





## COMPANY OVERVIEW

Transforming metal into engineered bearing solutions. That's what Lutco is all about.

From consumer lawn mowers to farm combines, from boat trailers to tractor trailer landing gear, Lutco products can be found improving performance. Lutco has been designing and making bearing solutions for more than 60 years. Innovation and solutions drive demand for our products, services and expertise. Our company wide commitment to quality products, competitive prices, innovative designs, and superior customer service provides an unparalleled value package for our customers. All of our products are proudly made in the USA.

## MISSION STATEMENT

Lutco is a family owned business whose progress is the result of integrity and a mutually beneficial partnership with customers, employees and stockholders.

We manufacture quality unground ball bearings and special metal stampings. Our team is committed to unique technical innovation and continuous improvement in all aspects of our business.

Our success is based upon a culture of tradition, customer satisfaction, TQM, productivity, teamwork and financial strength.

## QUALITY COMMITMENT

Lutco, Inc. has been recognized for supplying superior bearings and special metal stampings to OEMs and distributors around the globe. Our unparalleled reputation for customer satisfaction and quality is a product of the company's skilled workforce, quality assurance system, continuous improvement philosophy, and the commitment to quality by the entire Lutco team. We continuously strive to provide products and services that meet or exceed all customer expectations for quality, delivery, reliability, value, service, and safety. Quality is regarded as a critical factor affecting the company's long-term performance and basic to our objective of delighting our customers.

Lutco is registered to the ISO 9001:2008 quality system.

## WHAT WE MANUFACTURE

Lutco, Inc is a global supplier of quality semi-precision bearings, metal stampings and housed bearing assemblies with leading positions within its markets. We serve a diverse customer base in major industrial markets including Farm Machinery, Consumer Durables, Material Handling, Trucking, Industrial Equipment and Recreational Vehicles.

Lutco's wide selection of products includes:

- **Ball Bearings** – Unground full complement ball bearings in radial, thrust or angular contact styles.
- **Housed Bearing Assemblies** – Ball bearings assembled into pressed metal stampings. Various configurations with and without self-alignment feature are available.
- **Flangettes** – Pressed steel bearing housings offered in two bolt, three and four bolt round, triangular, four bolt square and relubricatable types.
- **Pillow Blocks** – Two piece separable stamped steel housing with spherical bearing seat.
- **Bearing/Sprocket Assemblies** – Wide range of unitized bearing/sprocket assemblies incorporating components such as powder metal couplers, springs, and plastic handles.
- **Cam Followers** – Specialty unground, standard stud ball bearing cam followers.
- **Custom Designed Bearings** – Lutco produces a wide range of custom bearings and value added assemblies for specific applications.

## LUTCO UNGROUND BALL BEARINGS

Lutco unground ball bearings are designed for applications where speeds and loads are moderate and where noise level requirements and running accuracy do not justify using more expensive precision ground bearings. Since these full complement bearings have unground raceways, the recommended maximum continuous speed is 700 rpm.

## LIMITED WARRANTY

Lutco products are warranted for defects in material and workmanship under normal use and maintenance for a period not to exceed one year from receipt of shipment and for a value not to exceed the purchase price. No other warranty is in effect.



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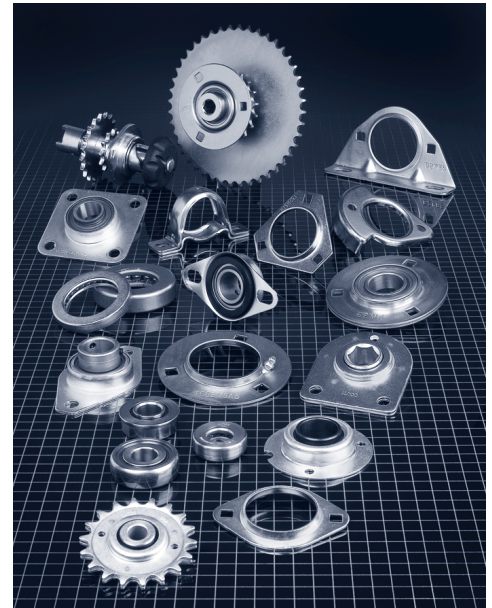
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# Lutco Bearing Design Information

The following design information is intended to be a general guide. For more specific information, please call the factory.

## Full Complement of Balls

A full complement of balls offers more contact between the balls and races. This results in more resistance to brinelling from shock loads. Carbon balls are standard. Alternate ball materials are available upon request. The grades of balls used range from 200 to 1000 depending on the specific application.

## Internal Clearance (Radial & Axial)

LUTCO's standard radial play is .002"/.008". Axial play is .005"/.020", depending on the size of the bearing.

## Lubrication

LUTCO's standard grease has a temperature range of -30°F to +325°F. Other greases are available upon request.

## Heat Treating

LUTCO's heat treating processes include carburizing and carbonitriding. Inner and outer race surface hardness specification is Rc 59-63.

## Loads and Speeds

See pages 33 and 34 for specifics on loads and speeds.

## Set Screws

The standard construction provides two ¼"-28 cup point socket set screws spaced 120° apart. For severe applications, special lock patch, serrated point, or other set screw designs are available. Recommended set screw torque is 60 in-lbs.

## Eccentric Locking Collar

LUTCO bearings are available with the same style eccentric locking collars as precision bearings.

## Special Locking Devices

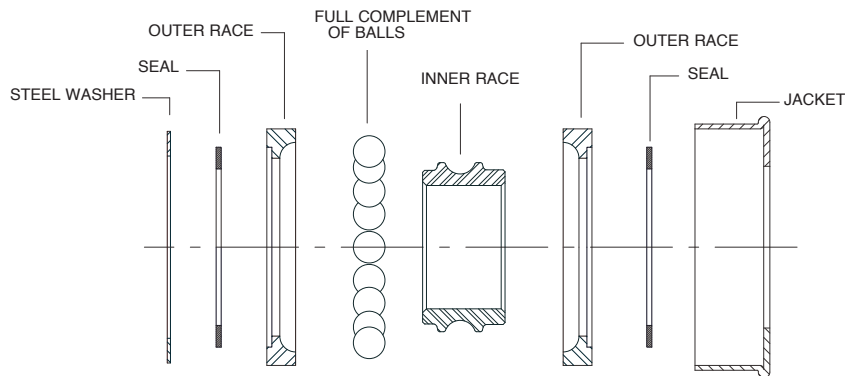
Keyways and cross drilled holes for pinning are among many available options depending upon application requirements.

## Plating

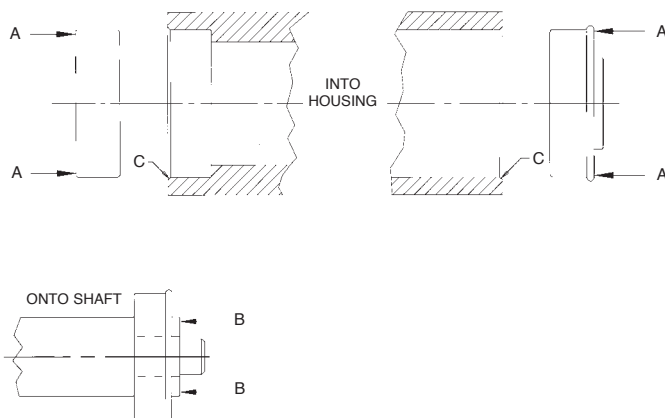
Lutco products utilize trivalent passivate plating per ASTM Standard B633-11 Type V and Type VI which eliminates the use of hexavalent chromate and is RoHS compliant.

## LUTCO Bearing Construction

LUTCO radial bearings consist of a full complement of precision steel balls, a machined inner race and a pair of cold formed outer races captured by a soft steel jacket. This design allows for retained seals, and extra deep raceways. The jacket on the OD allows for the bearing to be pressed into a housing made without close tolerances.



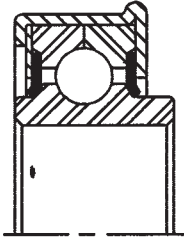
## Mounting Instructions for LUTCO Ball Bearings



1. When mounting a LUTCO ball bearing into a housing, pressure must be applied to the outer race, (A-A). Allow clearance for any seal step.
2. When mounting a LUTCO ball bearing onto a shaft, pressure must be applied to the inner race (B-B).
3. When mounting a LUTCO ball bearing into a housing and onto a shaft simultaneously, equal pressure must be applied to both outer and inner race.
4. A 1/32 inch minimum chamfer on housing (C) is required to ensure proper seating of bearing.
5. Recommended housing tolerance: from bearing OD low limit -.001"/-.005"

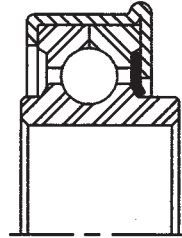
# Seal/Shield Options

LUTCO is the leader in sealed, full complement, unground bearings, servicing the needs of a wide range of industries. LUTCO provides various sealing and shielding options to meet challenging environmental demands. Seal/Shield designations are listed in the suffix of LUTCO bearing designs. See below for common options or call the factory for special applications.



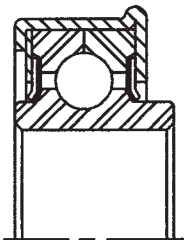
## PP Double Seal

This is our standard seal. The design is a single piece HY-CARR rubber seal.



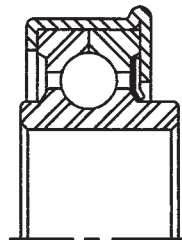
## P Single Seal

This is our standard seal. The design is a single piece HY-CARR rubber seal on flange side.



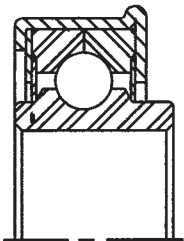
## PP2 Super Seal

Recommended where severe conditions require superior sealing. Seal construction includes a two piece BUNA N rubber with a NYLON GS backing.



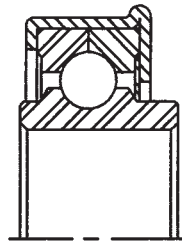
## P2 Super Seal

Recommended where severe conditions require superior sealing on flange side. Seal construction includes a two piece BUNA N rubber with a NYLON GS backing.



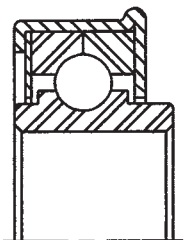
## NPP Nylon Double Shield

Recommended for light seal drag applications, grease retention, and minimal environmental protection.



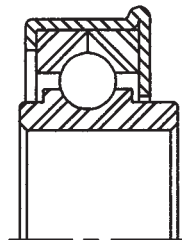
## NP Nylon Single Shield

Recommended for light seal drag applications, grease retention, and minimal environmental protection. Nylon shield on flange side only.



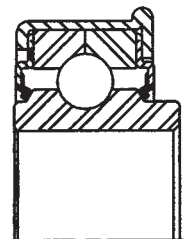
## MPP Double Shielded

Steel shields on both sides.



## MP Single Shielded

Steel shield on flange side only.



## PP3 Molded Shield

Available on select sizes. The design consists of a one piece NITRILE rubber which is molded to a stepped steel shield.

# Bearing and Flangette Identification

## Bearing Numbering System

CLASS	O.D. SIZE	TYPE	VARIATION	FINISH	BORE SIZE	SEALING	SUFFIX
Standard (No Prefix) HD – Heavy Duty C – Conveyor A – Non-Standard O.D. M – Metric	in 1/32" increments  ** see chart below	F – Flanged R – Radial/Cylindrical SR – Spherical AC – Angular Contact T – Thrust BR – Bearing Roller	A – Non-Standard Cone Extension H – Hex Bore S – Square Bore AX – Set Screw CX – Pin Type AL – Set Screw	Z – Zinc & Black Oxide B – Brass Y – Yellow Zinc YZ – Yellow Zinc & Black Oxide	in 1/64" increments  ** see chart below	MP – Single Shield MPP – Double Shield P – Single Rubber PP – Double Rubber PP2 – Super NP – Single Nylon NPP – Double Nylon T – Single Teflon TT – Double Teflon P2 – Single Super P3 – Single Molded Rubber PP3 – Double Molded Rubber	LP – Locking Patch Screw MC – Eccentric Locking Collar

### EXAMPLE: HD64FAZ48AMP

HD	64	F	A	Z	48	A	MPP
Heavy Duty	2" O.D.	Flanged	Non-Standard Inner Ring Extension	Plated	3/4" Bore	Non-Standard Bore	Double Shield

## \*\* Bearing O.D. and I.D. Conversion

Bearing O.D. Conversions	
O.D. Size	Inch Equivalent
28	7/8
36	1 1/8
44	1 3/8
M44	1.378
48	1 1/2
56	1 3/4
M59	1.850
64	2
M65	2.047
M78	2.441
80	2 1/2

Bearing I.D. Conversions	
Bore Size	Inch Equivalent
24	3/8
28	7/16
32	1/2
36	9/16
40	5/8
44	1 1/16
48	3/4
52	13/16
56	7/8
60	15/16
64	1"
65	1 1/64
68	1 1/16
72	1 1/8
76	1 3/16
80	1 1/4

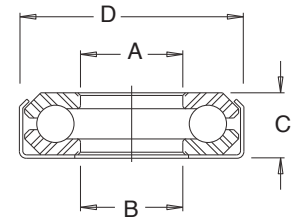
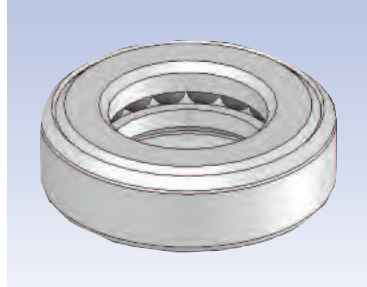
## Flangette Numbering System

CLASS	BEARING SIZE	TYPE	VARIATION	FINISH
Standard (NoPrefix) G – Relube T – Torque Rated	Spherical Bearing O.D. in M.M.	MS – Non-Relube MSA – Relube with Fitting MSB – Relube, Mating Flange to MSA MST – 2 Bolt MSTR – 3 Bolt Triangular MS-S – Non-Relube Square MSA-S – Relube Square with Fitting MSB-S – Relube Square, Mating Flange to MSA-S PB – Pillow Block PBS – Pillow Block Stand MSTU – Take-up Units	No Number – Standard Number – Non-Standard	ZP – Zinc with Clear Chromate YZP – Zinc with Yellow Chromate

### EXAMPLE: TG80MSA-S8YZP

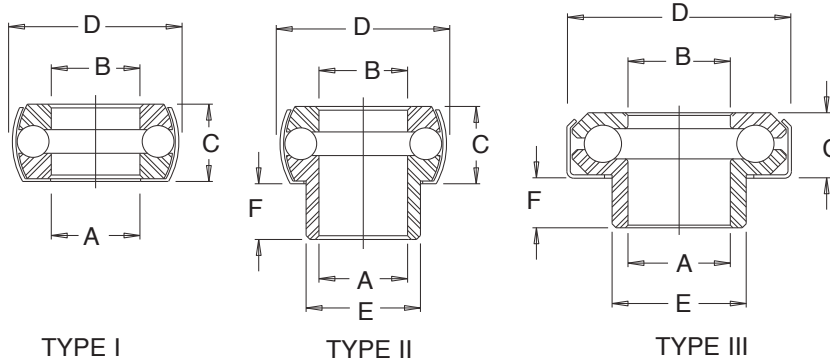
# Industrial Thrust Bearings

- Inch dimensional bearings
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Grease packed
- Optional materials available
- Various platings available for protection against corrosion
- Max Speed 700 rpm



