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Agricultural Bearings

Agricultural Bearings





PEER is a dynamic and customer focused bearing manufacturer delivering valued solutions to a global market...

- Valued bearing solutions for agricultural, electrical, fluid, HVAC, lawn & garden, material handling and transmission industries
- Global application engineering support
- TS-16949 certified manufacturing facilities
- Dedicated research and development center
- Testing capabilities include: fatigue life, noise/vibration, mud slurry and salt spray testing
- Flexible manufacturing to allow for low to high volume production
- Exclusive AGXTREME seal design. Single (F or G), double or triple lipseal options all bonded to a thick steel shroud for protection even in the harshest of environments
- Customer service excellence



PEER Ball Bearing Factory, Xinchang, Zhejiang, China

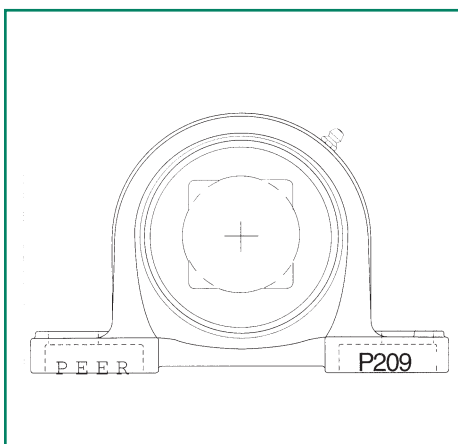


PEER Tapered Bearing Factory, Changshan, Zhejiang, China

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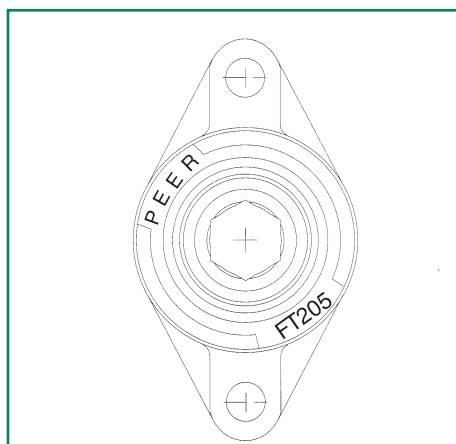
HOUSED UNITS ALSO AVAILABLE:

PEER is able to install bearings with beveled O.D. into cast iron, ductile, or pressed steel housings. See examples below. Consult with your PEER salesperson for other available sizes.



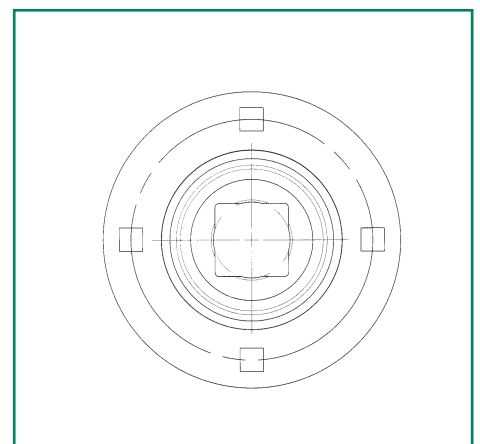
GW209PPB5-P

Consists of GW209PPB5 disc bearing installed in P-209-HA cast iron pillow block.



205KKRB2-FT

Consists of 205KKRB2 hex bearing installed in FT-205-H cast iron 2-bolt housing.



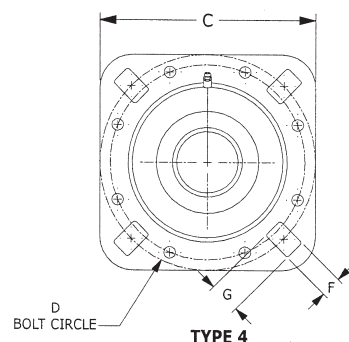
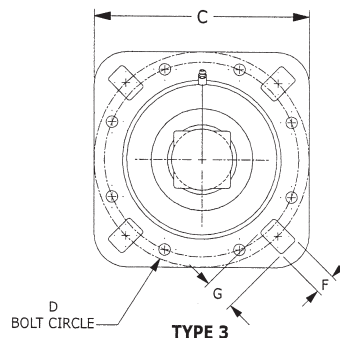
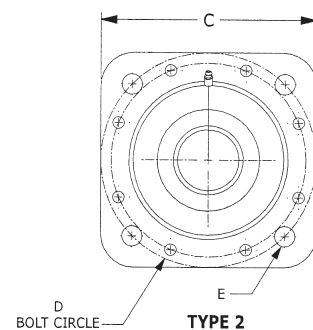
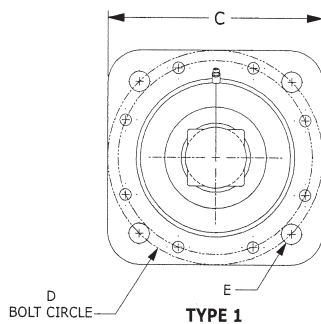
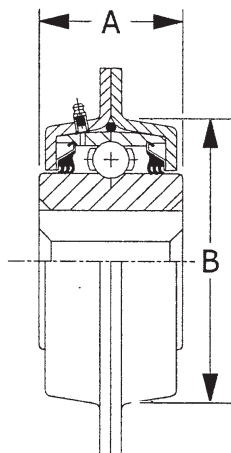
W208PPB12-PFFZ

Consists of W208PPB12 disc bearing installed into PFF-87mm 4-bolt pressed steel housing.



FLANGED DISC UNIT

PEER's Flanged Disc series incorporates a bearing with two, one-piece triple lip shroud seals and two rubber "O" rings. It is encased in two heavy gauge stamped steel housings which are riveted together. Relubricable.



PEER UNIT NUMBER	TYPE	SHAFT DIAMETER	A	B Min. Frame Opening	C	D	E	F	G
ST491A	2	1 3/4 RD	1.687	4.000	5.000	5.000	0.531		
ST491B	4	1 1/2 RD	1.687	4.000	5.000	5.000		0.531	0.687
FD209-1 1/8SQ	3	1 1/8 SQ	1.687	4.000	5.000	5.000		0.531	0.687
FD209-1 1/4SQ	3	1 1/4 SQ	1.687	4.000	5.000	5.000		0.531	0.687
FD211-1 1/2SQ	3	1 1/2 SQ	2.000	4.500	5.500	5.500		0.531	0.687
FD211-1 3/4RD	2	1 3/4 RD	2.187	4.500	5.500	5.500	0.531		
FD211-1 3/4HX		1 3/4 HX	2.188	4.500	5.500	5.500	0.531		
FD211-1 15/16RD	2	1 15/16 RD	2.187	4.500	5.500	5.500	0.531		
FD211-1 15/16RDC*		1 15/16 RD	2.125	4.500	5.500	5.500	0.531		
FD211-2 3/16RD	2	2 3/16 RD	2.187	4.500	5.500	5.500	0.531		

* CAN BE USED WITH LOCKING CAM

RD-ROUND

SQ-SQUARE

HX-HEX

Metric bores also available upon request

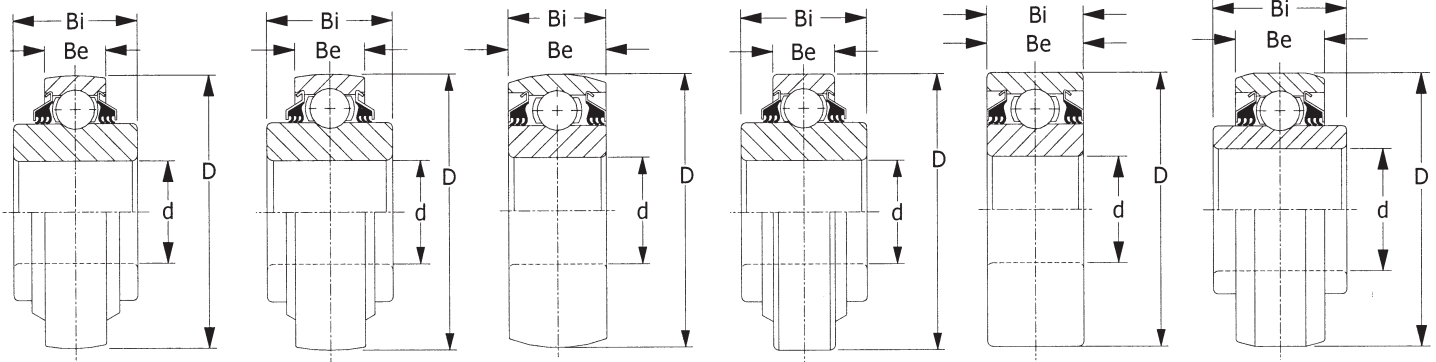
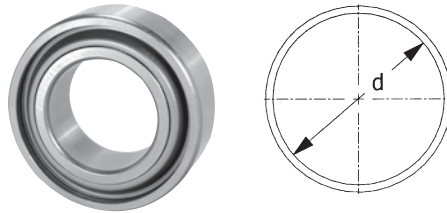
Flanged Disc Interchange Chart

PEER UNIT NUMBER	FAFNIR	BCA
ST491A	491A	FD-209-RA
ST491B	DHU 1 1/2R-209	FD-209-RB
FD209-1 1/8SQ	DHU 1 1/8S-209	FD-209-RM
FD209-1 1/4SQ	DHU 1 1/4S-209	FD-209-RK
FD211-1 1/2SQ	DHU 1 1/2S-211	FD-211-RM
FD211-1 3/4RD	DHU 1 3/4R-211	FD-211-RE
FD211-1 3/4HX		FD-211-RKB
FD211-1 15/16RD		FD-211-RK
FD211-1 15/16RDC		FD-211-RJA
FD211-2 3/16RD	DHU 2 3/16R-211	FD-211-RB

ROUND BORE NON-RELUBRICABLE



Heavy Duty Disc Harrow Bearings are made with triple lip seals to protect from corrosive environments. This seal is a one piece shroud cover with three molded contact seals. This series is lubricated for life.



TYPE 1

TYPE 2

TYPE 3

TYPE 4

TYPE 5

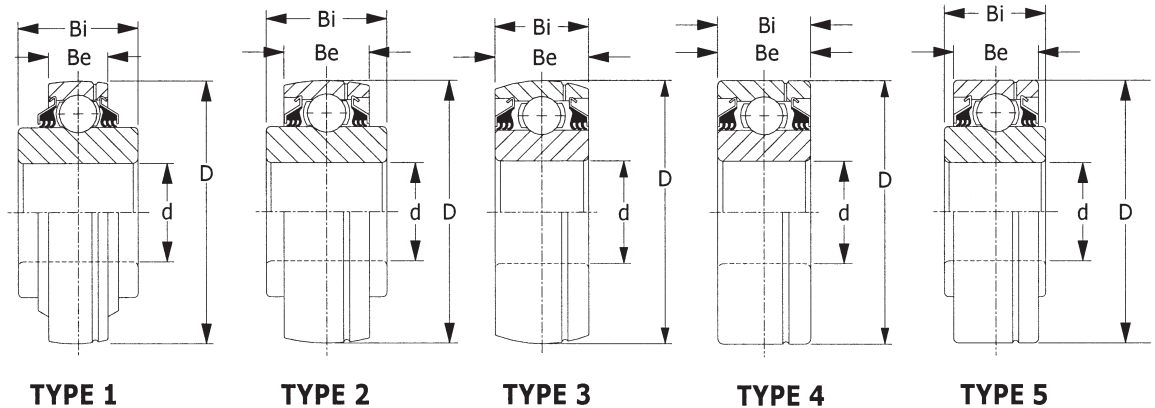
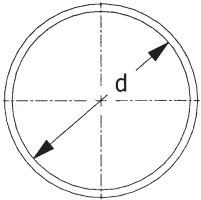
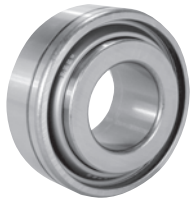
TYPE 6

