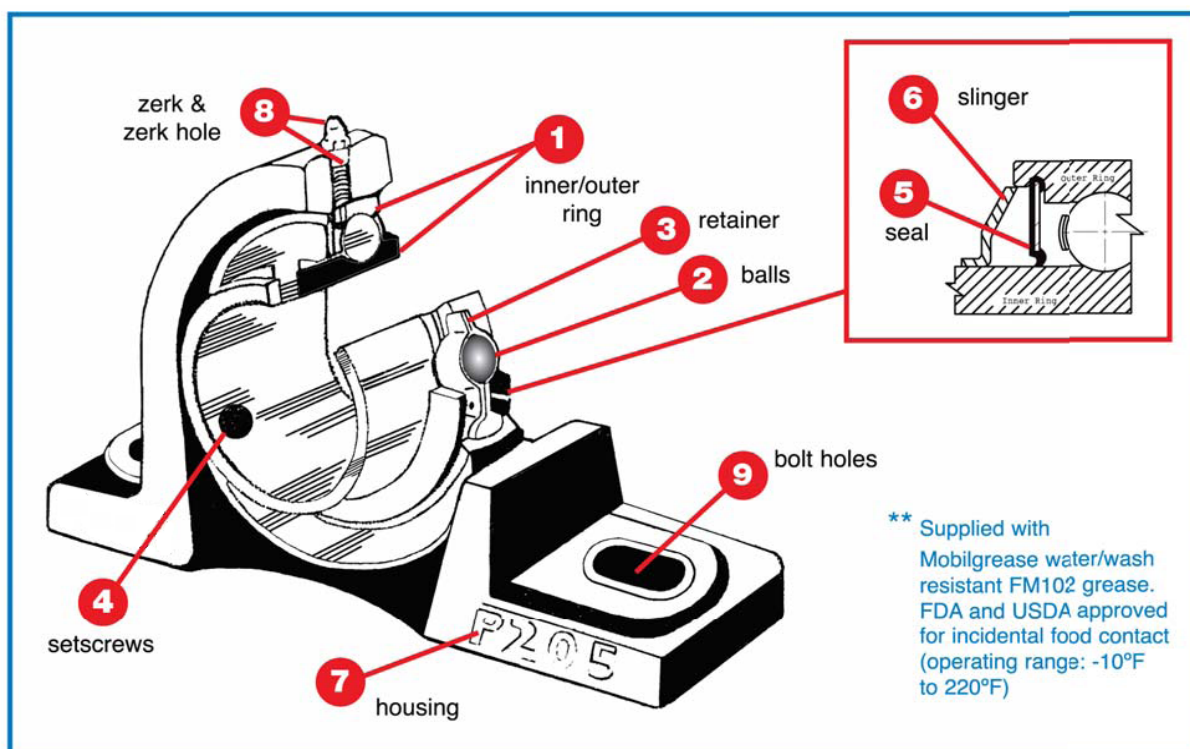
Whole set Stainless steel bearing / Housing

1. Stainless steel AISI 440C
2. Stainless steel AISI 440C
3. Stainless steel AISI 302
4. Stainless steel AISI 420
5. FDA approved silicone rubber (-10° F to 220° F)
6. Stainless steel AISI 302
7. Solid base stainless steel AISI 304
8. Stainless steel AISI 304

SS-UCP200-PBT Series -

Stainless steel bearing with PBT (Thermoplastic) Housing

1. Stainless steel AISI 440C
2. Stainless steel AISI 440C
3. Stainless steel AISI 302
4. Stainless steel AISI 420
5. FDA approved silicone rubber (-10° F to 220° F)
6. Stainless steel AISI 302
7. Thermoplastic solid base
8. Stainless steel zerk and stainless steel lined zerk hole for added strength
9. Stainless steel bolt bushing for added strength