BEARING NO.	DIMENSIONS				BALLS NO.-SIZE	BRG Wt. Lbs. Ea	STATIC LOAD LBS.
	A	B	C	D			
S20TB21	.323/.327	.323/.327	.281/.285	.625/.630	11-1/8	.014	
27T16	.250/.270	.265/.285	.323/.343	0.844	10-5/32	.030	3,600
28T29	.453/.463	.468/.488	.271/.291	0.859	15-1/8	.022	3,100
32T32	.500/.510	.515/.535	.334/.354	1.000	12-3/16	.038	12,000
33T24	.375/.385	.390/.410	.349/.369	1.047	14-5/32	.052	5,000
36T40	.625/.635	.646/.666	.334/.354	1.125	16-5/32	.044	9,100
A40TA32	.500/.510	.515/.535	.427/.447	1.265	10-1/4	.090	16,000
45T48A	.758/.773	.758/.773	.443/.463	1.406	15-7/32	.095	18,600
46T40	.625/.635	.646/.666	.443/.463	1.422	12-1/4	.106	19,200
53T48	.750/.760	.765/.785	.535/.555	1.656	15-1/4	.180	24,000
56T65	1.016/1.026	1.021/1.041	.615/.635	1.750	16-1/4	.225	25,600
60T56	.875/.885	.890/.910	.584/.604	1.891	17-1/4	.264	27,200
63T64	1.000/1.010	1.021/1.041	.615/.635	1.969	18-1/4	.292	28,800
63T68	1.063/1.073	1.084/1.104	.615/.635	1.969	18-1/4	.272	28,800
64T56	.876/.886	.937/.952	.620/.640	2.000	12-3/8	.305	32,000
64T64	1.065/1.085	1.010/1.020	.620/.640	2.000	12-3/8	.282	32,000
64TA64	1.000/1.020	1.000/1.020	.620/.640	2.000	12-3/8	.294	32,000
64TN64	1.000/1.020	1.065/1.085	.620/.640	2.000	12-3/8	.278	32,000
67T72	1.125/1.135	1.140/1.160	.615/.635	2.094	19-1/4	.308	30,400
70T86A	1.347/1.362	1.347/1.362	.615/.635	2.156	17-5/16	.280	43,500
80TA72A	1.104/1.124	1.140/1.160	.706/.726	2.500	12-7/16	.550	88,000
80T76C	1.185/1.205	1.185/1.205	.756/.776	2.500	12-7/16	.564	88,000
80T81D	1.255/1.275	1.255/1.275	.756/.776	2.500	12-7/16	.564	88,000
83T96	1.500/1.510	1.515/1.535	.615/.635	2.594	25-1/4	.454	40,000
84T68B	1.071/1.080	1.071/1.091	.756/.776	2.625	12-7/16	.672	88,000
84T76C	1.185/1.205	1.185/1.205	.756/.776	2.625	12-7/16	.676	88,000
84T81D	1.255/1.275	1.255/1.275	.756/.776	2.625	12-7/16	.635	88,000
88T107C	1.673/1.693	1.740/1.760	.740/.760	2.750	21-5/16	.656	53,800
90T81B	1.255/1.275	1.310/1.330	.756/.776	2.812	14-7/16	.684	102,200
94T128	2.010/2.030	2.010/2.030	.620/.640	2.937	20-3/8	.440	53,600
A94T128	2.010/2.030	2.010/2.030	.490/.510	2.937	30-1/4	.342	28,800
99T112C	1.750/1.770	1.781/1.801	.803/.823	3.094	17-7/16	.794	124,600
107T128C	2.000/2.020	2.030/2.050	.803/.823	3.344	18-7/16	.876	132,000

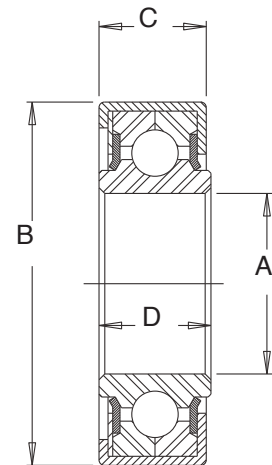
## Special Thrust Bearings



TYPE	BEARING NO.	DIMENSIONS				BALLS NO. SIZE	BRG Wt. Lbs. Ea.
		A	B	C	D		
I	18TS18AB	.282/.286	.282/.286	.281/.285	.572/.575	10-1/8	.010
I	A22TS20AB	.305/.309	.305/.309	.324/.328	.675/.677	13-1/8	.018
I	23TB24A	.380/.385	.380/.385	.285/.305	.723/.733	13-1/8	.016
II	18TBA16	.282/.286	.253/.259	.250/.260	.570/.580	10-1/8	.012
III	S18TBA18	.281/.291	.281/.291	.276/.286	.572/.582	14-3/32	.012
III	S20TBA16	.323/.327	.253/.261	.281/.285	.625/.630	11-1/8	.016

# Radial Bearings

- Inch dimensional bearings
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Cylindrical OD for mounting in straight-bored housings
- Grease packed
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



For sealing designation, add suffix to bearing number below.

BEARING NUMBER	A +.005 -.000	B +.005 -.000	C		D	BALLS NO. - SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.)	
			+.010 /-.010					50 rpm, 500 hrs.	
			Seal Type R, MP, P, P2	Seal Type MPP, PP, PP2				IRT*	ORT*
†28R16 †28R20 †28R24	¼ ⅝ ⅞	⅞	¼	—	¼	16 - ⅛	.03 .03 .03	149	127
36R24 36R28 36R32	⅜ 7/16 ½	1 ⅛	.370	.396	13/32	15 - 5/32	.07 .07 .07	273	232
44R24 44R28 44R32 44R36 44R40	⅜ 7/16 ½ 9/16 5/8	1 3/8	.470	.490	½	16 - 3/16	.14 .13 .12 .11 .10	419	356
48R32 48R36 48R40 48R44	½ 9/16 5/8 11/16	1 ½	.437	.468	15/32	17 - 3/16	.16 .15 .14 .13	445	378
56R40 56R44 56R48	5/8 11/16 ¾	1 ¾	.595	.625	5/8	15 - ¼	.25 .23 .22	699	594
** 57R48	¾	1.780	.574	.603	11/16	15 - ¼	.23	699	594
64R48 64R56 64R64	¾ 7/8 1"	2	.572	.620	5/8	17 - ¼	.33 .32 .30	792	673
80R48 80R64 80R68 80R72 80R76 80R80	¾ 1" 1 1/16 1 1/8 1 3/16 1 ¼	2 ½	.625	.677	21/32	17 - 5/16	.56 .53 .52 .51 .50 .59	1238	1052

\* IRT = Inner Race Turns    \*ORT = Outer Race Turns  
For Interchange, see Page 35

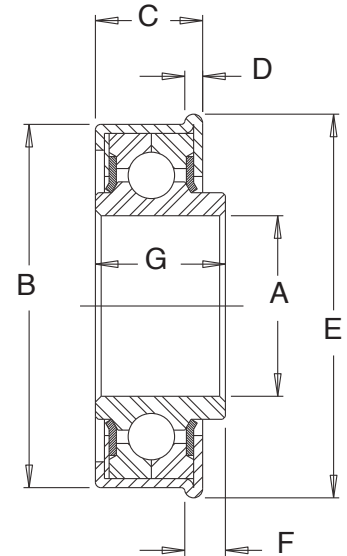
- \*\* Size equivalent to tapered roller bearing.
- † Call for availability. Solid outer race design.  
Other solid outer race sizes available.
- All dimensions should be verified with Mfg.

SEALING OPTIONS: See page 3



# Flanged Radial Bearings

- Flange axially locates bearing in housing
- Inch dimensional bearings
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Cylindrical OD for mounting in straight-bored housings
- Grease packed
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



For sealing designation, add suffix to bearing number below.

BEARING NUMBER	A +.005 -.000	B +.005 -.000	C +.010 /-.010		D	E	F	G	BALLS NO. - SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.)	
			Seal Type F, MP, P, P2	Seal Type MPP, PP, PP2							50 rpm, 500 hrs.	
											IRT*	ORT*
†29F16 †29F20 †29F24	1/4 5/16 3/8	29/32	5/16	—	1/16	1 1/32	1/8	3/8	16 - 1/8	.03	149	127
36F24 36F28 36F32	3/8 7/16 1/2	1 1/8	.385	.410	1/16	1 1/4	1/8	7/16	15 - 5/32	.07 .07 .07	273	232
44F24 44F28 44F32 44F36 44F40	3/8 7/16 1/2 9/16 5/8	1 3/8	.437	.490	1/16	1 1/2	1/8	35/64 ***	16 - 3/16	.14 .13 .12 .11 .10	419	356
44LF48	3/4	1 3/8	.435	.460	1/16	1 1/2	1/8	1/2	20 - 5/32	.09	297	252
48F32 48F36 48F40 48F44	1/2 9/16 5/8 1 1/16	1 1/2	.447	.468	1/16	2 1/32	1/8	17/32	17 - 3/16	.16 .15 .14 .13	445	378
56F32 56F40 56F44 56F48	1/2 5/8 1 1/16 3/4	1 3/4	.595	.625	3/32	1 7/8	5/32	1 1/16	15 - 1/4	.27 .25 .23 .22	699	594
64F44 64F48 64F56 64F64 64F65	1 1/16 3/4 7/8 1" 1 1/64	2	.572	.595	3/32	2 1/8	7/32	2 3/32	17 - 1/4	.33 .32 .32 .30 .29	792	673
80F56 80F64 80F68 80F72 80F76 80F80	7/8 1" 1 1/16 1 1/8 1 3/16 1 1/4	2 1/2	.630	.650	1/8	2 4 1/64	1/4	1 3/16	17 - 5/16	.56 .53 .52 .51 .50 .59	1238	1052

\*IRT = Inner Race Turns \*ORT = Outer Race Turns

For Interchange, see Page 35.

\*\*\* Inner Race Dimension for MP, P, P2 = 1/2

†Call for availability. Solid outer race design.

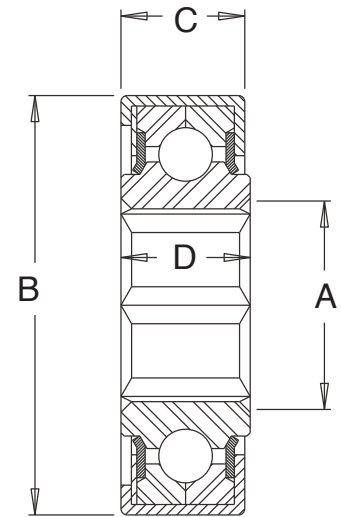
Other solid outer race sizes available.

All dimensions should be verified with Mfg.

SEALING OPTIONS: See page 3

# Radial Hex Bore Bearings

- Designed for mounting on hex shaft
- Inch dimensional bearings
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Cylindrical OD for mounting in straight-bored housings
- Grease packed
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



For sealing designation, add suffix to bearing number below.

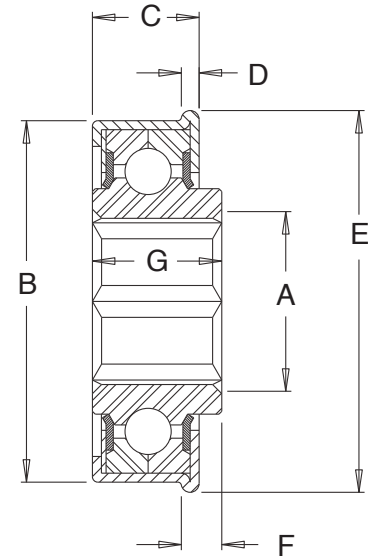
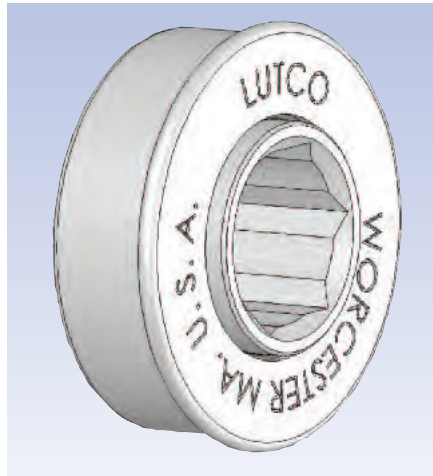
BEARING NUMBER	A +.006 -.000	B +.005 -.000	C +.010 /-.010		D	BALLS NO. - SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.) 50 rpm, 500 hrs.	
			Seal Type MP, P, P2	Seal Type MPP, PP, PP2				IRT*	ORT*
36RH24 36RH28	$\frac{3}{8}$ $\frac{7}{16}$	1 $\frac{1}{8}$	.370	.396	$1\frac{3}{32}$	15 - $\frac{5}{32}$	.07 .07	149	127
44RH24 44RH28 44RH32	$\frac{3}{8}$ $\frac{7}{16}$ $\frac{1}{2}$	1 $\frac{3}{8}$	.470	.490	$\frac{1}{2}$	16 - $\frac{3}{16}$	.14 .13 .11	419	356
48RH32 48RH36 48RH40	$\frac{1}{2}$ $\frac{9}{16}$ $\frac{5}{8}$	1 $\frac{1}{2}$	.437	.468	$1\frac{5}{32}$	17 - $\frac{3}{16}$	.16 .15 .14	445	378
56RH40 56RH44 56RH48	$\frac{5}{8}$ $1\frac{1}{16}$ $\frac{3}{4}$	1 $\frac{3}{4}$	.595	.625	$\frac{5}{8}$	15 - $\frac{1}{4}$	.25 .23 .22	699	594
64RH48 64RH56	$\frac{3}{4}$ $\frac{7}{8}$	2	.572	.620	$\frac{5}{8}$	17 - $\frac{1}{4}$	.33 .32	792	673
80RH64 80RH68 80RH72	1" $1\frac{1}{16}$ $1\frac{1}{8}$	2 $\frac{1}{2}$	.630	.680	$2\frac{1}{32}$	17 - $\frac{5}{16}$	.53 .52 .51	1238	1052

\*IRT = Inner Race Turns    \*ORT = Outer Race Turns  
Square and other Hex Bores available upon request.  
All dimensions should be verified with Mfg.

SEALING OPTIONS: See page 3

# Flanged Radial Hex Bore Bearings

- Designed for mounting on hex shaft
- Flange axially locates bearing in housing or tube
- Inch dimensional bearings
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Cylindrical OD for mounting in straight-bored housings
- Grease packed
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



For sealing designation, add suffix to bearing number below.