PEER UNIT NUMBER	TYPE	d		D		Be		Bi		Load Ratings		Wt. Lbs.
		nominal	TOL.+0/ to minus shown	nominal	TOL.+0/ to minus shown	nominal	TOL.+0/ to minus shown	nominal	TOL.+0/ to minus shown	Dynamic	Static	
W208PPB2	1	1.5005	.0005	3.1496	.0005	.7090	.0050	1.6880	.0050	7,340	3,650	1.59
		38.113	.013	80.000	.013	18.000	.127	42.875	.127			
W208PPB7	2	1.1880	.0005	3.1496	.0005	.7090	.0050	1.1880	.0050	7,340	3,650	1.41
		30.175	.013	80.000	.013	18.000	.127	30.175	.127			
W208PP10	4	1.5005	.0005	3.1496	.0005	.8270	.0050	1.6880	.0050	7,340	3,650	1.50
		38.113	.013	80.000	.013	21.000	.127	42.875	.127			
W208PPB10	1	1.5005	.0005	3.1496	.0005	.8270	.0050	1.6880	.0050	7,340	3,650	1.59
		38.113	.013	80.000	.013	21.000	.127	42.875	.127			
W208PPB23	2	1.5005	.0005	3.1496	.0005	1.1880	.0050	1.6880	.0050	7,340	3,650	1.50
		38.113	.013	80.000	.013	30.175	.127	42.875	.127			
W209PPB2	3	1.7717	.0005	3.3460	.0006	1.1880	.0050	1.1880	.0050	7,350	4,150	1.45
		45.000	.013	85.000	.015	30.175	.127	30.175	.127			
W209PPB4	3	1.5350	.0100	3.3460	.0060	1.1880	.0050	1.1880	.0050	7,350	4,150	1.65
		39.000	.254	85.000	.015	30.175	.127	30.175	.127			
W210PP2	5	1.9380	.0005	3.5433	.0006	1.1880	.0050	1.1880	.0050	7,880	4,650	1.69
		49.225	.013	90.000	.015	30.175	.127	30.175	.127			
W210PPB2	3	1.9380	.0005	3.5430	.0006	1.1880	.0050	1.1880	.0050	7,880	4,650	1.56
		49.225	.013	90.000	.015	30.175	.127	30.175	.127			
W210PPB5	3	1.7850	.0100	3.5430	.0006	1.1880	.0050	1.1880	.0050	7,880	4,650	1.75
		45.339	.254	90.000	.015	30.175	.127	30.175	.127			
W210PP8	5	1.5300	.0100	3.5433	.0006	1.1880	.0050	1.1880	.0050	7,880	4,650	1.97
		38.862	.254	90.000	.015	30.175	.127	30.175	.127			
W210PPB9	2	1.9448	.0070	3.5433	.0006	.9055	.0050	1.4382	.0050	7,880	4,650	1.91
		49.400	.178	90.000	.015	23.000	.127	36.530	.127			
W211PP2	5	2.1880	.0006	3.9370	.0006	1.3120	.0060	1.3120	.0060	9,740	5,850	2.33
		55.575	.015	100.000	.015	33.325	.152	33.325	.152			
W211PPB2	3	2.1880	.0006	3.9370	.0006	1.3120	.0060	1.3120	.0060	9,740	5,850	3.00
		55.575	.015	100.000	.015	33.325	.152	33.325	.152			
W211PPB4	6	2.1880	.0006	3.9370	.0006	1.3120	.0060	2.1870	.0060	9,740	5,850	3.63
		55.575	.015	100.000	.015	33.325	.152	55.500	.152			
W214PP2	5	2.7559	.0006	4.9213	.0008	1.5620	.0060	1.5620	.0060	14,000	8,800	4.19
		70.000	.015	125.000	.020	39.675	.152	39.675	.152			
W214PPB2	3	2.7559	.0006	4.9213	.0008	1.5620	.0060	1.5620	.0060	14,000	8,800	3.96
		70.000	.015	125.000	.020	39.675	.152	39.675	.152			
W214PPB9	3	2.7660	.0010	4.9213	.0008	1.1020	.0060	1.7500	.0060	14,000	8,800	3.96
		70.256	.025	125.000	.020	28.000	.152	44.450	.152			



ROUND BORE RELUBRICABLE

Heavy Duty Disc Harrow Bearings are made with triple lip seals to protect from corrosive environments. This seal is a one piece shroud cover with three molded contact seals. Standard relubrication feature is a drilled hole in groove.

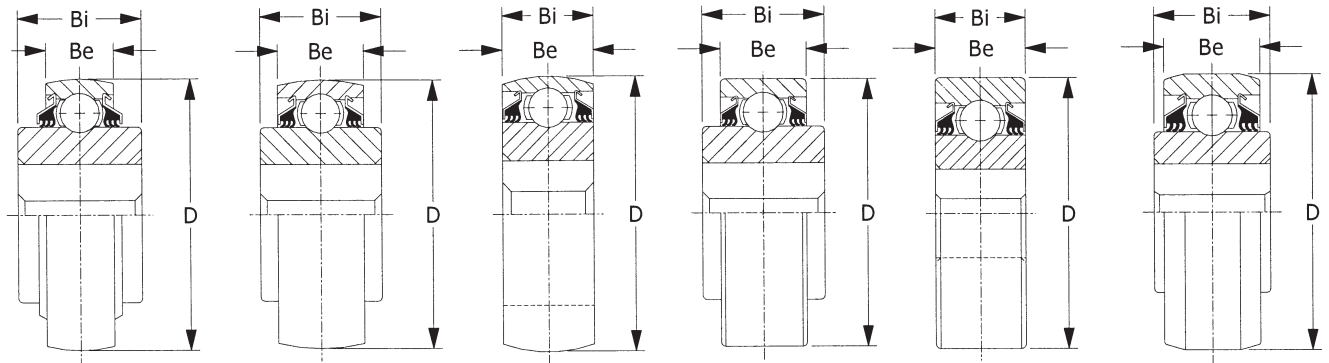
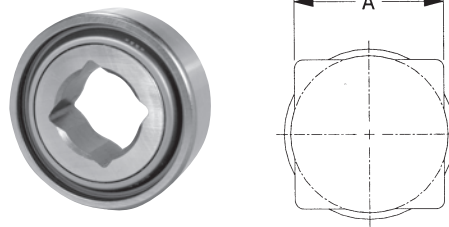


PEER UNIT NUMBER	TYPE	d		D		Be		Bi		Load Ratings		Wt. Lbs.
		nominal	TOL.+0/ to minus shown	nominal	TOL.+0/ to minus shown	nominal	TOL.+0/ to minus shown	nominal	TOL.+0/ to minus shown	Dynamic	Static	
GW209PPB2	3	1.7717	.0005	3.3465	.0006	1.1880	.0050	1.1880	.0050	7,350	4,150	1.44
		45.000	.013	85.000	.015	30.175	.127	30.175	.127			
GW209PPB4	3	1.5350	.0100	3.3465	.0006	1.1880	.0050	1.1880	.0050	7,350	4,150	1.65
		39.000	.254	85.000	.015	30.175	.127	30.175	.127			
GW209PPB11	1	1.7810	.0100	3.3465	.0006	.8660	.0050	1.4380	.0050	7,350	4,150	1.37
		45.237	.254	85.000	.015	22.000	.127	36.525	.127			
GW210PPB2	3	1.9380	.0005	3.5433	.0006	1.1880	.0050	1.1880	.0050	7,880	4,650	1.50
		49.225	.013	90.000	.015	30.175	.127	30.175	.127			
GW210PPB5	3	1.7850	.0100	3.5433	.0006	1.1880	.0050	1.1880	.0050	7,880	4,650	1.8
		45.339	.254	90.000	.015	30.175	.127	30.175	.127			
GW210PP9	5	1.9450	.0070	3.5433	.0006	.9060	.0050	1.4380	.0050	7,880	4,650	1.75
		49.403	.178	90.000	.015	23.000	.127	36.525	.127			
GW211PP2	4	2.1880	.0006	3.9370	.0006	1.3120	.0060	1.3120	.0060	9,740	5,850	3.00
		55.575	.015	100.000	.015	33.325	.152	33.325	.152			
GW211PPB2	3	2.1880	.0006	3.9370	.0006	1.3120	.0060	1.3120	.0060	9,740	5,850	2.62
		55.575	.015	100.000	.015	33.325	.152	33.325	.152			
GW211PPB8	1	2.1880	.0006	3.9370	.0006	.9840	.0060	1.3120	.0060	9,740	5,850	1.85
		55.575	.015	100.000	.015	25.000	.152	33.325	.152			
GW211PPB9	1	2.1950	.0070	3.9370	.0006	.9840	.0060	1.5620	.0060	9,740	5,850	2.02
		55.753	.178	100.000	.015	25.000	.152	39.675	.152			
GW211PPB10	3	1.9380	.0006	3.9370	.0006	1.3120	.0060	1.3120	.0060	9,740	5,850	2.26
		49.225	.015	100.000	.015	33.325	.152	33.325	.152			
GW211PPB13	1	1.7850	.0100	3.9370	.0006	.9840	.0060	1.3120	.0060	9,740	5,850	2.02
		45.339	.254	100.000	.015	25.000	.152	33.325	.152			
GW211PPB14	1	2.0150	.0100	3.9370	.0006	.9840	.0060	1.3120	.0060	9,740	5,850	2.00
		51.181	.254	100.000	.015	25.000	.152	33.325	.152			
GW211PP25	5	1.7800	.0050	3.9370	.0006	1.3120	.0060	1.7500	.0060	9,740	5,850	2.44
		45.212	.127	100.000	.015	33.325	.152	44.450	.152			
GW214PP2	4	2.7559	.0006	4.9213	.0008	1.5620	.0060	1.5620	.0060	14,000	8,800	4.19
		70.000	.015	125.000	.020	39.675	.152	39.675	.152			
GW214PPB2	3	2.7559	.0006	4.9213	.0008	1.5620	.0060	1.5620	.0060	14,000	8,800	3.96
		70.000	.015	125.000	.020	39.675	.152	39.675	.152			
GW214PPB3	3	1.9380	.0006	4.9213	.0008	1.5620	.0060	1.5620	.0060	14,000	8,800	4.24
		49.225	.015	125.000	.020	39.675	.152	39.675	.152			
GW214PPB5	2	2.7559	.0006	4.9213	.0008	1.5620	.0060	2.4380	.0060	14,000	8,800	4.75
		70.000	.015	125.000	.020	39.675	.152	61.925	.152			
GW214PPB6	1	2.6881	.0006	4.9213	.0008	1.1024	.0060	2.6875	.0060	14,000	8,800	5.14
		68.278	.015	125.000	.020	28.000	.152	68.263	.152			

SQUARE BORE NON-RELUBRICABLE



Heavy Duty Disc Harrow Bearings are made with triple lip seals to protect from corrosive environments. This seal is a one piece shroud cover with three molded contact seals. This series is lubricated for life.



TYPE 1

TYPE 2

TYPE 3

TYPE 4

TYPE 5

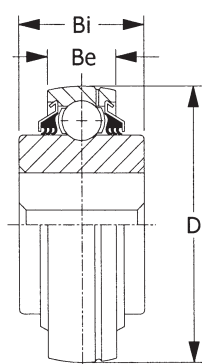
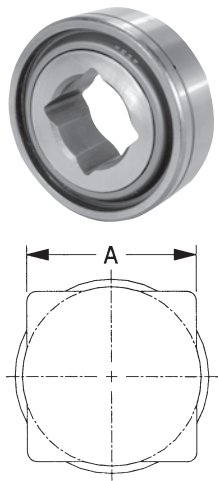
TYPE 6

PEER UNIT NUMBER	TYPE	Shaft Size	A		D		TOL.+0/ to minus shown	Be nominal	Bi nominal	Be & Bi TOL. +0/ to minus	Load Ratings		Wt. Lbs.
			nominal	Tol.	nominal						Dynamic	Static	
W208PP5	4	1 1/8	1.1800	±.005	3.1496	.0005	.7090	1.4380	.0050		7,340	3,650	1.50
		28.575	29.970	.127	80.000	.013	18.000	36.520	.127				
W208PPB5	1	1 1/8	1.1800	±.005	3.1496	.0005	.7090	1.4380	.0050		7,340	3,650	1.47
		28.575	29.970	.127	80.000	.013	18.000	36.520	.127				
W208PP6	4	1	1.0300	±.005	3.1496	.0005	.7090	1.4380	.0050		7,340	3,650	1.62
		25.400	26.162	.127	80.000	.013	18.000	36.520	.127				
W208PPB6	1	1	1.0300	±.005	3.1496	.0005	.7090	1.4380	.0050		7,340	3,650	1.59
		25.400	26.162	.127	80.000	.013	18.000	36.520	.127				
W208PP8	4	1 1/8	1.1800	±.005	3.1496	.0005	1.1880	1.4380	.0050		7,340	3,650	1.66
		28.575	29.972	.127	80.000	.013	30.175	36.520	.127				
W208PPB8	2	1 1/8	1.1800	±.005	3.1496	.0005	1.1880	1.4380	.0050		7,340	3,650	1.66
		28.575	29.972	.127	80.000	.013	30.175	36.520	.127				
W208PPB9	2	1	1.0300	±.005	3.1496	.0005	1.1880	1.4380	.0050		7,340	3,650	1.74
		25.400	26.162	.127	80.000	.013	30.175	36.520	.127				
W208PPB11	6	7/8	.9050	±.005	3.3760	.0005	1.1880	1.4380	.0050		7,340	3,650	2.05
		22.225	23.000	.127	85.750	.013	30.175	36.520	.127				
W208PPB12	6	1 1/8	1.1800	±.005	3.3760	.0005	1.1880	1.4380	.0050		7,340	3,650	1.62
		28.575	29.972	.127	85.750	.013	30.175	36.520	.127				
W208PPB13	1	7/8	.9050	±.005	3.1496	.0005	.7090	1.4380	.0050		7,340	3,650	1.62
		22.225	23.000	.127	80.000	.013	18.000	36.520	.127				
W209PPB5	2	1 1/4	1.2900	±.005	3.3465	.0005	1.1880	1.4380	.0050		7,350	4,150	1.75
		31.750	32.766	.127	85.000	.013	30.175	36.520	.127				
W209PPB7	6	1 1/4	1.2900	±.005	3.3760	.0005	1.1880	1.4375	.0050		7,350	4,150	1.80
		31.750	32.766	.127	85.750	.013	30.175	36.510	.127				
W210PP4	5	1 1/8	1.1800	±.005	3.5433	.0005	1.1880	1.1880	.0050		7,880	4,650	1.92
		28.575	29.972	.127	90.000	.013	30.175	30.150	.127				
W210PPB4	3	1 1/8	1.1800	±.005	3.5433	.0005	1.1880	1.1880	.0050		7,880	4,650	2.11
		28.575	29.972	.127	90.000	.013	30.175	30.175	.127				
W210PPB6	2	1 1/8	1.1800	±.005	3.5433	.0005	1.1880	1.4380	.0050		7,880	4,650	2.11
		28.575	29.972	.127	90.000	.013	30.175	36.520	.127				
W211PP3	5	1 1/2	1.5311	±.005	3.9370	.0006	1.3120	1.3120	.0060		9,740	5,850	2.79
		38.100	38.890	.127	100.00	.015	33.324	33.324	.152				
W211PPB3	3	1 1/2	1.5311	±.005	3.9370	.0006	1.3120	1.3120	.0060		9,740	5,850	2.66
		38.100	38.890	.127	100.00	.015	33.324	33.324	.152				
W211PP5	4	1 1/2	1.5311	±.005	4.0000	.0006	1.4380	1.7500	.0060		9,740	5,850	3.38
		38.100	38.890	.127	101.600	.015	36.520	44.450	.152				
W211PPB6	6	1 1/2	1.5311	±.005	4.0770	.0006	1.4380	1.7500	.0060		9,740	5,850	4.05
		38.100	38.890	.127	103.556	.015	36.520	44.450	.152				

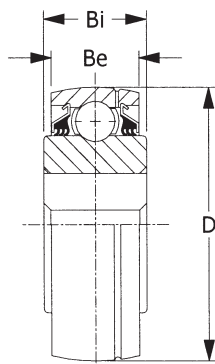


SQUARE BORE RELUBRICABLE

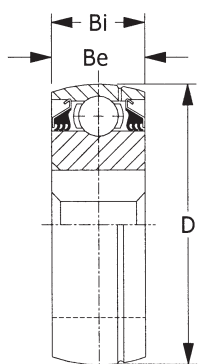
Heavy Duty Disc Harrow Bearings are made with triple lip seals to protect from corrosive environments. This seal is a one piece shroud cover with three molded contact seals. Standard relubrication feature is a drilled hole in groove.



