



Frantz Wheel and Bearing Division
-176 Series Bearings-

[Return to Bearing Catalog](#)

[Introduction](#)

[Core Bearings](#)

[176 Series](#)

[300 Series](#)

[620 Series](#)

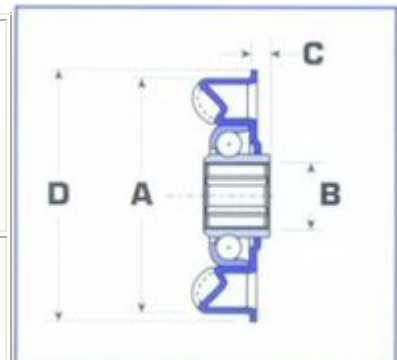
[Conclusion](#)



| Model Number | D Nominal Flange OD (Tube OD) | Tube Wall Thickness | A Bearing Shell Body OD | B Nominal Shaft Size | C Nominal Extension | Dynamic Load Rating | Shield or Particulate Seal |
|--------------|-------------------------------|---------------------|-------------------------|----------------------|---------------------|---------------------|----------------------------|
| 1956 | 1.9" | 16 gauge | 1.777" | 7/16" hex | .172" | 176 lbs. | none |
| 1960 | 2.0" | 16 gauge | 1.862" | 7/16" hex | .172" | 176 lbs. | none |
| 1852 | 50mm | 1.5mm | 47.3mm | 12mm round | 3.7mm | 80 kgs. | none |
| 1853 | 50mm | 1.5mm | 47.3mm | 6mm round | 3.7mm | 80 kgs. | none |
| 1854 | 50mm | 1.5mm | 47.3mm | 8mm round | 3.7mm | 80 kgs. | none |
| 1855 | 50mm | 1.5mm | 47.3mm | 10mm round | 3.7mm | 80 kgs. | none |
| 1856 | 50mm | 1.5mm | 47.3mm | 11mm round | 3.7mm | 80 kgs. | none |

176 Series bearings are intended for low-cost everyday applications. They feature:

| | |
|---|--|
| <ul style="list-style-type: none"> Load Rating: Speed Rating: Noise Rating: | 176 lbs. (80 kgs.) 600 SFM (with a 1.9" roller) 59.7 dBA (at 250 RPM) Compared to 66.8 dBA for competitive bearings. |
| <ul style="list-style-type: none"> Roller Tube Sizes: | 1.9", 2.0", 50mm Fits a variety of axle sizes. |



The 176 Series is constantly expanding; call for additional roller tube sizes and tube wall thicknesses.



Frantz Wheel and Bearing Division
-300 Series Bearings-

[Return to Bearing Catalog](#)

| |
|---------------|
| Catalog |
| Introduction |
| Core Bearings |
| 176 Series |
| 300 Series |
| 620 Series |
| Conclusion |

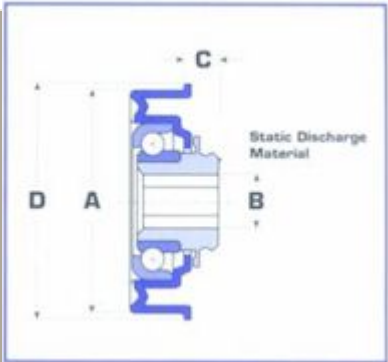


The 300 Series is intended as a low-cost alternative to precision bearings in some applications. It can be fit with a 2.5" adapter for use in 2.5" roller applications requiring 7/16" hex axles.

| Model Number | D Nominal Flange OD (Tube OD) | Tube Wall Thickness | A Bearing Shell Body OD | B Nominal Shaft Size | C Nominal Extension | Dynamic Load Rating | Shield or Particulate Seal |
|--------------|-------------------------------------|---------------------|----------------------------|-------------------------|------------------------|---------------------|----------------------------|
| 1815 | 1.9" | 16 gauge | 1.777" | 7/16" hex | .25" | 300 lbs. | shield |
| 1829 | 2.0" | 16 gauge | 1.862" | 7/16" hex | .25" | 300 lbs. | shield |
| 1860 | 2.5" | 11 gauge | 2.259" | 7/16" hex | .25" | 300 lbs. | shield |
| 1824 | 50mm | 1.5mm | 47.3mm | 11mm hex | 6.3mm | 136 kgs. | shield |
| 1825 | 50mm | 1.5mm | 47.3mm | 6mm round | 6.3mm | 136 kgs. | shield |
| 1826 | 50mm | 1.5mm | 47.3mm | 8mm round | 6.3mm | 136 kgs. | shield |
| 1827 | 50mm | 1.5mm | 47.3mm | 10mm round | 6.3mm | 136 kgs. | shield |
| 1828 | 50mm | 1.5mm | 47.3mm | 12mm round | 6.3mm | 136 kgs. | shield |
| 1831 | 60mm | 2.0mm | 56.3mm | 11mm hex | 6.3mm | 136 kgs. | shield |
| 1832 | 60mm | 2.0mm | 56.3mm | 6mm hex | 6.3mm | 136 kgs. | shield |
| 1833 | 60mm | 2.0mm | 56.3mm | 8mm hex | 6.3mm | 136 kgs. | shield |
| 1834 | 60mm | 2.0mm | 56.3mm | 10mm round | 6.3mm | 136 kgs. | shield |
| 1835 | 60mm | 2.0mm | 56.3mm | 12mm round | 6.3mm | 136 kgs. | shield |

176 Series bearings are intended for low-cost everyday applications. They feature:

| | |
|---|---|
| <ul style="list-style-type: none"> • Load Rating: • Speed Rating: • Noise Rating: | 300 lbs. (136 kgs.) 750 SFM (with a 1.9" roller) 57.1 dBA (at 250 RPM) Compared to 66.8 dBA for competitive bearings. |
| <ul style="list-style-type: none"> • Roller Tube Sizes: | 1.9", 2.0", 2.5" 50mm and 60mm. Fits a variety of axle sizes. |



The 300 Series is constantly expanding; call for additional roller tube sizes and tube wall thicknesses.

Frantz Manufacturing - 620 Series Bearings



Frantz Wheel and Bearing Division
-620 Series Bearings-

| |
|---------------------------|
| Return to Bearing Catalog |
| Introduction |
| Core Bearings |
| 176 Series |

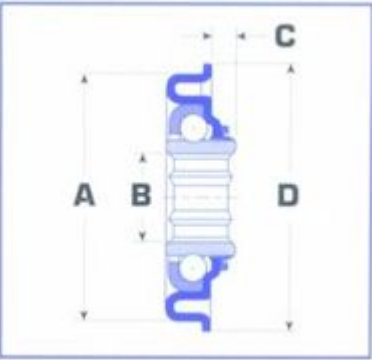
| |
|------------|
| 300 Series |
| 620 Series |
| Conclusion |



| Model Number | D Nominal Flange OD (Tube OD) | Tube Wall Thickness | A Bearing Shell Body OD | B Nominal Shaft Size | C Nominal Extension | Dynamic Load Rating | Shield or Particulate Seal |
|--------------|-------------------------------------|---------------------|----------------------------|-------------------------|------------------------|---------------------|----------------------------|
| 1970 | 2.5" | 11 gauge | 2.259" | 5/8" hex | .305" | 620 lbs. | none |
| 1971 | 2.5" | 11 gauge | 2.259" | 5/8" hex | .305" | 620 lbs. | particulate seal |
| 1972 | 2.5" | 11 gauge | 2.259" | 11/16" hex | .305" | 620 lbs. | none |
| 1973 | 2.5" | 11 gauge | 2.259" | 11/16" hex | .305" | 620 lbs. | particulate seal |

The 620 Series is intended for heavy-duty applications for rollers using up to 11/16" hex axles.

| | |
|---|--|
| <ul style="list-style-type: none"> Load Rating: Speed Rating: Noise Rating: | <p>620 lbs. (280 kgs.) 385 SFM (with a 2.5" roller) 62.2 dBA (at 190 RPM) Compared to 64.8 dBA for competitive bearings.</p> |
| <ul style="list-style-type: none"> Roller Tube Sizes: | <p>Fit 2.5" x 11 gauge tubes in 5/8" and 11/16" hex bores. Available with or without particulate seals on the extension side.</p> |



The 620 Series is constantly expanding; call for additional roller tube sizes and wall thicknesses.

Frantz Manufacturing - Agitator Balls



Sterling Steel Ball Division
 -Agitator Balls-

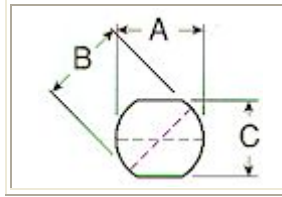
Custom shapes make our Agitator line flexible for many different applications.

| |
|---------------------|
| Quality |
| Hardened Carbon |
| Economy Grade Balls |
| Sterling Armor |
| Drilled Carbon |
| Soft Ground |

| FEATURES | TYPICAL USES |
|---|--|
| <ul style="list-style-type: none"> Various size ranges Inexpensive Available in sizes from (1/4"-1/2") Available in soft and hardened | <ul style="list-style-type: none"> Aerosol cans Sling shot |

Polished
Plated Balls
Stainless Steel Balls
Agitator Balls
Burnishing Balls

| Nominal Size | Dimensions (± 0.010) | | |
|--------------|----------------------------|--------|-------|
| | A | B | C |
| 1/4" | .250" | .250" | .235" |
| 5/16" | .3125" | .3125" | .275" |
| 3/8" | .375" | .375" | .344" |



Frantz Manufacturing - Burnishing Balls



Quality
Hardened Carbon
Economy Grade Balls
Sterling Armor
Drilled Carbon
Soft Ground Polished
Plated Balls
Stainless Steel Balls
Agitator Balls
Burnishing Balls

Don't settle for a substitute. Our Burnishing line is specifically manufactured for burnishing and polishing applications.

Sterling Steel Ball Division -Burnishing Balls-

| FEATURES | TYPICAL USES |
|--|---|
| <ul style="list-style-type: none"> Wide range of ball sizes Available in round condition or with flats | <ul style="list-style-type: none"> Pulverizing chocolate Polishing Deburring |

Frantz Manufacturing - Conclusion



Return to Bearing Catalog

Frantz Wheel and Bearing Division -Conclusion-

GEN II is the next generation in conveyor bearing technology. Manufactured with a proprietary process from Frantz Manufacturing, the **GEN II** delivers:

| LONG LIFE | HIGH SPEED | LOW NOISE |
|-----------|------------|-----------|
| UP TO | UP TO | UP TO |

| |
|----------------------|
| Introduction |
| Core Bearings |
| 176 Series |
| 300 Series |
| 620 Series |
| Conclusion |

**10x
LONGER
VERSATILITY
QUALITY
REPUTATION**

**10x
FASTER**
Full range of sizes and load ratings.
Like precision bearings without the high price.
**14%
QUIETER**
Frantz Manufacturing, a leader in balls, bearings and semi-precision bearing products.

Frantz Manufacturing - Core Bearings



Frantz Wheel and Bearing Division -Core Bearings-

| |
|----------------------------------|
| Home |
| Return to Bearing Catalog |
| Introduction |
| Core Bearings |
| 176 Series |
| 300 Series |
| 620 Series |
| Conclusion |

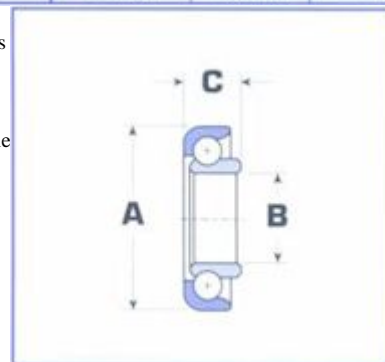


Core Bearings available to fit into existing shells or assemblies.

Core Bearing selection is constantly expanding; call for additional options.

*
Various
shaft
size
inserts
available

| Model Number | Load Rating (lbs.) (kg) | A Bearing OD (inches) (mm) | B Bore/Nominal Shaft Size (inches) (mm) | C Overall Width (inches) (mm) | Presence of a Ball Cage? |
|--------------|-------------------------------|--|---|---|--------------------------------|
| 1672 | 176 lbs. 80 kgs. | 1.08" 27.4mm | 0.483" RD 12.25mm | 0.366" 8.35mm | no |
| 1793 | 300 lbs. 136 kgs. | 1.263" 32mm | 0.596" RD 15mm* | 0.35" 9mm | no |
| 1794 | 121 lbs. 55 kgs. | 1.263" 32mm | 0.596" RD 15mm* | 0.35" 9mm | yes |
| 1974 | 620 lbs. 281 kgs. | 1.716" 43.6mm | 0.625" 5/8" Hex 15.9mm | 0.65" 16.5mm | no |
| 1975 | 620 lbs. 281 kgs. | 1.716" 43.6mm | 0.6875" 11/16" Hex 17.5mm | 0.65" 16.5mm | no |



Frantz Manufacturing - Drilled Carbon Steel Balls



- Quality
- Hardened Carbon
- Economy Grade Balls
- Sterling Armor
- Drilled Carbon
- Soft Ground Polished
- Plated Balls
- Stainless Steel Balls
- Agitator Balls
- Burnishing Balls

Sterling Steel Ball Division

-Drilled Carbon Steel Balls-

Our Drilled Balls undergo extensive testing and inspection to meet your exact specifications. We feature a high volume drilling facility. Special drilling of customer-supplied product is available.

| FEATURES | TYPICAL USES |
|---|---|
| <ul style="list-style-type: none"> Manufactured from SAE/AISI grade carbon steel or tool steel Full range of drilled hole diameters and depths Variety of ball sizes | <ul style="list-style-type: none"> Push rods Seat slides Decorative applications |

Tolerances by Grade for Lots of Balls and Individual Balls

| Ball Grade | Allowable Lot Diameter Variation | Allowable Ball Diameter Variation | Allowable Deviation from Spherical Form |
|------------|----------------------------------|-----------------------------------|---|
| 500 | .001" | .0005" | .0005" |
| 600 | .0012" | .0006" | .0006" |
| 1000 | .002" | .001" | .001" |
| 2000 | .004" | .002" | .002" |

Frantz Manufacturing - Economy Grade Balls



- Quality
- Hardened Carbon
- Economy Grade Balls
- Sterling Armor
- Drilled Carbon
- Soft Ground Polished

Sterling Steel Ball Division

-Economy Grade Balls-

If you need the lowest possible price in a Hardened Carbon Steel Ball, then this line of balls is perfect for your needs. They have many of the qualities of Hardened Carbon Steel Balls, but are priced less because of their lower case depths.

| Ball Diameter | | | Minimum Case Depth | FEATURES |
|--|---------|--|--------------------|---|
| at least | but not | | | <ul style="list-style-type: none"> Low cost alternative Manufactured in Sterling, IL Fast Delivery |
| 1/8" | 1/4" | | .015" | |
| 5/16" | 11/16" | | .030" | |
| 3/4" | 1" | | .045" | |
| Refer to Hardened Carbon Steel Balls page for Tolerances and Ball Weight tables. | | | | TYPICAL USES |
| | | | | <ul style="list-style-type: none"> Game balls Drawer slides |

Plated Balls

Stainless Steel Balls

Agitator Balls

Burnishing Balls

- Casters and wheels
- Chair swivels
- Lazy Susans

Frantz Manufacturing - GEN II Bearings



Frantz Wheel and Bearing Division

-GEN II Bearings-

Home

Return to Bearing Catalog

GEN II Bearings

Swage Fit

Press Fit

End Cup Adapters

Conveyor Wheels

Special Items

| Bearing Number | Approx. O.D. of Flange | Max. O.D. of Body | Maximum Bore Size | Weight Per 1000 | Standard Box Quantity |
|-------------------|------------------------|-------------------|-------------------|-----------------|-----------------------|
| 1672 Core Bearing | ---- | 1.083 | .485 Rd. | 41 | 2000 |
| 1676 Core Bearing | ---- | 1.083 | .485 Rd. | 39 | 2000 |
| 1793 Core Bearing | ---- | 1.266 | .598 Rd. | 62 | 1850 |
| 1794 Core Bearing | ---- | 1.266 | .598 Rd | 59 | 1850 |
| 1815 Bearing | 1.900 | 1.780 | .452 Hex | 138 | 500 |
| 1955 Bearing | 1.900 | 1.780 | .260 Rd. | 132 | 500 |
| 1956 Bearing | 1.900 | 1.780 | .452 Hex | 112 | 500 |
| 1860 Bearing | 2.447 | 2.262 | .452 Hex | 166 | 350 |