BEARING NUMBER	A +.006 -.000	B +.005 -.000	C		D	E	F	G	BALLS NO. - SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.)	
			+.010 / - .010								50 rpm, 500 hrs.	
			Seal Types MP, P, P2	Seal Types MPP, PP, PP2							IRT*	ORT*
36FH24 36FH28	$\frac{3}{8}$ $\frac{7}{16}$	$1\frac{1}{8}$	.385	.410	$\frac{1}{16}$	$1\frac{1}{4}$	$\frac{1}{8}$	$\frac{7}{16}$	15 - $\frac{5}{32}$	.07 .07	273	232
44FH24 44FH28 44FH32	$\frac{3}{8}$ $\frac{7}{16}$ $\frac{1}{2}$	$1\frac{3}{8}$	.437	.490	$\frac{1}{16}$	$1\frac{1}{2}$	$\frac{1}{8}$	$\frac{35}{64}$ ***	16 - $\frac{3}{16}$	.14 .13 .11	419	356
48FH32 48FH36 48FH40	$\frac{1}{2}$ $\frac{9}{16}$ $\frac{5}{8}$	$1\frac{1}{2}$	.447	.468	$\frac{1}{16}$	$1\frac{21}{32}$	$\frac{1}{8}$	$\frac{1}{2}$	17 - $\frac{3}{16}$	.16 .15 .14	445	378
56FH40 56FH44 56FH48	$\frac{5}{8}$ $1\frac{1}{16}$ $\frac{3}{4}$	$1\frac{3}{4}$	.595	.625	$\frac{3}{32}$	$1\frac{7}{8}$	$\frac{5}{32}$	$1\frac{1}{16}$	15 - $\frac{1}{4}$	.25 .23 .22	699	594
64FH48 64FH56	$\frac{3}{4}$ $\frac{7}{8}$	2	.572	.595	$\frac{3}{32}$	$2\frac{1}{8}$	$\frac{7}{32}$	$\frac{23}{32}$	17 - $\frac{1}{4}$	.33 .30	792	673
80FH64 80FH68 80FH72	1" $1\frac{1}{16}$ $1\frac{1}{8}$	$2\frac{1}{2}$	.630	.650	$\frac{1}{8}$	$2\frac{41}{64}$	$\frac{1}{4}$	$\frac{13}{16}$	17 - $\frac{5}{16}$	.53 .52 .51	1238	1052

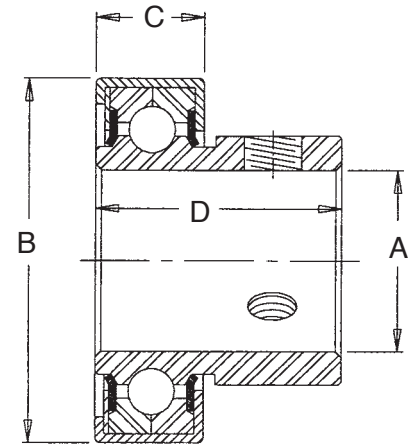
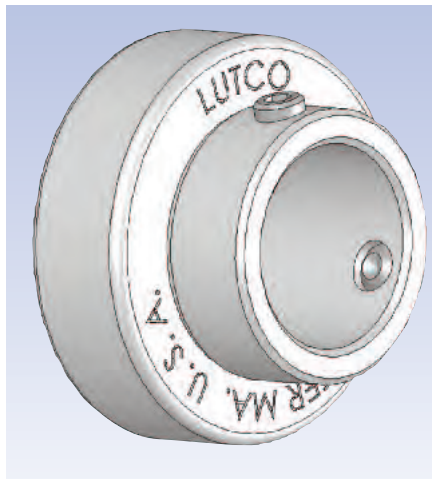
\*IRT = Inner Race Turns    \*ORT = Outer Race Turns  
Square and other Hex bores available upon request.

\*\*\* Inner Race Dimension for MP, P, P2 =  $\frac{1}{2}$   
All dimensions should be verified with Mfg.

SEALING OPTIONS: See page 3

## Extended Inner Race Set Screw Construction

- Inch dimensional bearings
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Cylindrical OD for mounting in straight-bored housings
- Grease packed
- Extended inner race with set screws
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



For sealing designation, add suffix to bearing number below.

BEARING NUMBER	A +.005 -.000	B +.005 -.000	C +.010 / -.010		D	BALLS NO. - SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.) 50 rpm, 500 hrs.	
			Seal Types MP, P, P2	Seal Types MPP, PP, PP2				IRT*	ORT*
36RAX24 36RAX28 36RAX32	3/8 7/16 1/2	1 1/8	.370	.396	3/4	15 - 5/32	.10 .10 .09	273	232
44RAX24 44RAX28 44RAX32 44RAX36 44RAX40	3/8 7/16 1/2 9/16 5/8	1 3/8	.470	.490	1"	16 - 3/16	.20 .18 .16 .14 .12	419	356
48RAX32 48RAX36 48RAX40	1/2 9/16 5/8	1 1/2	.437	.468	1"	17 - 3/16	.26 .24 .21	445	378
56RAX32 56RAX36 56RAX40 56RAX44 56RAX48	1/2 9/16 5/8 11/16 3/4	1 3/4	.595	.625	1 5/32	15 - 1/4	.35 .34 .34 .33 .33	699	594
64RAX48 64RAX56 64RAX64	3/4 7/8 1"	2	.572	.620	1 3/16	17 - 1/4	.45 .43 .40	792	673
64RAL48 64RAL56 64RAL64	3/4 7/8 1"	2	.572	.620	1 3/32	17 - 1/4	.43 .41 .39	792	673
80RAX64 80RAX68 80RAX72 80RAX76 80RAX80	1" 1 1/16 1 1/8 1 3/16 1 1/4	2 1/2	.630	.680	1 11/32	17 - 5/16	.72 .70 .68 .65 .60	1238	1052

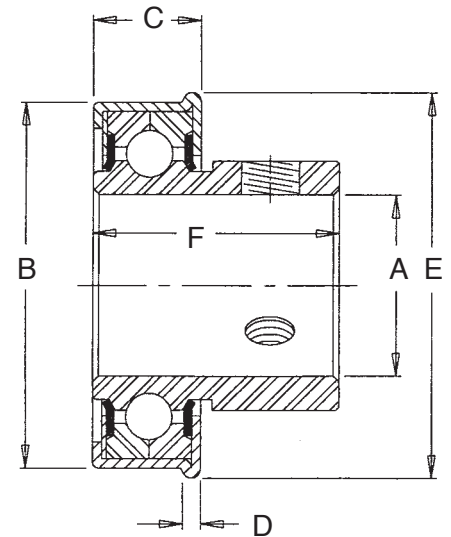
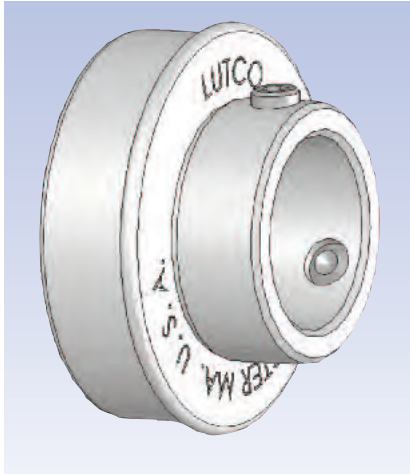
\*IRT = Inner Race Turns    \*ORT = Outer Race Turns  
All dimensions should be verified with Mfg.

SEALING OPTIONS: See page 3

# Flanged Radial Bearings

## Extended Inner Race Set Screw Construction

- Flange axially locates bearing in housing
- Inch dimensional bearings
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Cylindrical OD for mounting in straight-bored housings
- Grease packed
- Extended inner race with set screws
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



For sealing designation, add suffix to bearing number below.

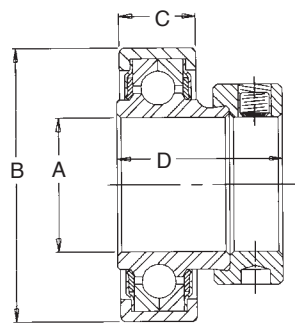
BEARING NUMBER	A +.005 -.000	B +.005 -.000	C +.010 /-.010		D	E	F	BALLS NO. - SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.) 50 rpm, 500 hrs.	
			Seal Type MP, P, P2	Seal Type MPP, PP, PP2						IRT*	ORT*
36FAX24 36FAX28 36FAX32	3/8 7/16 1/2	1 1/8	.380	.410	1/16	1 1/4	3/4	15 - 5/32	.10 .10 .09	273	232
44FAX24 44FAX28 44FAX32 44FAX36 44FAX40	3/8 7/16 1/2 9/16 5/8	1 3/8	.437	.490	1/16	1 1/2	1"	16 - 3/16	.20 .18 .16 .14 .12	419	356
48FAX32 48FAX36 48FAX40	1/2 9/16 5/8	1 1/2	.447	.468	1/16	1 21/32	1"	17 - 3/16	.26 .24 .21	445	378
56FAX32 56FAX36 56FAX40 56FAX44 56FAX48	1/2 9/16 5/8 11/16 3/4	1 3/4	.595	.625	3/32	1 7/8	1 5/32	15 - 1/4	.35 .34 .34 .33 .33	699	594
64FAX48 64FAX56 64FAX64	3/4 7/8 1"	2	.572	.595	3/32	2 1/8	1 3/16	17 - 1/4	.45 .43 .40	792	673
64FAL48 64FAL56 64FAL64	3/4 7/8 1"	2	.572	.595	3/32	2 1/8	1 3/32	17 - 1/4	.43 .41 .39	792	673
80FAX64 80FAX68 80FAX72 80FAX76 80FAX80	1" 1 1/16 1 1/8 1 3/16 1 1/4	2 1/2	.630	.650	1/8	2 41/64	1 11/32	17 - 5/16	.68 .72 .70 .65 .60	1238	1052

\*IRT = Inner Race Turns    \*ORT = Outer Race Turns  
All dimensions should be verified with Mfg.

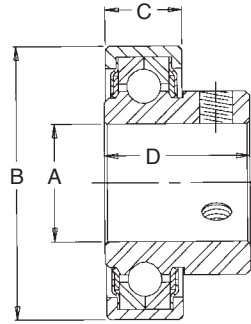
SEALING OPTIONS: See page 3

# Metric Radial Bearings

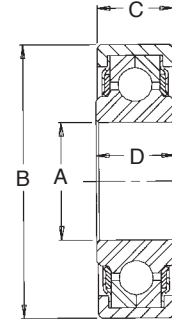
- Industry standard metric sizes
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Cylindrical OD for mounting in straight-bored housings
- Grease packed
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



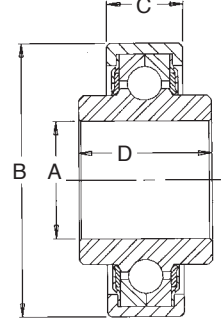
MC  
ECCENTRIC  
LOCKING COLLAR



RAL, RAX  
2 SET SCREWS  
AT 120°



R - ROUND I.D.  
RH - HEX I.D.



RB - ROUND I.D.  
RBH - HEX I.D.

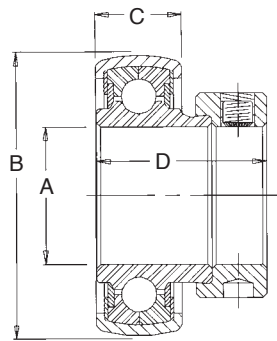
MC – LOCKING COLLAR PURCHASED SEPARATELY  
AVAILABLE WITH PP2 OR PP3 SEALS ON SELECT SIZES. SEE PG. 3 FOR DETAILS  
HEX BORE AVAILABLE ON REQUEST

BEARING NUMBER	A +.005 -.000	B		C +.010 -.010	D	BALLS NO. – SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.)		LOCKING COLLAR NO.
		mm	+0.005 -0.000					50 rpm, 500 hrs. IRT*	ORT*	
M44R32PP	1/2	35	1.378	.490	1/2	16 – 3/16	.12	419	356	
M44RAL32PP	1/2									
M44R38PP	15mm									
M44RAL38PP	15mm									
M44R40PP	5/8									
M44RAL40PP	5/8									
M59R48PP	3/4	47	1.850	.540	9/16	16 – 1/4	.22	745	633	S1012KC2
M59RAL48PP	3/4									
M59RAX48PP	3/4									
M59R48PPMC	3/4									
M59R48PPMC	3/4									
M65R48PP	3/4	52	2.047	.590	5/8	17 – 1/4	.33	792	673	S1012KC2
M65RAL48PP	3/4									
M65RAX48PP	3/4									
M65R48PPMC	3/4									
M65RB48PP	3/4									
M65R56PP	7/8									
M65RAL56PP	7/8									
M65RAX56PP	7/8									
M65R56PPMC	7/8									
M65RB56PP	7/8									
M65RBH56PP	7/8 HEX									
M65R64PP	1"									
M65RAL64PP	1"									
M65RAX64PP	1"									
M65R64PPMC	1"									
M65RB64PP	1"									
M78R72PP	1 1/8	62	2.441	.650	23/32	19 – 9/32	.51	1120	952	S1102K
M78RAL72PP	1 1/8									
M78RAX72PP	1 1/8									
M78R72PPMC	1 1/8									
M78R76PP	1 3/16									
M78RAL76PP	1 3/16									
M78RAX76PP	1 3/16									
M78R76PPMC	1 3/16									
M78R80PP	1 1/4									
M78RAL80PP	1 1/4									
M78RAX80PP	1 1/4									
M78RAX80PP	1 1/4									

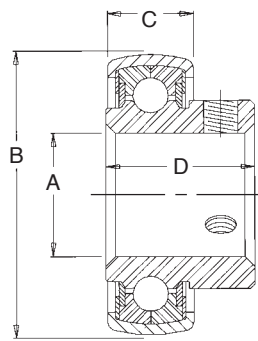
\*IRT = Inner Race Turns    \*ORT = Outer Race Turns

# Metric Spherical Bearings

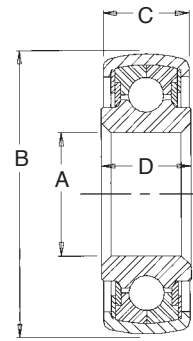
- Industry standard metric sizes
- Full complement of balls for maximum bearing capacity
- Case carburized raceways for high wear resistance
- Spherical OD for initial self alignment
- Grease packed
- Various platings available for protection against corrosion
- Max Speed 700 RPM
- Can be ordered open, shielded or sealed



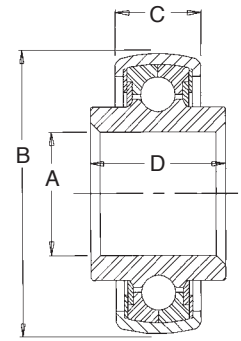
MC  
ECCENTRIC  
LOCKING COLLAR



SRAL, SRAX  
2 SET SCREWS  
AT 120°



SR - ROUND I.D.  
SRH - HEX I.D.



SRB - ROUND I.D.  
SRBH - HEX I.D.