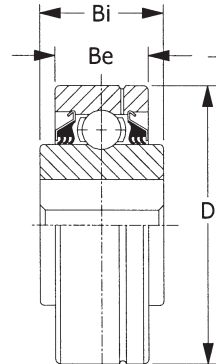
TYPE 1



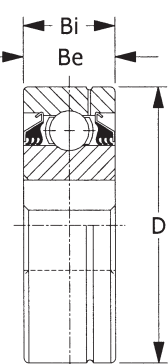
TYPE 2



TYPE 3



TYPE 4



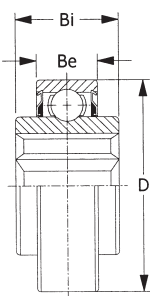
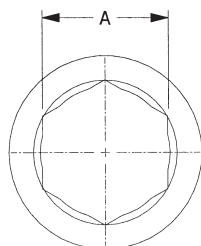
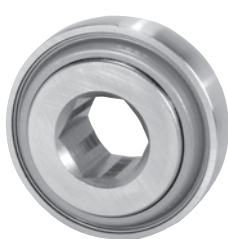
TYPE 5

PEER UNIT NUMBER	TYPE	Shaft Size	A nominal	ToL.	D		Be nominal	Bi nominal	Be & Bi TOL. +0/to minus shown	Load Ratings		Wt. Lbs.
					nominal	TOL. +0/to minus shown				Dynamic	Static	
GW208PPB5	1	1 1/8	1.1800	±.005	3.1496	.0005	.8270	1.4380	.0050	7,340	3,650	1.47
		28.575	29.972	.127	80.000	.013	21.000	36.525	.127			
GW208PPB6	1	1	1.0300	±.005	3.1496	.0005	.8270	1.4380	.0050	7,340	3,650	1.75
		25.400	26.162	.127	80.000	.013	21.000	36.525	.127			
GW208PPB8	2	1 1/8	1.1800	±.005	3.1496	.0005	1.1880	1.4380	.0050	7,340	3,650	1.75
		28.575	29.972	.127	80.000	.013	30.175	36.525	.127			
GW208PP17	4	1 1/8	1.1800	±.005	3.3755	.0005	1.1880	1.4380	.0500	7,340	3,650	2.04
		28.575	29.972	.127	85.738	.013	30.175	36.525	.127			
GW208PPB17	2	1 1/8	1.1800	±.005	3.3755	.0005	1.1880	1.4380	.0050	7,340	3,650	2.04
		28.575	29.972	.127	85.738	.013	30.175	36.525	.127			
GW209PPB5	2	1 1/4	1.2900	±.005	3.3465	.0006	1.1880	1.4380	.0050	7,350	4,150	1.75
		31.750	32.776	.127	85.000	.015	30.175	36.525	.127			
GW209PPB8	1	1 1/4	1.2900	±.005	3.3465	.0006	.8660	1.4380	.0050	7,350	4,150	1.65
		31.750	32.776	.127	85.000	.015	22.000	36.525	.127			
GW210PP4	5	1 1/8	1.1800	±.005	3.5433	.0006	1.1880	1.1880	.0050	7,880	4,650	2.31
		28.575	29.972	.127	90.000	.015	30.175	30.175	.127			
GW210PPB4	3	1 1/8	1.1800	±.005	3.5433	.0006	1.1880	1.1880	.0050	7,880	4,650	1.75
		28.575	29.972	.127	90.000	.015	30.175	30.175	.127			
GW211PP3	5	1 1/2	1.5311	±.005	3.9370	.0006	1.3120	1.3120	.0060	9,740	5,850	2.79
		38.100	39.890	.127	100.000	.015	33.325	33.325	.152			
GW211PPB3	3	1 1/2	1.5311	±.005	3.9370	.0006	1.3120	1.3120	.0060	9,740	5,850	2.66
		38.100	38.890	.127	100.000	.015	33.325	33.325	.152			
GW211PP5	4	1 1/2	1.5311	±.005	4.0000	.0006	1.4380	1.7500	.0060	9,740	5,850	2.69
		38.100	38.890	.127	101.600	.015	36.525	44.450	.152			
GW211PP17	4	1 1/2	1.5311	±.005	3.9370	.0006	1.3120	1.7500	.0060	9,740	5,850	2.62
		38.100	38.890	.127	100.000	.015	33.325	44.450	.152			
GW211PPB17	1		1.5311	±.005	3.9370	.0006	1.3120	1.7500	.0060	9,740	5,850	2.55
		38.100	38.890	.127	100.000	.015	33.325	44.450	.152			
GW212PP50	4	1 3/4	1.7400	±.005	4.3307	.0006	1.5060	2.0000	.0059	11,790	8,110	4.35
		44.450	45.466	.127	110.000	.015	38.252	50.800	.150			
GW214PPB4	3	2	2.0551	±.005	4.9213	.0008	1.5620	1.5620	.0060	14,000	8,800	4.75
		50.800	52.200	.127	125.000	.020	39.675	39.675	.152			
GW216PP2	4	2 1/4	2.3150	±.005	5.5118	.0008	1.1810	2.5000	.0060	16,280	10,400	6.32
		57.150	58.800	.127	140.000	.020	30.000	63.500	.152			

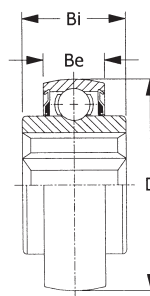
HEX BORE SERIES



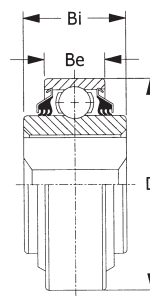
This series features a hex bore. Used in applications where collars, set screws, or any other locking devices are not required. This series incorporates PEER'S TRASH SEAL, a close fitting metal shield backed by a molded rubber seal. Also available relubricable-prefix "G".



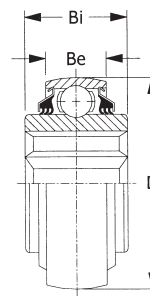
TYPE 1



TYPE 2



TYPE 3



TYPE 4

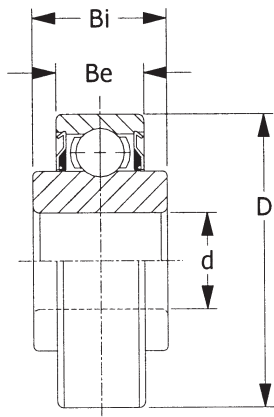
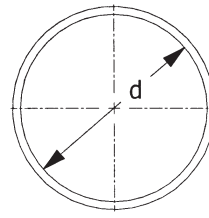
PEER UNIT NUMBER	TYPE	Hex Shaft Size	A nominal	"B" & "A" TOL. - 0/ to plus	D nominal	D TOL. + 0/ to minus shown	Be nominal	Bi nominal	Be & Bi TOL. +0/ to minus shown	Load Ratings		Wt. Lbs.
										Dynamic	Static	
202KRR3	1	9/16"	.5630 14.300	.0050 .127	1.3780 35.000	.0005 .013	.4330 11.000	.5120 13.000	.0050 .127	2,160	1,000	.12
204KPP2	3	11/16"	.6950 17.653	.0050 .127	1.8504 47.000	.0005 .013	.5510 14.000	.8250 20.955	.0050 .127	2,900	1,000	.34
204KRR2	1	11/16"	.6950 17.653	.0050 .127	1.8504 47.000	.0005 .013	.5510 14.000	.8250 20.955	.0050 .127	2,900	1,410	.32
204KRRB2	2	11/16"	.6950 17.653	.0050 .127	1.8504 47.000	.0005 .013	.5510 14.000	.8250 20.955	.0050 .127	2,900	1,410	.32
205KPP2	3	7/8"	.8760 22.250	.0050 .127	2.0472 52.000	.0005 .013	.5910 15.000	1.0000 25.400	.0050 .127	3,150	1,610	.47
205KRR2	1	7/8"	.8760 22.250	.0050 .127	2.0472 52.000	.0005 .013	.5910 15.000	1.0000 25.400	.0050 .127	3,150	1,610	.44
205KPPB2	4	7/8"	.8760 22.250	.0050 .127	2.0472 52.000	.0005 .013	.5910 15.000	1.0000 25.400	.0050 .127	3,150	1,610	.47
205KRRB2	2	7/8"	.8760 22.250	.0050 .127	2.0472 52.000	.0005 .013	.5910 15.000	1.0000 25.400	.0050 .127	3,150	1,610	.44
206KPP4***	3	1"	1.0010 25.425	.0050 .127	2.4409 62.000	.0005 .013	.6299 16.000	1.0600 26.924	.0047 .120	4,370	2,320	.47
G206KPPB4*	4	1"	1.0010 25.425	.0050 .127	2.4409 62.000	.0005 .013	.7087 18.000	.9449 24.000	.0047 .120	4,370	2,320	.47
206KRR6	1	1"	1.0010 25.425	.0050 .127	2.4409 62.000	.0005 .013	.6300 16.000	.9450 24.000	.0050 .127	4,370	2,320	.75
206KRRB6	2	1"	1.0010 25.425	.0050 .127	2.4409 62.000	.0005 .013	.6300 16.000	.9450 24.000	.0050 .127	4,370	2,320	.75
G207KPPB2*	4	1 1/8"	1.1260 28.600	.0050 .127	2.8346 72.000	.0005 .013	.7480 19.000	1.4840 37.694	.0050 .127	5,770	3,150	1.10
207KRRB9	2	1 1/8"	1.1260 28.600	.0050 .127	2.8346 72.000	.0005 .013	.6690 17.000	1.4840 37.694	.0050 .127	5,770	3,150	1.00
207KRRB12	2	1 1/8"	1.1260 28.600	.0050 .127	2.8346 72.000	.0005 .013	.6690 17.000	.9840 25.000	.0050 .127	5,770	3,150	.87
GW208PPB22*	4	1 1/4"	1.2510 31.877	.0050 .127	3.1496 80.000	.0005 .013	.8270 21.000	1.4380 36.520	.0050 .127	7,340	3,650	1.50
W208KRRB6	2	1 3/8"	1.3760 34.950	.0050 .127	3.1496 80.000	.0005 .013	.8270 21.000	1.4380 1.438	.0050 .127	7,340	3,650	1.31
W208PPB16	4	1 1/4"	1.2510 31.775	.0050 .127	3.1496 80.000	.0005 .013	.7090 18.000	1.4380 36.520	.0050 .127	7,340	3,650	1.45
W208PP21	3	1 1/4"	1.2510 31.775	.0050 .127	3.1496 80.000	.0005 .013	.7090 18.000	1.4380 36.520	.0050 .127	7,340	3,650	1.45
G209KPPB2*	4	1 1/2"	1.5010 38.125	.0050 .127	3.3465 85.000	.0006 .015	.7480 19.000	1.1810 30.000	.0050 .127	7,350	4,150	1.26
G5209KYYB2**		1 1/2"	1.5010 38.125	.0050 .127	3.3465 85.000	.0006 .015	1.1811 30.000	1.2992 33.000	.0050 .127	9,330	7,580	1.27
209KRRB2	2	1 1/2"	1.5010 38.125	.0050 .127	3.3465 85.000	.0006 .015	.7480 19.000	1.1810 30.000	.0050 .127	7,350	4,150	1.27
210PPB20	3	1 1/4"	1.2550 31.877	.0050 .127	3.5433 90.000	.0006 .015	0.8661 22.000	1.4350 36.450	.0050 .127	9,070	5,675	2.00
210PP20	3	1 1/4"	1.2550 31.877	.0050 .127	3.5433 90.000	.0006 .015	0.8661 22.000	1.435 36.450	.0050 .127	9,070	5,675	2.05
G210KPPB2*	4	1 1/2"	1.5010 38.125	.0050 .127	3.5433 90.000	0.115 .13	0.8661 22.000	1.1811 30.000	.0050 .127	7,780	4,650	
GC211-32-NLC*	3	1 3/4"	1.7510 44.475	.0050 .127	3.9370 100.000	.0006 .015	.9840 25.000	2.2500 57.150	.0060 .152	9,740	5,850	3.35

* Relubricable

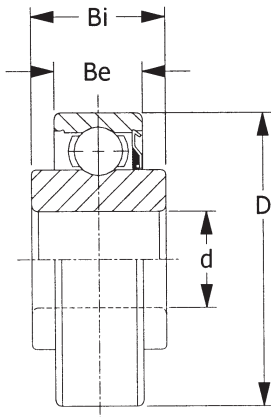
** Double row bearing with double lip shroud seals.