Frantz Manufacturing - GEN II Bearings



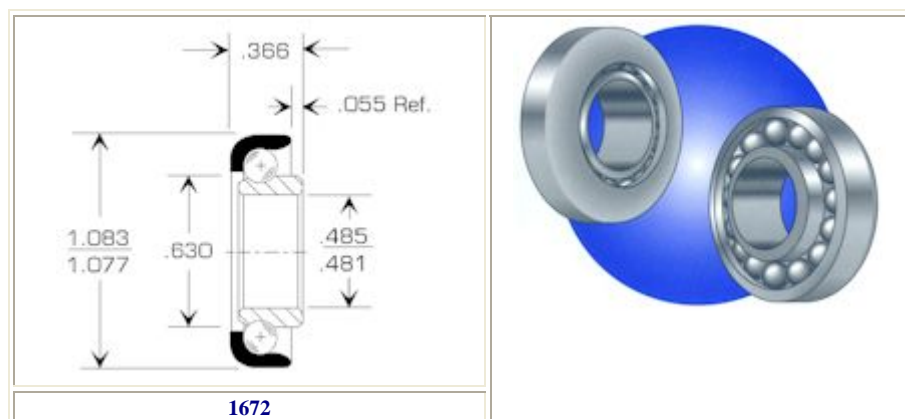
Frantz Wheel and Bearing Division

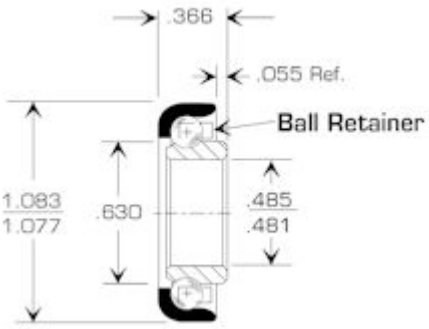
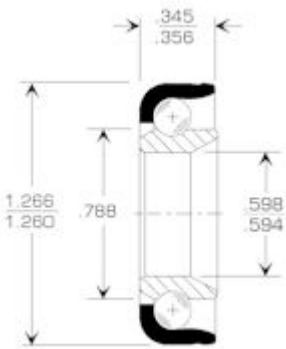
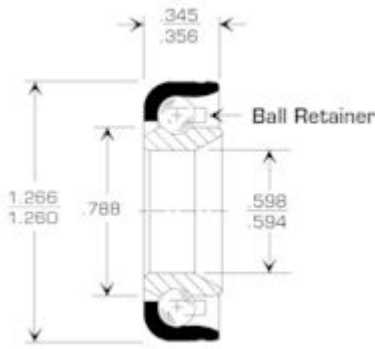
-GEN II Bearings-

Return to Bearing Catalog

1815/1860/1956

1672/1676/1793
1794



| | | |
|--|---|--|
| | Load Rating 176# • (13) 3/16" Balls | |
| |  | |
| | 1676 Load Rating 75# • (8) 3/16" Balls | |
| |  |  |
| | 1793 Load Rating 300# • (15) 3/16" Balls | 1794 Load Rating 120# • (10) 3/16" Balls |
| | | |

Frantz Manufacturing - GEN II Bearings

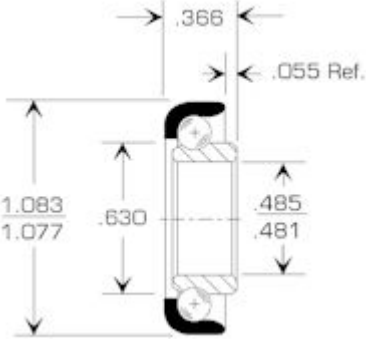
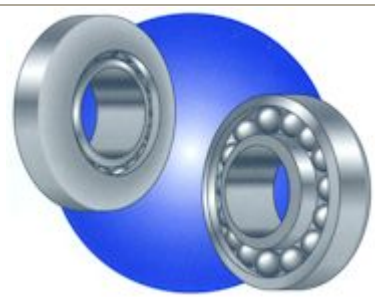


FRANTZ WHEEL AND BEARING DIVISION
-GEN II BEARINGS-

Return to Bearing
Catalog

1815/1860/1956

1672/1676/1793
1794

| | |
|---|--|
|  |  |
| | |
| <p>1672 Load Rating 176# • (13) 3/16" Balls</p> | |

| | | |
|--|--|--|
| | | |
| | 1676 Load Rating 75# • (8) 3/16" Balls | |
| | | |
| | 1793 Load Rating 300# • (15) 3/16" Balls | 1794 Load Rating 120# • (10) 3/16" Balls |

Frantz Manufacturing - Hardened Carbon Steel Balls



Sterling Steel Ball Division -Hardened Carbon Steel Balls-

| | | | |
|--|--|--|--|
| Quality Hardened Carbon Economy Grade Balls Sterling Armor Drilled Carbon Soft Ground Polished Plated Balls Stainless Steel | <p>When you're looking for a cost efficient ball selection look to our Hardened Carbon Steel Balls. Many sizes available for immediate shipment, or have our engineering service develop the precision ball to fit your exact specifications.</p> | TYPICAL USES | |
| | <p>Manufacturing and quality are handled at our plant in Sterling, IL, USA. Balls are carburized and hardened, with a highly polished surface finish. They feature a minimum hardness of 60 Rc with ball sphericity to .0001" and will fit a wide range of applications.</p> | <ul style="list-style-type: none"> • Drawer slides • Quick connect fittings • Bicycles • Door closures • Conveyor rollers • Seat slides • Steering columns • Casters | |
| | FEATURES <ul style="list-style-type: none"> • Manufactured to stringent ABMA Spec. 10 standards • Full range of ball sizes (1/8" | <ul style="list-style-type: none"> • Tool cases • Turn signal switches • Fishing lures • Seat swivels • Lawn mowers • Patio door slides | |
| | | | |
| | | | |
| | | | |

Balls

Agitator Balls

Burnishing Balls

- to 1")
- High quality carbon steel material
- Available grades (100, 200, 500, 1000, 2000)
- Full traceability of material
- Case hardened carbon steel

and wheels

- Lazy susans
- Hinges

HARDNESS PROPERTIES

Hardness for carbon steel balls, as measured on the ball's surface is Rockwell "C" 60 (minimum) or specified by customers. See chart for minimum case depth.

CHEMICAL ANALYSIS (Raw Material)

| | |
|---------------|----------------|
| Carbon (core) | 0.10 to 0.20% |
| Manganese | 0.60 to 0.90% |
| Silicon | 0.10 to 0.20 |
| Sulphur | 0.50% maximum |
| Phosphorus | 0.040% maximum |

Ball Weight table

Case Depth Requirements

| Ball Diameter | | Minimum Case Depth | Ball Diameter | | Minimum Case Depth |
|---------------|---------|--------------------|---------------|---------|--------------------|
| at least | but not | | at least | but not | |
| 1/8" | 3/16" | .025" | 3/8" | 7/16" | .055" |
| 3/16" | 7/32" | .030" | 7/16" | 1/2" | .065" |
| 7/32" | 1/4" | .035" | 1/2" | 9/16" | .070" |
| 1/4" | 3/8" | .045" | 9/16" | 3/4" | .075" |
| | | | 3/4" | 1½" | .080" |

| Ball Diameter | | No. of Balls per lb. | No. of Balls per kg. |
|---------------|----------|----------------------|----------------------|
| Decimal | Fraction | | |
| .1250 | 1/8" | 3440 | 7584 |
| .1875 | 3/16" | 1020 | 2249 |
| .2500 | 1/4" | 430 | 948 |
| .3125 | 5/16" | 220 | 485 |
| .3750 | 3/8" | 128 | 282 |
| .4375 | 7/16" | 80.3 | 177 |
| .5000 | 1/2" | 53.8 | 119 |
| .5625 | 9/16" | 37.8 | 83 |
| .6250 | 5/8" | 27.5 | 61 |
| .6875 | 11/16" | 20.7 | 46 |
| .7500 | 3/4" | 15.9 | 35 |
| .8125 | 13/16" | 12.5 | 28 |
| .8750 | 7/8" | 10.0 | 22 |
| .9375 | 15/16" | 8.16 | 18 |
| 1.0000 | 1" | 6.72 | 14 |

Tolerances by Grade for Lots of Balls and Individual Balls

| Ball Grade | Allowable Lot Diameter Variation | Allowable Ball Diameter Variation | Allowable Deviation from Spherical Form | Maximum Surface Roughness Arithmetic Avg. |
|------------|----------------------------------|-----------------------------------|---|---|
| 100 | .0002" | .0001" | .0001" | 5 |
| 200 | .0004" | .0002" | .0002" | 8 |
| 500 | .001" | .0005" | .0005" | N/A |
| 1000 | .002" | .001" | .001" | N/A |
| 2000 | .004" | .002" | .002" | N/A |



Frantz Wheel and Bearing Division
-Mounting Procedures, Lubrication and Bearing Nomenclature-

Mounting and
Lubrication

Warranty

Product Index

GENII
Bearings

Swage Fit Bearings

Conveyor Bearings

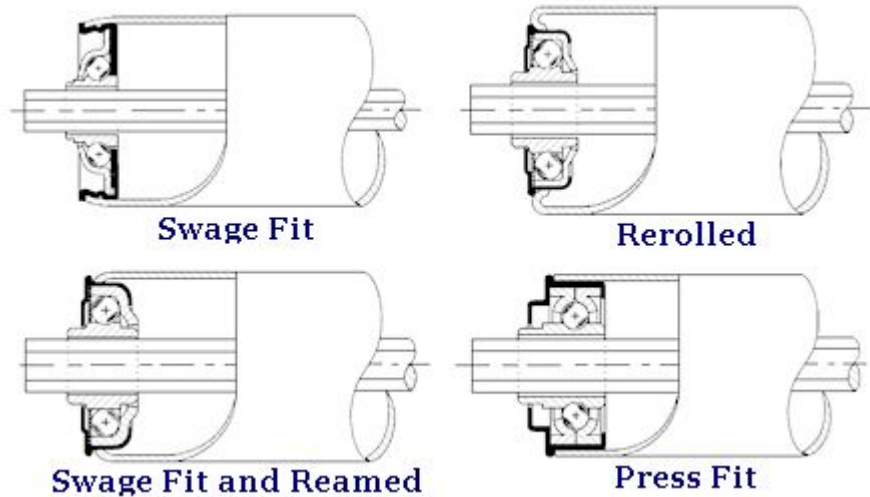
Bearings in
Adapters

End Cup
Adapters

Conveyor
Wheels

Special Items

Technical
Information



Lubrication

Frantz wheels and bearings may be ordered with the following factory lubrication:

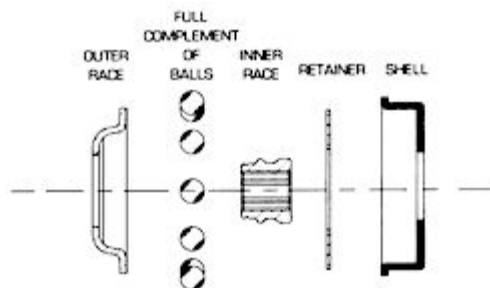
Frantz #14 Grease: Standard lube for wide temperature range (-40° to 120°F)

Frantz #15 Grease: For use when quietest operation is most important. *This is not recommended for cold applications (below 39°F) where higher torque required to turn rollers may be a problem.*

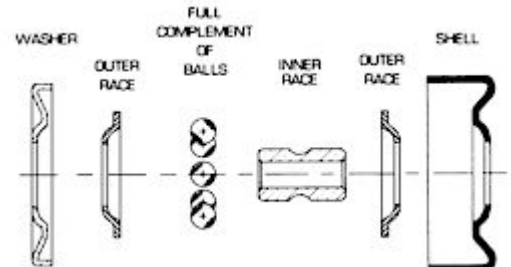
Lightly Oiled: For most freely-turning operations, such as light product rolling on a gravity conveyor with minimal pitch.

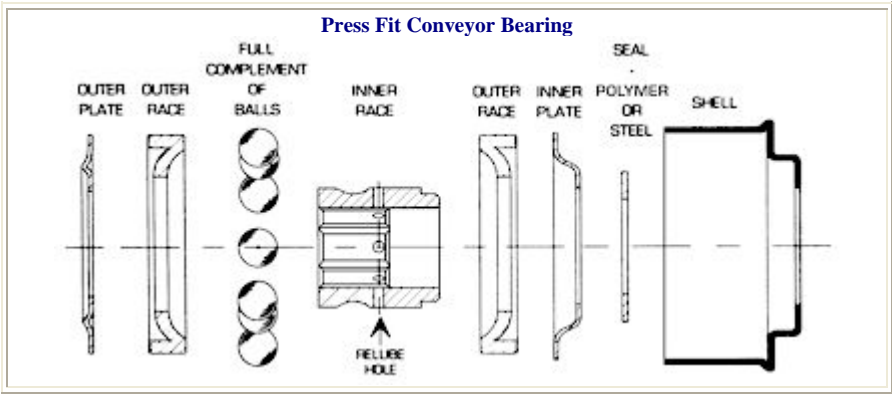
Special Lubes: May be available when requested.
There may be an additional cost.

Swage Fit Conveyor Bearing



Conveyor Wheel





Frantz Manufacturing - Plated Balls



Sterling Steel Ball Division
-Plated Balls-

When you need a specific surface color or protection in a corrosive environment, look to our line of Plated Balls.

| FEATURES | TYPICAL USES |
|--|---|
| <ul style="list-style-type: none">Attractive surface finishVarious plating options (electroless nickel, copper nickel)Your custom color is available | <ul style="list-style-type: none">Game ballsPlumbing fixtures (faucets)Fishing luresBall checksDrapery hardware |

Tolerances by Grade for Lots of Balls and Individual Balls

| Ball Grade | Allowable Lot Diameter Variation | Allowable Ball Diameter Variation | Allowable Deviation from Spherical Form |
|------------|----------------------------------|-----------------------------------|---|
| 1000 | .002" | .001" | .001" |
| 2000 | .004" | .002" | .002" |
| 5000 | .010" | .005" | .005" |

Frantz Manufacturing - Press Fit Conveyor Bearings



FRANTZ WHEEL AND BEARING DIVISION
-PRESS FIT CONVEYOR BEARINGS-

[Return to Bearing Catalog](#)