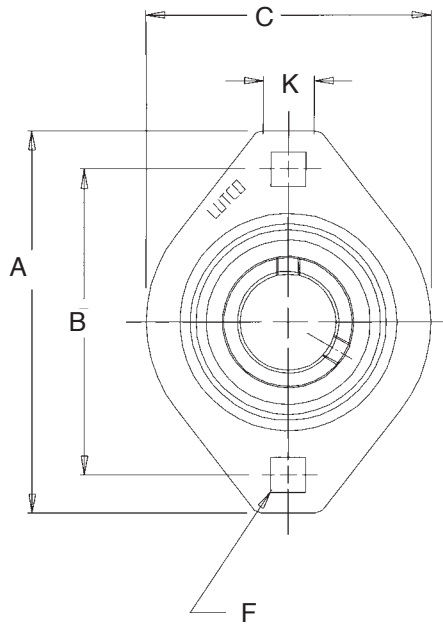
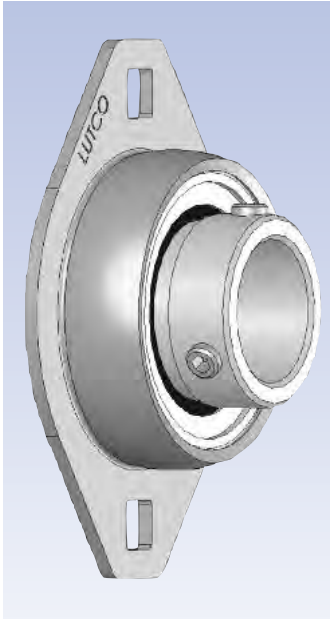
MC – LOCKING COLLAR PURCHASED SEPARATELY  
AVAILABLE WITH PP2 OR PP3 SEALS ON SELECT SIZES. SEE PG. 3 FOR DETAILS

BEARING NUMBER	A +.005 -.000	B		C	D	BALLS NO. – SIZE	BRG. Wt. Lbs. Ea.	LOAD RATING (lbs.)		LOCKING COLLAR NO.
		mm	+0.05 -.000					50 rpm, 500 hrs. IRT*	ORT*	
M59SR48PP M59SRAL48PP M59SRAX48PP M59SR48PPMC	3/4 3/4 3/4 3/4	47	1.850	.585	9/16 1" 1 1/32 1 1/32	16 – 1/4	.22 .30 .33 .33	745	633	S1012KC2
M65SR48PP M65SRAL48PP M65SRAX48PP M65SR48PPMC M65SRB48PP M65SR56PP M65SRAL56PP M65SRAX56PP M65SR56PPMC M65SRB56PP M65SRBH56PP M65SR64PP M65SRAL64PP M65SRAX64PP M65SR64PPMC M65SRB64PP	3/4 3/4 3/4 3/4 3/4 7/8 7/8 7/8 7/8 7/8 7/8 1" 1" 1" 1" 1"	52	2.047	.635	5/8 1 3/32 1 7/32 1 7/32 1 7/32 5/8 1 3/32 1 7/32 1 7/32 29/32 29/32 5/8 1" 1" 1" 1" 1"	17 – 1/4	.33 .48 .48 .45 .44 .32 .44 .44 .40 .38 .38 .30 .40 .42 .42 .39	792	673	S1012KC2 S1014K S1100KC2
M78SR72PP M78SRAL72PP M78SRAX72PP M78SR72PPMC M78SR76PP M78SRAL76PP M78SRAX76PP M78SR76PPMC M78SR80PP M78SRAL80PP M78SRAX80PP	1 1/8 1 1/8 1 1/8 1 1/8 1 3/16 1 3/16 1 3/16 1 3/16 1 1/4 1 1/4 1 1/4	62	2.441	.720	23/32 1 1/32 1 19/32 1 19/32 23/32 1 1/32 1 19/32 1 19/32 1 19/32 23/32 1 1/32 1 19/32	19 – 9/32	.51 .68 .68 .65 .50 .65 .65 .65 .55 .49 .60 .60	1120	952	S1102K S1103K

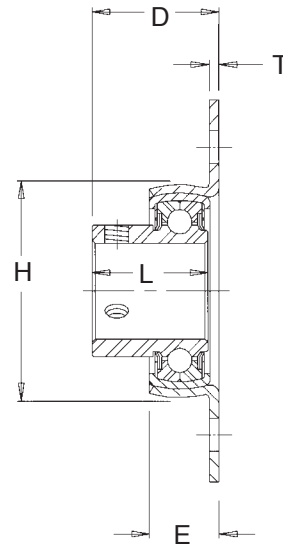
\*IRT = Inner Race Turns    \*ORT = Outer Race Turns  
Hex bores and other specials available upon request.  
Flangettes are available for above bearings. See pages 22-27.  
Keyways and cross drilled holes for pinning are among available options.

# Self-Aligning Flushmount Bearing

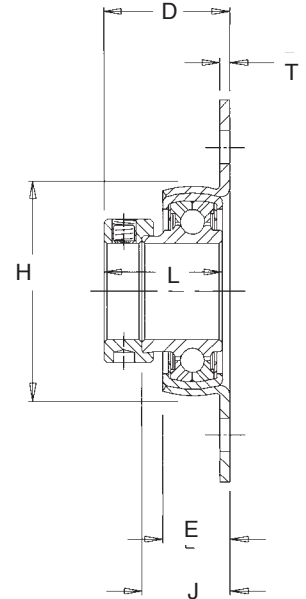
## 2 Bolt Standard



**LUTCO BEARING**



**PRECISION BEARING**



- Economical alternative to cast units
- Ideal in tight mounting areas
- Inch dimensions
- Moderate Loads
- Max Speed 700 RPM using Lutco bearing
- Zinc plated housing is standard
- Misalignment torque controlled through a patented process
- Bearings are supplied prelubricated
- Offered with semi-precision or precision bearings
- All units are non-relubricatable

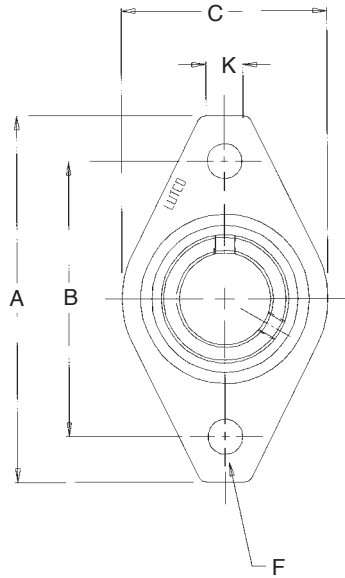
SHAFT	ASSEMBLY NO.	BEARING NO.	A	B	C	D	E	F	H	J	K	L	T	WT. LBS.	HOUSING NO.
3/4	31SAFLMRA012RRB	PRECISION RA012RRB	3 <sup>9</sup> / <sub>16</sub>	2 <sup>13</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>32</sub>	2	2 <sup>9</sup> / <sub>32</sub>	1/2	1 <sup>7</sup> / <sub>32</sub>	.104	.37	9061-ZP
	31SAFLM48PP	LUTCO M59SRAX48PP													
7/8	41SAFLMRA014RRB	PRECISION RA014RRB	3 <sup>3</sup> / <sub>4</sub>	3	2 <sup>51</sup> / <sub>64</sub>	1 <sup>5</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>32</sub>	2 <sup>3</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1/2	1 <sup>7</sup> / <sub>32</sub>	.104	.56	9048-ZP
	41SAFLM56PP2	LUTCO M65SRAX56PP2													
1"	41SAFLMRA100RRB	PRECISION RA100RRB	3 <sup>3</sup> / <sub>4</sub>	3	2 <sup>51</sup> / <sub>64</sub>	1 <sup>5</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>32</sub>	2 <sup>3</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1/2	1 <sup>7</sup> / <sub>32</sub>	.104	.50	9048-ZP
	41SAFLM64PP2	LUTCO M65SRAX64PP2													
1 1/8	51SAFLMRA102RRB	PRECISION RA102RRB	4 <sup>7</sup> / <sub>16</sub>	3 <sup>9</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>16</sub>	1 <sup>17</sup> / <sub>32</sub>	7/8	1 <sup>3</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	3/4	1 <sup>13</sup> / <sub>32</sub>	.134	.91	9049-ZP
	51SAFLM72PP2	LUTCO M78SRAX72PP2													
1 3/16	51SAFLMRA103RRB	PRECISION RA103RRB	4 <sup>7</sup> / <sub>16</sub>	3 <sup>9</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>16</sub>	1 <sup>17</sup> / <sub>32</sub>	7/8	1 <sup>3</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	3/4	1 <sup>13</sup> / <sub>32</sub>	.134	.89	9049-ZP
	51SAFLM76PP2	LUTCO M78SRAX76PP2													
1 1/4	51SAFLMRA13RRB2	PRECISION RA103RRB2	4 <sup>7</sup> / <sub>16</sub>	3 <sup>9</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>16</sub>	1 <sup>17</sup> / <sub>32</sub>	7/8	1 <sup>3</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	3/4	1 <sup>13</sup> / <sub>32</sub>	.134	.84	9049-ZP
	51SAFLM80PP2	LUTCO M78SRAX80PP2													
1 1/4	61SAFLMRA104RRB	PRECISION RA104RRB	4 <sup>15</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>32</sub>	3	1 <sup>3</sup> / <sub>32</sub>	7/8	1 <sup>17</sup> / <sub>32</sub>	.156	1.74	9050-ZP
1 5/16	61SAFLMRA105RRB	PRECISION RA105RRB											1.69		
1 3/8	61SAFLMRA106RRB	PRECISION RA106RRB	4 <sup>15</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>32</sub>	3	1 <sup>3</sup> / <sub>32</sub>	7/8	1 <sup>17</sup> / <sub>32</sub>	.156	1.68	9050-ZP
	1 7/16	61SAFLMRA107RRB											1.55		

\* For Interchange, see page 37  
Other spherical wide inner race bearings available upon request.

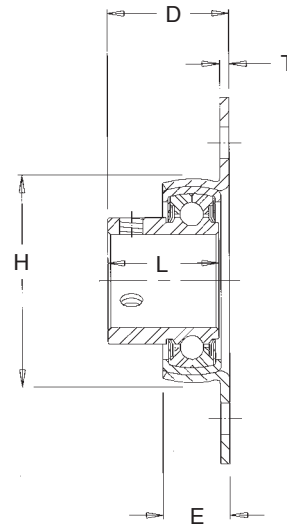


# Self-Aligning Flushmount Bearing

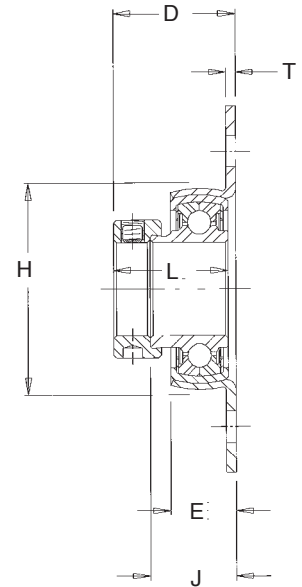
## 2 Bolt Light Duty



**LUTCO BEARING**



**PRECISION BEARING**

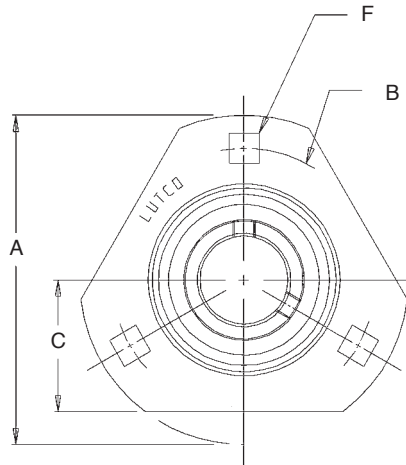
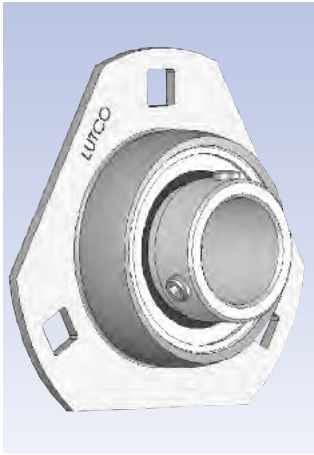


- Economical alternative to cast units
- Ideal in tight mounting areas
- Inch dimensions
- Moderate Loads
- Max Speed 700 RPM using Lutco bearing
- Zinc plated housing is standard
- Misalignment torque controlled through a patented process
- Bearings are supplied prelubricated
- Offered with semi-precision or precision bearings
- All units are non-relubricatable

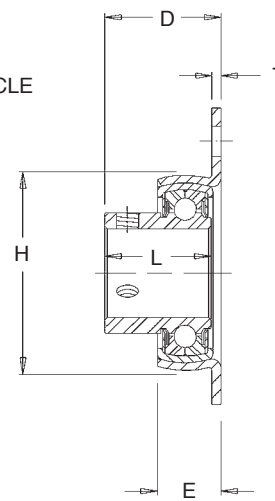
SHAFT	ASSEMBLY NO.	BEARING NO.	A	B	C	D	E	F	H	J	K	L	T	WT. LBS.	HOUSING NO.
7/8	43SAFLMRA014RRB	PRECISION RA014RRB	4 7/8	3 57/64	2 3/4	1 5/16	29/32	15/32	2 3/16	1 5/16	1/2	1 7/32	.104	.59	9058-ZP
	43SAFLM56PP2	LUTCO M65SRAX56PP2													
1"	43SAFLMRA100RRB	PRECISION RA100RRB	4 7/8	3 57/64	2 3/4	1 5/16	29/32	15/32	2 3/16	1 5/16	1/2	1 7/32	.104	.53	9058-ZP
	43SAFLM64PP2	LUTCO M65SRAX64PP2													
1 1/8	53SAFLMRA102RRB	PRECISION RA102RRB	5 9/16	4 19/32	3 5/16	1 17/32	7/8	29/64	2 5/8	1 1/16	5/8	1 13/32	.134	.97	9059-ZP
	53SAFLM72PP2	LUTCO M78SRAX72PP2													
1 3/16	53SAFLMRA103RRB	PRECISION RA103RRB	5 9/16	4 19/32	3 5/16	1 17/32	7/8	29/64	2 5/8	1 1/16	5/8	1 13/32	.134	.95	9059-ZP
	53SAFLM76PP2	LUTCO M78SRAX76PP2													
1 1/4	53SAFLMRA13RRB2	PRECISION RA103RRB2	5 9/16	4 19/32	3 5/16	1 17/32	7/8	29/64	2 5/8	1 1/16	5/8	1 13/32	.134	.90	9059-ZP
	53SAFLM80PP2	LUTCO M78SRAX80PP2													
1 1/4	63SAFLMRA104RRB	PRECISION RA104RRB	6 1/8	5 1/8	3 11/16	1 5/8	29/32	33/64	3	1 3/32	7/8	1 17/32	.156	1.87	9060-ZP
1 5/16	63SAFLMRA105RRB	PRECISION RA105RRB											1.82		
1 3/8	63SAFLMRA106RRB	PRECISION RA106RRB	6 1/8	5 1/8	3 11/16	1 5/8	29/32	33/64	3	1 3/32	7/8	1 17/32	.156	1.81	9060-ZP
1 7/16	63SAFLMRA107RRB	PRECISION RA107RRB											1.68		

# Self-Aligning Flushmount Bearing

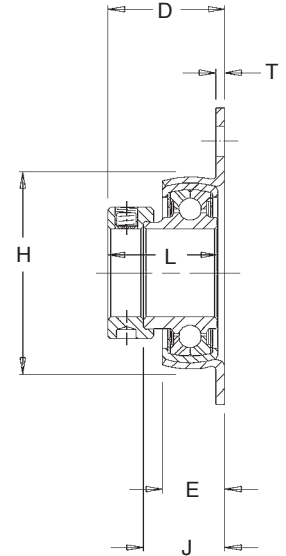
## 3 Bolt Triangular



**LUTCO BEARING**



**PRECISION BEARING**

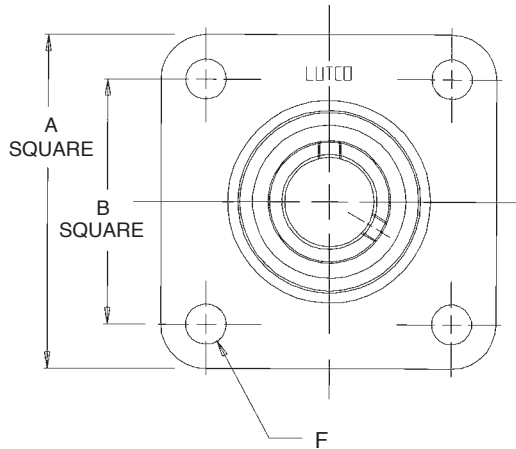


- Economical alternative to cast units
- Ideal in tight mounting areas
- Inch dimensions
- Moderate Loads
- Max Speed 700 RPM using Lutco bearing
- Zinc plated housing is standard
- Misalignment torque controlled through a patented process
- Bearings are supplied prelubricated
- Offered with semi-precision or precision bearings
- All units are non-relubricatable