Z-UCP200-PBT Series -

Zinc/Stainless bearing with PBT housing

1. Zinc chromate plated Gcr15 (52100) steel
2. Stainless steel AISI 440C
3. Stainless steel AISI 302
4. Stainless steel AISI 420
5. FDA approved silicone rubber (-10° F to 220° F)
6. Stainless steel AISI 302
7. Thermoplastic (PBT) solid base
8. Stainless steel zerk and stainless steel lined zerk hole for added strength
9. Stainless steel bolt bushing for added strength

Note:

- Material PBT - white, black and green colour available
- Interchangeable with cast iron housing
- Grease: Shell Alvania RL2, or FDA approved food grease
- Supplying with end cover upon required

- Illustration shown above is for standard pillow blocks, also available in other housing styles.

Basic Agricultural Bearing Construction:

The basic components of a ball bearing are an inner ring, outer ring, balls and retainer (See Figure 1). Most TANN agricultural ball bearings also come sealed on both sides (See Figure 2 for available seal designs).

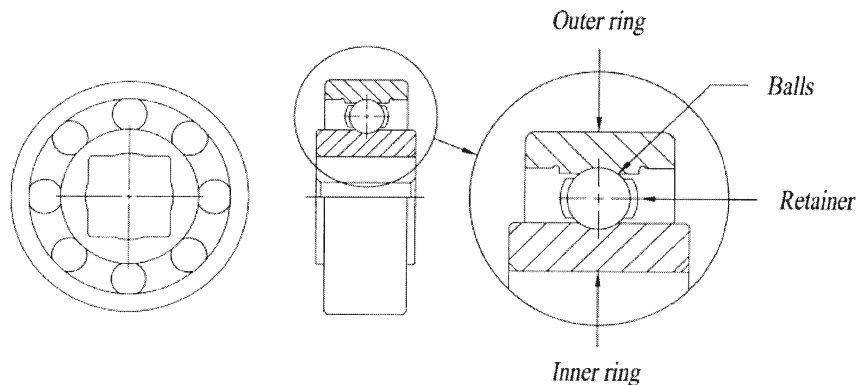


Figure 1: Basic TANN agricultural ball bearing components.

BEARING COMPONENT MATERIALS:

Component	Material
Inner ring	SAE 52100 steel
Outer ring	SAE 52100 steel
Balls	SAE 52100 steel
Retainer	Two piece riveted mild steel
	One piece fiberglass reinforced nylon 66

Table 1: Bearing component materials.

SEALS:

Most TANN agricultural ball bearings are supplied with seals on both sides. TANN agricultural bearing seals feature one, two, or three Nitrile "Buna N" rubber lips bonded to a heavy gauge steel shroud. The shroud of the seal is staked into the outer ring for positive seal retention and protects the seal lips from abrasion, debris and fiber/crop wrap.

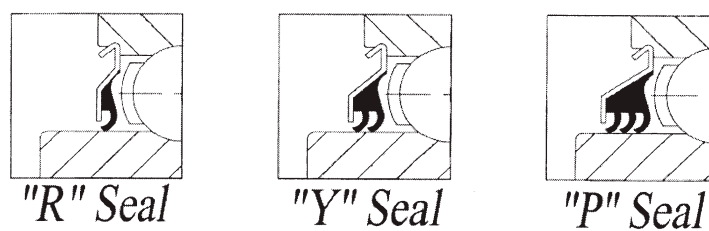


Figure 2: TANN agricultural ball bearing seal designs.

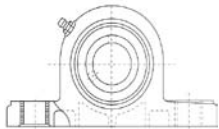
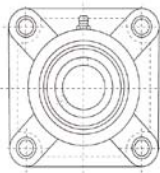
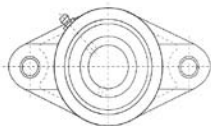

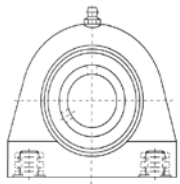
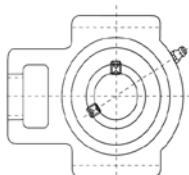

SEAL DESCRIPTIONS:

"R" Seal: Shroud seal featuring one, land riding, Nitrile "Buna N" rubber lip. This seal is designed for use in moderate contamination environments and higher speed agricultural applications.