3875/3878/3879

1903/1945

1150/1151/1152
1154/1156

1250/1260/1489
1490

1500/1510/2900
2910

1515/1521

1624/1634

410/411/412

418/419/420

1875/1876

2000/2100

2500/2510/2512
2515

2530/2532/2539
2540/2542

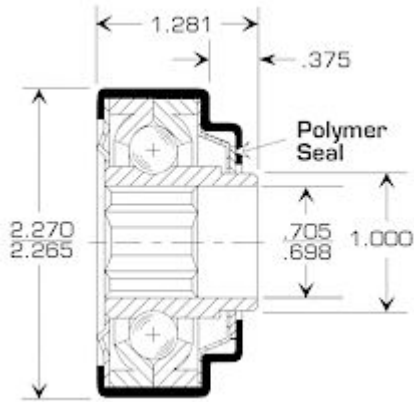
2600/2610/2612
2630

2632/2638/2640
2642

4113/4114/4115

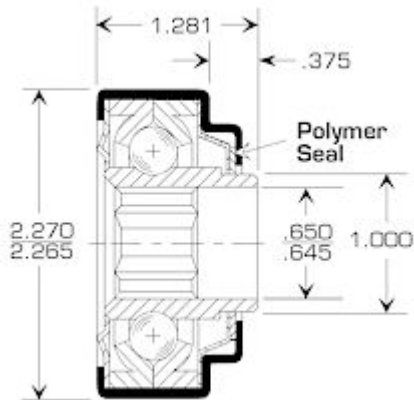
3065/3070/3080
3082/3084

3087/3090/3092
3094/3095



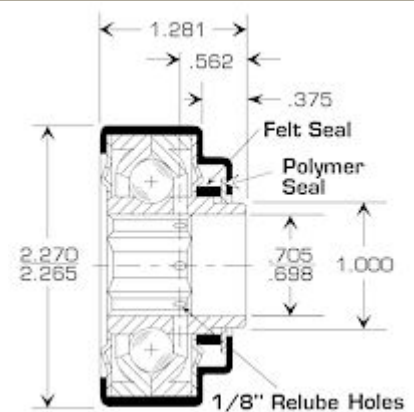
2632

Load Rating 290# • (11) 3/8" Balls



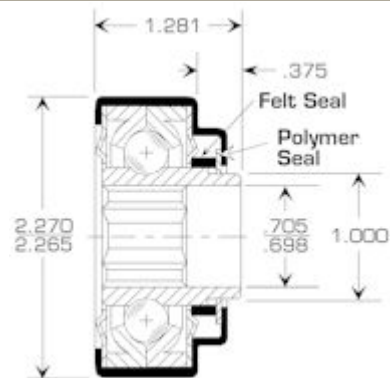
2638

Load Rating 290# • (11) 3/8" Balls



2640

Load Rating 290# • (11) 3/8" Balls



2642

Load Rating 290# • (11) 3/8" Balls



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

3875/3878/3879

1903/1945

1150/1151/1152
1154/1156

1250/1260/1489
1490

1500/1510/2900
2910

1515/1521

1624/1634

410/411/412

418/419/420

1875/1876

2000/2100

2500/2510/2512
2515

2530/2532/2539
2540/2542

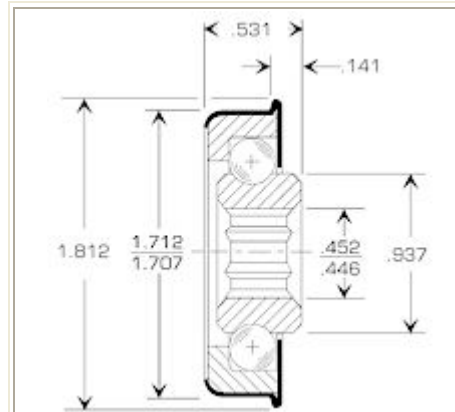
2600/2610/2612
2630

2632/2638/2640
2642

4113/4114/4115

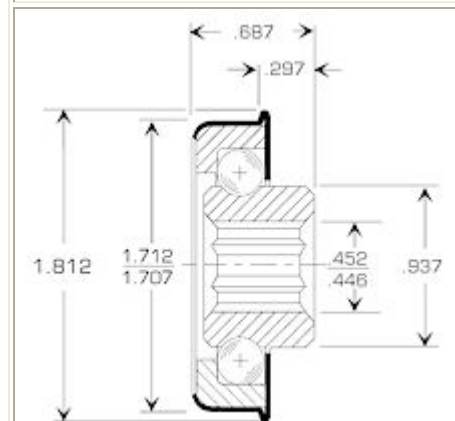
3065/3070/3080
3082/3084

3087/3090/3092



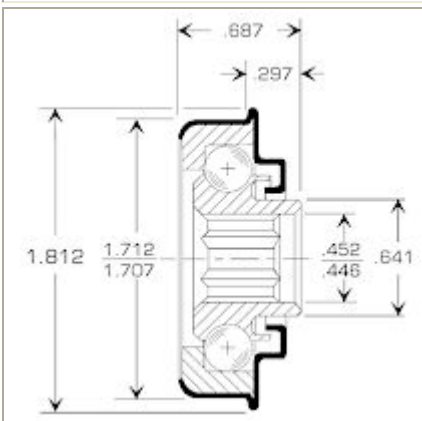
418

Load Rating 150# • (12) 9/32" Balls



419

Load Rating 150# • (12) 9/32" Balls



420

Load Rating 150# • (12) 9/32" Balls



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[3875/3878/3879](#)

[1903/1945](#)

[1150/1151/1152](#)
[1154/1156](#)

[1250/1260/1489](#)
[1490](#)

[1500/1510/2900](#)
[2910](#)

[1515/1521](#)

[1624/1634](#)

[410/411/412](#)

[418/419/420](#)

[1875/1876](#)

[2000/2100](#)

[2500/2510/2512](#)
[2515](#)

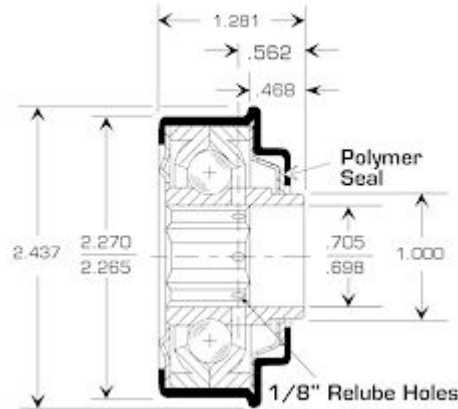
[2530/2532/2539](#)
[2540/2542](#)

[2600/2610/2612](#)
[2630](#)

[2632/2638/2640](#)
[2642](#)

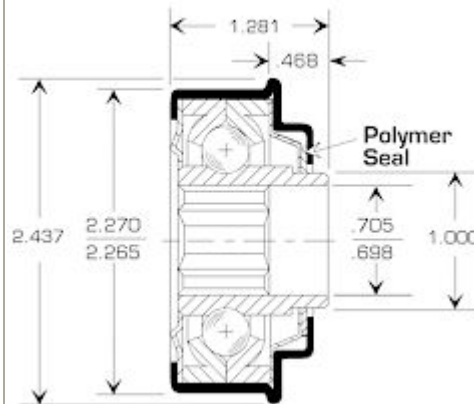
[4113/4114/4115](#)

[3065/3070/3080](#)
[3082/3084](#)



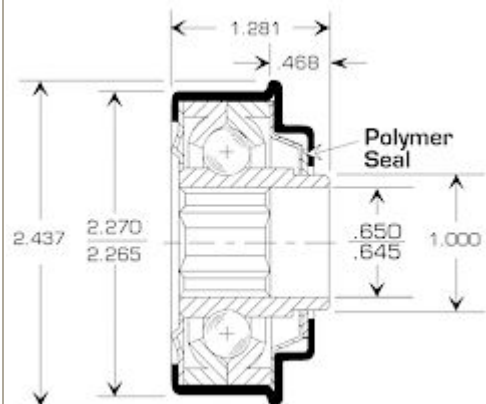
2530

Load Rating 290# • (11) 3/8" Balls



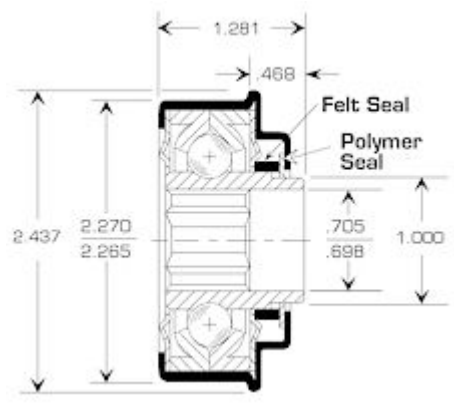
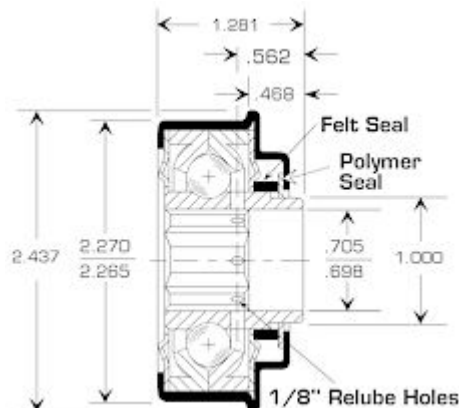
2532

Load Rating 290# • (11) 3/8" Balls



2539

Load Rating 290# • (11) 3/8" Balls



3087/3090/3092
3094/3095

2540
Load Rating 290# • (11) 3/8" Balls

2542
Load Rating 290# • (11) 3/8" Balls

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[3875/3878/3879](#)

[1903/1945](#)

[1150/1151/1152](#)
[1154/1156](#)

[1250/1260/1489](#)
[1490](#)

[1500/1510/2900](#)
[2910](#)

[1515/1521](#)

[1624/1634](#)

[410/411/412](#)

[418/419/420](#)

[1875/1876](#)

[2000/2100](#)

[2500/2510/2512](#)
[2515](#)

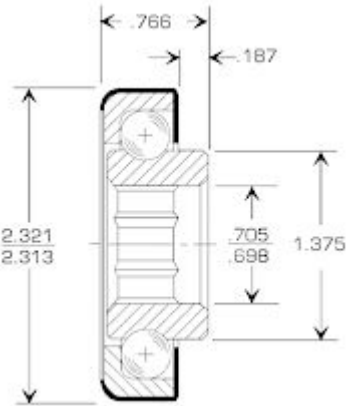
[2530/2532/2539](#)
[2540/2542](#)

[2600/2610/2612](#)
[2630](#)

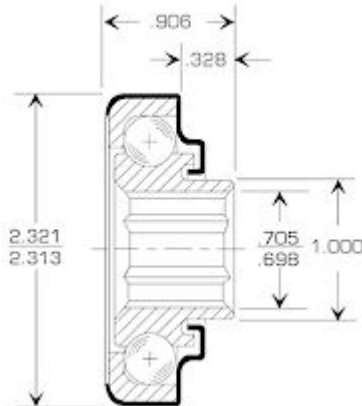
[2632/2638/2640](#)
[2642](#)

[4113/4114/4115](#)

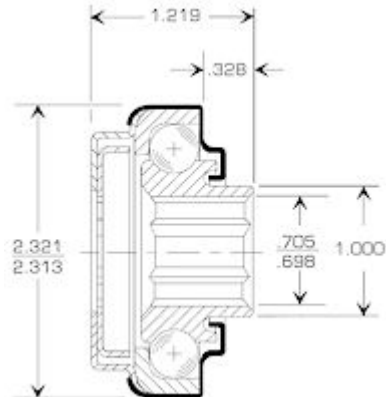
[3065/3070/3080](#)
[3082/3084](#)



4113
Load Rating 325# • (13) 3/8" Balls



4114
Load Rating 325# • (13) 3/8" Balls



4115
Load Rating 325# • (13) 3/8" Balls

3087/3090/3092
3094/3095

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

Return to Bearing
Catalog

3875/3878/3879

1903/1945

1150/1151/1152
1154/1156

1250/1260/1489
1490

1500/1510/2900
2910

1515/1521

1624/1634

410/411/412

418/419/420

1875/1876

2000/2100

2500/2510/2512
2515

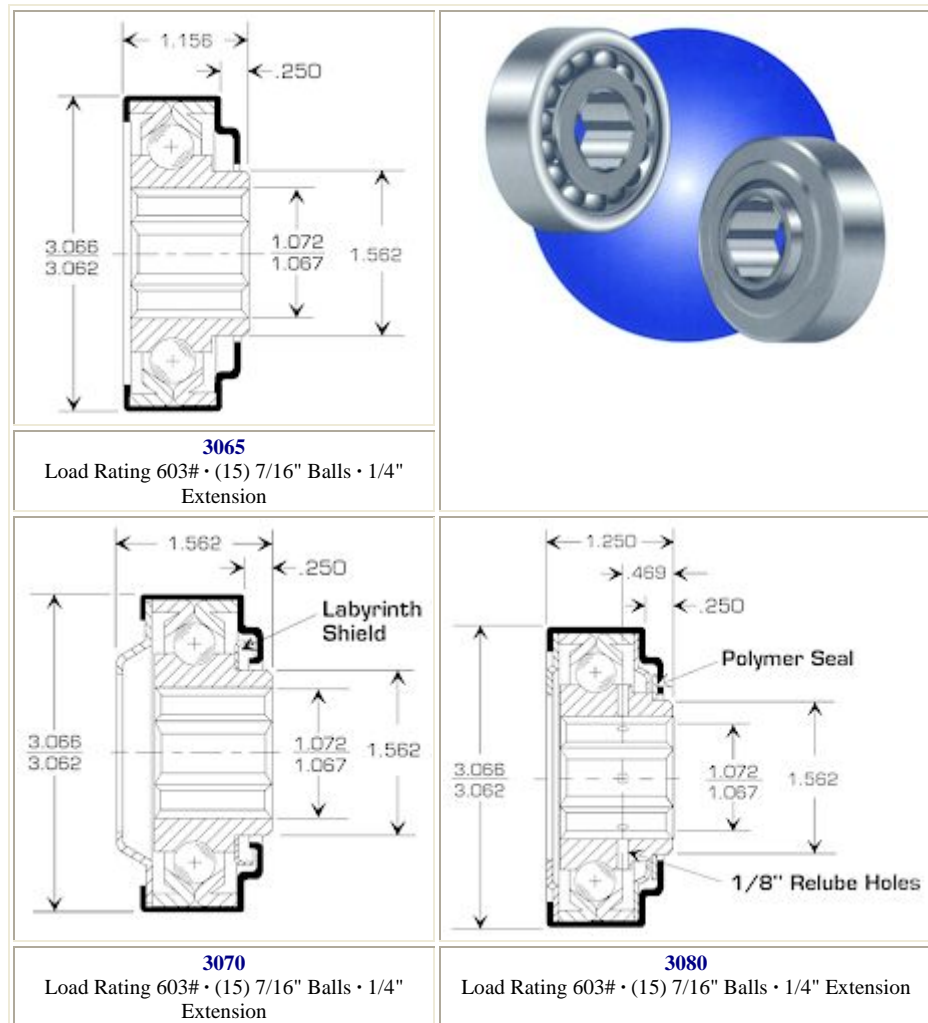
2530/2532/2539
2540/2542

2600/2610/2612
2630

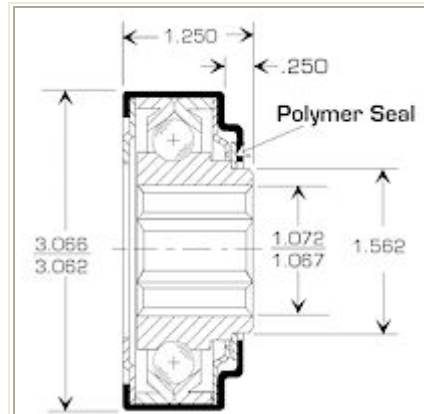
2632/2638/2640
2642

4113/4114/4115

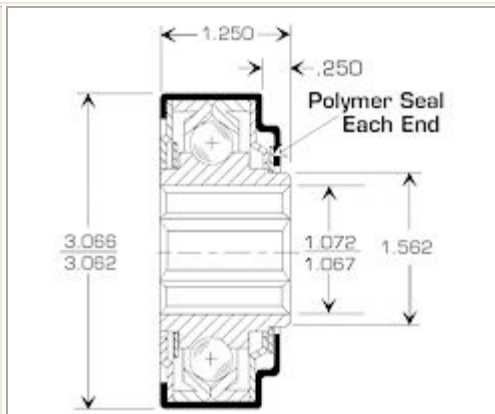
3065/3070/3080
3082/3084



3087/3090/3092
3094/3095



3082
Load Rating 603# • (15) 7/16" Balls • 1/4" Extension



3084
Load Rating 603# • (15) 7/16" Balls • 1/4" Extension

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

Return to Bearing
Catalog

3875/3878/3879

1903/1945

1150/1151/1152
1154/1156

1250/1260/1489
1490

1500/1510/2900
2910

1515/1521

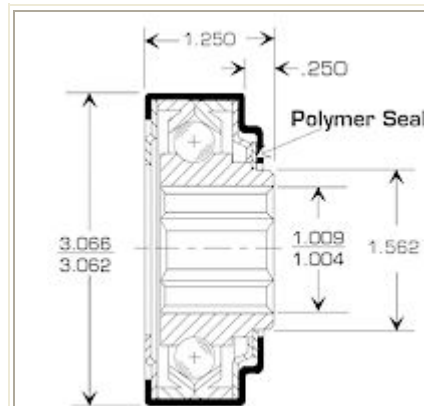
1624/1634

410/411/412

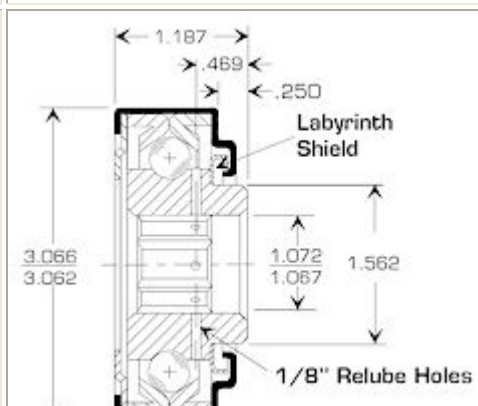
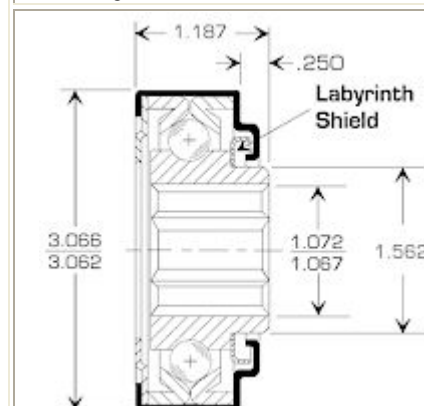
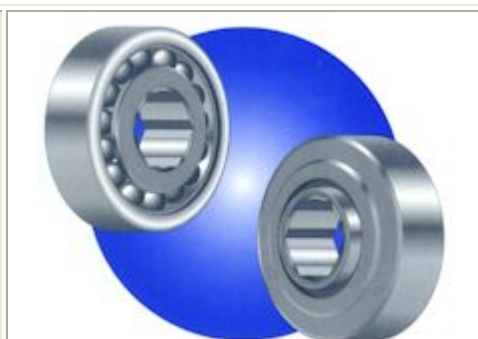
418/419/420