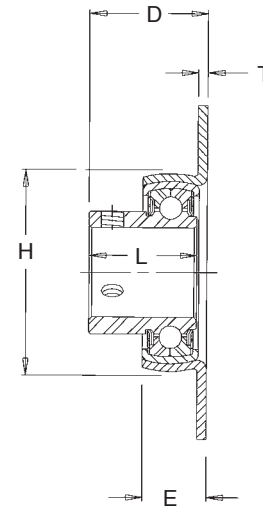
SHAFT	ASSEMBLY NO.	BEARING NO.	A	B	C	D	E	F	H	J	L	T	WT. LBS.	HOUSING NO.
3/4	37SAFLMRA012RRB	PRECISION RA012RRB	3 <sup>9</sup> / <sub>16</sub>	2 <sup>13</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>32</sub>	2	2 <sup>9</sup> / <sub>32</sub>	1 <sup>7</sup> / <sub>32</sub>	.104	.41	9069-ZP
	37SAFLM48PP	LUTCO M59SRAX48PP												
7/8	47SAFLMRA014RRB	PRECISION RA014RRB	3 <sup>3</sup> / <sub>4</sub>	3	1 <sup>1</sup> / <sub>2</sub>	1 <sup>5</sup> / <sub>16</sub>	2 <sup>9</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>32</sub>	2 <sup>9</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>32</sub>	.104	.61	9070-ZP
	47SAFLM56PP2	LUTCO M65SRAX56PP2												
1"	47SAFLMRA100RRB	PRECISION RA100RRB	3 <sup>3</sup> / <sub>4</sub>	3	1 <sup>1</sup> / <sub>2</sub>	1 <sup>5</sup> / <sub>16</sub>	2 <sup>9</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>32</sub>	2 <sup>9</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>32</sub>	.104	.55	9070-ZP
	47SAFLM64PP2	LUTCO M65SRAX64PP2												
1 1/8	57SAFLMRA102RRB	PRECISION RA102RRB	4 <sup>7</sup> / <sub>16</sub>	3 <sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>17</sup> / <sub>32</sub>	7/8	1 <sup>3</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>13</sup> / <sub>32</sub>	.134	1.08	9071-ZP
	57SAFLM72PP2	LUTCO M78SRAX72PP2												
1 3/16	57SAFLMRA103RRB	PRECISION RA103RRB	4 <sup>7</sup> / <sub>16</sub>	3 <sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>17</sup> / <sub>32</sub>	7/8	1 <sup>3</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>13</sup> / <sub>32</sub>	.134	1.06	9071-ZP
	57SAFLM76PP2	LUTCO M78SRAX76PP2												
1 1/4	57SAFLMRA13RRB2	PRECISION RA103RRB2	4 <sup>7</sup> / <sub>16</sub>	3 <sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>17</sup> / <sub>32</sub>	7/8	1 <sup>3</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>13</sup> / <sub>32</sub>	.134	1.01	9071-ZP
	57SAFLM80PP2	LUTCO M78SRAX80PP2												
1 1/4	67SAFLMRA104RRB	PRECISION RA104RRB	4 <sup>15</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>32</sub>	3	1 <sup>3</sup> / <sub>32</sub>	1 <sup>17</sup> / <sub>32</sub>	.156	1.87	9072-ZP
1 5/16	67SAFLMRA105RRB	PRECISION RA105RRB											1.82	
1 3/8	67SAFLMRA106RRB	PRECISION RA106RRB	4 <sup>15</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>32</sub>	3	1 <sup>3</sup> / <sub>32</sub>	1 <sup>17</sup> / <sub>32</sub>	.156	1.81	9072-ZP
1 7/16	67SAFLMRA107RRB	PRECISION RA107RRB											1.68	

# Self-Aligning Flushmount Bearing

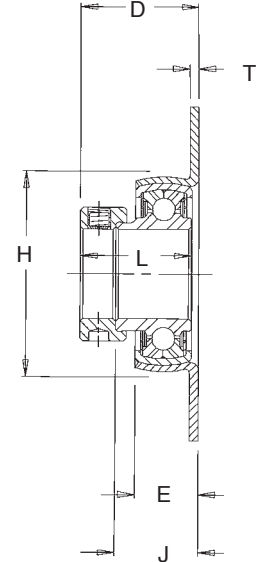
## 4 Bolt Square



**LUTCO BEARING**



**PRECISION BEARING**

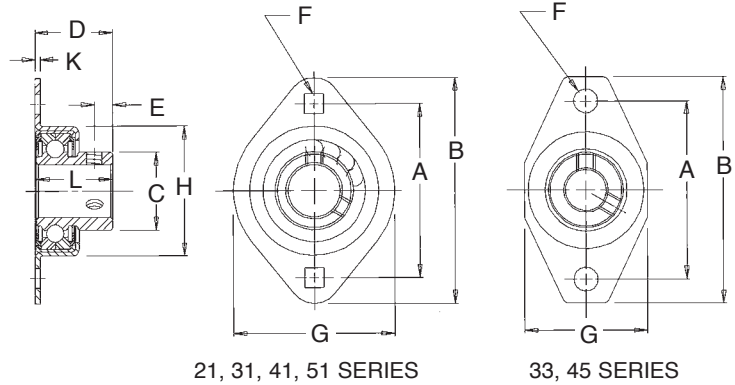


- Economical alternative to cast units
- Ideal in tight mounting areas
- Inch dimensions
- Moderate Loads
- Max Speed 700 RPM using Lutco bearing
- Zinc plated housing is standard
- Misalignment torque controlled through a patented process
- Bearings are supplied prelubricated
- Offered with semi-precision or precision bearings
- All units are non-relubricatable

SHAFT	ASSEMBLY NO.	BEARING NO.	A	B	D	E	F	H	J	L	T	WT. LBS.	HOUSING NO.
7/8	44SAFLMRA014RRB	PRECISION RA014RRB	3 3/4	2 3/4	1 5/16	23/32	29/64	2 3/16	15/16	1 7/32	.104	.76	9065-ZP
	44SAFLM56PP2	LUTCO M65SRAX56PP2											
1"	44SAFLMRA100RRB	PRECISION RA100RRB	3 3/4	2 3/4	1 5/16	23/32	29/64	2 3/16	15/16	1 7/32	.104	.70	9065-ZP
	44SAFLM64PP2	LUTCO M65SRAX64PP2											
1 1/8	54SAFLMRA102RRB	PRECISION RA102RRB	4 1/4	3 1/4	1 17/32	7/8	29/64	2 5/8	1 1/16	1 13/32	.134	1.40	9066-ZP
	54SAFLM72PP2	LUTCO M78SRAX72PP2											
1 3/16	54SAFLMRA103RRB	PRECISION RA103RRB	4 1/4	3 1/4	1 17/32	7/8	29/64	2 5/8	1 1/16	1 13/32	.134	1.38	9066-ZP
	54SAFLM76PP2	LUTCO M78SRAX76PP2											
1 1/4	54SAFLMRA13RRB2	PRECISION RA103RRB	4 1/4	3 1/4	1 17/32	7/8	29/64	2 5/8	1 1/16	1 13/32	.134	1.32	9066-ZP
	54SAFLM80PP2	LUTCO M78SRAX80PP2											
1 1/4	64SAFLMRA104RRB	PRECISION RA104RRB	4 5/8	3 5/8	1 5/8	29/32	33/64	3	1 3/32	1 17/32	.156	2.44	9067-ZP
1 5/16	64SAFLMRA105RRB	PRECISION RA105RRB										2.39	
1 3/8	64SAFLMRA106RRB	PRECISION RA106RRB	4 5/8	3 5/8	1 5/8	29/32	33/64	3	1 3/32	1 17/32	.156	2.38	9067-ZP
1 7/16	64SAFLMRA107RRB	PRECISION RA107RRB										2.20	

# 2-Bolt and 3-Bolt Economount Bearings

- Available in 2-bolt and 3-bolt round configurations
- Ideal in tight mounting areas
- Inch dimensions
- Moderate loads
- Max Speed 700 RPM
- Intended for applications which have little or no shaft misalignment
- Zinc and Yellow dichromate platings available for corrosion protection
- Bearings are supplied prelubricated
- All units are non-relubricatable

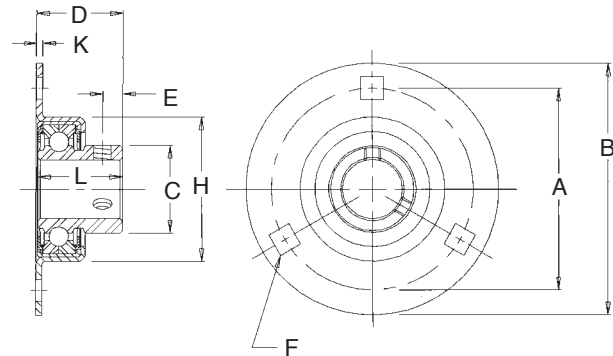


## 2-Bolt

BEARING NUMBER	BORE SIZE +.005 -.000	A	B	C	D	E	F	G	H	K	L	WEIGHT IN POUNDS	LUTCO BEARING
21FLMX32PP2 21FLMX40PP2 21FLMX48PP2	1/2 5/8 3/4	2 1/2	3 1/4	1 1/8	1 1/8	1/4	9/32	2 5/16	1 55/64	5/64	1 3/32	.62 .58 .50	56RAX
31FLMX48PP2	3/4	2 13/16	3 1/4	1 1/8	1 1/8	1/4	9/32	2 5/8	1 55/64	5/64	1 3/32	.50	
33FLMX32PP2 33FLMX40PP2 33FLMX48PP2	1/2 5/8 3/4	2 7/8	3 5/8	1 1/8	1 1/8	1/4	7/16	2	1 55/64	5/64	1 3/32	.63 .59 .51	64RAX
41FLMX56PP2 41FLMX60PP2 41FLMX64PP2	7/8 15/16 1"	3	3 3/4	1 3/8	1 7/32	1/4	1 1/32	2 5/16	2 1/8	5/64	1 3/16	.60 .56 .54	
45FLMX48PP2 45FLMX56PP2 45FLMX64PP2	3/4 7/8 1"	3 1/4	4 1/8	1 3/8	1 7/32	1/4	7/16	2 1/4	2 1/8	5/64	1 3/16	.60 .56 .54	80RAX
51FLMX72PP2 51FLMX76PP2 51FLMX80PP2	1 1/8 1 3/16 1 1/4	3 9/16	4 7/16	1 5/8	1 9/8	5/16	13/32	3 5/16	2 39/64	5/64	1 11/32	1.04 1.00 .96	

Select sizes available with precision bearings

SEALING OPTIONS: See page 3



## 3-Bolt

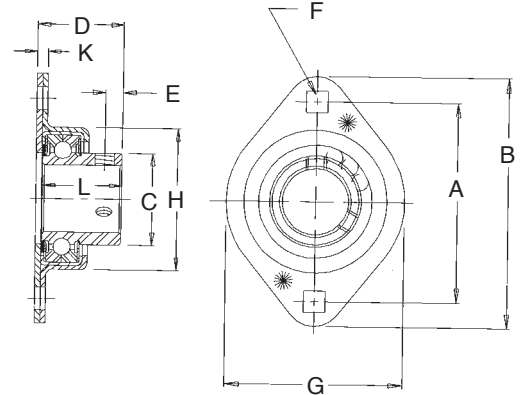
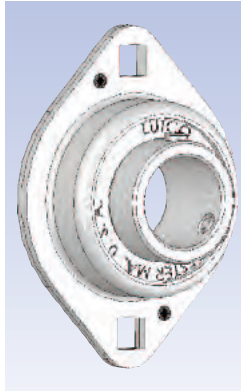
BEARING NUMBER	BORE SIZE +.005 -.000	A	B	C	D	E	F	H	K	L	WEIGHT IN POUNDS	LUTCO BEARING
2FLMX32PP2 2FLMX40PP2 2FLMX48PP2	1/2 5/8 3/4	2 1/2	3 1/4	1 1/8	1 1/8	1/4	9/32	1 55/64	5/64	1 3/32	.66 .60 .53	56RAX
*3FLMX48PP2	3/4	2 13/16	3 1/4	1 1/8	1 1/8	1/4	9/32	1 55/64	5/64	1 3/32	.53	
4FLMX56PP2 4FLMX60PP2 4FLMX64PP2	7/8 15/16 1"	3	3 3/4	1 3/8	1 7/32	1/4	1 1/32	2 1/8	5/64	1 3/16	.66 .61 .59	64RAX
5FLMX72PP2 5FLMX76PP2 5FLMX80PP2	1 1/8 1 3/16 1 1/4	3 9/16	4 7/16	1 5/8	1 9/8	5/16	13/32	2 39/64	5/64	1 11/32	1.07 1.03 .71	80RAX

\* Check with factory for availability.