*** Nylon sling included

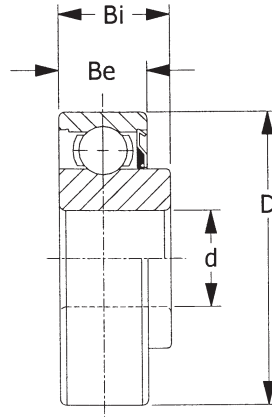
This series incorporates a standard Conrad type bearing with a special heavy contact seal. This allows use in heavily contaminated areas.



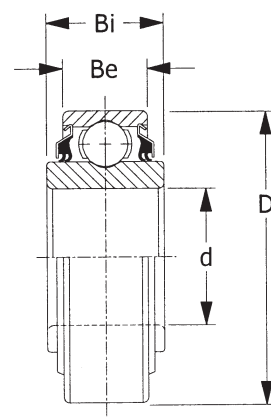
TYPE 1



TYPE 2



TYPE 3

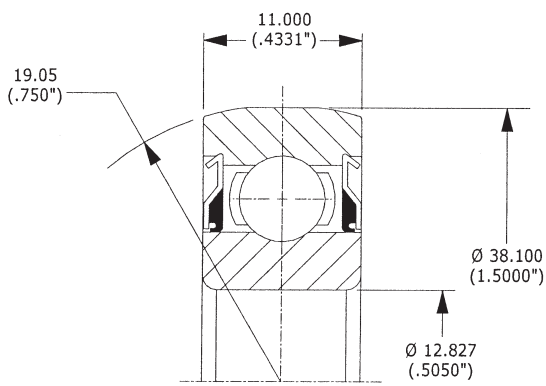


TYPE 4

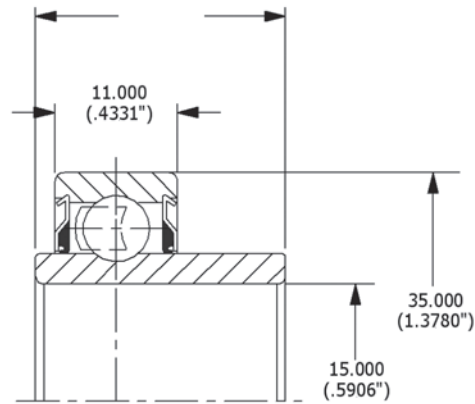
PEER UNIT NUMBER	TYPE	d		D		Bi		Be		Load Ratings		Wt. Lbs.
		nominal	TOL. +0/ to minus	nominal	TOL. +0/ to minus	nominal	TOL. +0/ to minus	nominal	TOL. +0/ to minus	Dynamic	Static	
203KRR2	3	.6253	.0003	1.5748	.0005	.5510	.0050	.4724	.0050	2,160	889	.18
BB203KRR2*	1	15.883	.008	40.000	.013	14.000	.127	12.000	.127	1,900	825	.16
		16.260	.127	40.000	.013	18.288	.127	12.000	.127			
203KRR2	1	.6400	.0050	1.5748	.0005	.7200	.0050	.4724	.0050	2,160	889	.16
		16.260	.127	40.000	.013	18.288	.127	12.000	.127			
BB203KRR2FD**	4	.6400	.0050	1.5748	.0005	.7200	.0050	.4724	.0050	1,900	825	.17
		16.260	.127	40.000	.013	18.288	.127	12.000	.127			
203KRR5	1	.5150	.0050	1.5748	.0005	.7200	.0050	.4724	.0050	2,160	889	.22
		13.081	.127	40.000	.013	18.288	.127	12.000	.127			
203KRR7	1	.6693	.0003	1.5748	.0005	.6540	.0050	.4724	.0050	2,160	889	.18
		17.000	.008	40.000	.013	16.612	.127	12.000	.127			
207KRR	1	1.3780	.0005	2.8346	.0005	.9840	.0050	.6690	.0050	5,770	3,150	.77
		35.000	.013	72.000	.013	25.000	.127	17.000	.127			
208KRR2	1	1.5748	.0005	3.1496	.0005	1.0630	.0050	.8270	.0050	7,340	3,650	1.04
		40.000	.013	80.000	.013	27.000	.127	21.000	.127			

*BASIC 203KRR2 WITH GOTHIC ARCH RACEWAY.

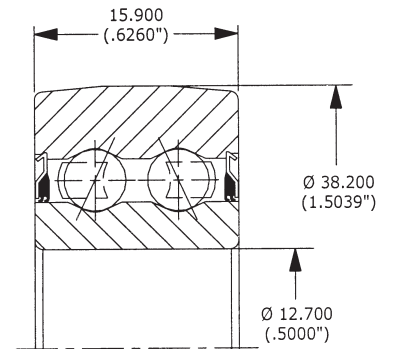
**BASIC 203KRR2 WITH DOUBLE LIP SEALS AND GOTHIC ARCH RACEWAY.



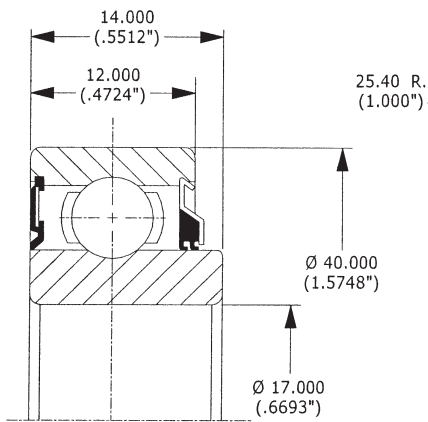
202NPP9



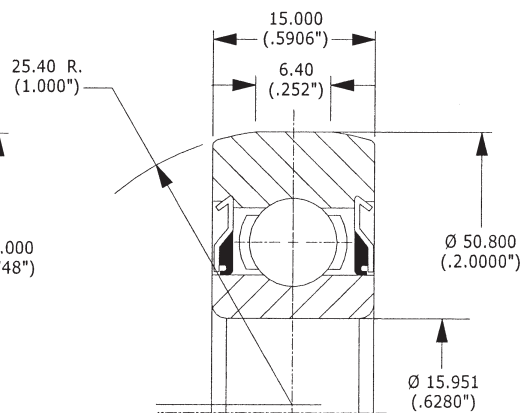
202RRE



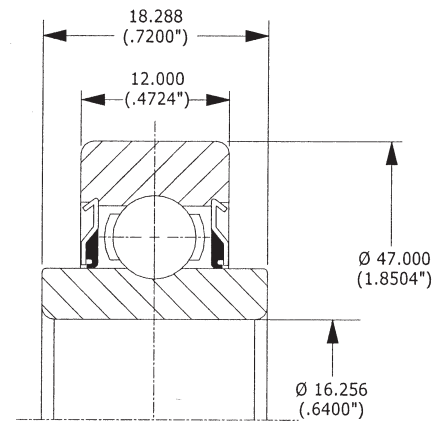
CF5202-2RST-8



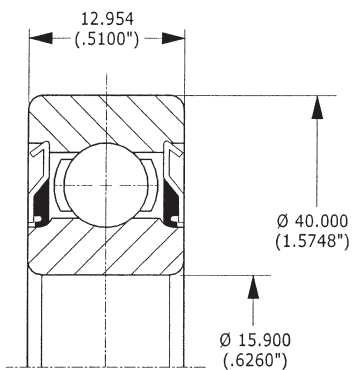
203JD



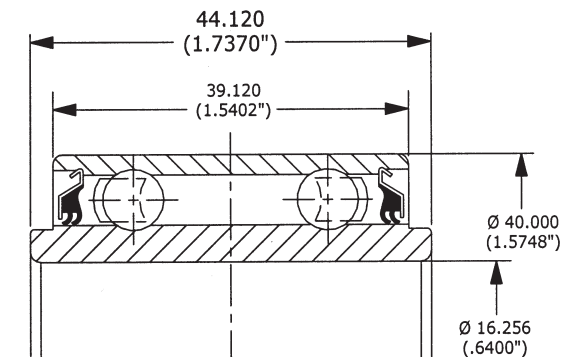
203KRR3



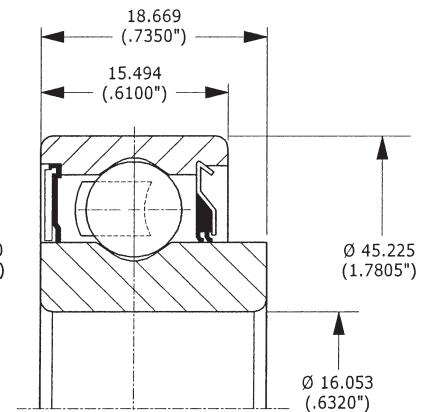
203KRR6



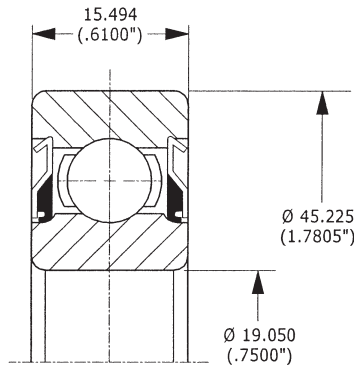
203NPP9



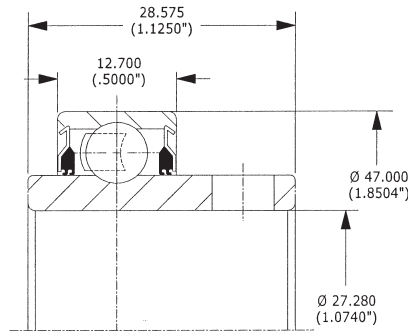
5203KYY2



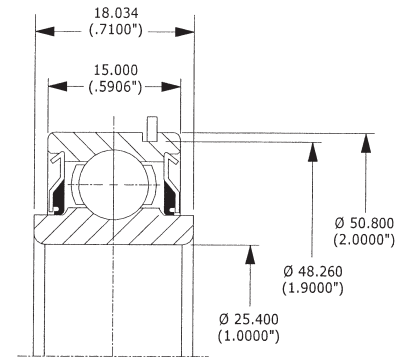
204JY3



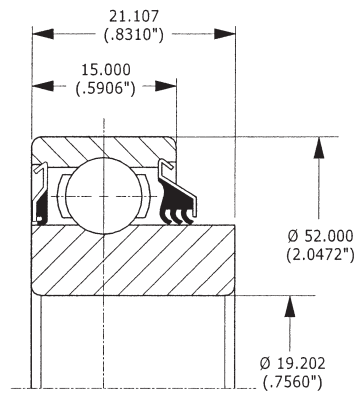
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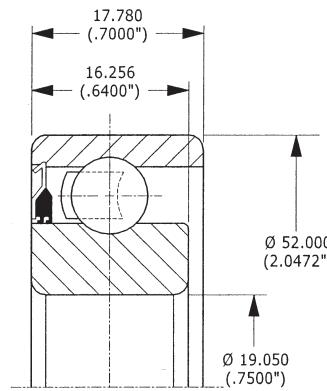
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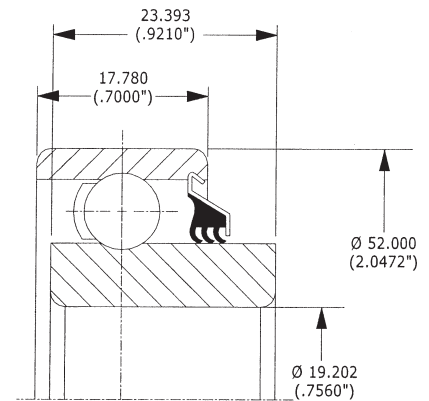
X365



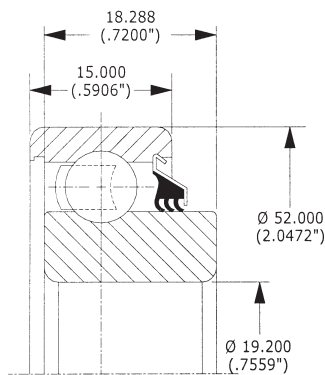
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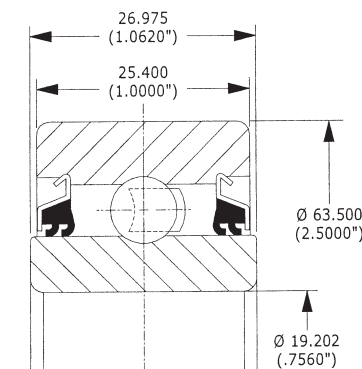
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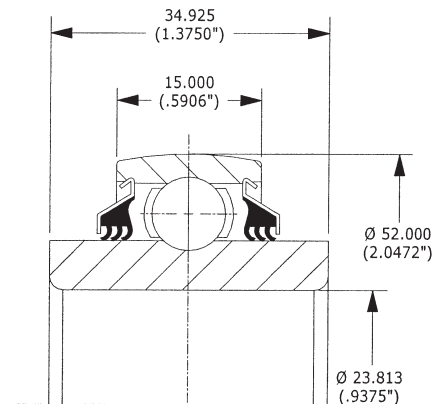
205KP6