1875/1876

2000/2100



3087
Load Rating 603# • (15) 7/16" Balls • 1/4" Extension



2500/2510/2512
2515

2530/2532/2539
2540/2542

2600/2610/2612
2630

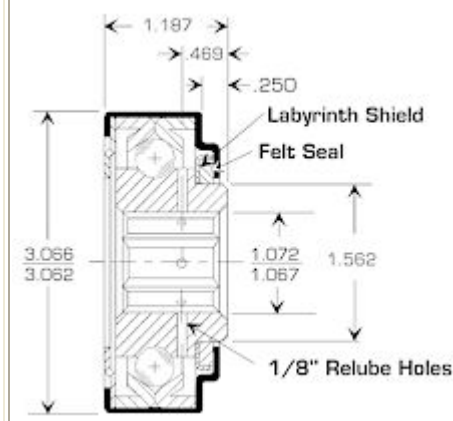
2632/2638/2640
2642

4113/4114/4115

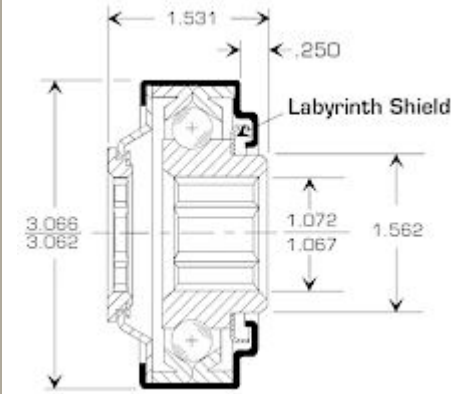
3065/3070/3080
3082/3084

3087/3090/3092
3094/3095

3090
Load Rating 603# • (15) 7/16" Balls • 1/4" Extension



3092
Load Rating 603# • (15) 7/16" Balls • 1/4" Extension



3094
Load Rating 603# • (15) 7/16" Balls • 1/4" Extension

3095
Load Rating 603# • (15) 7/16" Balls • 1/4" Extension

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

Return to Bearing
Catalog

3875/3878/3879

1903/1945

1150/1151/1152
1154/1156

1250/1260/1489
1490

1500/1510/2900
2910

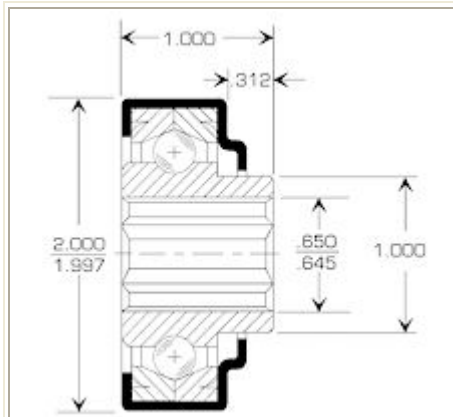
1515/1521

1624/1634

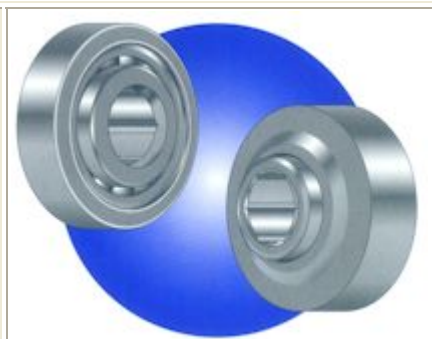
410/411/412

418/419/420

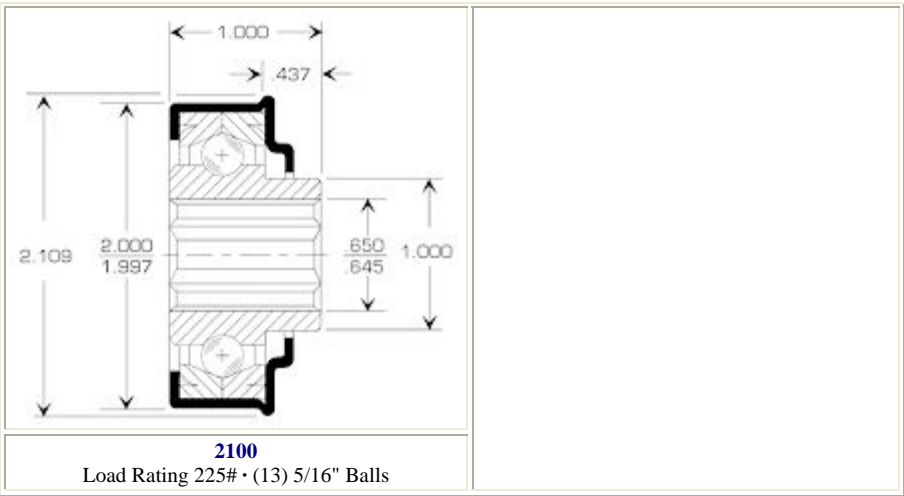
1875/1876



2000
Load Rating 225# • (13) 5/16" Balls



| |
|-----------------------------|
| 2000/2100 |
| 2500/2510/2512 2515 |
| 2530/2532/2539 2540/2542 |
| 2600/2610/2612 2630 |
| 2632/2638/2640 2642 |
| 4113/4114/4115 |
| 3065/3070/3080 3082/3084 |
| 3087/3090/3092 3094/3095 |

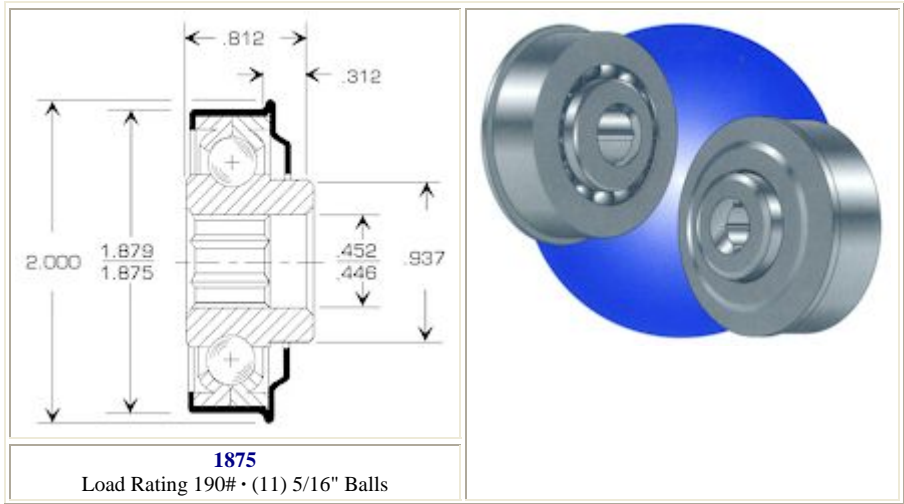


Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

| |
|-----------------------------|
| Return to Bearing Catalog |
| 3875/3878/3879 |
| 1903/1945 |
| 1150/1151/1152 1154/1156 |
| 1250/1260/1489 1490 |
| 1500/1510/2900 2910 |
| 1515/1521 |
| 1624/1634 |
| 410/411/412 |
| 418/419/420 |



1875/1876

2000/2100

2500/2510/2512
2515

2530/2532/2539
2540/2542

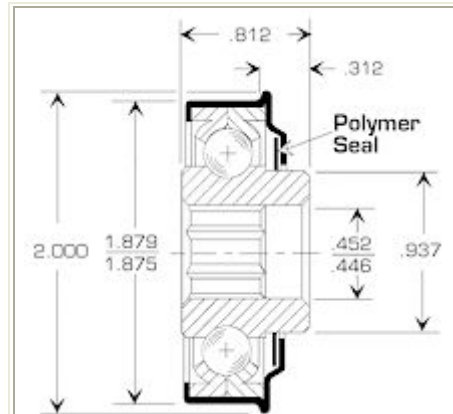
2600/2610/2612
2630

2632/2638/2640
2642

4113/4114/4115

3065/3070/3080
3082/3084

3087/3090/3092
3094/3095



1876

Load Rating 190# • (11) 5/16" Balls

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

Return to Bearing
Catalog

3875/3878/3879

1903/1945

1150/1151/1152
1154/1156

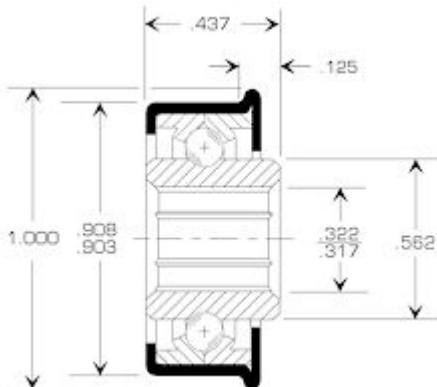
1250/1260/1489
1490

1500/1510/2900
2910

1515/1521

1624/1634

410/411/412



1903

Load Rating 35# • (15) 1/8" Balls • 1/8" Extension



418/419/420

1875/1876

2000/2100

2500/2510/2512
2515

2530/2532/2539
2540/2542

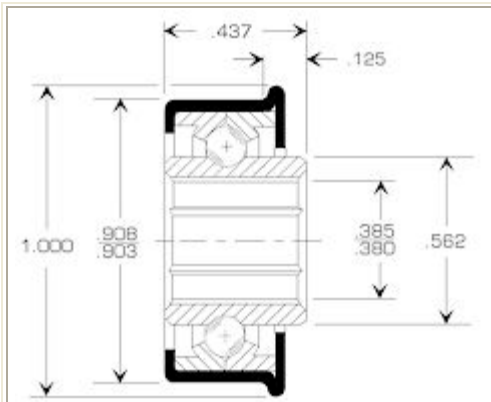
2600/2610/2612
2630

2632/2638/2640
2642

4113/4114/4115

3065/3070/3080
3082/3084

3087/3090/3092
3094/3095



1945

Load Rating 35# • (15) 1/8" Balls • 1/8" Extension

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

Return to Bearing
Catalog

3875/3878/3879

1903/1945

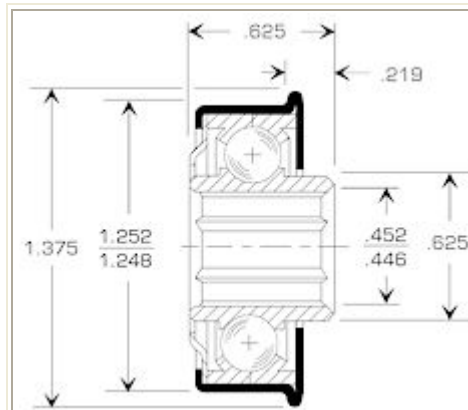
1150/1151/1152
1154/1156

1250/1260/1489
1490

1500/1510/2900
2910

1515/1521

1624/1634

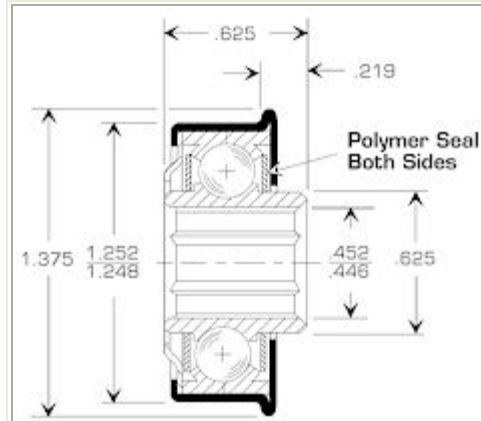


1250

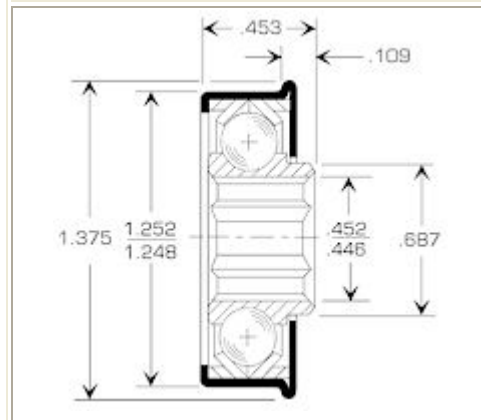
Load Rating 105# • (10) 1/4" Balls



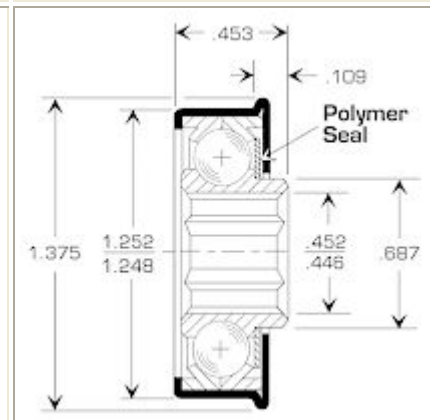
410/411/412
418/419/420
1875/1876
2000/2100
2500/2510/2512
2515
2530/2532/2539
2540/2542
2600/2610/2612
2630
2632/2638/2640
2642
4113/4114/4115
3065/3070/3080
3082/3084
3087/3090/3092
3094/3095



1260
Load Rating 105# • (10) 1/4" Balls



1489
Load Rating 105# • (10) 1/4" Balls



1490
Load Rating 105# • (10) 1/4" Balls

Frantz Manufacturing - Press Fit Conveyor Bearings



Return to Bearing
Catalog

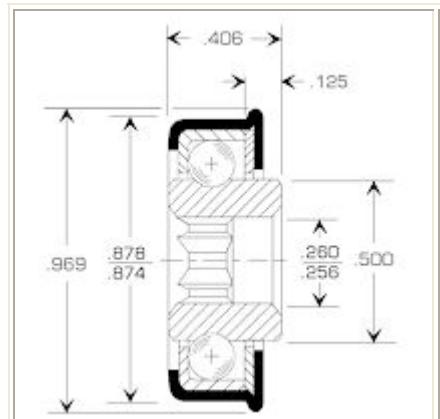
3875/3878/3879

1903/1945

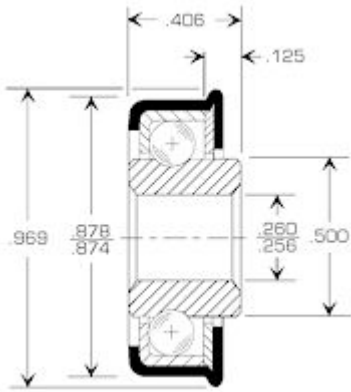
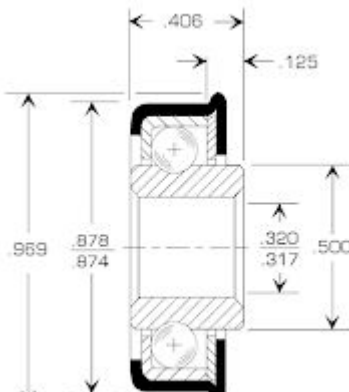
1150/1151/1152
1154/1156

1250/1260/1489
1490

Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-



| |
|-----------------------------|
| 1500/1510/2900 2910 |
| 1515/1521 |
| 1624/1634 |
| 410/411/412 |
| 418/419/420 |
| 1875/1876 |
| 2000/2100 |
| 2500/2510/2512 2515 |
| 2530/2532/2539 2540/2542 |
| 2600/2610/2612 2630 |
| 2632/2638/2640 2642 |
| 4113/4114/4115 |
| 3065/3070/3080 3082/3084 |
| 3087/3090/3092 3094/3095 |

| | |
|---|--|
| <p>3875 Load Rating 40# • (10) 5/32" Balls</p>  | <p>3879 Load Rating 40# • (10) 5/32" Balls</p>  |
| <p>3878 Load Rating 40# • (10) 5/32" Balls</p> | <p>3879 Load Rating 40# • (10) 5/32" Balls</p> |

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

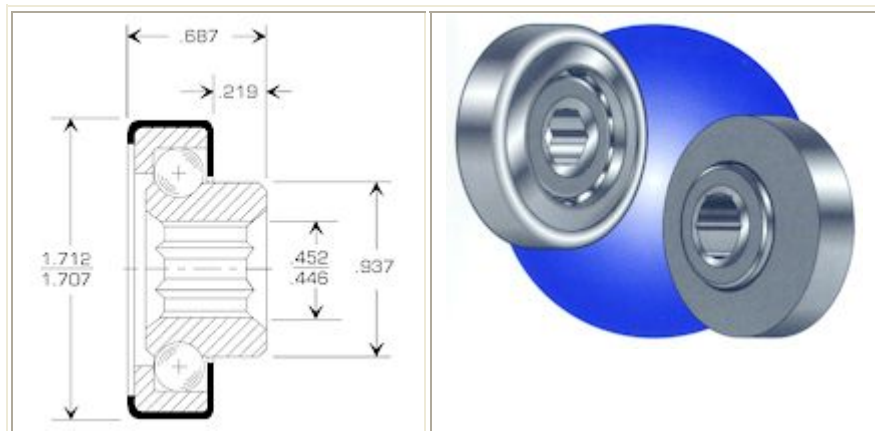
**Return to Bearing
Catalog**

3875/3878/3879

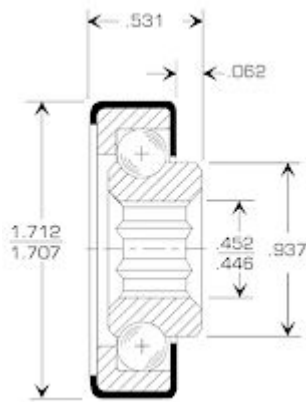
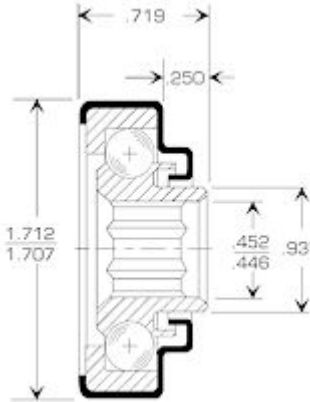
1903/1945