SEALING OPTIONS: See page 3

# 2-Bolt and 3-Bolt Flushmounts

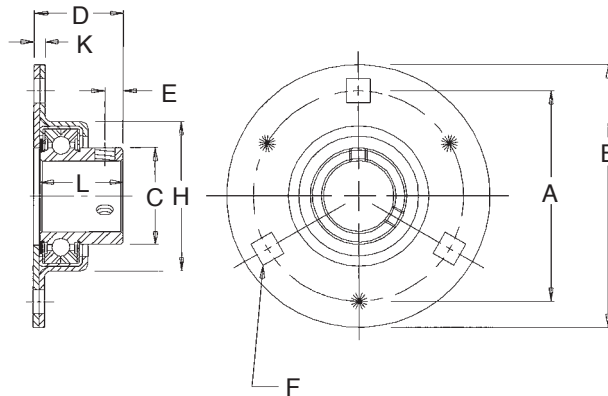
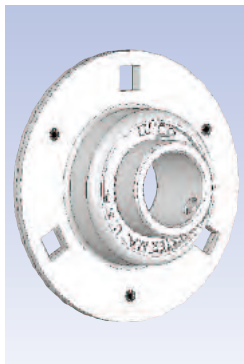
- Available in 2-bolt and 3-bolt round configurations
- Ideal in tight mounting areas
- Inch dimensions
- Moderate Loads
- Max Speed 700 RPM
- Welded backing for extra rigidity
- Various bore configurations available
- Intended for applications which have little or no shaft misalignment
- Zinc and yellow dichromate platings available for corrosion protection
- Bearings are supplied prelubricated
- All units are non-relubricatable



## 2-Bolt Flushmount

BEARING NUMBER	BORE SIZE +.005 -.000	A	B	C	D	E	F	G	H	K	L	WEIGHT IN POUNDS	LUTCO BEARING
21FLM32PP2 21FLM40PP2 21FLM48PP2	1/2 5/8 3/4	2 1/2	3 1/4	1 1/8	1 3/16	1/4	9/32	2 5/16	1 55/64	5/32	1 5/32	.70 .64 .57	56RAX
31FLM48PP2	3/4	2 13/16	3 1/4	1 1/8	1 3/16	1/4	9/32	2 5/8	1 55/64	5/32	1 5/32	.60	
41FLM56PP2 41FLM60PP2 41FLM64PP2	7/8 1 1/16 1"	3	3 3/4	1 3/8	1 9/32	1/4	1 1/32	2 5/16	2 1/8	5/32	1 3/16	.80 .75 .73	64RAX
51FLM72PP2 51FLM76PP2 51FLM80PP2	1 1/8 1 3/16 1 1/4	3 9/16	4 7/16	1 5/8	1 7/16	5/16	1 3/32	3 5/16	2 39/64	5/32	1 11/32	1.27 1.23 1.17	80RAX

SEALING OPTIONS: See page 3



## 3-Bolt Flushmount

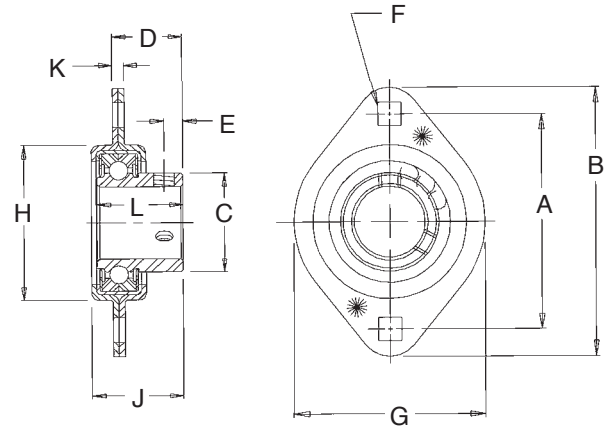
BEARING NUMBER	BORE SIZE +.005 -.000	A	B	C	D	E	F	H	K	L	WEIGHT IN POUNDS	LUTCO BEARING
2FLM32PP2 2FLM40PP2 2FLM48PP2	1/2 5/8 3/4	2 1/2	3 1/4	1 1/8	1 3/16	1/4	9/32	1 55/64	5/32	1 5/32	.78 .72 .65	56RAX
*3FLM48PP2	3/4	2 13/16	3 1/4	1 1/8	1 3/16	1/4	9/32	1 55/64	5/32	1 5/32	.65	
4FLM56PP2 4FLM60PP2 4FLM64PP2	7/8 1 1/16 1"	3	3 3/4	1 3/8	1 9/32	1/4	1 1/32	2 1/8	5/32	1 3/16	.88 .83 .81	64RAX
5FLM72PP2 5FLM76PP2 5FLM80PP2	1 1/8 1 3/16 1 1/4	3 9/16	4 7/16	1 5/8	1 7/16	5/16	1 3/32	2 39/64	5/32	1 11/32	1.35 1.31 1.25	80RAX

\* Check with factory for availability.

SEALING OPTIONS: See page 3

# 2-Bolt and 3-Bolt Centerflange

- Available in 2-bolt and 3-bolt round configurations
- Ideal in tight axial space arrangements
- Inch dimensions
- Moderate loads
- Max Speed 700 RPM
- Intended for applications which have little or no shaft misalignment
- Zinc and Yellow dichromate platings available for corrosion protection
- Bearings are supplied prelubricated
- All units are non-relubricatable

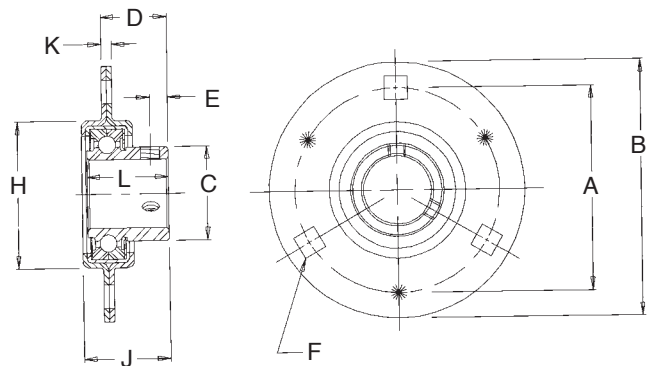
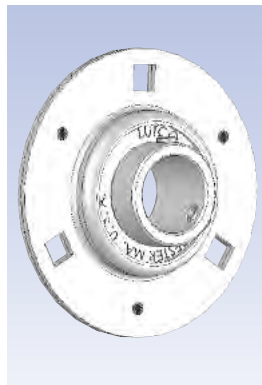


## 2-Bolt Centerflange

BEARING NUMBER	BORE SIZE +.005 -.000	A	B	C	D	E	F	G	H	J	K	L	WEIGHT IN POUNDS	LUTCO BEARING
21FL32PP2 21FL40PP2 21FL48PP2	1/2 5/8 3/4	2 1/2	3 3/4	1 1/8	1 5/16	1/4	9/32	2 5/16	1 55/64	1 7/32	5/32	1 5/32	.70 .64 .57	56RAX
*31FL48PP2	3/4	2 13/16	3 3/4	1 1/8	1 5/16	1/4	9/32	2 5/8	1 55/64	1 7/32	5/32	1 5/32	.60	
41FL56PP2 41FL60PP2 41FL64PP2	7/8 15/16 1"	3	3 3/4	1 3/8	3 1/32	1/4	1 1/32	2 5 1/64	2 1/8	1 1/4	5/32	1 3/16	.80 .75 .73	64RAX
51FL72PP2 51FL76PP2 51FL80PP2	1 1/8 1 3/16 1 1/4	3 9/16	4 7/16	1 5/8	1 5/64	5/16	1 3/32	3 5/16	2 5/8	1 13/32	5/32	1 1 1/32	1.27 1.23 1.17	80RAX

\* Check with factory for availability.

SEALING OPTIONS: See page 3



## 3-Bolt Centerflange

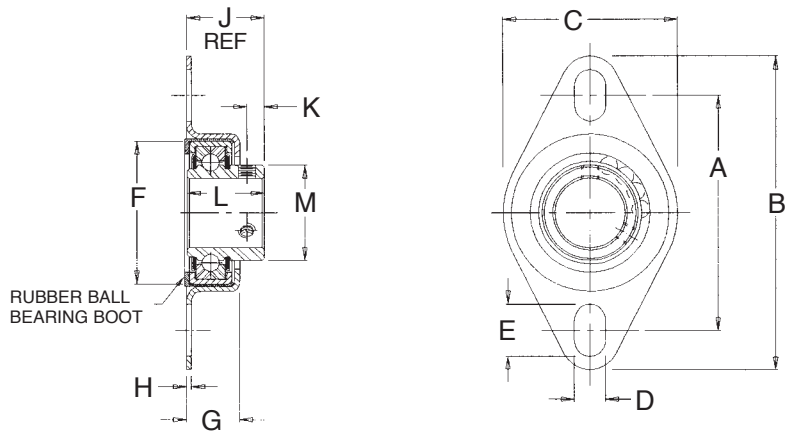
BEARING NUMBER	BORE SIZE +.005 -.000	A	B	C	D	E	F	H	J	K	L	WEIGHT IN POUNDS	LUTCO BEARING
2FL32PP2 2FL40PP2 2FL48PP2	1/2 5/8 3/4	2 1/2	3 3/4	1 1/8	1 5/16	1/4	9/32	1 55/64	1 7/32	5/32	1 5/32	.78 .72 .65	56RAX
*3FL48PP2	3/4	2 13/16	3 3/4	1 1/8	1 5/16	1/4	9/32	1 55/64	1 7/32	5/32	1 5/32	.65	
4FL56PP2 4FL60PP2 4FL64PP2	7/8 15/16 1"	3	3 3/4	1 3/8	3 1/32	1/4	1 1/32	2 1/8	1 1/4	5/32	1 3/16	.88 .83 .81	64RAX
5FL72PP2 5FL76PP2 5FL80PP2	1 1/8 1 3/16 1 1/4	3 9/16	4 7/16	1 5/8	1 5/64	5/16	1 3/32	2 5/8	1 13/32	5/32	1 1 1/32	1.35 1.31 1.25	80RAX

\* Check with factory for availability.

SEALING OPTIONS: See page 3

# Rubber Mount

- Rubber bearing liner reduces noise/vibration
- Intended for applications which have little or no shaft misalignment
- Zinc and yellow dichromate platings available for corrosion protection
- Bearings are supplied prelubricated
- All units are non-relubricatable

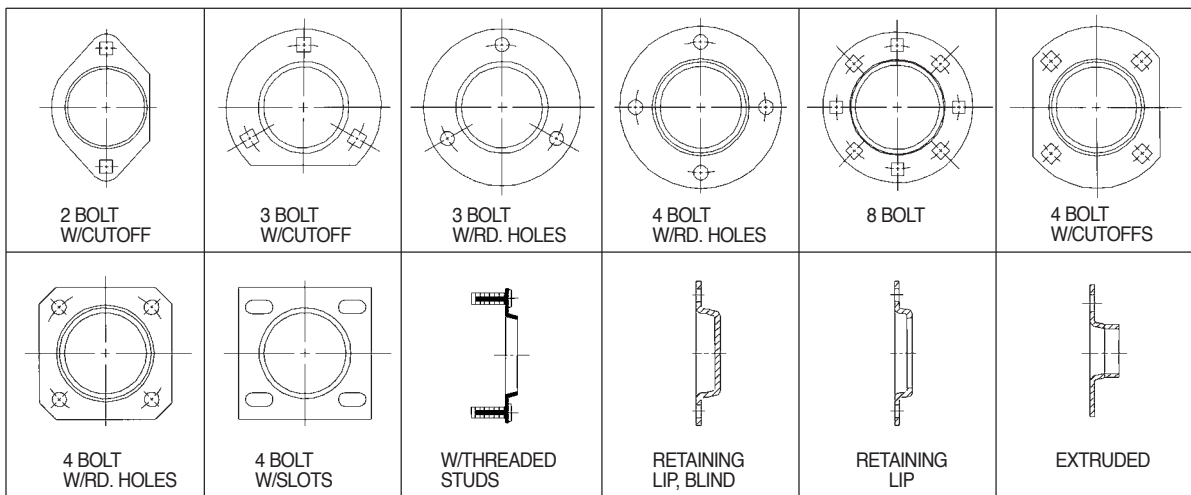


	SHAFT SIZE	A	B	C	D	E	F	G	H	J	K	L	M
SP41FLMXYA008RR SP41FLMXYA010RR	1/2 5/8	3	4 1/8	2	.451	3/4	1.5748 (40MM)	5/8	1/16	15/16	3/16	15/16	31/32
SP45FLMX48PP SP45FLMXYA012RR	3/4	3 3/8	4 1/2	2 1/2	.451	3/4	1.8504 (47MM)	3/4	1/16	1 1/32 1 3/32	1/4 15/64	1 1 1/16	1 9/64
SP45FLMX56PP SP45FLMX64PP	7/8 1	3 3/8	4 1/2	2 1/2	.451	3/4	2.0472 (52MM)	3/4	1/16	1 9/64	9/32	1 3/32	1 1/8
SP45FLMXYA014RR SP45FLMXYA100RR	7/8 1	3 3/8	4 1/2	2 1/2	.451	3/4	2.0472 (52MM)	3/4	1/16	1 9/64	1/4	1 7/64	1 2 1/64

## Special Flangettes

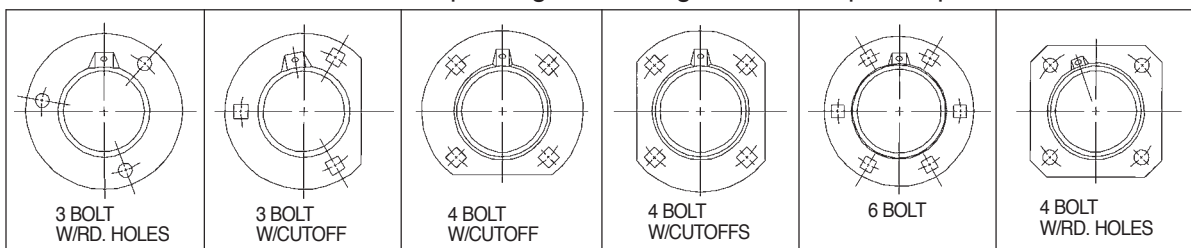
Special flangettes include various configurations, material thicknesses and heat treating specifications.

### Non-Relube



### Special Relube Flangettes

Threaded holes and special grease fittings available upon request.



# General Flangette Information

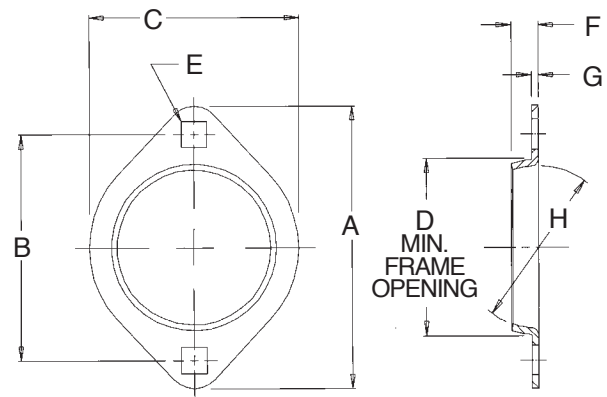
LUTCO is the largest manufacturer of precision flangettes in North America. With an extensive tooling inventory, we are able to offer a wide variety of standard and custom units.

Fit and surface contact between the flangettes and the bearing contribute to the life of the assembly. By allowing the bearing to misalign in the housing under a predetermined torque, premature failure can be eliminated. Sophisticated measuring and torque rating equipment are employed to provide statistical process control, through charting and minimum 1.0 CPK values.

For more specific information on the processes utilized, please contact the factory.