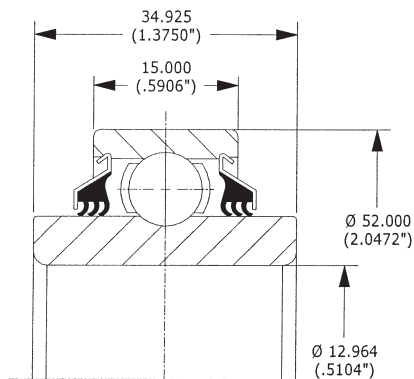
205KP8



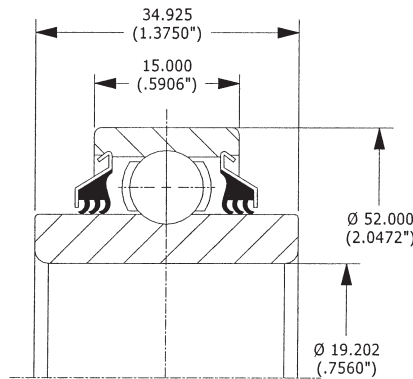
205KYY3



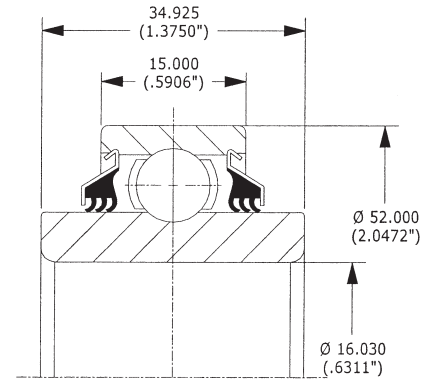
205PPB7



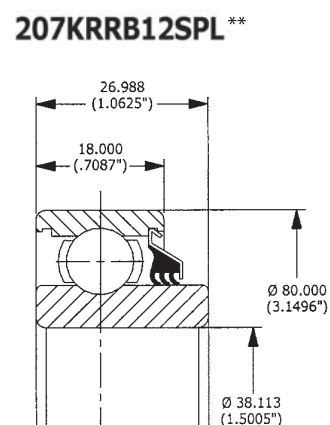
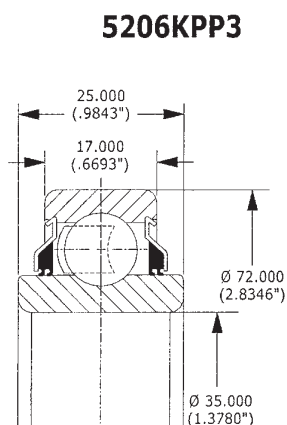
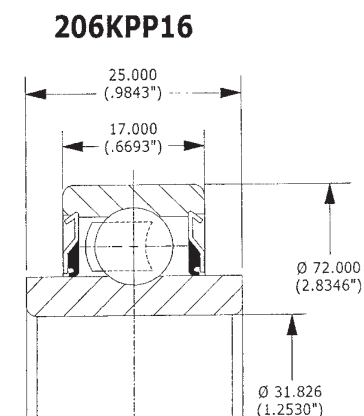
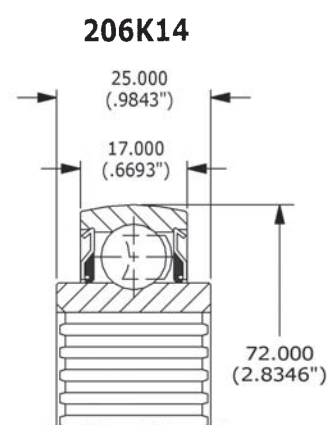
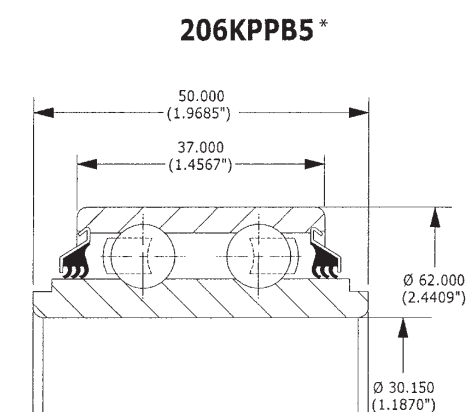
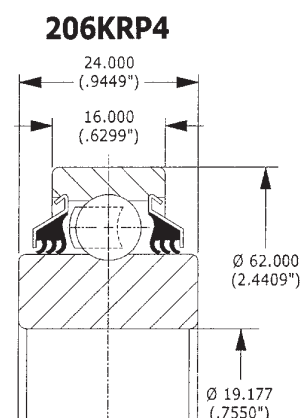
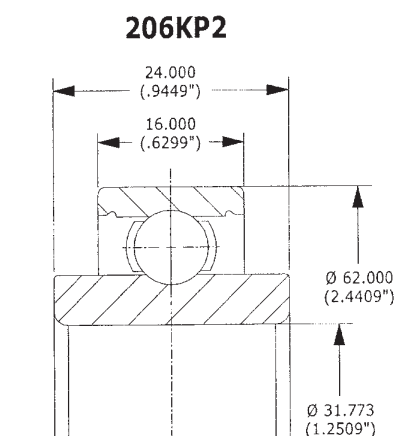
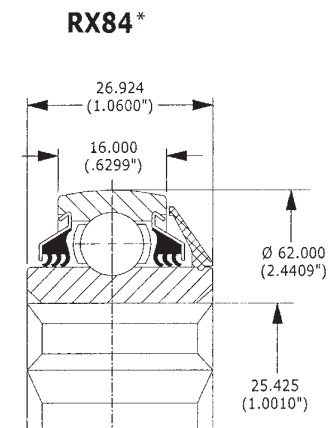
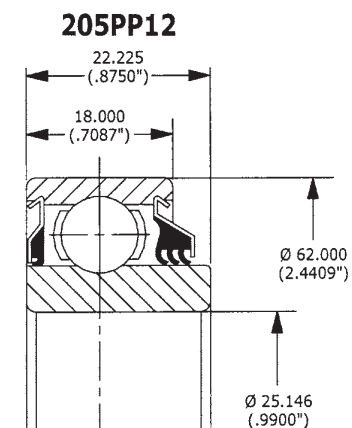
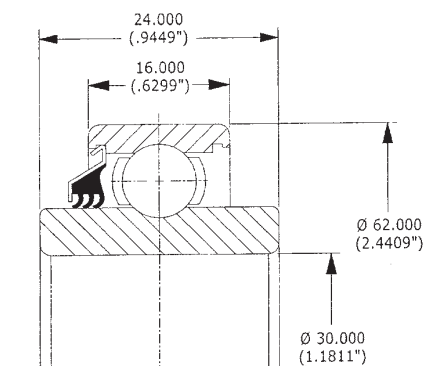
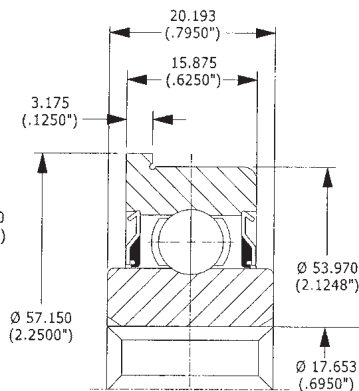
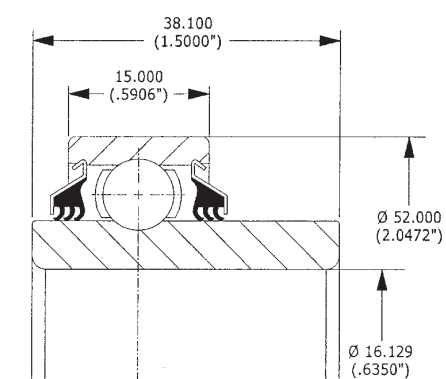
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205PP9



205PP10

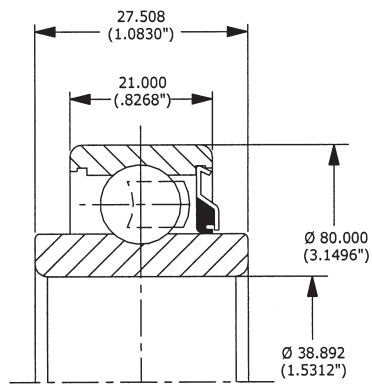


207KRR14

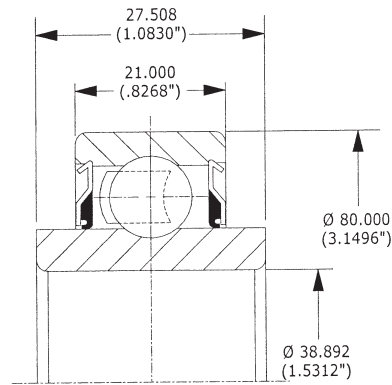
207KYY

208KP2

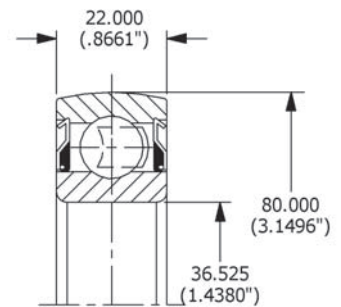
* Hex bore
** Spline bore



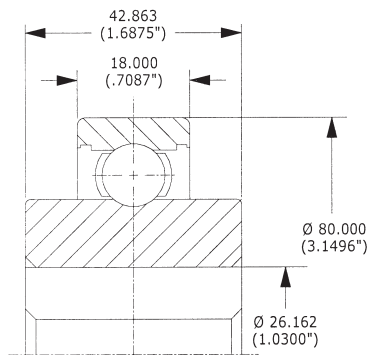
208KR4



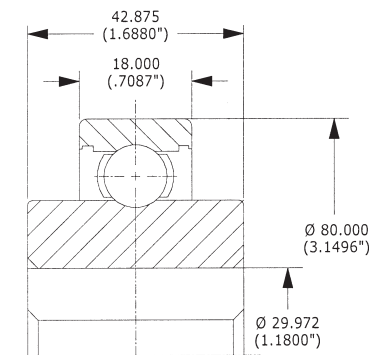
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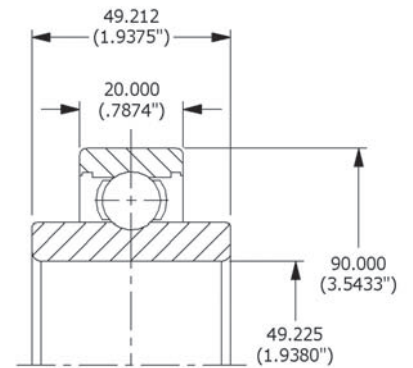
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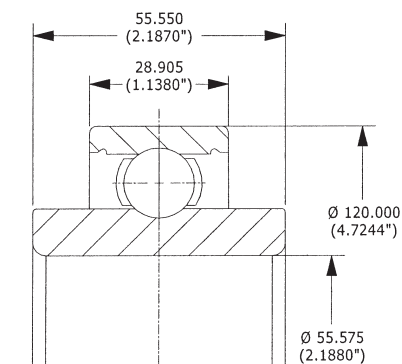
W208K2***



W208K3***

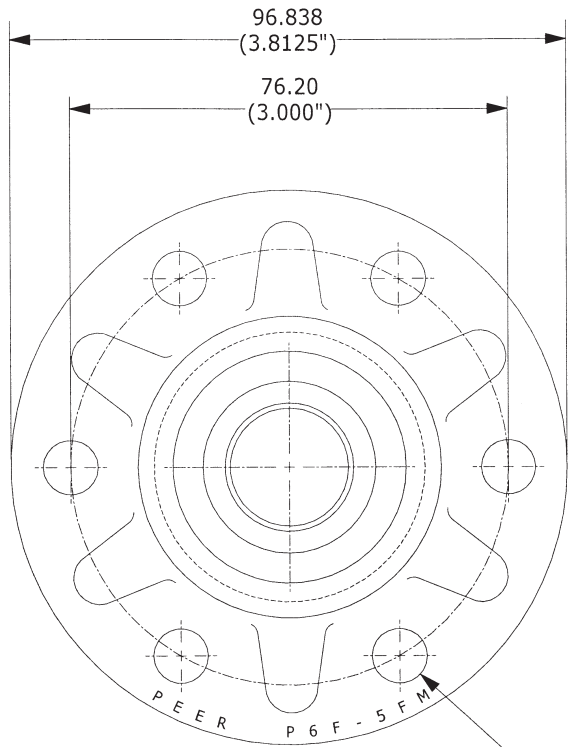


W210



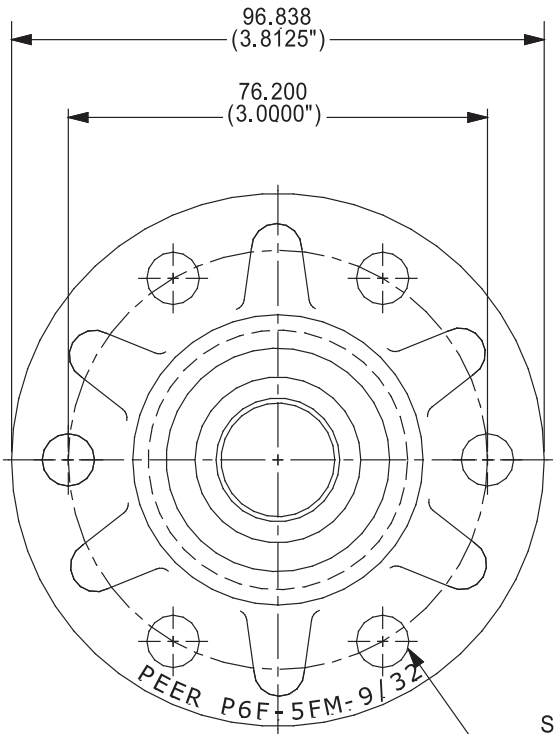
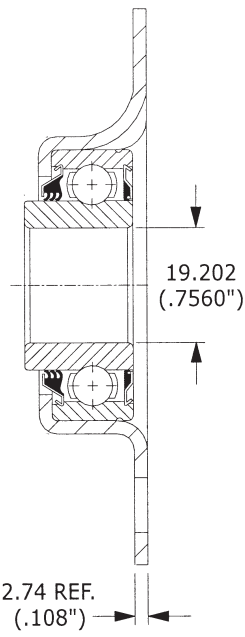
W213-8445

*** Square bore



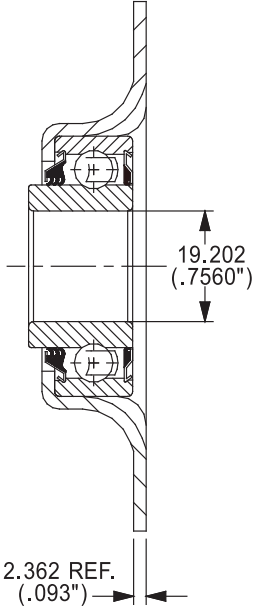
Six, $\varnothing 9.52$ (.375")
holes, equally spaced.