**1150/1151/1152
1154/1156**

**1250/1260/1489
1490**



| |
|-----------------------------|
| 1500/1510/2900 2910 |
| 1515/1521 |
| 1624/1634 |
| 410/411/412 |
| 418/419/420 |
| 1875/1876 |
| 2000/2100 |
| 2500/2510/2512 2515 |
| 2530/2532/2539 2540/2542 |
| 2600/2610/2612 2630 |
| 2632/2638/2640 2642 |
| 4113/4114/4115 |
| 3065/3070/3080 3082/3084 |
| 3087/3090/3092 3094/3095 |

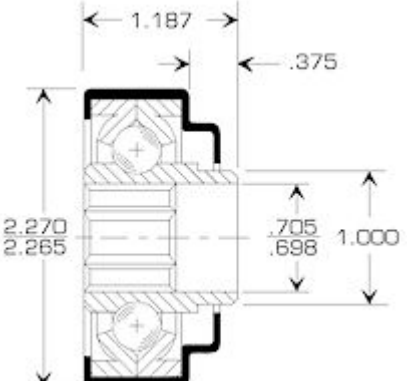

| | |
|---|--|
| <p>410 Load Rating 150# • (12) 9/32" Balls</p>  | <p>412 Load Rating 150# • (12) 9/32" Balls</p>  |
| <p>411 Load Rating 150# • (12) 9/32" Balls</p> | <p>412 Load Rating 150# • (12) 9/32" Balls</p> |

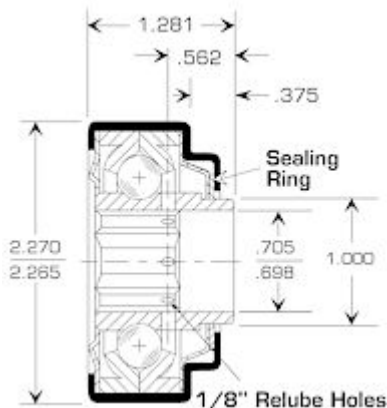
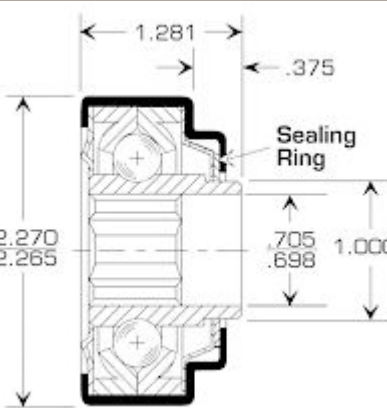

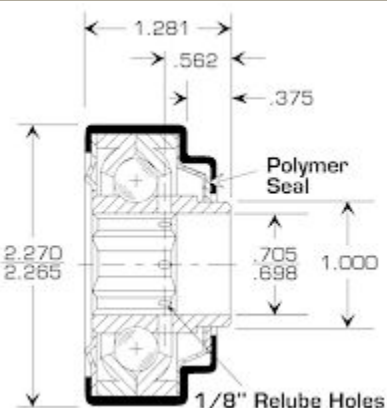
Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

| |
|------------------------------|
| Return to Bearing Catalog |
| 3875/3878/3879 |
| 1903/1945 |
| 1150/1151/1152 1154/1156 |
| 1250/1260/1489 |

| | |
|---|--|
|  |  |
|---|--|

| | | |
|---|---|--|
| 1490 1500/1510/2900 2910 1515/1521 1624/1634 410/411/412 418/419/420 1875/1876 2000/2100 2500/2510/2512 2515 2530/2532/2539 2540/2542 2600/2610/2612 2630 2632/2638/2640 2642 4113/4114/4115 3065/3070/3080 3082/3084 3087/3090/3092 3094/3095 | <p align="center">2600 Load Rating 290# • (11) 3/8" Balls</p>  | |
| | <p align="center">2610 Load Rating 290# • (11) 3/8" Balls</p>  | |
| | <p align="center">2612 Load Rating 290# • (11) 3/8" Balls • 15/32" Extension</p>  | |
| | <p align="center">2630 Load Rating 290# • (11) 3/8" Balls</p>  | |

Frantz Manufacturing - Press Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[3875/3878/3879](#)

[1903/1945](#)

[1150/1151/1152](#)
[1154/1156](#)

[1250/1260/1489](#)
[1490](#)

[1500/1510/2900](#)
[2910](#)

[1515/1521](#)

[1624/1634](#)

[410/411/412](#)

[418/419/420](#)

[1875/1876](#)

[2000/2100](#)

[2500/2510/2512](#)
[2515](#)

[2530/2532/2539](#)
[2540/2542](#)

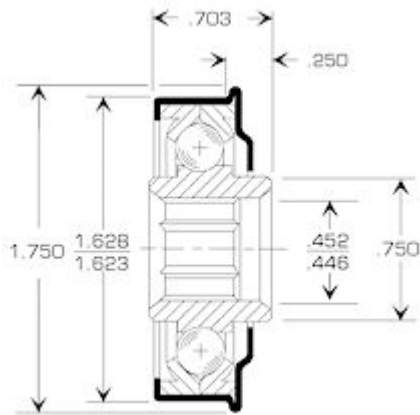
[2600/2610/2612](#)
[2630](#)

[2632/2638/2640](#)
[2642](#)

[4113/4114/4115](#)

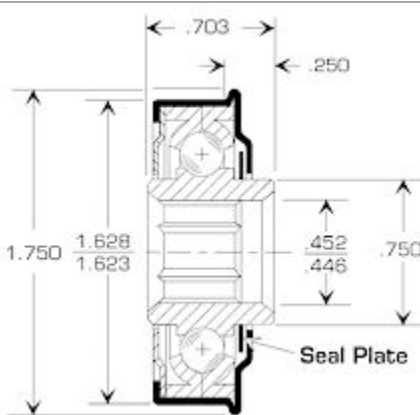
[3065/3070/3080](#)
[3082/3084](#)

[3087/3090/3092](#)
[3094/3095](#)



1624

Load Rating 125# • (13) 1/4" Balls



1634

Load Rating 125# • (13) 1/4" Balls



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

Return to Bearing Catalog

3875/3878/3879

1903/1945

**1150/1151/1152
1154/1156**

**1250/1260/1489
1490**

**1500/1510/2900
2910**

1515/1521

1624/1634

410/411/412

418/419/420

1875/1876

2000/2100

**2500/2510/2512
2515**

**2530/2532/2539
2540/2542**

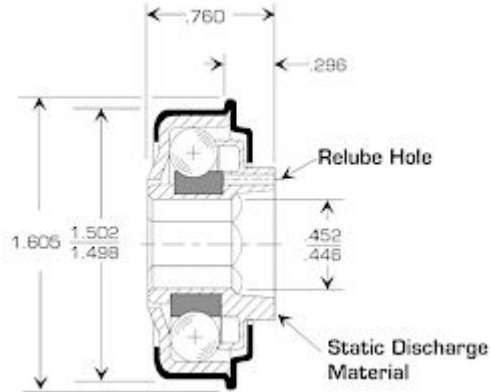
**2600/2610/2612
2630**

**2632/2638/2640
2642**

4113/4114/4115

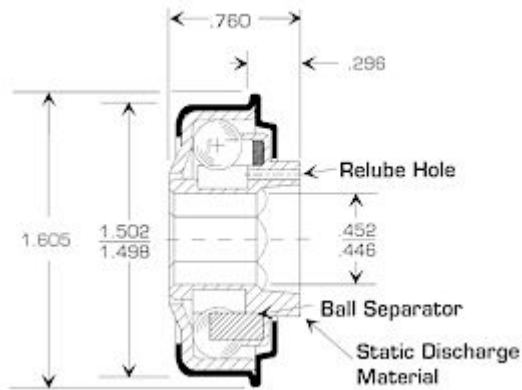
**3065/3070/3080
3082/3084**

**3087/3090/3092
3094/3095**



1515

Load Rating 145# • (11) 9/32" Balls



1521

Load Rating 145# • (11) 9/32" Balls



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[3875/3878/3879](#)

[1903/1945](#)

[1150/1151/1152](#)
[1154/1156](#)

[1250/1260/1489](#)
[1490](#)

[1500/1510/2900](#)
[2910](#)

[1515/1521](#)

[1624/1634](#)

[410/411/412](#)

[418/419/420](#)

[1875/1876](#)

[2000/2100](#)

[2500/2510/2512](#)
[2515](#)

[2530/2532/2539](#)
[2540/2542](#)

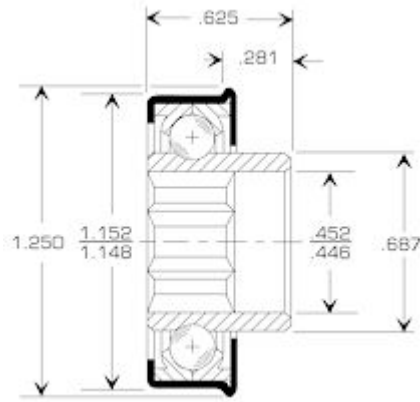
[2600/2610/2612](#)
[2630](#)

[2632/2638/2640](#)
[2642](#)

[4113/4114/4115](#)

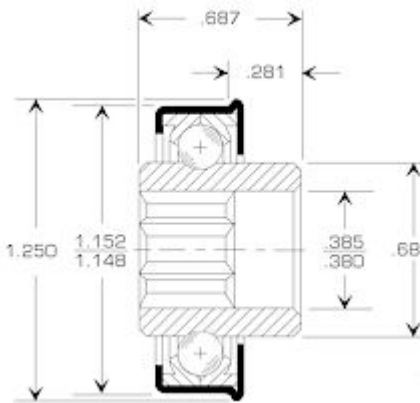
[3065/3070/3080](#)
[3082/3084](#)

[3087/3090/3092](#)
[3094/3095](#)