## 2 Bolt Self-Aligning Flangettes

- Allows for initial bearing self alignment
- Ideal in applications with space constraints
- Most sizes available in torque rated versions
- Zinc and yellow dichromate platings available for corrosion protection
- Accommodates industry standard metric spherical OD bearings
- All units are non-relubricatable



PART NUMBER	Shaft DIA (inches)	A	B	C	D	E	F	G	H	RADIAL LOAD LBS. N	UNIT WT. LBS.	LUTCO BEARING
		in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	nom. mm			
<b>2 BOLT</b>												
35MST	1/2, 9/16, 5/8	2 7/8 73.0	2 1/2 63.50	2 5/16 58.74	1 5/8 41.28	9/32 7.14	7/32 5.54	0.054 1.37	35	280 1237	0.06	
35MST-3	1/2, 9/16, 5/8	2 7/8 73.0	2 1/2 63.50	2 5/16 58.74	1 5/8 41.28	25/64 9.93	7/32 5.54	.054 1.37	35	280 1237	0.05	
40MST	1/2, 9/16, 5/8	3 1/16 80.96	2 1/2 63.50	2 5/16 58.74	1 7/8 47.63	9/32 7.14	9/32 7.14	0.075 1.905	40	600 2650	0.08	
47MST	3/4	3 9/16 90.49	2 19/16 71.44	2 5/8 66.68	2 3/16 55.56	1 1/32 8.73	5/16 7.94	0.083 2.11	47	700 3100	0.10	M59SR
52MST	13/16, 7/8, 15/16, 1	3 3/4 95.25	3 76.20	2 51/64 71.04	2 3/8 60.33	1 1/32 8.73	1 1/32 8.73	0.083 2.11	52	800 3550	0.11	M65SR
52MST-3	13/16, 7/8, 15/16, 1	3 3/4 95.25	3 76.20	2 51/64 71.04	2 3/8 60.33	1 1/32 8.73	3/8 9.53	.134 3.40	52	1000 4450	0.21	M65SR
62MST	1 1/16, 1 1/8, 1 3/16, 1 1/4	4 7/16 112.71	3 3/16 90.49	3 5/16 84.14	2 13/16 71.44	1 9/32 10.31	3/8 9.53	0.104 2.64	62	1100 4900	0.33	M78SR
62MST-2	1 1/16, 1 1/8, 1 3/16, 1 1/4	4 7/16 112.71	3 3/16 90.49	3 5/16 84.14	2 13/16 71.44	1 3/32 10.31	27/64 10.72	.134 3.40	62	1400 6200	0.38	M78SR
72MST	1 1/4, 1 5/16, 1 3/8, 1 1/2	4 15/16 125.41	3 15/16 100.01	3 11/16 93.66	3 3/16 80.96	1 9/32 10.31	1 9/32 10.31	0.104 2.64	72	1400 6220	0.40	

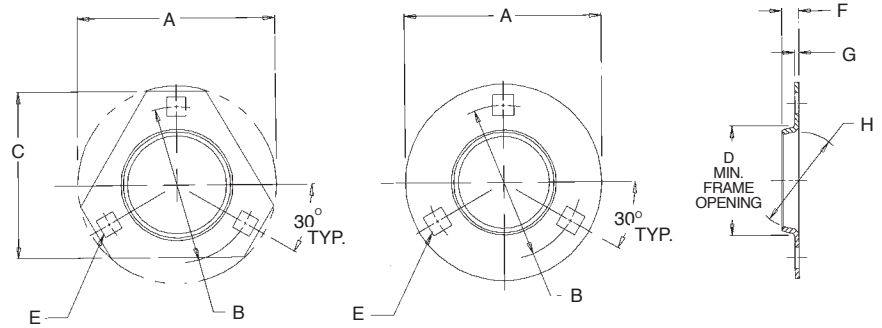
For Torque rated flangettes, add the prefix "T".  
 Add, "ZP" for standard zinc plate and "YZP" for yellow dichromate finishes.  
 Special designs available upon request.



# 3 Bolt Self-Aligning Flangettes

Many LUTCO customers have switched from the 3 bolt round style to the 3 bolt triangular. The triangular design is more cost effective and the radial load ratings are equivalent.

- Allows for initial bearing self alignment
- Ideal in applications with space constraints
- Most sizes available in torque rated versions
- Zinc and yellow dichromate platings available for corrosion protection
- Accommodates industry standard metric spherical OD bearings
- All units are non-relubricatable



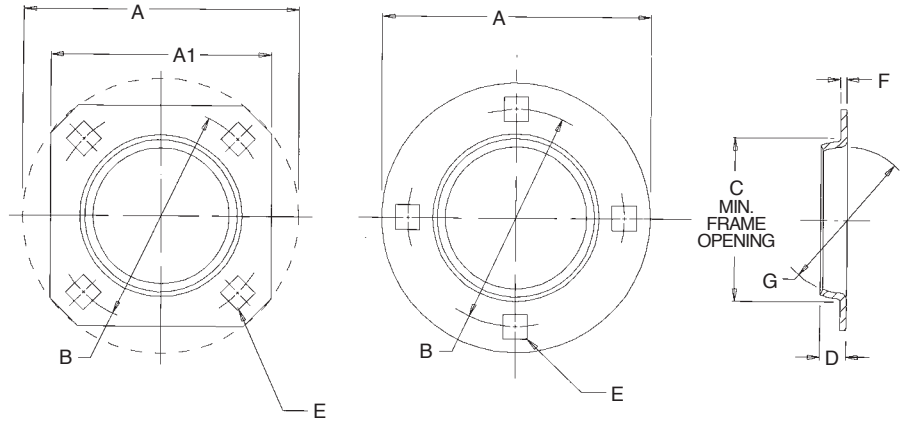
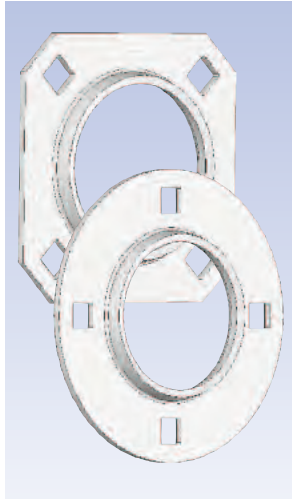
PART NUMBER	Shaft DIA (inches)	A	B	C	D	E	F	G	H	RADIAL LOAD LBS. N	UNIT WT. LBS.	LUTCO BEARING
		in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	nom. mm			
<b>3 BOLT TRIANGULAR</b>												
40MSTR	1/2, 9/16, 5/8	3 9/32 83.34	2 1/2 63.50	2 23/32 69.06	1 7/8 47.63	9/32 7.14	9/32 7.14	0.075 1.905	40	600 2650	0.09	
47MSTR	3/4	3 9/16 90.49	2 13/16 71.44	3 76.2	2 3/16 55.56	1 1/32 8.73	5/16 7.94	0.083 2.11	47	700 3100	0.11	M59SR
52MSTR	13/16, 7/8, 15/16, 1	3 3/4 95.25	3 76.20	3 5/32 54.76	2 3/8 60.33	1 1/32 8.73	5/16 8.73	0.083 2.11	52	800 3550	0.13	M65SR
T62MSTR	1 1/16, 1 1/8, 1 3/16, 1 1/4	4 7/16 112.71	3 9/16 90.49	3 5/8 92.08	2 13/16 71.44	1 3/32 10.31	1 1/32 8.73	0.104 2.64	62	1100 4900	0.19	M78SR
T72MSTR	1 1/4, 1 5/16, 1 3/8, 1 7/16	5 1/32 127.79	3 15/16 100.01	4 3/16 106.36	3 3/16 80.96	1 13/32 10.31	3/8 9.53	0.104 2.64	72	1400 6300	0.25	
<b>3 BOLT ROUND</b>												
40MS	1/2, 9/16, 5/8	3 9/16 80.96	2 1/2 63.50	—	1 7/8 47.63	9/32 7.14	9/32 7.14	0.075 1.905	40	600 2650	0.15	
47MS	3/4	3 9/16 90.49	2 13/16 71.44	—	2 3/16 55.56	1 1/32 8.73	5/16 7.94	0.083 2.11	47	700 3100	0.19	M59SR
52MS	13/16, 7/8, 15/16, 1	3 3/4 95.25	3 76.20	—	2 3/8 60.33	1 1/32 8.73	3/8 9.53	0.083 2.11	52	800 3550	0.20	M65SR
52MS-2	13/16, 7/8, 15/16, 1	3 3/4 95.25	3 76.20	—	2 3/8 60.33	1 1/32 8.73	3/8 9.53	0.104 2.64	52	1000 4450	0.24	M65SR
62MS	1 1/16, 1 1/8, 1 3/16, 1 1/4	4 7/16 112.71	3 9/16 90.49	—	2 13/16 71.44	1 3/32 10.31	3/8 9.53	0.104 2.64	62	1100 4900	0.28	M78SR
72MS	1 1/4, 1 5/16, 1 3/8, 1 7/16	4 13/16 122.24	3 15/16 100.01	—	3 3/16 80.96	1 13/32 10.31	7/16 11.11	0.104 2.64	72	1400 6220	0.54	

For Torque rated flangettes, add the prefix "T".  
 Add, "ZP" for standard zinc plate and "YZP" for yellow dichromate finishes.  
 Special designs available upon request.

# 4 Bolt Self-Aligning Flangettes

Many LUTCO customers have switched from the round to the square design. The square design is more cost effective and the load ratings are equivalent.

- Allows for initial bearing self alignment
- Ideal in applications with space constraints
- Most sizes available in torque rated versions
- Zinc and yellow dichromate platings available for corrosion protection
- Accommodates industry standard metric spherical OD bearings
- All units are non-relubricatable



PART NUMBER	Shaft DIA (inches)	A	A1	B	C	D	E	F	G	RADIAL LOAD LBS. N	UNIT WT. LBS.
		in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	nom. mm		
<b>4 BOLT SQUARE</b>											
T80MS-S	1½, 1 <sup>9</sup> / <sub>16</sub>	5 <sup>7</sup> / <sub>8</sub> 149.23	4 <sup>3</sup> / <sub>4</sub> 120.65	4 <sup>11</sup> / <sub>16</sub> 119.06	3 <sup>9</sup> / <sub>16</sub> 90.49	9 <sup>1</sup> / <sub>16</sub> 14.28	1 <sup>7</sup> / <sub>32</sub> 13.49	0.134 3.40	80	1700 7500	0.58
T80MS-S4	1½, 1 <sup>9</sup> / <sub>16</sub>	5 <sup>7</sup> / <sub>8</sub> 149.23	4 <sup>3</sup> / <sub>4</sub> 120.65	4 <sup>11</sup> / <sub>16</sub> 119.06	3 <sup>9</sup> / <sub>16</sub> 90.49	9 <sup>1</sup> / <sub>16</sub> 14.28	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	80	1900 8500	0.68
T85MS-S	1 <sup>5</sup> / <sub>8</sub> , 1 <sup>11</sup> / <sub>16</sub> , 1 <sup>3</sup> / <sub>4</sub>	5 <sup>7</sup> / <sub>8</sub> 149.23	4 <sup>3</sup> / <sub>4</sub> 120.65	4 <sup>3</sup> / <sub>4</sub> 120.65	3 <sup>3</sup> / <sub>4</sub> 95.25	1 <sup>9</sup> / <sub>32</sub> 15.09	1 <sup>7</sup> / <sub>32</sub> 13.49	0.134 3.40	85	1700 7500	0.56
T85MS-S5	1 <sup>5</sup> / <sub>8</sub> , 1 <sup>11</sup> / <sub>16</sub> , 1 <sup>3</sup> / <sub>4</sub>	5 <sup>7</sup> / <sub>8</sub> 149.23	4 <sup>3</sup> / <sub>4</sub> 120.65	4 <sup>3</sup> / <sub>4</sub> 120.65	3 <sup>3</sup> / <sub>4</sub> 95.25	5 <sup>5</sup> / <sub>8</sub> 15.88	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	85	1900 8500	0.66
87MS-S	Square bore 7 <sup>7</sup> / <sub>8</sub>	5 <sup>7</sup> / <sub>8</sub> 149.23	4 <sup>3</sup> / <sub>4</sub> 120.65	4 <sup>3</sup> / <sub>4</sub> 120.65	3 <sup>7</sup> / <sub>8</sub> 98.43	5 <sup>5</sup> / <sub>8</sub> 15.88	1 <sup>7</sup> / <sub>32</sub> 13.49	0.134 3.40	87	1700 7500	0.56
90MS-S	1 <sup>13</sup> / <sub>16</sub> , 1 <sup>7</sup> / <sub>8</sub> , 1 <sup>15</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>2</sub> 165.10	5 <sup>1</sup> / <sub>4</sub> 133.35	5 127.00	4 101.60	1 <sup>1</sup> / <sub>2</sub> 12.70	1 <sup>7</sup> / <sub>32</sub> 12.70	0.149 3.78	90	2300 10200	0.72
* 100MS-S	2, 2 <sup>1</sup> / <sub>16</sub> , 2 <sup>1</sup> / <sub>8</sub> , 2 <sup>3</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub> 171.45	6 152.40	5 <sup>7</sup> / <sub>16</sub> 138.11	4 <sup>7</sup> / <sub>16</sub> 112.71	9 <sup>1</sup> / <sub>16</sub> 14.28	1 <sup>7</sup> / <sub>32</sub> 13.49	.149 3.78	100	1700 7500	0.94
<b>4 BOLT ROUND</b>											
80MS	1½, 1 <sup>9</sup> / <sub>16</sub>	5 <sup>13</sup> / <sub>16</sub> 147.64	—	4 <sup>11</sup> / <sub>16</sub> 119.06	3 <sup>9</sup> / <sub>16</sub> 90.49	1 <sup>3</sup> / <sub>32</sub> 10.32	1 <sup>7</sup> / <sub>32</sub> 13.49	0.134 3.40	80	2100 9500	0.70
80MS-4	1½, 1 <sup>9</sup> / <sub>16</sub>	5 <sup>13</sup> / <sub>16</sub> 147.64	—	4 <sup>11</sup> / <sub>16</sub> 119.06	3 <sup>9</sup> / <sub>16</sub> 90.49	1 <sup>3</sup> / <sub>32</sub> 10.32	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	80	2100 9500	0.72
85MS	1 <sup>5</sup> / <sub>8</sub> , 1 <sup>11</sup> / <sub>16</sub> , 1 <sup>3</sup> / <sub>4</sub>	5 <sup>7</sup> / <sub>8</sub> 149.23	—	4 <sup>3</sup> / <sub>4</sub> 120.65	3 <sup>3</sup> / <sub>4</sub> 95.25	3 <sup>1</sup> / <sub>64</sub> 12.29	1 <sup>7</sup> / <sub>32</sub> 13.49	0.134 3.40	85	2100 9500	0.70
90MS	1 <sup>13</sup> / <sub>16</sub> , 1 <sup>7</sup> / <sub>8</sub> , 1 <sup>15</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>8</sub> 155.58	—	5 127.00	4 101.60	1 <sup>1</sup> / <sub>2</sub> 12.70	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	90	2400 10500	0.75
100MS	2, 2 <sup>1</sup> / <sub>16</sub> , 2 <sup>1</sup> / <sub>8</sub> , 2 <sup>3</sup> / <sub>16</sub>	6 <sup>9</sup> / <sub>16</sub> 166.69	—	5 <sup>7</sup> / <sub>16</sub> 138.11	4 <sup>7</sup> / <sub>16</sub> 112.71	9 <sup>1</sup> / <sub>16</sub> 14.28	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	100	2900 12500	0.85

\* Check with factory for availability  
 For Torque rated flanges, add the prefix "T".  
 Add, "ZP" for standard zinc plate and "YZP" for yellow dichromate finishes.  
 Special designs available upon request.

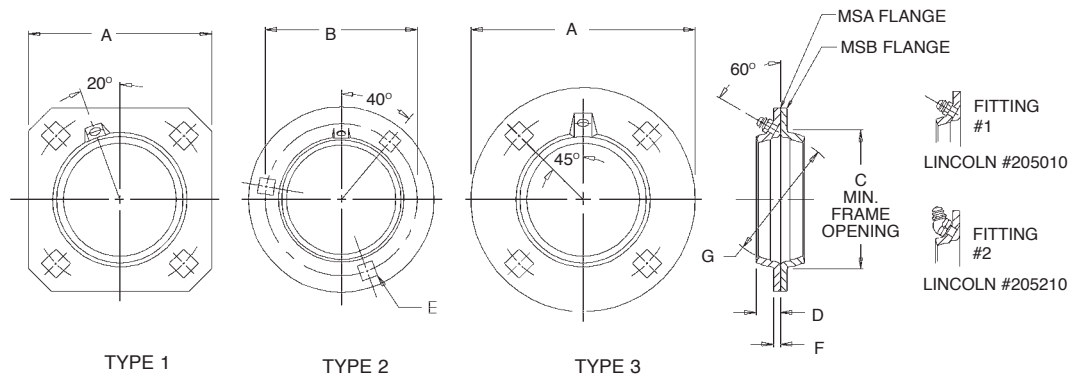
# Relube Self-Aligning Flangettes

Flangettes MSA and MSA-S have a grease fitting and a grease groove in the bore which allows the grease to enter the holes in the outer ring of the bearing.