"Y" Seal: Shroud seal featuring two, land riding, Nitrile "Buna N" rubber lips. This seal is designed for use in moderate to high contamination environments and moderate speed agricultural applications.

"P" Seal: Shroud seal featuring three, land riding, Nitrile "Buna N" rubber lips. This seal is designed for use in high to severe contamination environments and slow speed agricultural applications.

Available Ranges of Popular Sizes

Bearing Unit Types		Description	TANN Number for reference
 PILLOW BLOCKS		STAINLESS STEEL BEARING & HOUSING	SS-UCP200 SERIES
		STAINLESS STEEL BEARING WITH THERMOPLASTIC HOUSING	S-UCP200-PBT SERIES
		ZIN BEARING & THERMOPLASTIC HOUSING	Z-UCP200-PBT SERIES
 SQUARE BEARING UNIT		STAINLESS STEEL BEARING & HOUSING	SS-UCF200 SERIES
		STAINLESS STEEL BEARING WITH THERMOPLASTIC HOUSING	S-UCF200-PBT SERIES
		ZIN BEARING & THERMOPLASTIC HOUSING	Z-UCF200-PBT SERIES
 OVAL FLANGE UNIT		STAINLESS STEEL BEARING & HOUSING	SS-UCFL200 SERIES
		STAINLESS STEEL BEARING WITH THERMOPLASTIC HOUSING	SUCFL200-PBT SERIES
		ZIN BEARING & THERMOPLASTIC HOUSING	Z-UCFL200-PBT SERIES
 FLANGE BRACKET UNIT		STAINLESS STEEL BEARING & HOUSING	SS-UCFB200 SERIES
		STAINLESS STEEL BEARING WITH THERMOPLASTIC HOUSING	S-UCFB200-PBT SERIES
		ZIN BEARING & THERMOPLASTIC HOUSING	Z-UCFB200-PBT SERIES
 TAP BASE UNIT		STAINLESS STEEL BEARING & HOUSING	SS-UCPA200 SERIES
		STAINLESS STEEL BEARING WITH THERMOPLASTIC HOUSING	S-UCPA200-PBT SERIES
		ZIN BEARING & THERMOPLASTIC HOUSING	Z-UCPA200-PBT SERIES
 TAKE UP UNIT		STAINLESS STEEL BEARING & HOUSING	SS-UCT200 SERIES
		STAINLESS STEEL BEARING WITH THERMOPLASTIC HOUSING	S-UCT200-PBT SERIES
		ZIN BEARING & THERMOPLASTIC HOUSING	Z-UCT200-PBT SERIES
 HANGER UNIT		STAINLESS STEEL BEARING & HOUSING	SS-UCHA200 SERIES
		STAINLESS STEEL BEARING WITH THERMOPLASTIC HOUSING	S-UCHA200-PBT SERIES
		ZIN BEARING & THERMOPLASTIC HOUSING	Z-UCHA200-PBT SERIES

** The above for reference only, available in full range of popular shaft sizes.

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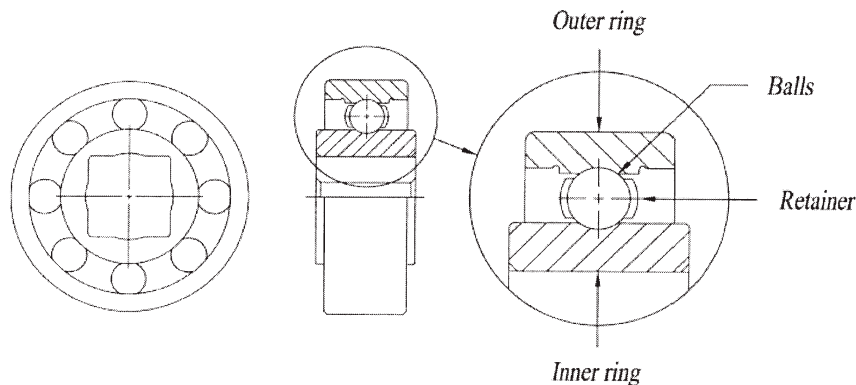


Figure 1: Basic **TANN** agricultural ball bearing components.