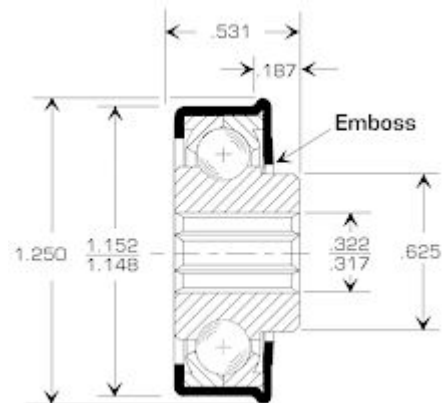
1150

Load Rating 75# • (13) 3/16" Balls



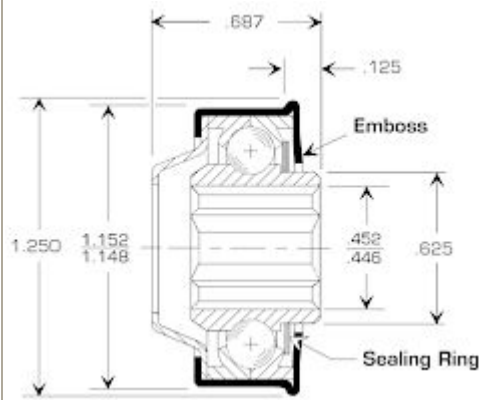
1151

Load Rating 75# • (13) 3/16" Balls



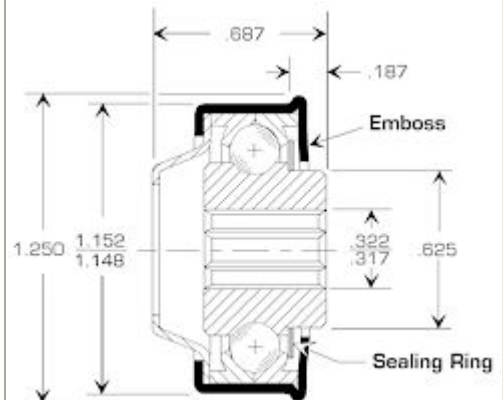
1152

Load Rating 75# • (13) 3/16" Balls



1154

Load Rating 75# • (13) 3/16" Balls



1156

Load Rating 75# • (13) 3/16" Balls



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

**Return to Bearing
Catalog**

3875/3878/3879

1903/1945

**1150/1151/1152
1154/1156**

**1250/1260/1489
1490**

**1500/1510/2900
2910**

1515/1521

1624/1634

410/411/412

418/419/420

1875/1876

2000/2100

**2500/2510/2512
2515**

**2530/2532/2539
2540/2542**

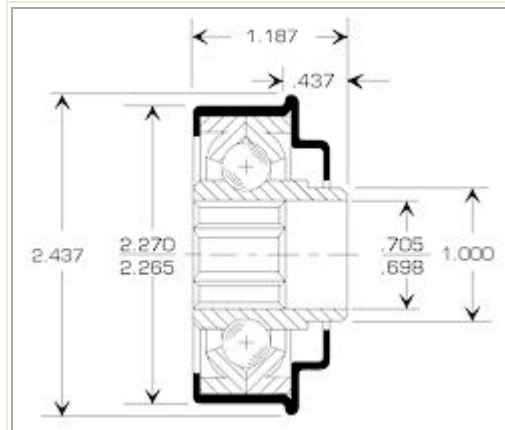
**2600/2610/2612
2630**

**2632/2638/2640
2642**

4113/4114/4115

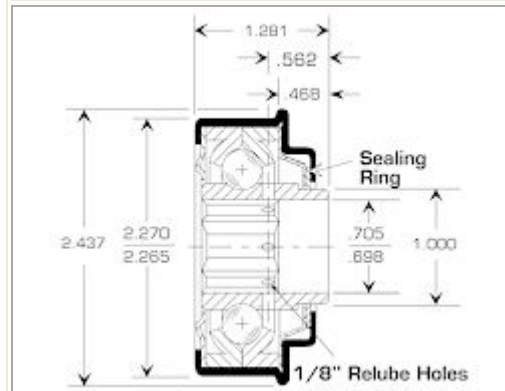
**3065/3070/3080
3082/3084**

**3087/3090/3092
3094/3095**



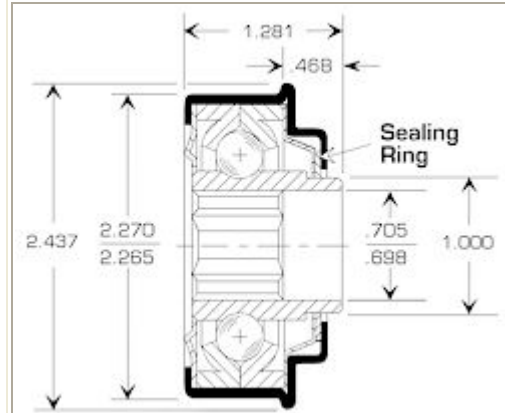
2500

Load Rating 290# • (11) 3/8" Balls



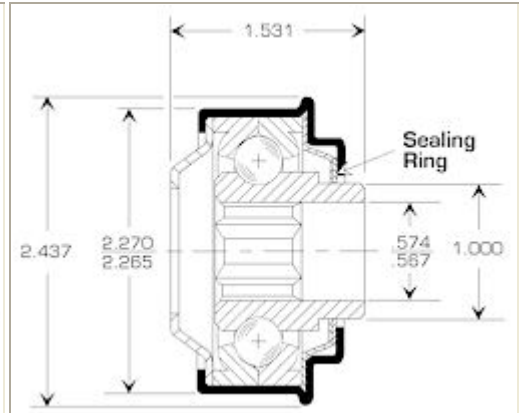
2510

Load Rating 290# • (11) 3/8" Balls



2512

Load Rating 290# • (11) 3/8" Balls • 15/32" Extension



2515

Load Rating 290# • (11) 3/8" Balls



Frantz Wheel and Bearing Division
-Press Fit Conveyor Bearings-

Return to Bearing
Catalog

3875/3878/3879

1903/1945

1150/1151/1152
1154/1156

1250/1260/1489
1490

1500/1510/2900
2910

1515/1521

1624/1634

410/411/412

418/419/420

1875/1876

2000/2100

2500/2510/2512
2515

2530/2532/2539
2540/2542

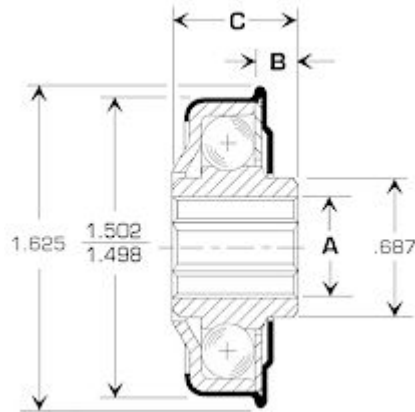
2600/2610/2612
2630

2632/2638/2640
2642

4113/4114/4115

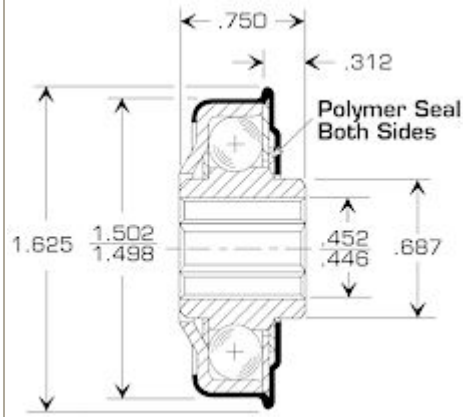
3065/3070/3080
3082/3084

3087/3090/3092
3094/3095



1500

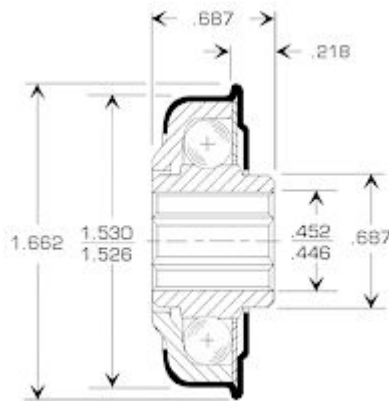
Load Rating 145# • (11) 9/32" Balls



1510

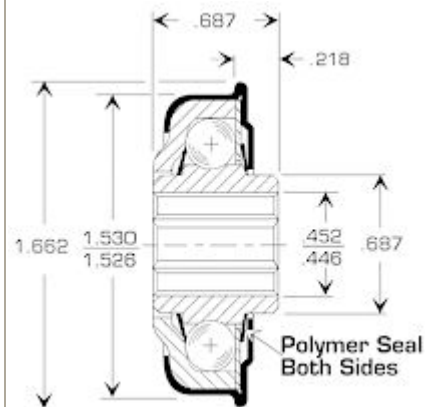
Load Rating 145# • (11) 9/32" Balls

| No. | A | B | C |
|------|------------|------|-----|
| 1500 | .452/.446H | 5/16 | 3/4 |
| 1502 | .385/.380H | 5/16 | 3/4 |
| 1503 | .508/.503R | 5/16 | 3/4 |
| 1504 | .452/.446H | 7/32 | 5/8 |



2900

Load Rating 145# • (11) 9/32" Balls



2910

Load Rating 145# • (11) 9/32" Balls



Sterling Steel Ball Division -Quality-

Quality

Frantz Manufacturing is one of the leading producers of balls, bearings and precision bearing products. Frantz has a reputation of engineering groundbreaking solutions and delivering quality products. Frantz is a QS 9000 and ISO 9002 registered firm.

Hardened Carbon

All steel ball product is put through rigorous testing to assure it meets exact specifications and our own high quality standards.

Economy Grade Balls

You know this, if you're already a Frantz customer. If not, take time now to familiarize yourself with the complete line of quality steel ball products from Frantz Manufacturing.

Sterling Armor

Drilled Carbon

Soft Ground Polished

Plated Balls

Stainless Steel Balls

Agitator Balls

Burnishing Balls

Selected ABMA Definitions

| | | |
|--|--|---|
| Lot: A specified number of balls taken as a unit. Balls in a lot are manufactured under uniform conditions and have basically identical characteristics. | Surface Roughness: Irregularities on the surface of balls having height, width and direction. | Grade: The guaranteed roundness of a ball identified in millionths of an inch. The grade designation is based on a combination of tolerances including dimension, form and surface roughness. |
| Hardness: The ball surface's ability to withstand penetration by a specific indenting shape. | Corrosion: Cracks, pits and rust on the surface of balls when examined visually without magnification. | Nominal Ball Diameter: The value used to make a general identification of a ball size. For example, a 1/8-inch ball. |

For Your Information

| | | |
|---|---|---|
| Packaging Capabilities Various packaging options are available: 50lb. and 100 lb. cartons, 14 gallon fiber drum, 55 gallon steel drum, 11 lb. plastic bags, and others to fit your needs. | Storage Guidelines Regardless of the package you choose, remember to keep it sealed and stored in a dry area until balls are ready for use. | Lead Times Most steel ball products are ready for immediate delivery. Call us to discuss your specific needs. |
|---|---|---|

A few examples of equipment in our quality and testing department.



Metallograph (reflected light microscope) Balls are embedded in a suitable mounting medium, sectioned, ground, polished and etched. The metallograph is used to examine and evaluate the internal microstructure of the ball.



Grinder/Polisher
Balls are embedded in a suitable mounting medium and then cut in half. The Grinder/Polisher is used to create a mirror-like surface on the flat surface of the sectioned mount so that it can be examined with the metallograph.



Automatic head for Grinder/Polisher
This machine mounts on the Grinder/Polisher and allows unattended grinding and polishing of the metallographic.



Microhardness Tester
This machine is used to make a precision indentation in a highly-polished, flat, metal surface, and then measure that indentation. The size of the indentation is directly related to the hardness of the metal at the location of the indentation. By making a series of indentations from ball surface to core, numerical values can be assigned to surface hardness, core hardness and effective case



depth.

Frantz Manufacturing - Soft Ground Polished Balls



Sterling Steel Ball Division
-Soft Ground Polished Balls-

- Quality
- Hardened Carbon
- Economy Grade Balls
- Sterling Armor
- Drilled Carbon
- Soft Ground Polished
- Plated Balls
- Stainless Steel Balls
- Agitator Balls
- Burnishing Balls

Our Soft Ground line of non-hardened balls is perfect for decorative, display and merchandising applications.

| FEATURES | TYPICAL USES |
|------------------------------------|--|
| Available in a full range of sizes | <ul style="list-style-type: none">Ornamental decorationsDisplay fixturesShelving |

Tolerances by Grade for Lots of Balls and Individual Balls

| Ball Grade | Allowable Lot Diameter Variation | Allowable Ball Diameter Variation | Allowable Deviation from Spherical Form |
|------------|----------------------------------|-----------------------------------|---|
| 2000 | .004" | .002" | .002" |
| 5000 | .010" | .005" | .005" |

Frantz Manufacturing - Special Items



Frantz Wheel and Bearing Division
-Special Items-

- Mounting and Lubrication
- Warranty
- Product Index
- GENII Bearings
- Swage Fit Bearings

Conveyor Bearings

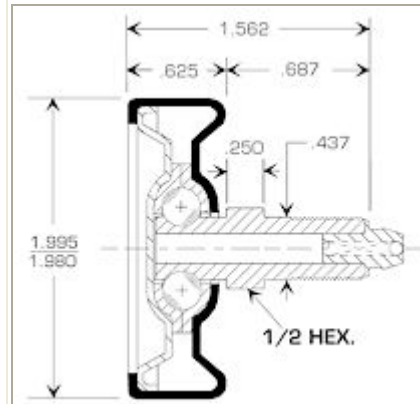
Bearings in
Adapters

End Cup
Adapters

Conveyor
Wheels

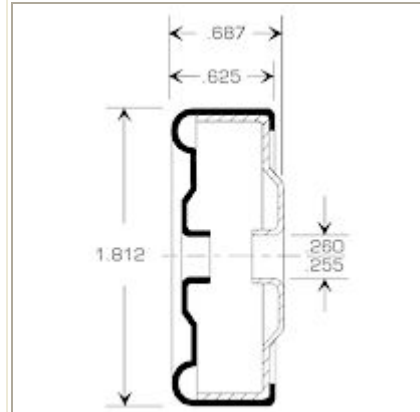
Special Items

Technical
Information



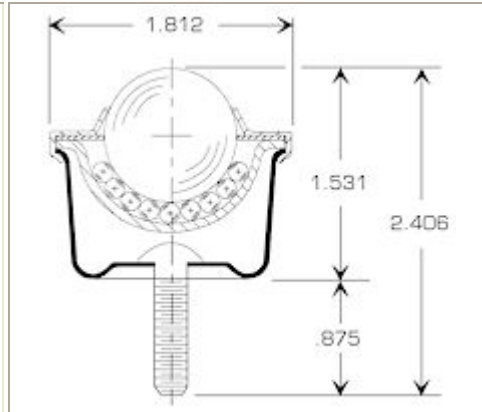
10-TC

1 15/16" diameter Trolley Wheel • 7/16" - 20 Threaded Stud • Furnished with #1957 Alemite Fitting • Load Rating 65# for Overhead Use, 85# for other uses • (7) 1/4" Balls



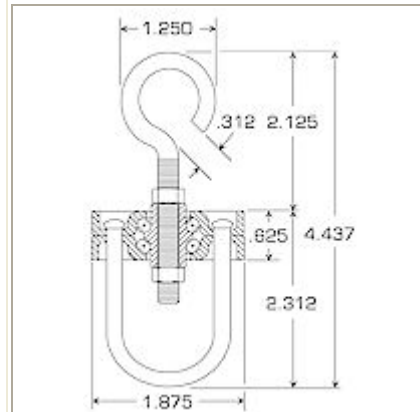
645

1/4" Extruded Hole • Not Hardened • Contains No Balls



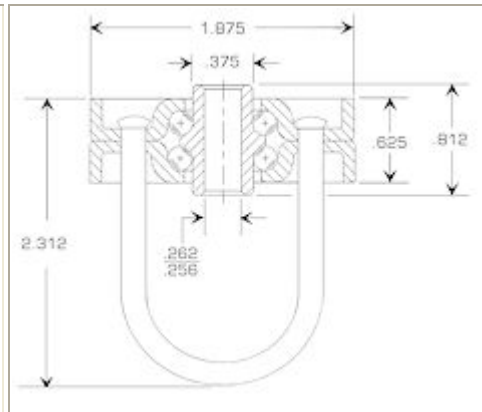
1000

1" Ball transfer • Load Rating 50# • 1/4" - 20 Mounting Bolt



6100

Load Rating: 100#



6101

Load Rating: 100#



Sterling Steel Ball Division

-Stainless Steel Balls-

Quality

When maintaining the integrity of the ball finish in a corrosive environment is important, choose our Stainless Steel line of quality balls.

FEATURES

- Corrosion resistant
- Available in AISI 430 Stainless Steel

TYPICAL USES

- Cosmetics (nail polish, lip gloss, eye liner)

Hardened Carbon

Economy Grade Balls

Sterling Armor

Drilled Carbon

Soft Ground Polished

Plated Balls

Stainless Steel Balls

Agitator Balls

Burnishing Balls

Tolerances by Grade for Lots of Balls and Individual Balls

| Ball Grade | Allowable Lot Diameter Variation | Allowable Ball Diameter Variation | Allowable Deviation from Spherical Form |
|------------|----------------------------------|-----------------------------------|---|
| 2000 | .004" | .002" | .002" |
| 5000 | .010" | .005" | .005" |

Frantz Manufacturing - Steel Balls, Carbon Steel Balls, Bearings, Conveyor Bearings, Conveyor Wheels



Welcome to Frantz Manufacturing.

Bearing Catalog

What's New

Steel Ball Catalog

Bearing Catalog

**Drilled Balls
Conveyor
Wheels**

Agitator Balls



Carbon Steel Balls

**Stainless
Steel
Balls**

Swage Fit Bearings



**Burnishing
Balls**

Conveyor Bearings

Steel Ball Catalog

Frantz Manufacturing, headquartered in Sterling, Illinois, is a manufacturer of conveyor bearings and steel balls. Frantz's conveyor bearings and wheels are used primarily in unit handling conveyor systems. Frantz's steel ball products are used throughout the world in a wide variety of ways ranging from automotive, drawer slides, bearings, agitation, just to name a few.

Since 1909 Frantz Manufacturing has been a leading supplier of components to many different industries.

Frantz Bearing Division: Products include swage fit and press fit conveyor bearings, bearings in adapters, end cup adapters, conveyor wheels, trolley wheels, ball transfers, and our new line of [GEN II conveyor bearings](#).

Sterling Steel Ball Division: Products include hardened carbon steel balls, economy grade balls, soft ground polished balls, carbon steel balls, plated balls, stainless steel balls, agitator balls, burnishing balls, and we proudly introduce [Sterling Armor™](#) — the alternative to stainless steel.

The Frantz Manufacturing Company was started in 1909 by Peter Frantz, producing a line of building hardware. In 1928, Frantz entered the garage door industry and in 1939, began manufacturing conveyor wheels as part of its garage door operation.

To supply the needs of Frantz, the Sterling Steel Ball Plant was created in 1947, and is now part of the Frantz Manufacturing Company. The Bearing Division originated in 1971 with the building of a new 84,000 square foot facility devoted exclusively to bearing production.

Frantz has established the standard of excellence with over 90 years of experience in the design and manufacture of ball bearings, steel wheels and carriers and virtually any type of carbon steel ball.

Innovations such as the Frantz Gen II bearing and the new Sterling Armor line of steel balls have kept Frantz in the forefront of product development for customers worldwide.

With a complete bearing plant, steel ball plant and laboratory testing facility located in the central United States, Frantz is able to supply the demands of a wide variety of customer applications.

Frantz takes pride in the skills, talent and dedication of its workforce allowing Frantz to produce superior products that serve customers with the best engineering and manufacturing in the industry.



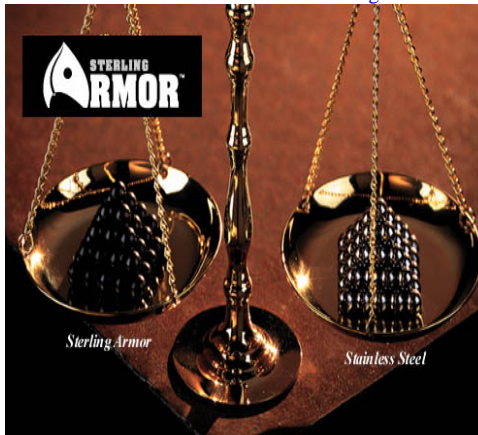
- Quality
- Hardened Carbon
- Economy Grade Balls
- Sterling Armor**
- Drilled Carbon
- Soft Ground Polished
- Plated Balls
- Stainless Steel Balls
- Agitator Balls
- Burnishing Balls

Sterling Armor™ is turning the stainless steel or plated ball world upside down. An inexpensive alternative for both load bearing and non-load applications. Our exclusive patented manufacturing process controls time, temperature and gaseous composition defusing corrosion protection into the microstructure of the steel creating a superior scuff and wear resistant surface. Sterling Armor™ is unaffected by UV exposure, and is ideal for caustic environments. It provides a complete and uniform barrier capable of withstanding 24, 48, or 96 hour salt fog testing.

Sterling Steel Ball Division -Sterling Armor-

| TYPICAL USES | FEATURES |
|---|--|
| <ul style="list-style-type: none"> • Cosmetics (nail polish, lip gloss, eye liner) • Automotive switches • Seat belts • Quick disconnect fittings • Pump switches • Inertia systems | <ul style="list-style-type: none"> • Superior scuff and wear-resistance • Load and non-load applications • Salt fog tested • Corrosion resistant • Gloss black or dull finish • Less expensive than stainless and most multi-layered plating • Will not blister or flake • Patented process • Magnetic attributes |

[Click here to learn more about Sterling Armor!](#)



Tolerances by Grade for Lots of Balls and Individual Balls

| Ball Grade | Allowable Lot Diameter Variation | Allowable Ball Diameter Variation | Allowable Deviation from Spherical Form |
|------------|----------------------------------|-----------------------------------|---|
| 200 | .0004" | .0002" | .0002" |
| 400 | .0008" | .0004" | .0004" |
| 500 | .001" | .0005" | .0005" |



| | | | |
|------|-------|-------|-------|
| 1000 | .002" | .001" | .001" |
| 2000 | .004" | .002" | .002" |

▼ Frantz Manufacturing - Sterling Steel Ball Division



Frantz Wheel and Bearing Division

Mounting and
Lubrication

Product Index

GENII
Bearings

Swage Fit Bearings

Conveyor Bearings

Bearings in
Adapters

End Cup
Adapters

Conveyor
Wheels

Special Items

Technical
Information



Every company has a personality, and Frantz Manufacturing is extremely proud of its reputation.