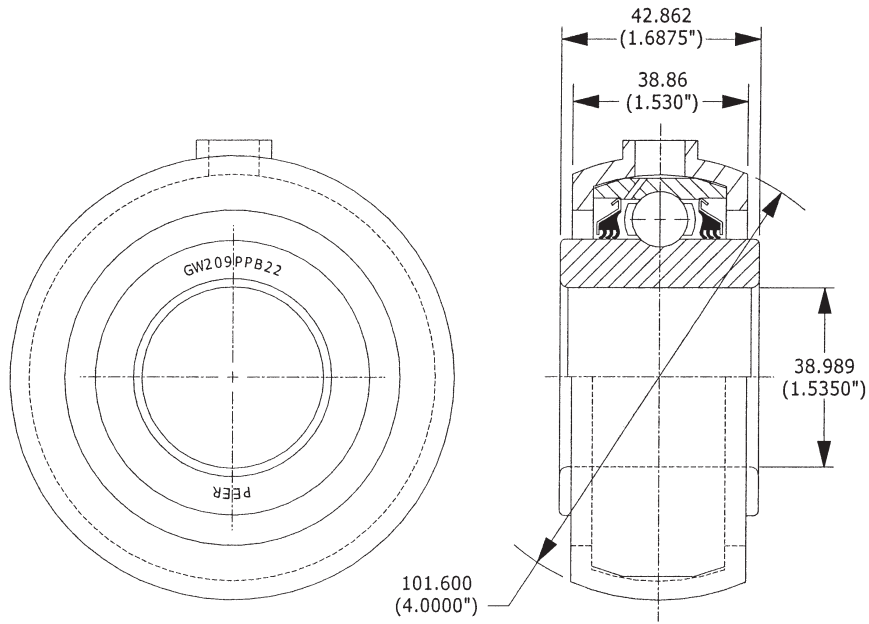
205KRP2-6PF



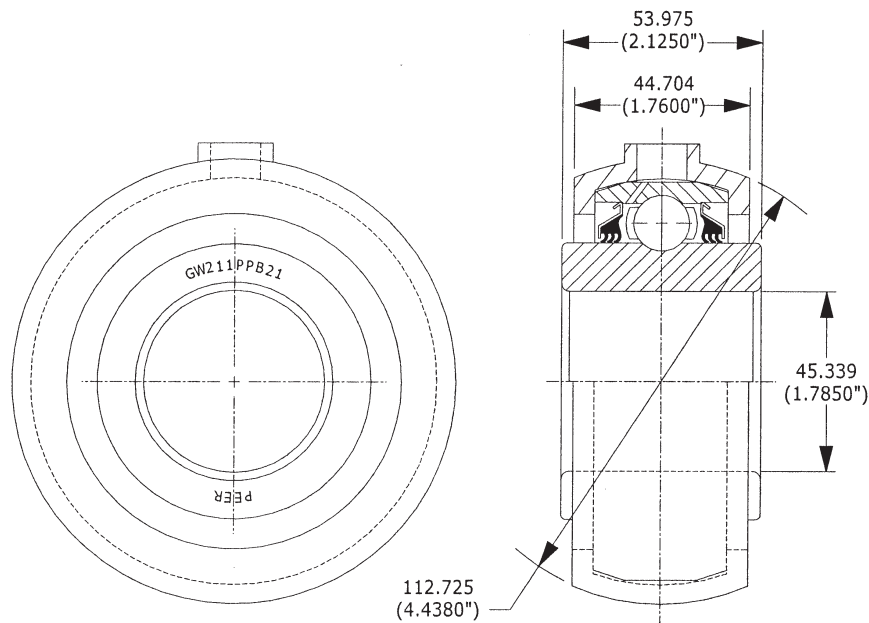
Six, $\varnothing 7.14$ (.281")
holes, equally spaced.

205KRP2-P6F-5YD-FM

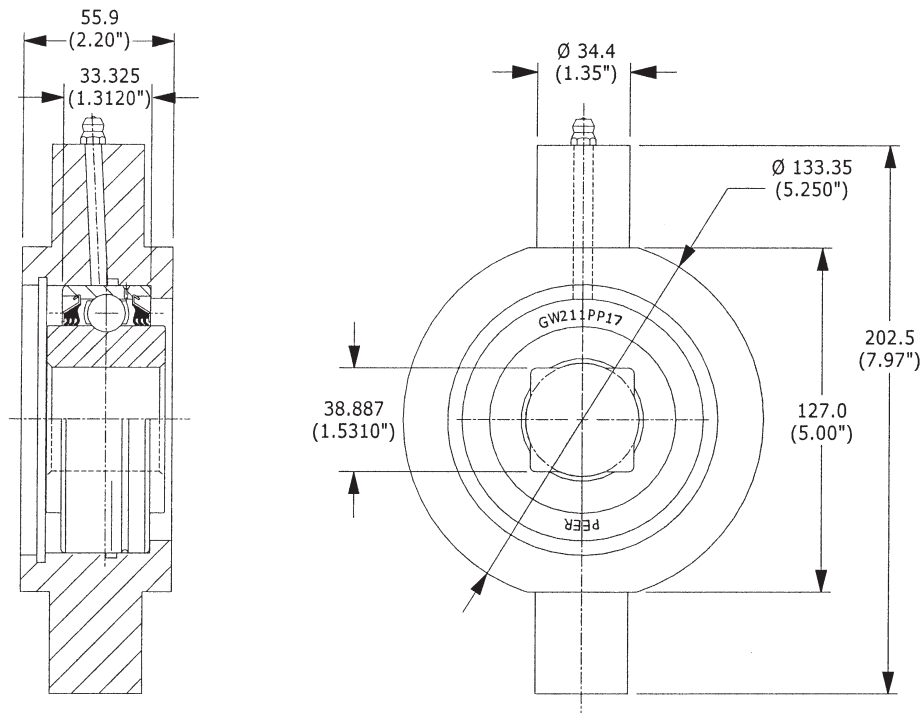




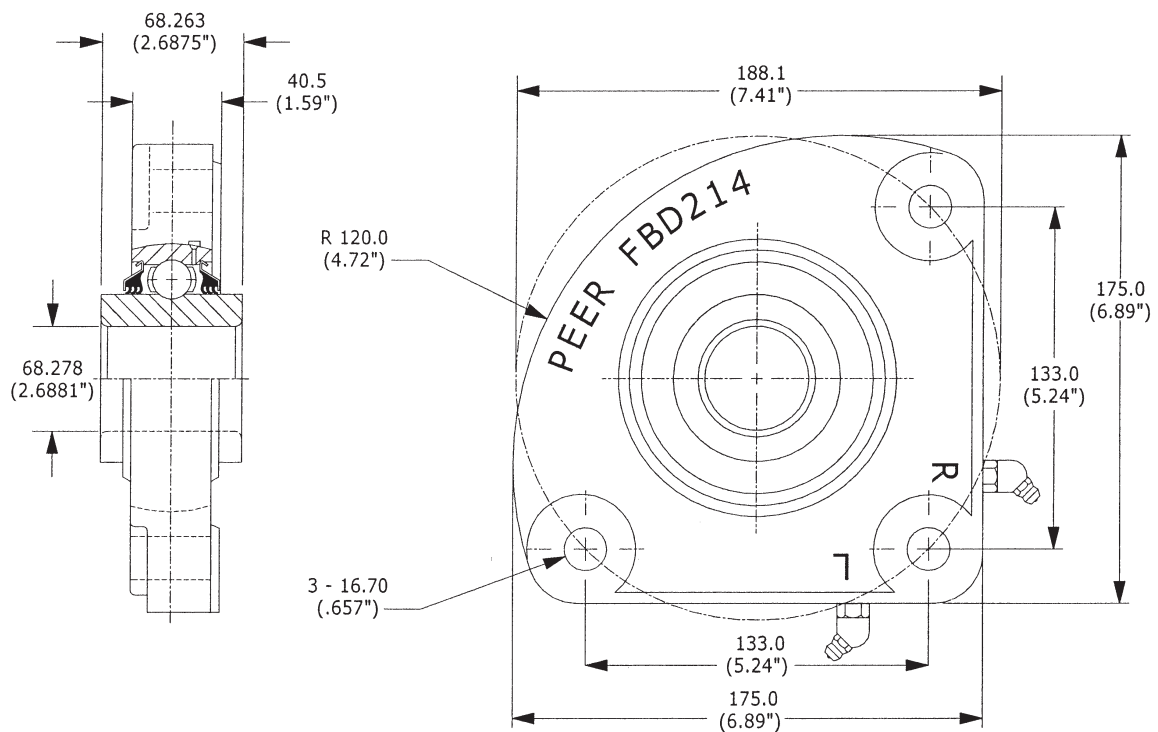
GW209PPB22-BR209RH



GW211PPB21-BR211RH



GW211PP17-HDT-211-H



GW214PPB6-FBD

BASIC PEER AGRICULTURAL BALL BEARING CONSTRUCTION:

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

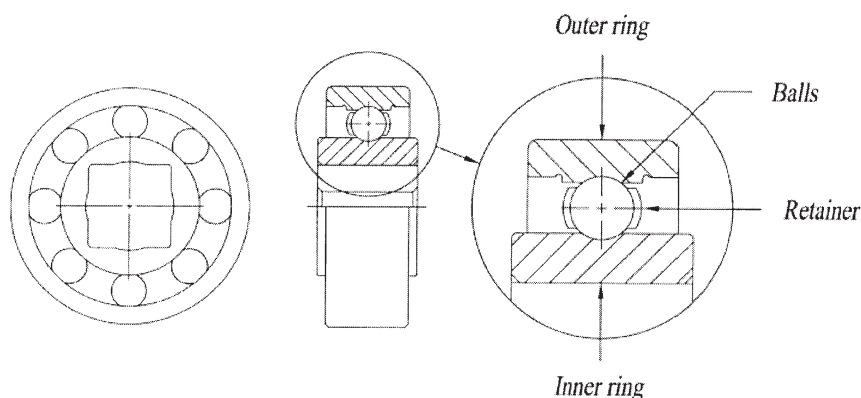


Figure 1: Basic PEER agricultural ball bearing components.
Shown: PEER square bore bearing.

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 PEER agricultural ball bearings are supplied with seals on both sides. PEER 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.

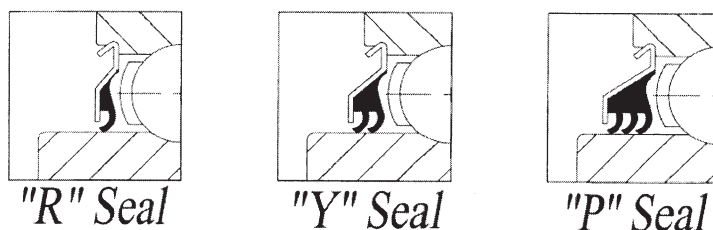


Figure 2: PEER agricultural ball bearing seal designs.

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.

GREASE:

Grease is a popular form of lubrication used in ball bearings. Greases are composed primarily of three components, base oil, thickener and additives.

–**Base oil:** Provides virtually all the lubrication function of the grease.

- Mineral
- Synthetic

–**Thickener:** Acts as a sponge for the base oil.

- Soap: lithium, calcium, sodium
- Non-soap: polyurea, silica gel

–**Additives:** Improves desired properties of a grease.

- Rust inhibitors
- Anti-oxidants

The consistency of a grease is described by its NLGI* number. The NLGI number of a particular grease is determined using a standard worked penetration test. Table 2 gives relative consistencies of ball bearing greases based on NLGI numbers.

NLGI Number	Relative Consistency
1	Very soft
2	Soft
3	Semi-firm
4	Firm

Table 2: Relative grease consistency based on NLGI number.

*National Lubricating Grease Institute

PEER bearings are pre-lubricated with high quality grease suitable for a wide variety of applications, speeds, temperatures and environments. Special greases are readily available. Shown in Table 3 is a sample of the standard and special greases offered.

Product Name	Shell Alvania RL #2	Shell Alvania RL #3	Mobil Polyrex EM	Exxon Unirex N 2
Color	Amber	Amber	Blue	Green
Thickener Type	Lithium	Lithium	Polyurea	Lithium-complex
Oil Type	Mineral	Mineral	Mineral	Mineral
NLGI number	2	3	2	2
Base oil viscosity	98	98	115	115
Typical operating temperature	-20 / 250 °F	-10 / 250 °F	-10 / 320 °F	-20 / 300 °F
Dropping point	385°F	385°F	550°F	437°F
PEER grease code	L15	L16	L151	L05

Table 3: Grease properties.

RADIAL INTERNAL CLEARANCE:

Radial internal clearance between balls and raceways in a ball bearing permits interference fits on one or both bearing rings without causing radial preload and accommodates slight misalignment of the bearing mounting.