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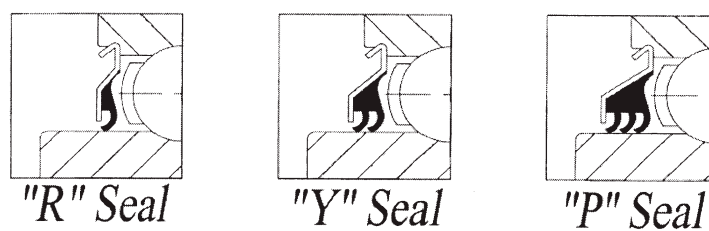


Figure 2: **TANN** agricultural ball bearing seal designs.

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“P” Seal: Shroud seal featuring three, land riding, Nitrile “Buna N” rubber lips. This seal is designed for use in high to severe contamination environments and slow speed agricultural applications.

Popular sizes and Interchange

Bearing No.	John Deere OE Ref.	Boundary Dimensions			
		d	D	Bi	Be
203KRR2	AN142670	16.256	40.000	18.288	12.000
203KRR5		13.080	40.000	18.288	12.000
208KRR2		40.000	80.000	27.000	21.000
205PP13	AA28271	25.600	52.000	25.400	15.000
205PPB13	AA22097	25.600	52.000	25.400	15.000
67048/10	JD8187/JD8225	31.750	59.131	15.875	-
DG1542ARSL	CJ13975	15.000	42.000	22.000	18.000
DG1640ARSL	AN212132	16.256	40.000	44.120	39.120
DG1645ARSL	AA21480	16.000	45.225	18.660	15.490
DG1747ARSL	CJ13976	17.000	47.000	27.000	19.000
DG1952ARSL	A27002	19.100	52.000	21.000	15.000
DG2562ARSL	AA34616	25.140	62.000	18.000	-
GW205PPB7	GW205PPB7 NSR	23.813	52.000	34.925	15.000
GW209PPB11	AN20649	45.237	85.000	36.530	22.000
GW209PPB5	GW209PPB5 NSR	32.770	85.000	36.530	30.180
GW211PPB2	GW211PPB2	55.575	100.000	33.325	33.325
GW211PPB9	B34215	55.753	100.000	39.690	25.000
GW214PPB6	JD8658	68.278	125.000	68.263	28.000
GW309PPB2	GW309PPB2	45.000	100.000	47.620	27.000
ST491A	XF-009	45.000	127.000	42.800	42.000
ST491B		38.860	127.000	42.800	42.000
ST740		55.562	139.700	55.600	45.000
W208PPB12	613233A	40.560	85.738	36.530	30.180
W209PP5	4509BA	32.770	85.000	36.530	30.180
W30-75S1	AA35741	15.918	74.700	30.000	-
XF013	PF951	45.000	175.000	42.800	31.800
RALE 25 NPP		25.000	47.000	25.500	12.000
RALE 30 NPP		35.000	55.000	26.500	13.000
GRAE 25 NPPB		25.000	52.000	31.000	15.000
GRAE 30 NPPB		30.000	62.000	35.800	18.000
GRAE 35 NPPB		35.000	72.000	39.000	19.000
GRAE 40 NPPB		40.000	80.000	43.800	21.000
GRAE 45 NPPB		45.000	85.000	43.800	22.000
GRAE 50 NPPB		50.000	90.000	43.800	22.000
GRAE 55 NPPB		55.000	100.000	48.400	25.000