Ask our customers and you will hear "good products," "well engineered," and "high quality." These descriptions are product related and confirm our commitment to providing the highest quality products in the marketplace.

We're equally proud of the descriptions you will hear as they relate to our people. "High integrity," "good work ethic," and "reliable" are the characteristics of the entire Frantz Manufacturing team.

A combination of all these traits has resulted in Frantz Manufacturing Co. becoming and remaining a market leader. You not only receive the product you expect, you will be communicating with people who keep their word, who follow up and who provide personal service.

We are a leading designer and manufacturer of bearings and steel balls for the above reasons. We look forward to applying our corporate personality — our leadership — to serve you.



Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[1124/1125/1126](#)

[1274/1275/1276](#)
[1284](#)

[1405/1407/1408](#)
[1409/1410](#)

[1690/1705/1005](#)

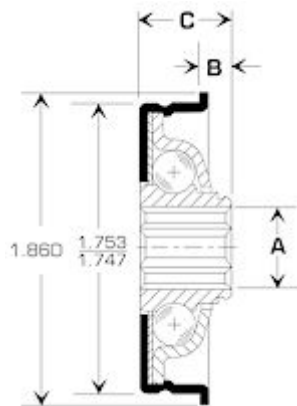
[124/1721](#)

[110/1107](#)

[1001/1013/1015](#)
[1018/1102](#)

[2550/2552/2553](#)

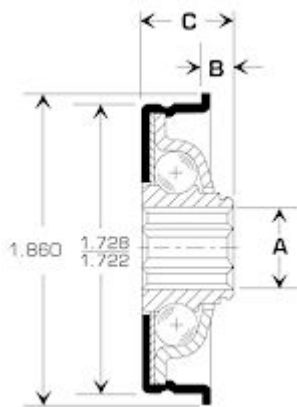
[2555/2557/2558](#)



| No. | A | B | C |
|-----|------------|-------|-----------|
| 119 | .452/.446H | 11/64 | .536/.526 |
| 124 | .452/.446H | 1/4 | .614/.604 |

124

Load Rating 130# • (11) 1/4" Balls



| No. | A | B | C |
|------|------------|-------|-----------|
| 1721 | .452/.446H | 11/64 | .536/.526 |

1721

Load Rating 130# • (11) 1/4" Balls



Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

Return to Bearing Catalog

1124/1125/1126

1274/1275/1276
1284

1405/1407/1408
1409/1410

1690/1705/1005

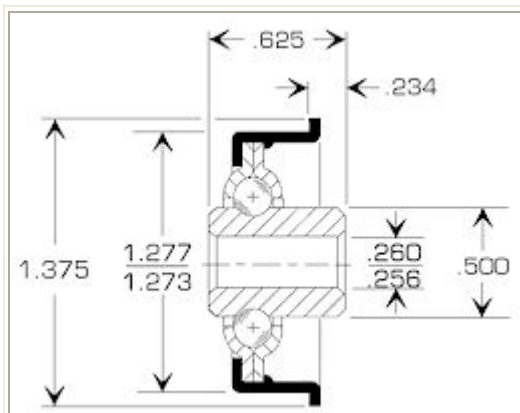
124/1721

110/1107

1001/1013/1015
1018/1102

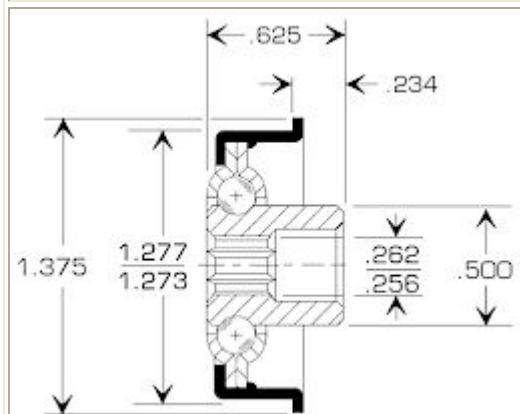
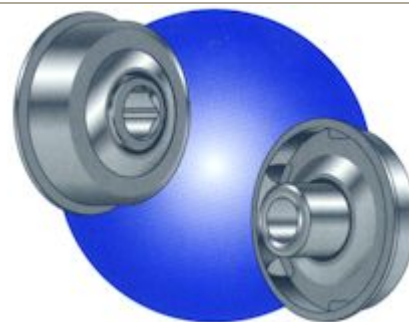
2550/2552/2553

2555/2557/2558



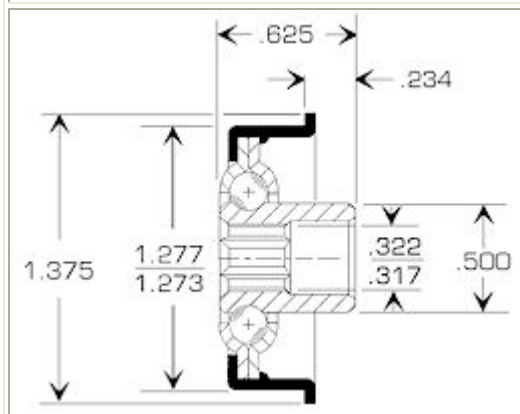
1274

Load Rating 47# • (11) 5/32" Balls



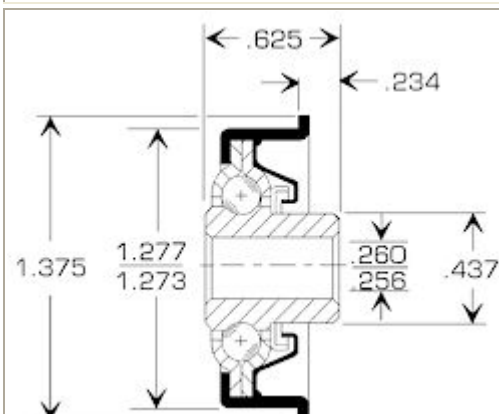
1275

Load Rating 47# • (11) 5/32" Balls



1276

Load Rating 47# • (11) 5/32" Balls



1284

Load Rating 47# • (11) 5/32" Balls



Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[1124/1125/1126](#)

[1274/1275/1276](#)
[1284](#)

[1405/1407/1408](#)
[1409/1410](#)

[1690/1705/1005](#)

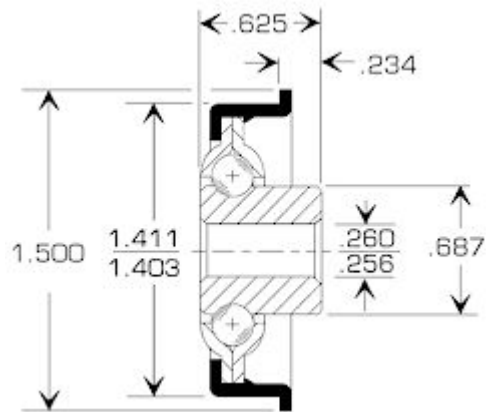
[124/1721](#)

[110/1107](#)

[1001/1013/1015](#)
[1018/1102](#)

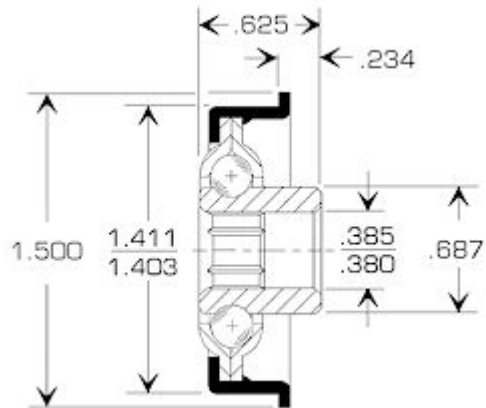
[2550/2552/2553](#)

[2555/2557/2558](#)



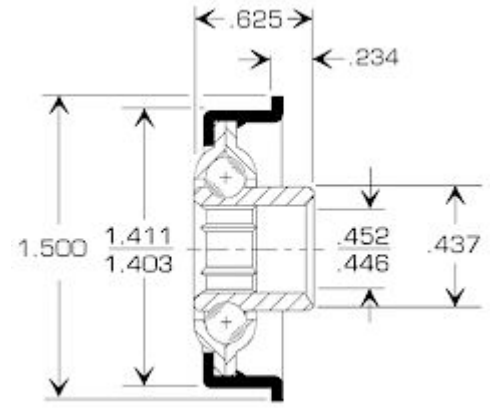
1405

Load Rating 75# • (13) 3/16" Balls



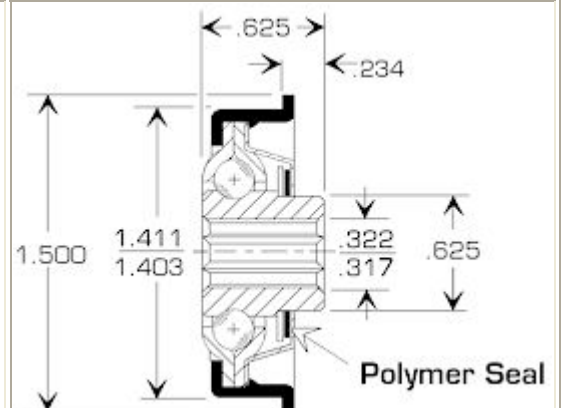
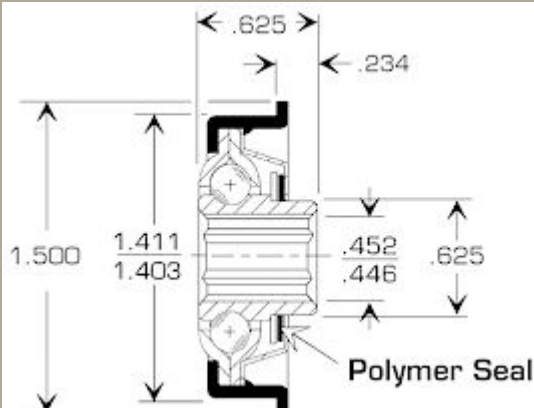
1407

Load Rating 75# • (13) 3/16" Balls



1408

Load Rating 75# • (13) 3/16" Balls



| | | |
|--|---|---|
| | 1409 Load Rating 75# • (13) 3/16" Balls | 1410 Load Rating 75# • (13) 3/16" Balls |
| | | |

Frantz Manufacturing - Swage Fit Conveyor Bearings



FRANTZ WHEEL AND BEARING DIVISION
-SWAGE FIT CONVEYOR BEARINGS-

Return to Bearing
Catalog

1124/1125/1126

1274/1275/1276
1284

1405/1407/1408
1409/1410

1690/1705/1005

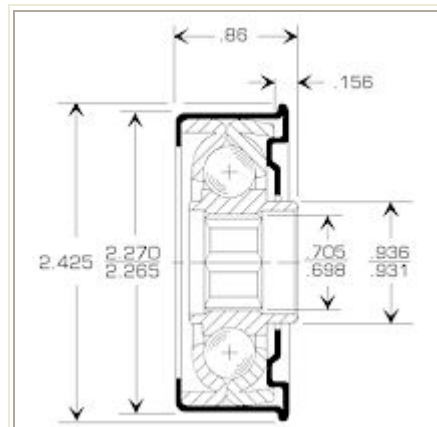
124/1721

110/1107

1001/1013/1015
1018/1102

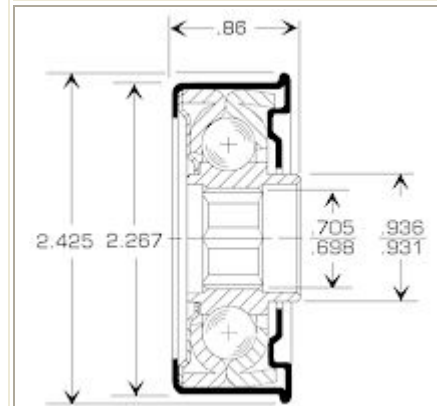
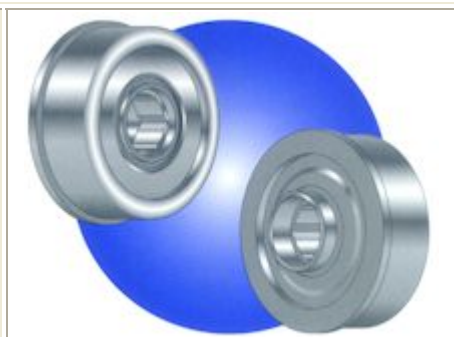
2550/2552/2553

2555/2557/2558



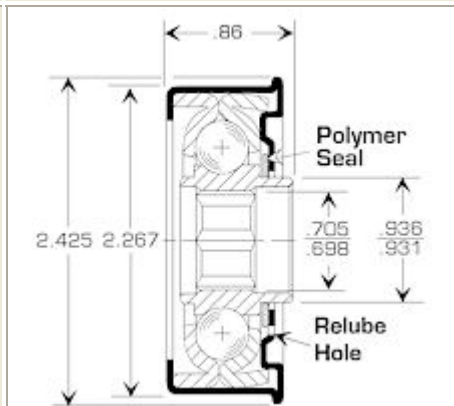
2550

Load Rating 290# • (11) 3/8" Balls



2552

Load Rating 290# • (11) 3/8" Balls



2553

Load Rating 290# • (11) 3/8" Balls

Frantz Manufacturing - Swage Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

1124/1125/1126

1274/1275/1276
1284

1405/1407/1408
1409/1410

1690/1705/1005

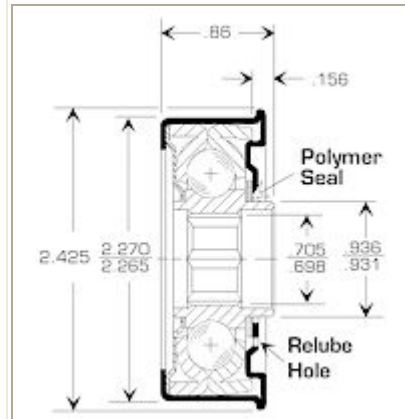
124/1721

110/1107

1001/1013/1015
1018/1102

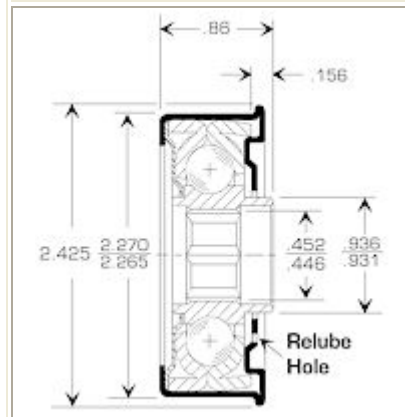
2550/2552/2553

2555/2557/2558



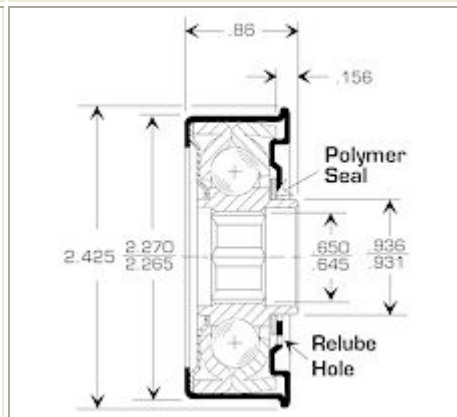
2555

Load Rating 290# • (11) 3/8" Balls



2557

Load Rating 290# • (11) 3/8" Balls



2558

Load Rating 290# • (11) 3/8" Balls

Frantz Manufacturing - Swage Fit Conveyor Bearings

Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

1124/1125/1126

1274/1275/1276
1284

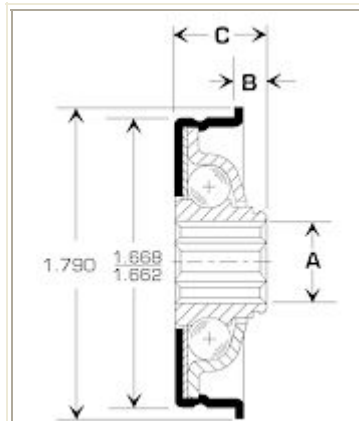
1405/1407/1408
1409/1410

1690/1705/1005

124/1721

110/1107

1001/1013/1015



1690

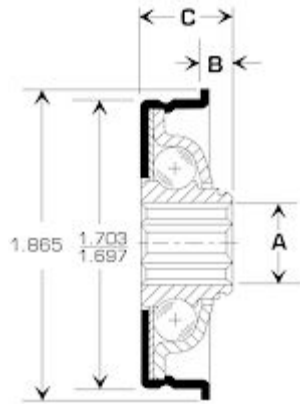
Load Rating 130# • (11) 1/4" Balls

| No. | A | B | C |
|------|------------|-------|-----------|
| 1690 | .452/.446H | 11/64 | .536/.526 |
| 1694 | .452/.446H | 1/4 | .614/.604 |
| 1698 | .445/.440R | 11/64 | .536/.526 |