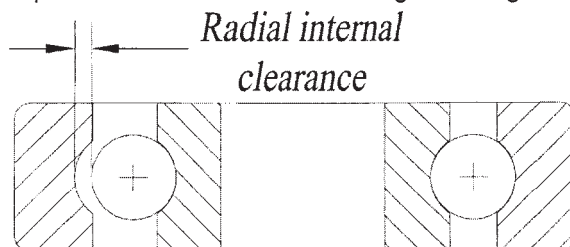


Figure 3: Exaggerated depiction of radial internal clearance.

Radial internal clearance may be defined as the average diameter of the outer ring raceway, minus the average diameter of the inner ring raceway, minus twice the ball diameter. Generally, radial internal clearance is measured on assembled bearings by displacing the outer ring radially with respect to the inner ring under a reversing light gauge load.

Clearance values in micrometers

Basic bearing size	C2		C0 (Normal)		C3		C4		C5	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
202	0	9	3	18	11	25	18	33	25	45
203	0	9	3	18	11	25	18	33	25	45
204	0	10	5	20	13	28	20	36	28	48
205	1	11	5	20	13	28	23	41	30	53
206	1	11	5	20	13	28	23	41	30	53
207	1	11	6	20	15	33	28	46	40	64
208	1	11	6	20	15	33	28	46	40	64
209	1	11	6	23	18	36	30	51	45	73
210	1	11	6	23	18	36	30	51	45	73
211	1	15	8	28	23	43	38	61	55	90
212	1	15	8	28	23	43	38	61	55	90
213	1	15	8	28	23	43	38	61	55	90
214	1	15	10	30	25	51	46	71	65	105
215	1	15	10	30	25	51	46	71	65	105
216	1	15	10	30	25	51	46	71	65	105

Table 4: Radial internal clearance values (Clearance values in micrometers).

Clearance values in .0001 inch

Basic bearing size	C2		C0 (Normal)		C3		C4		C5	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
202	0	3.5	1	7	4	10	7	13	10	18
203	0	3.5	1	7	4	10	7	13	10	18
204	0	4	2	8	5	11	8	14	11	19
205	0.5	4.5	2	8	5	11	9	16	12	21
206	0.5	4.5	2	8	5	11	9	16	12	21
207	0.5	4.5	2	8	6	13	11	18	16	25
208	0.5	4.5	2	8	6	13	11	18	16	25
209	0.5	4.5	2.5	9	7	14	12	20	18	29
210	0.5	4.5	2.5	9	7	14	12	20	18	29
211	0.5	6	3.5	11	9	17	15	24	22	35
212	0.5	6	3.5	11	9	17	15	24	22	35
213	0.5	6	3.5	11	9	17	15	24	22	35
214	0.5	6	4	12	10	20	18	28	26	41
215	0.5	6	4	12	10	20	18	28	26	41
216	0.5	6	4	12	10	20	18	28	26	41

Table 5: Radial internal clearance values (Clearance values in .0001 inch).

LOAD CAPACITY:

The load capacity of PEER agricultural ball bearings are specified by two standardized ratings, the basic dynamic radial load rating (C_r) and the basic static radial load rating (C_{or}).

The basic dynamic radial load rating (C_r) is used for calculations when selecting a bearing that is to rotate under load. It represents the constant radial load a ball bearing could theoretically endure for a basic rating life of one million revolutions ($33\frac{1}{3}$ RPM for 500 hours).

The basic static radial load rating (C_{or}) of a bearing represents the load at which plastic deformation of the balls and raceways begins.

LIFE: The life of an individual ball bearing can be defined as the number of revolutions that the bearing is capable of enduring before fatigue damage occurs on one of the raceways or balls.

The basic rating life (L_{10}) represents the number of revolutions that 90% of a group of identical bearings can be expected to reach or exceed under the specified load before the onset of fatigue damage.

The basic rating life (L_{10}) equation for ball bearings*:

The relationship between the basic rating life in hours, the basic dynamic radial load rating, the bearing load and the rotational speed is expressed by equation 1.1.

$$L_{10} = (C_r / P_r)^3 (16,667/n) \quad (\text{hours}) \quad (1.1)$$

C_r = Basic dynamic radial load rating.

P_r = Dynamic equivalent radial load.

n = Bearing rotational speed, RPM.

*The basic rating life (L_{10}) equation should be used when selecting a bearing size.

The applied load may be directly substituted for the dynamic equivalent radial load (P_r) if it is constant and acts upon the bearing in a radial direction. If the bearing is subjected to any axial (thrust) load, the radial and/or axial loads must first be used to calculate P_r using equation 1.2 in conjunction with Table 6 and this result is substituted for P_r in equation 1.1. As the name suggests, the dynamic equivalent radial load is the theoretical equivalent radial load that would have the same influence over bearing life as the actual loads to which the bearing is subjected.

$$P_r = X(F_r) + Y(F_a) \quad (1.2)$$

F_r = Radial load applied to bearing

X = Radial factor (Table 6)

F_a = Axial (thrust) load applied to bearing

Y = Thrust factor (Table 6)

F_a / C_{or}	e	$(F_a / F_r) \leq e$		$(F_a / F_r) > e$	
		X	Y	X	Y
0.014	0.19				2.30
0.028	0.22				1.99
0.056	0.26				1.71
0.084	0.28				1.55
0.11	0.30	1	0	0.56	1.45
0.17	0.34				1.31
0.28	0.38				1.15
0.42	0.42				1.04
0.56	0.44				1.00

Table 6: Radial and thrust factors for radial ball bearings.

Intermediate values of X , Y and e may be obtained through linear interpolation.

VARIABLE LOAD AND SPEED:

When a bearing is subjected to consecutive runs at different speeds and different periods of load application, the equivalent constant load (P_m) can be calculated using equation 1.3.

$$P_m = \sqrt[3]{\frac{(P_1^3 \times n_1 \times t_1) + (P_2^3 \times n_2 \times t_2) + \dots + (P_n^3 \times n_n \times t_n)}{(n_1 \times t_1) + (n_2 \times t_2) + \dots + (n_n \times t_n)}} \quad (1.3)$$

Where P_1 = Constant load at a speed of n_1 RPM for a time of t_1 minutes.

P_2 = Constant load at a speed of n_2 RPM for a time of t_2 minutes.

P_n = Constant load at a speed of n_n RPM for a time of t_n minutes.

Example calculations for use of the basic rating life (L_{10}) equation:

Example 1:

A GW209PPB2 is being considered for an application where it will rotate at a constant speed of 200 RPM and will be subjected to a constant 1,400 lbf. radial load.

From the catalog tables, the basic dynamic radial load rating (C_r) of 7,350 lbf. can be obtained.

Since the application does not incorporate an axial (thrust) load, the radial load can be substituted directly for P_r in equation 1.1.

Solution: $L_{10} = (7,350 \text{ lbf.} / 1,400 \text{ lbf.})^3 (16,667 / 200 \text{ RPM})$

$$L_{10} = 12,059 \text{ hours}$$

Example 2:

A W211PP2 is being considered for an application where it will rotate at a constant speed of 200 RPM and will be subjected to a constant 1,800 lbf. radial load and 995 lbf. axial (thrust) load.

From the catalog tables, the basic dynamic radial load rating (C_r) of 9,740 lbf. and the basic static radial load rating (C_{or}) of 5,850 lbf. can be obtained.

Since the application incorporates an axial load, equation 1.2 must be used to calculate the dynamic equivalent radial load.

Using equation 1.2:

1.) Calculate (F_a / C_{or}).

$$(995 \text{ lbf.} / 5,850 \text{ lbf.}) = 0.17$$

2.) Calculate (F_a / F_r).

$$(995 \text{ lbf.} / 1,800 \text{ lbf.}) = 0.553$$

3.) Find the value, (F_a / C_{or}) in the first column of Table 6 and the corresponding value for "e" in the second column*.

0.17 corresponds with an "e" value of 0.34.

**If the value for (F_a / C_{or}) is not present in the table, X, Y and e values may be obtained through linear interpolation.*

4.) Compare the value, (F_a / F_r) to the value of "e".

▪ If (F_a / F_r) $\leq$ e, the first two columns of X,Y values should be used.

▪ If (F_a / F_r) $>$ e, the second two columns of X,Y values should be used.

Since 0.553 is greater than 0.34, the second two columns of X,Y values will be used. X = 0.56, Y = 1.31.

5.) Calculate the dynamic equivalent radial load (P_r) using equation 1.2.

$$P_r = 0.56(1,800 \text{ lbf.}) + 1.31(995 \text{ lbf.})$$

$$P_r = 2,311 \text{ lbf.}$$

Now that the value for P_r has been obtained, this result can be substituted into equation 1.1.

Solution: $L_{10} = (9,740 \text{ lbf.} / 2,311 \text{ lbf.})^3 (16,667 / 200 \text{ RPM})$

$$L_{10} = 6,239 \text{ hours}$$

HOUSING FIT SELECTION FOR BALL BEARINGS WITH CYLINDRICAL OUTSIDE DIAMETERS:

DESIGN & OPERATING CONDITIONS				HOUSING FIT
Rotational Conditions	Loading	Other Conditions	Outer Ring Axial Displaceability	
Outer Ring Point Loaded	Light	Heat input through shaft	Outer ring easily axially displaceable	G7
	Normal or	Housing split axially		H7
	Heavy	Housing not split axially		H6
	Shock with temporary complete unloading		J6	
Indeterminate Load Direction	Light	Split housing not recommended	Transitional Range	K6
	Normal or Heavy			M6
	Heavy shock			
Outer Ring Circumferentially Loaded	Light			N6
	Normal or Heavy			
	Heavy	Thin wall housing not split	Outer ring not easily axially displaceable	P6

Table 7: Selection of housing fits for ball bearings with cylindrical outside diameters.

HOUSING FITS FOR BALL BEARINGS WITH CYLINDRICAL OUTSIDE DIAMETERS:

Dimensions in Millimeters
Deviations and Fits in Micrometers

D			PART 1 – TOLERANCE CLASSIFICATIONS															
			F7		G7		H8		H7		H6		J6		J7		K6	
over	incl.	Devia- tion	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit
10	18	0 -8	+16 +34	42L 16L	+6 +24	32L 6L	0 +27	35L 0	0 +18	26L 0	0 +11	19L 0	-5 +6	14L 5T	-8 +10	18L 8T	-9 +2	10L 9T
18	30	0 -9	+20 +41	50L 20L	+7 +28	37L 7L	0 +33	42L 0	0 +21	30L 0	0 +13	22L 0	-5 +8	17L 5T	-9 +12	21L 9T	-11 +2	11L 11T
30	50	0 -11	+25 +50	61L 25L	+9 +34	45L 9L	0 +39	50L 0	0 +25	36L 0	0 +16	27L 0	-6 +10	21L 6T	-11 +14	25L 11T	-13 +3	14L 13T
50	80	0 -13	+30 +60	73L 30L	+10 +40	53L 10L	0 +46	59L 0	0 +30	43L 0	0 +19	32L 0	-6 +13	26L 6T	-12 +18	31L 12T	-15 +4	17L 15T
80	120	0 -15	+36 +71	86L 36L	+12 +47	62L 12L	0 +54	69L 0	0 +35	50L 0	0 +22	37L 0	-6 +16	31L 6T	-13 +22	37L 13T	-18 +4	19L 18T
120	150	0 -18	+43 +83	101L 43L	+14 +54	72L 14L	0 +63	81L 0	0 +40	58L 0	0 +25	43L 0	-7 +18	36L 7T	-14 +26	44L 14T	-21 +4	22L 21T
150	180	0 -25	+43 +83	108L 43L	+14 +54	79L 14L	0 +63	88L 0	0 +40	65L 0	0 +25	50L 0	-7 +18	43L 7T	-14 +26	51L 14T	-24 +4	29L 21T

Table 8: Housing fits for ball bearings with cylindrical outside diameters.

A “L” suffix specifies a loose, or clearance fit.

A “T” suffix specifies a tight, or interference fit.

Dimensions in Millimeters
Deviations and Fits in Micrometers

D			TOLERANCE CLASSIFICATIONS													
			K7		M6		M7		N6		N7		P6		P7	
over	incl.	Devia- tion	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit
10	18	0 -8	-12 +6	14L 12T	-15 -4	4L 15T	-18 0	8L 18T	-20 -9	1T 20T	-23 -5	3L 23T	-26 -15	7T 26T	-29 -11	3T 29T
18	30	0 -9	-15 +6	15L 15T	-17 -4	5L 17T	-21 0	9L 21T	-24 -11	2T 24T	-28 -7	2L 28T	-31 -18	9T 31T	-35 -14	5T 35T
30	50	0 -11	-18 +7	18L 18T	-20 -4	7L 20T	-25 0	11L 25T	-28 -12	1T 28T	-33 -8	3L 33T	-37 -21	10T 37T	-42 -17	6T 42T
50	80	0 -13	-21 +9	22L 21T	-24 -5	8L 24T	-30 0	13L 30T	-33 -14	1T 33T	-39 -9	4L 39T	-45 -26	13T 45T	-51 -21	8T 51T
80	120	0 -15	-25 +10	25L 25T	-28 -6	9L 28T	-35 0	15L 35T	-38 -16	1T 38T	-45 -10	5L 45T	-52 -30	15T 52T	-59 -24	9T 59T
120	150	0 -18	-28 +12	30L 28T	-33 -8	10L 33T	-40 0	18L 40T	-45 -20	2T 45T	-52 -12	6L 52T	-61 -36	18T 61T	-68 -28	10T 68T
150	180	0 -25	-28 +12	37L 28T	-33 -8	17L 33T	-40 0	25L 40T	-45 -20	5L 45T	-52 -12	13L 52T	-61 -36	11T 61T	-68 -28	3T 68T

Table 8: continued: Housing fits for ball bearings with cylindrical outside diameters.