1018/1102

2550/2552/2553

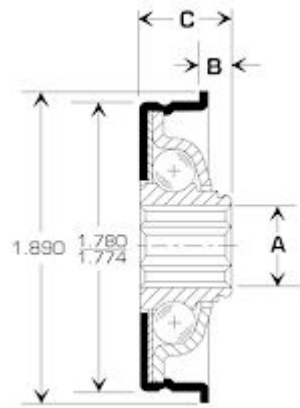
2555/2557/2558



1701

Load Rating 130# • (11) 1/4" Balls

| No. | A | B | C |
|------|------------|-------|-----------|
| 1701 | .452/.446H | 1/4 | .614/.604 |
| 1705 | .452/.446H | 11/64 | .536/.526 |



1005

Load Rating 130# • (11) 1/4" Balls

| No. | A | B | C |
|------|------------|-------|-----------|
| 1002 | .260/.256R | 11/64 | .536/.526 |
| 1004 | .385/.380H | 11/64 | .536/.526 |
| 1005 | .452/.446H | 11/64 | .536/.526 |
| 1006 | .260/.256R | 1/4 | .614/.604 |
| 1009 | .452/.446H | 1/4 | .614/.604 |
| 1011 | .322/.317H | 1/4 | .614/.604 |
| 1012 | .320/.316R | 11/64 | .536/.526 |
| 1014 | .443/.439R | 11/64 | .536/.526 |

Frantz Manufacturing - Swage Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

1124/1125/1126

1274/1275/1276
1284

1405/1407/1408
1409/1410

1690/1705/1005

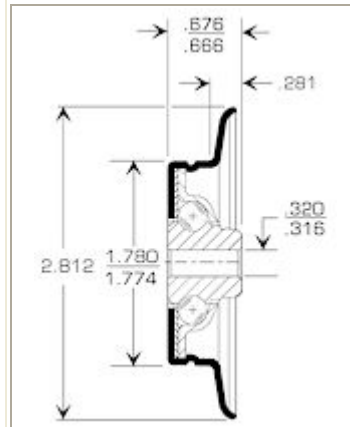
124/1721

110/1107

1001/1013/1015
1018/1102

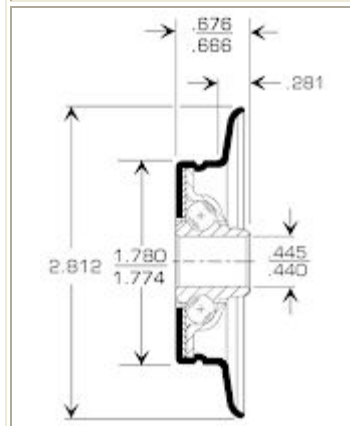
2550/2552/2553

2555/2557/2558



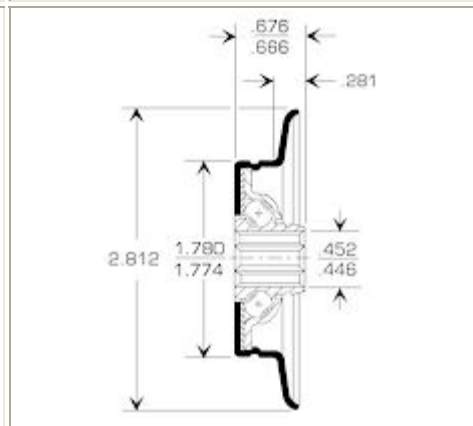
1001

Load Rating 130# • (11) 1/4" Balls



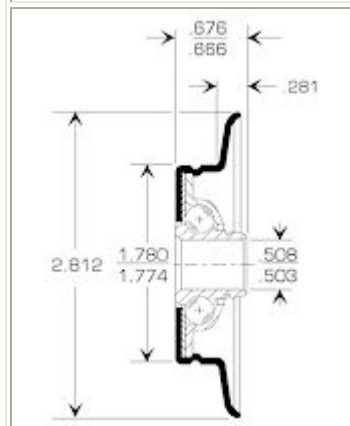
1013

Load Rating 130# • (11) 1/4" Balls



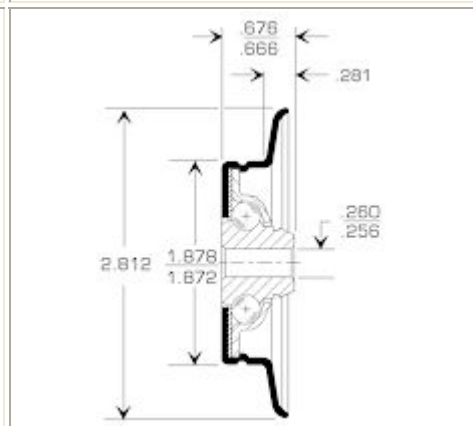
1015

Load Rating 130# • (11) 1/4" Balls



1018

Load Rating 130# • (11) 1/4" Balls



1102

Load Rating 130# • (11) 1/4" Balls



Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[1124/1125/1126](#)

[1274/1275/1276](#)
[1284](#)

[1405/1407/1408](#)
[1409/1410](#)

[1690/1705/1005](#)

[124/1721](#)

[110/1107](#)

[1001/1013/1015](#)
[1018/1102](#)

[2550/2552/2553](#)

[2555/2557/2558](#)

| | | | | |
|---|------------|------------|----------|-----------|
| | No. | A | B | C |
| | 110 | .452/.446H | 11/64 | .614/.604 |
| | 114 | .452/.446H | 1/4 | .676/.666 |
| | 116 | .320/.316R | 11/64 | .614/.604 |
| <p>110 Load Rating 130# • (11) 1/4" Balls</p> | | | | |
| | No. | A | B | C |
| | 1107 | .452/.446H | 11/64 | .614/.604 |
| | 1106 | .385/.380H | 11/64 | .614/.604 |
| | 1111 | .452/.446H | 1/4 | .676/.666 |
| <p>1107 Load Rating 130# • (11) 1/4" Balls</p> | | | | |
| | | | | |

Frantz Manufacturing - Swage Fit Conveyor Bearings



Frantz Wheel and Bearing Division
-Swage Fit Conveyor Bearings-

[Return to Bearing Catalog](#)

[1124/1125/1126](#)

[1274/1275/1276
1284](#)

[1405/1407/1408
1409/1410](#)

[1690/1705/1005](#)

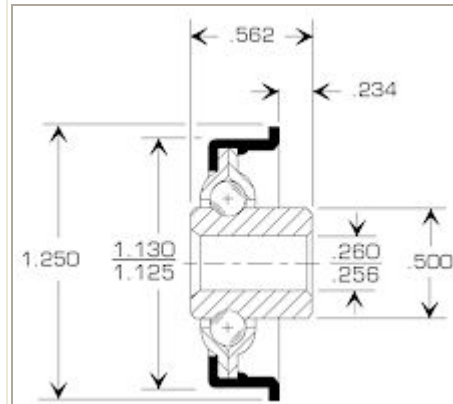
[124/1721](#)

[110/1107](#)

[1001/1013/1015
1018/1102](#)

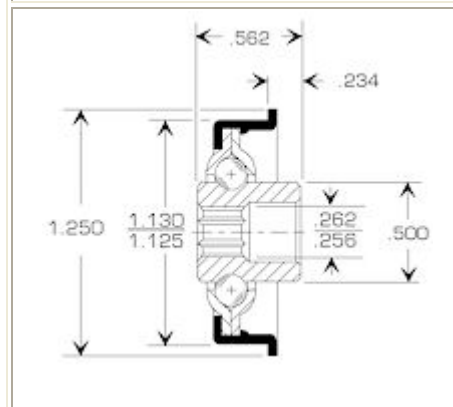
[2550/2552/2553](#)

[2555/2557/2558](#)



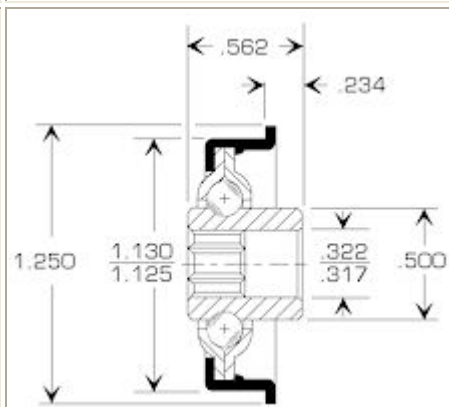
1124

Load Rating 45# • (11) 5/32" Balls



1125

Load Rating 45# • (11) 5/32" Balls



1126

Load Rating 45# • (11) 5/32" Balls

Frantz Manufacturing - Technical Information



Frantz Wheel and Bearing Division
-Technical Information-

Frantz Conveyor Bearings and Wheels

On this site are shown various bearings and skate wheels adapted for conveyor use.

All bearings and wheels are standard, but not all are shelf items. Certain variations from standard can be furnished if quantities are sufficient. Estimates on special bearings may be obtained on request.

All bearings are designed for use in roller type conveyor installations, where use does not exceed load ratings.

Swage fit bearings are not designed to be used where subjected to any continuous end thrust or continuous operation without lubrication. Bearings used in continuous operations should be ordered greased or should be lubricated after installation and periodically thereafter.

None of our bearings are sealed against continuous exposure to dust, sand, flour, etc. A few bearings, as noted, are partly sealed, but these types are not designed as permanently sealed bearings. These should be

[Mounting and Lubrication](#)

[Product Index](#)

[GENII Bearings](#)

[Swage Fit Bearings](#)

[Conveyor Bearings](#)

[Bearings in](#)

| | |
|------------------------------|---|
| Adapters | ordered greased if to be used in continuous operations as they cannot be lubricated properly after assembly. |
| End Cup Adapters | Most standard non-sealed bearings will be furnished zinc plated, without grease, except when ordered as greased. |
| Conveyor Wheels | Mounting Specifications <ol style="list-style-type: none"> 1. Care should be taken to cut all tubes to the proper length to avoid thrust loading the bearing through insufficient distance between side rails when installed. 2. The tube should be reamed or mandrel sized to supply a .003" to .005" interference fit, which is optimum, with .008" as an absolute maximum. 3. The tube should have adequate chamfers to allow the bearing proper seating. 4. Tube ends should be absolutely parallel to each other and perpendicular to the axis of rotation. 5. The tubes should be clean and free of grit and chips in the bore to prevent bearing contamination. 6. Axles should be clean and straight, any camber or bends will only shorten normal life. 7. Lugs on axle should be proper distance apart so when the spring is installed and in relaxed position, there is 1/8 inch clearance between the spring and inner bearing race. 8. The actual bearing mount should be done in as clean an environment as possible. 9. In pressing the bearing into the tube, an adapter must be used to prevent cocking and provide uniform pressure. The adapter must conform to the exact shape of the outboard side of the bearing and sufficient diameter to cover the entire bearing with ample clearance for the inner race and axle extension. At no time should the axle or inner race be subjected to any force. 10. The bearing flange should come to bear solidly and squarely on the tube end. 11. Rotate the tube, supported by the two outer most portions of the axle. If you can detect any reciprocating movement of the inner race along the length of the axle, this is indicative of a bearing that is not mounted perpendicular to its rotation. The maximum allowable deviation from perpendicularity between the face of the bearing and inner race is 1° 30" for normal life. 12. Additional life can be obtained through periodic inspection and lubrication. <p>There is a fundamental equation in mounting bearings. Quality mounting is directly proportional to successful bearing life.</p> |
| Special Items | Packaging <p>Bearings can be shipped in steel drums or one of two sizes of corrugated paper boxes. The box sizes are 12" x 12" x 6" high or 12" x 12" x 12" high depending upon contents. The average weight per carton will vary from 60# to 150#. We can also furnish a bulk cardboard container which is approximately 28" x 35" x 20" high and contains about 1200# to 1400#.</p> |
| Technical Information | Load Ratings <p>A formula has been developed by the Conveyor Equipment Manufacturers Association (CEMA) which enables one to estimate the load carrying ability of underground commercial bearings. If the diameter and number of balls used in a bearing are known, this formula may be used to estimate the "Basic Conveyor Bearing Load Rating," which is defined as that constant, radial bearing load which a group of apparently identical bearings can endure for 1,000,000 revolutions with 90% of the bearings surviving.</p> <p>(Refer to Section 3 of CEMA Standard No. 401-1994)</p> <p>Actual "Service Life" is dependent upon conditions surrounding the use of a bearing, such as temperature, dust, moisture, lubrication, shock, side loads, excessive speeds, installation procedures, etc. The CEMA Standard 401-1994 attempted to insert a "Service Factor" to allow for these factors in the calculation of load ratings. The determination of service conditions is however best done by the user of the bearings considering each application individually. It is for this reason that Frantz Manufacturing does not attempt to apply a Service Factor to our load ratings.</p> |



Frantz Wheel and Bearing Division
-The GEN II Family of Quality Bearings-

| | |
|---|--|
| Return to Bearing Catalog | <p>GEN II takes conveyor bearing performance to an entirely new level. GEN II bearings run faster, smoother and quieter than the competition. They're produced to rigorous quality standards, ensuring long life. And a full family of GEN II bearings means you'll find one suitable for a large variety of bearing applications. You get the best qualities of expensive precision bearings without the high cost. The GEN II. It literally is the next generation in conveyor bearing technology.</p> |
| Introduction | |
| Core Bearings | <p>GEN II bearings. Just built better.</p> |
| 176 Series | <p>Old-style bearings are made of stamped metal outer races, machined inner races and the least precise carbon steel balls. Our engineers knew there had to be a better way. They determined that if you use a better ball and tighten the tolerances, the result would be a better bearing.</p> |
| 300 Series | |
| 620 Series | <p>They developed a proprietary fabrication process, exclusive to the GEN II. It ensures a more precise fit-up between raceways and balls. To that, our engineers added the most precise carbon steel balls available.</p> |
| Conclusion | <p>The result, the GEN II bearing outlives standard conveyor bearings by as much as 10 times, at speeds up to 10 times faster.</p> <p>Listen. You can hear the difference quality makes.</p> <p>You probably already guessed it. By tightening the tolerances, the GEN II bearing runs quieter than competing conveyor bearings. As much as 14% quieter. The result is a more pleasant work environment that helps achieve OSHA noise standards.</p> <p>It's fast. Up to 600 surface feet per minute.</p> <p>By tightening the fit-up tolerances and using balls 10 times more precise than the balls used in old-style conveyor bearings, the GEN II is not only quieter, but considerably faster. Up to 10 times faster. Which means better conveyor performance and greater productivity.</p> <p>The right solution for your application.</p> <p>Unlike the competition, GEN II bearings come in a flexible range of sizes and specifications. The 176 Series, load rated for 176 pounds (80 kgs.). The 300 Series, a low-cost alternative to precision bearings in some applications, load rated up to 300 pounds (136 kgs.). And for heavy-duty applications, the 620 Series, which can handle an impressive 620-pound (280 kgs.) load rating. Check each link on the left for exact specifications. A full family of complete conveyor bearings, plus Core Bearings, and Frantz Manufacturing engineering prowess, make GEN II the most versatile line of conveyor bearings available on the market today.</p> <p>Made to last.</p> <p>Frantz Manufacturing is one of the leading producers of balls, bearings and semi-precision bearing products. Frantz has a reputation for engineering groundbreaking solutions and delivering quality products. The GEN II is no exception, providing bearing life up to 10 times longer than competitors' products. You already know this if you're a Frantz customer. If not, take the time to look into the GEN II family of quality conveyor bearings. GEN II from Frantz Manufacturing. The next generation in conveyor bearing technology.</p> |



What's New

Steel Ball
Catalog

Bearing Catalog

What's New at Frantz Manufacturing?



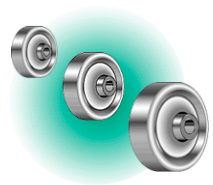
Frantz Manufacturing is excited to announce our new line of **GEN II** conveyor bearings. [Here's why you should specify the GEN II for all your quality bearing applications.....](#)

Frantz Manufacturing proudly displays our membership with the [Material Handling Industry of America](#).



Frantz Manufacturing proudly introduces **Sterling Armor™** — the alternative to stainless steel. [In a direct response to customer requests](#), Frantz engineers have developed a low carbon steel ball that has the best attributes of stainless steel.....

Frantz Manufacturing reveals the new **Tortoise Shell** Wheel. [When you see "Genuine Frantz Tortoise Shell Wheels Inside" on the label](#), you can be assured that you're using one tough wheel.....





Sterling Steel Ball receives QS-9000/ISO-9002 registration. [Sterling Steel Ball](#), division of Frantz Manufacturing Company, is pleased to announce that it has officially received registration.....