A “L” suffix specifies a loose, or clearance fit.

A “T” suffix specifies a tight, or interference fit.

HOUSING FITS FOR BALL BEARINGS WITH CYLINDRICAL OUTSIDE DIAMETERS, CONTINUED:

Dimensions in Inches
Deviations and Fits in .0001 Inches

D			PART 2 – TOLERANCE CLASSIFICATIONS															
			F7		G7		H8		H7		H6		J6		J7		K6	
over	incl.	Devia- tion	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit
0.3937	0.7087	0	+6	16L	+2	12L	0	14L	0	10L	0	7L	-2	5L	-3	7L	-4	4L
		-3	+13	6L	+9	2L	+11	0	+7	0	+4	0	+2	2T	+4	3T	+1	4T
0.7087	1.1811	0	+8	19.5L	+3	14.5L	0	16.5L	0	11.5L	0	8.5L	-2	6.5L	-4	8.5L	-4	4.5L
		-3.5	+16	8L	+11	3L	+13	0	+8	0	+5	0	+3	2T	+5	4T	+1	4T
1.1811	1.9685	0	+10	24.5L	+4	17.5L	0	19.5L	0	14.5L	0	10.5L	-2	8.5L	-4	10.5L	-5	5.5L
		-4.5	+20	10L	+13	4L	+15	0	+10	0	+6	0	+4	2T	+6	4T	+1	5T
1.9685	3.1496	0	+12	29L	+4	21L	0	23L	0	17L	0	12L	-2	10L	-5	12L	-6	7L
		-5	+24	12L	+16	4L	+18	0	+12	0	+7	0	+5	2T	+7	5T	+2	6T
3.1496	4.7244	0	+14	34L	+5	25L	0	27L	0	20L	0	15L	-2	12L	-5	15L	-7	8L
		-6	+28	14L	+19	5L	+21	0	+14	0	+9	0	+6	2T	+9	5T	+2	7T
4.7244	5.9055	0	+17	40L	+6	28L	0	32L	0	23L	0	17L	-3	14L	-6	17L	-8	9L
		-7	+33	17L	+21	6L	+25	0	+16	0	+10	0	+7	3T	+10	6T	+2	8T
5.9055	7.0866	0	+17	43L	+6	31L	0	35L	0	26L	0	20L	-3	17L	-6	20L	-8	12L
		-10	+33	17L	+21	6L	+25	0	+16	0	+10	0	+7	3T	+10	6T	+2	8T

Table 9: Housing fits for ball bearings with cylindrical outside diameters.

A “L” suffix specifies a loose, or clearance fit.

A “T” suffix specifies a tight, or interference fit.

Dimensions in Inches
Deviations and Fits in .0001 Inches

D			TOLERANCE CLASSIFICATIONS													
			K7		M6		M7		N6		N7		P6		P7	
over	incl.	Devia- tion	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit	Housing Devia- tion	Result- ant Fit
0.3937	0.7087	0	-5	5L	-6	1L	-7	3L	-8	A1T	-9	1L	-10	3T	-11	1T
		-3	+2	5T	-2	6T	0	7T	-4	9T	-2	9T	-6	10T	-4	11T
0.7087	1.1811	0	-6	5.5L	-7	1.5L	-8	3.5L	-9	0.5T	-11	0.5L	-12	3.5T	-14	2.5T
		-3.5	+2	6T	-2	7T	0	8T	-4	9T	-3	11	-7	12T	-6	14T
1.1811	1.9685	0	-7	7.5L	-8	2.5L	-10	4.5L	-11	0.5T	-13	1.5L	-15	3.5T	-17	2.5T
		-4.5	+3	7T	-2	8T	0	10T	-5	11T	-3	13T	-8	15T	-7	17T
1.9685	3.1496	0	-8	9L	-9	3L	-12	5L	-13	1T	-15	1L	-18	5T	-20	3T
		-5	+4	8T	-2	9T	0	12T	-6	13T	-4	15T	-10	18T	-28	20T
3.1496	4.7244	0	-10	10L	-11	4L	-14	6L	-15	0	-18	2L	-20	6T	-23	3T
		-6	+4	10T	-2	11T	0	14T	-6	15T	-4	18T	-12	20T	-9	23T
4.7244	5.9055	0	-11	12L	-13	4L	-16	7L	-18	1T	-20	2L	-24	7T	-27	4T
		-7	+5	11T	-3	13T	0	16T	-8	18T	-5	20T	-14	24T	-11	27T
5.9055	7.0866	0	-11	15L	-13	7	L-16	10L	-18	2L	-20	5L	-24	4T	-27	1T
		-10	+5	11T	-3	13T	0	16T	-8	18T	-5	20T	-14	24T	-11	27T

Table 9: continued: Housing fits for ball bearings with cylindrical outside diameters.

A “L” suffix specifies a loose, or clearance fit.

A “T” suffix specifies a tight, or interference fit.

PEER	FAFNIR	BCA	LINK-BELT	NTN
W208PPB2	W208PPB2		24R6-208E3	2AC08-1 1/2
W208PP5	W208PP5	DC208TT5	18SB5-2E08E3	5AS08-1 1/8
W208PPB5	W208PPB5	DS208TT5	18S5-2E08E3	1AS08-1 1/8
W208PP6	W208PP6	DC208TT6	16SB5-208E3	
W208PPB6	W208PPB6	DS208TT6	16S5-208E3	1AS08-1
W208PPB7	W208PPB7	DS208TT7	19R208E3	1AC08-1 3/16
W208PP8	W208PP8	DC208TT8	18SB2-2E08E3	6AS09-1 1/8
W208PPB8	W208PPB8	DS208TT8	18S2-2E08E3	2AS08-1 1/8
W208PPB9	W208PPB9	DS208TT9	16S2-208E3	2AS08-1 1/8
W208PP10	W208PP10	DC208TT10	24RB8-208E3	
W208PPB10	W208PPB10			
W208PPB11	W208PPB11	DS208TT11	14S4-208E3	4AS08-7/8
W208PPB12	W208PPB12	DS208TT12	18S4-2E08E3	4AS08-1 1/8
W208PPB13	W208PPB13	DS208TT13	14S5-208E3	1AS08-7/8
W208PPB23	W208PPB23	DS208TT2A		
GW208PPB5	GW208PPB5	DS208TTR21	18SG7-2E08E3	1AS08-1 5/32D1
GW208PPB6	GW208PPB6	DS208TTR6	16SG7-208E3	
GW208PPB8	GW208PPB8	DS208TTR8	18SG2-2E08E3	2AS08-1 1/8 D1
GW208PP17	GW208PP17	DC208TTR17		
GW208PPB17	GW208PPB17			
W209PPB2	W209PPB2	DS209TT2	R3-209E3	
W209PPB4	W209PPB4	DS209TT4	24R3-209E3	3AC09-1/2
W209PPB5	W209PPB5	DS209TT5	20S2-209E3	2AS09-1 1/4
W209PPB6	W209PPB6	DS209TT6	24R-209E3	
W209PPB7	W209PPB7	DS209TT7	20S4-209E3	
W209PPB8	W209PPB8	DS209TT8A		
GW209PPB2	GW209PPB2	DS209TTR2	RG3-209E3	3AC09D1
GW209PPB4	GW209PPB4	DS209TTR4	24RG3-209E3	3AC09 1 1/2 D1
GW209PPB5	GW209PPB5	DS209TTR5		
GW209PPB8	GW209PPB8	DS209TTR8	20SG5-209E3	
GW209PPB11	GW209PPB11	DS209TTR10		1AC09D1V1
W210PP2	W210PP2	DC210TT2	31RB3-210E3	7AC10-1 15/16
W210PPB2	W210PPB2	DS210TT2	31R3-210E3	3AC10-1 15/16
W210PP4	W210PP4	DC210TT4	18SB3-210E3	7AS10-1 1/8
W210PPB4	W210PPB4	DS210TT4	18S3-210E3	3AS10-1 3/4
W210PPB5	W210PPB5	DS210TT5	28R3-210E3	3AC10-1 3/4
W210PPB6	W210PPB6	DS210TT6	18S2-210E3	2AS10-1 1/8
W210PPB9	W210PPB9			
GW210PPB2	GW210PPB2	DS210TTR2	31RG3-210E3	3AC10-1 15/16 D1
GW210PP4	GW210PP4	DC210TTR4	18SBG3-210E3	7AS10-1 1/8 D1
GW210PPB4	GW210PPB4	DS210TTR4	18SG3-210E3	
GW210PPB5	GW210PPB5	DS210TTR5R	28RG3-210E3	3AC10-1 3/4 D1
W211PP2	W211PP2	DC211TT2	35RB3-211E3	7AC11-2 3/16
W211PPB2	W211PPB2	DS211TT2	35R3-211E3	3AC11-2 3/16
W211PP3	W211PP3	DC211TT3	24SB3-211E3	7AS11-1 1/2
W211PPB3	W211PPB3	DS211TT3	24S3-211E3	3AS11-1 1/2
W211PPB4	W211PPB4	DS211TT4		
W211PP5	W211PP5	DC211TT5		6AS11-1 1/2 V1
W211PPB5	W211PPB5			
W211PPB6	W211PPB6	DS211TT6		4AS11-1 1/2

PEER	FAFNIR	BCA	LINK-BELT	NTN
GW211PP2	GW211PP2	DC211TTR2	35RBG3-211E3	7AS11-1 1/2 D1
GW211PPB2	GW211PPB2	DS211TTR2	35RG3-211E3	3AC11-2 3/16 D1
GW211PP3	GW211PP3	DC211TTR3	24SBG3-211E3	7AS11-1 1/2 D1
GW211PPB3	GW211PPB3	DS211TTR3	24SG3-211E3	3AS11-1 1/2 D1
GW211PP5	GW211PP5			
GW211PPB9	GW211PPB9	DS211TTR9		
GW211PPB13	GW211PPB13	DS211TTR13		
GW211PP17	GW211PP17	DC211TTR3E		
GW211PPB17	GW211PPB17			
GW211PP25	GW211PP37	DC211TTR21		
GW214PP2	GW214PP2	DC214TTR2		
GW214PPB2	GW214PPB2			3AC14D1
GW214PPB3		DS214TTR3		
GW214PPB4	GW214PPB4			3AS14-2DI
GW214PPB5	GW214PPB5	DS214TTR5		
GW214PPB6		DS214TTRA		
GW216PP2	GW216PP2	DC216TTR2		
RX84				
X365				
202KRR3	202KRR3			
202NPP9	202NPP9	202FFH8		
202RRE	J202KRR8	202RRE		
CF5202-2RST-8				DF0109LLPK1
203JD		203K		5X0366LUL
203KR2	203KR2			
BB203KRR2	BB203KRR2	203RRAR10N2		
BB203KRR2FD				
203KRR2	203KRR2	203RRAR10	126115	
203KRR2FD				
203KRR3	203KRR3	8984YY	BS226119	
203KRR5	203KRR5	203RRAR8		
203KRR6	203KRR6	203RRH10		
203NPP9	203NPP9			
5203KYY2	5203KYY2			
Z9504-2RST	P204RR6	204BBAR		SC0451IIC3
204KRR2	204KRR2	HPC011GP	11KB204N	1AH04-11/16
204KRRB2	204KRRB2		11K204N	
204KRR14	204KRR14			
204JY3	204RY2	204FVMN		
204KRD4	204KRD4	204FGB		
204RR8	204RR8	204BBE		
205KRP2	205KRP2	205RVA		
205KR3	205KR3	205RHN		
205KP6	205KP6	205TNJ		
205KP8	205KP	205-TNK		
205KPP2				
205KRP2-P6F-5YD-FM		SE689		
205KPPB2				
205KRR2	205KRR2	HPC014GP	14KB205N	1AH05-7/8
205KRRB2	205KRRB2	HPS014GP	14K205N	2AH05-7/8
205KRR7	205KRR7	205RRUN		
205KYY3	205KYY3	205-VVA		
G205PPB7		205TTRH		
205PPB7	205PPB7	205TTH	BS217948N	

PEER	FAFNIR	BCA	LINK-BELT	NTN
205PP8	205PP8			
205PP9	205PP9	205TTB	BS225817	
205PP10	205PP10			
205PP12	205PP12	205TTP		
6205-2RST-22	205PPB	S205FF		CS205LLU
206K14	206K14			
206KP2	206KP2			
206KPP16	206KPP16	206GGH		
206KRR6	206KRR6	HPC100GP	16KB206N	1AH06-1
206KRRB6	206KRRB6	HPS100GP	16K206N	2AH06-1
206KRP4	206KRP4			
206KPPB5	206KPPB5			
5206KPP3	5206KPP3			
G207KPPB2	G207KPPB2	HPS102TR		
207KRR14	207KRR14			
207KRRB9	207KRRB9	HPS102GP	18K207N	2AH07-1 1/8
207KRRB12	207KRRB12	HPS102GPE		
207KRRB12SPL		SPS105GPN		
207KYY	207KYY			
88107	207KRR3	88107		
GW208PPB22	GW208PPB22			
W208K2	W208K2			DC208-TT2
W208K3	W208K3			DC208
W208KRRB6	W208KRRB6	HPS106GPN		
W208PPB16	W208PPB16	HPS104TP	20K5-208E3	A2AH08-1 1/4V2
208KRR4	208KRR4			
208NPPB5	208NPPB5			
G209KPPB2				
209KRRB2	209KRRB2	HPS108GPH	24K209N	2AH09-1 1/2
GW209PPB22-BR209RH		CDS209TTR6P		
G5209KYYB2				
W210		DC210		
GC211-32-NLC	GC1200KPPB2			
GW211PPB21-BR211RH		CDS211TTR23		
W213-8445		8445		



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