Flangettes MSB and MSB-S, contain a similar grease groove in the bore for the same purpose.

With the grease groove in both flangettes, the bearing can be reversed in the assembly and still be relubricated.

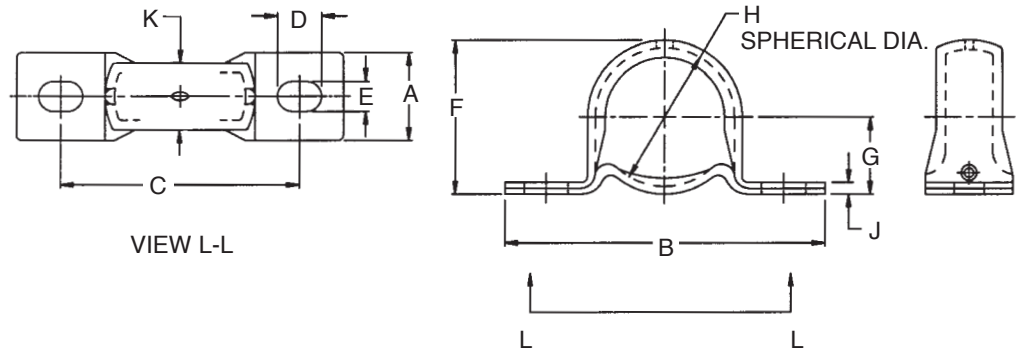
- Allows for initial bearing self alignment
- Designs come in both round and square types
- Most sizes available in torque rated versions
- Various grease fitting types available
- Zinc and yellow dichromate platings available for corrosion protection
- Accommodates industry standard metric spherical OD bearings



PART NUMBER	Shaft DIA (inches)	A	B	C	D	E	F	G	RADIAL LOAD LBS. N	UNIT WT. LBS.	TYPE	FITTING #	LUTCO BEARING
		in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	nom. mm					
G52MSA									800	0.25	#2	#1	
G52MSA-3	1 <sup>9</sup> / <sub>16</sub> , 7 <sup>7</sup> / <sub>8</sub> , 1 <sup>5</sup> / <sub>16</sub> , 1	3 <sup>3</sup> / <sub>4</sub> 95.25	3 76.20	2 <sup>3</sup> / <sub>8</sub> 60.33	1 <sup>9</sup> / <sub>32</sub> 10.32 3 <sup>3</sup> / <sub>8</sub> 9.53 1 <sup>9</sup> / <sub>32</sub> 10.32	1 <sup>1</sup> / <sub>32</sub> 8.73	0.083 0.104 2.64 0.083 2.11	52	1000 4550 800 3550	0.31 0.20	#2 #2	#2 Gr. Rec.	M65SR
G62MSA					3 <sup>3</sup> / <sub>8</sub> 9.53 2 <sup>7</sup> / <sub>64</sub> 10.72		0.104 2.64 0.134 3.4		1100 4900 1450 6200	0.33 0.43	#2 #2	#1 #1	
G62MSA-3					3 <sup>3</sup> / <sub>8</sub> 9.53 2 <sup>7</sup> / <sub>64</sub> 10.72		0.104 2.64 0.134 3.4		1100 4900 1450 6200	0.33 0.43	#2 #2	#2 #2	M78SR
G62MSA-5	1 <sup>1</sup> / <sub>16</sub> , 1 <sup>1</sup> / <sub>8</sub> , 1 <sup>3</sup> / <sub>16</sub> , 1 <sup>1</sup> / <sub>4</sub>	4 <sup>7</sup> / <sub>16</sub> 112.71	3 <sup>9</sup> / <sub>16</sub> 90.49	2 <sup>27</sup> / <sub>32</sub> 72.24	3 <sup>3</sup> / <sub>8</sub> 9.53 2 <sup>7</sup> / <sub>64</sub> 10.72	1 <sup>3</sup> / <sub>32</sub> 10.32	0.104 2.64 0.134 3.4	62	1100 4900 1450 6200	0.33 0.43	#2 #2	#2 #2	
G62MSA-6					3 <sup>3</sup> / <sub>8</sub> 9.53 2 <sup>7</sup> / <sub>64</sub> 10.72		0.104 2.64 0.134 3.4		1100 4900 1450 6200	0.28 0.38	#2 #2	Gr. Rec. Gr. Rec.	
G62MSB					3 <sup>3</sup> / <sub>8</sub> 9.53 2 <sup>7</sup> / <sub>64</sub> 10.72		0.104 2.64 0.134 3.4		1100 4900 1450 6200	0.28 0.38	#2 #2	Gr. Rec. Gr. Rec.	
G62MSB-3					3 <sup>3</sup> / <sub>8</sub> 9.53 2 <sup>7</sup> / <sub>64</sub> 10.72		0.104 2.64 0.134 3.4		1100 4900 1450 6200	0.28 0.38	#2 #2	Gr. Rec. Gr. Rec.	
G72MSA					1 <sup>5</sup> / <sub>32</sub> 11.91		0.134 3.4		1400 6220	0.59 0.59 0.54	#2 #2 #2	#1 #2 Gr. Rec.	
G72MSA-2	1 <sup>1</sup> / <sub>4</sub> , 1 <sup>9</sup> / <sub>16</sub> , 1 <sup>3</sup> / <sub>8</sub> , 1 <sup>7</sup> / <sub>16</sub>	4 <sup>13</sup> / <sub>16</sub> 122.24	3 <sup>15</sup> / <sub>16</sub> 100.01	3 <sup>7</sup> / <sub>32</sub> 81.74	1 <sup>5</sup> / <sub>32</sub> 11.91	1 <sup>3</sup> / <sub>32</sub> 10.32	0.134 3.4	72	1400 6220	0.59 0.59 0.54	#2 #2 #2	#1 #2 Gr. Rec.	
G72MSB					1 <sup>5</sup> / <sub>32</sub> 11.91		0.134 3.4		1400 6220	0.59 0.59 0.54	#2 #2 #2	#1 #2 Gr. Rec.	
G80MSA					1 <sup>9</sup> / <sub>32</sub> 15.09		0.149 3.78		1700 7500	0.75 0.75 0.70	#3 #3 #3	#1 #2 Gr. Rec.	
G80MSA-2	1 <sup>1</sup> / <sub>2</sub> , 1 <sup>9</sup> / <sub>16</sub>	5 <sup>13</sup> / <sub>16</sub> 147.64	4 <sup>11</sup> / <sub>16</sub> 119.06	3 <sup>9</sup> / <sub>16</sub> 90.49	1 <sup>9</sup> / <sub>32</sub> 15.09	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	80	1700 7500	0.75 0.75 0.70	#3 #3 #3	#1 #2 Gr. Rec.	
G80MSB					1 <sup>9</sup> / <sub>32</sub> 15.09		0.149 3.78		1700 7500	0.75 0.75 0.70	#3 #3 #3	#1 #2 Gr. Rec.	
TG80MSA-S					1 <sup>9</sup> / <sub>32</sub> 15.09		0.149 3.78		1700 7500	0.65 0.65 0.60	#1 #1 #1	#1 #2 Gr. Rec.	
TG80MSA-S2	1 <sup>1</sup> / <sub>2</sub> , 1 <sup>9</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>4</sub> 120.65	4 <sup>11</sup> / <sub>16</sub> 119.06	3 <sup>9</sup> / <sub>16</sub> 90.40	1 <sup>9</sup> / <sub>32</sub> 15.09	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	80	1700 7500	0.65 0.65 0.60	#1 #1 #1	#1 #2 Gr. Rec.	
TG80MSB-S					1 <sup>9</sup> / <sub>32</sub> 15.09		0.149 3.78		1700 7500	0.65 0.65 0.60	#1 #1 #1	#1 #2 Gr. Rec.	
G85MSA					5 <sup>7</sup> / <sub>8</sub> 15.88		0.149 3.78		1700 7500	0.75 0.75 0.70	#3 #3 #3	#1 #2 Gr. Rec.	
G85MSA-3	1 <sup>5</sup> / <sub>8</sub> , 1 <sup>11</sup> / <sub>16</sub> , 1 <sup>3</sup> / <sub>4</sub>	5 <sup>7</sup> / <sub>8</sub> 149.23	4 <sup>3</sup> / <sub>4</sub> 120.65	3 <sup>3</sup> / <sub>4</sub> 95.25	5 <sup>7</sup> / <sub>8</sub> 15.88	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	85	1700 7500	0.75 0.75 0.70	#3 #3 #3	#1 #2 Gr. Rec.	
G85MSB					5 <sup>7</sup> / <sub>8</sub> 15.88		0.149 3.78		1700 7500	0.75 0.75 0.70	#3 #3 #3	#1 #2 Gr. Rec.	
G85MSA-S					1 <sup>9</sup> / <sub>32</sub> 15.09		0.149 3.78		1700 7500	0.65 0.65 0.60	#1 #1 #1	#1 #2 Gr. Rec.	
G85MSA-S2	1 <sup>5</sup> / <sub>8</sub> , 1 <sup>11</sup> / <sub>16</sub> , 1 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub> 120.65	4 <sup>3</sup> / <sub>4</sub> 120.65	3 <sup>3</sup> / <sub>4</sub> 95.25	1 <sup>9</sup> / <sub>32</sub> 15.09	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	85	1700 7500	0.65 0.65 0.60	#1 #1 #1	#1 #2 Gr. Rec.	
G85MSB-S					1 <sup>9</sup> / <sub>32</sub> 15.09		0.149 3.78		1700 7500	0.65 0.65 0.60	#1 #1 #1	#1 #2 Gr. Rec.	
G90MSA	1 <sup>13</sup> / <sub>16</sub> , 1 <sup>7</sup> / <sub>8</sub> , 1 <sup>15</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>8</sub> 155.58	5 127.00	4 101.60	1 <sup>1</sup> / <sub>2</sub> 12.70	1 <sup>7</sup> / <sub>32</sub> 13.49	0.164 4.16	90	1900 8500	0.80 0.75	#3 #3	#1 Gr. Rec.	
G90MSB					1 <sup>1</sup> / <sub>2</sub> 12.70		0.164 4.16		1900 8500	0.80 0.75	#3 #3	#1 Gr. Rec.	
G90MSA-S2					1 <sup>1</sup> / <sub>2</sub> 12.70		0.149 3.78		1900 8500	0.85 0.85 0.80	#1 #1 #1	#2 #1 Gr. Rec.	
G90MSA-S4	1 <sup>3</sup> / <sub>16</sub> , 1 <sup>7</sup> / <sub>8</sub> , 1 <sup>15</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>4</sub> 133.35	5 127.00	4 101.60	1 <sup>1</sup> / <sub>2</sub> 12.70	1 <sup>7</sup> / <sub>32</sub> 13.49	0.149 3.78	90	1900 8500	0.85 0.85 0.80	#1 #1 #1	#2 #1 Gr. Rec.	
G90MSB-S2					1 <sup>1</sup> / <sub>2</sub> 12.70		0.149 3.78		1900 8500	0.85 0.85 0.80	#1 #1 #1	#2 #1 Gr. Rec.	
G100MSA	2, 2 <sup>1</sup> / <sub>16</sub> , 2 <sup>1</sup> / <sub>8</sub>	6 <sup>9</sup> / <sub>16</sub> 166.69	5 <sup>7</sup> / <sub>16</sub> 138.11	4 <sup>7</sup> / <sub>16</sub> 112.71	1 <sup>9</sup> / <sub>32</sub> 15.09	1 <sup>7</sup> / <sub>32</sub> 13.49	0.164 4.16	100	2300 10200	0.90 0.90 0.85	#3 #3 #3	#1 #2 Gr. Rec.	
G100MSA-2					1 <sup>9</sup> / <sub>32</sub> 15.09		0.164 4.16		2300 10200	0.90 0.90 0.85	#3 #3 #3	#1 #2 Gr. Rec.	
G100MSB	2 <sup>1</sup> / <sub>8</sub> , 2 <sup>9</sup> / <sub>16</sub>	6 <sup>9</sup> / <sub>16</sub> 166.69	5 <sup>7</sup> / <sub>16</sub> 138.11	4 <sup>7</sup> / <sub>16</sub> 112.71	1 <sup>9</sup> / <sub>32</sub> 15.09	1 <sup>7</sup> / <sub>32</sub> 13.49	0.164 4.16	100	2300 10200	0.90 0.90 0.85	#3 #3 #3	#1 #2 Gr. Rec.	

# Stamped Strap Mount Pillow Blocks

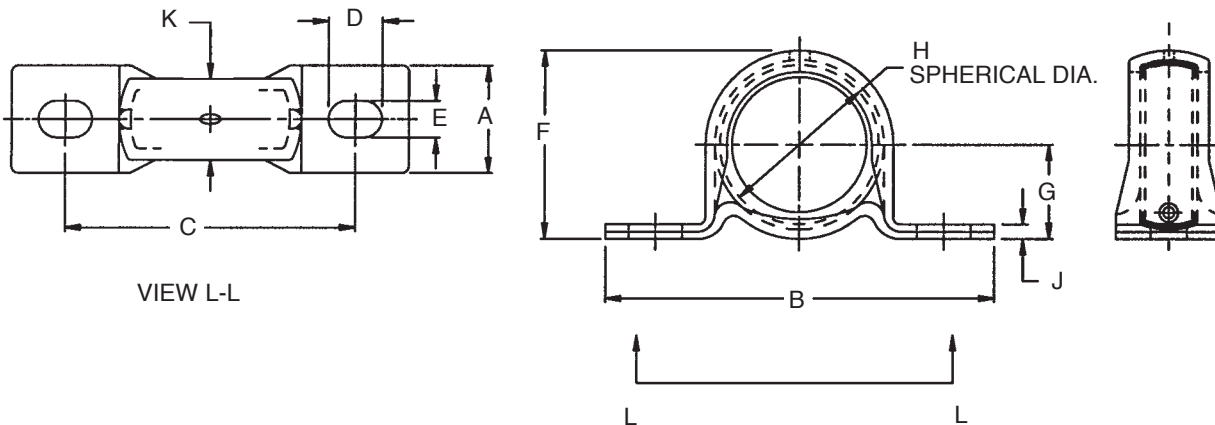
- Two piece housings
- Zinc and yellow dichromate platings available for corrosion protection
- Accommodates industry standard metric spherical OD bearings
- Available with rubber grommet to dampen noise and vibration while providing quiet operation
- All units are non-relubricatable



Part Number	Shaft DIA (inches)	A	B	C	D	E	F	G	H	J	K	LUTCO BEARING
40PB	1/2, 9/16, 5/8	1"	3 5/8	2 11/16	1/2	11/32	1 3/4	7/8	40 mm	.133	13/16	
47PB	3/4	1"	4 5/32	3	1/2	13/32	2"	1"	47 mm	.156	29/32	M59SR
52PB	13/16, 7/8, 15/16, 1	1 1/8	4 1/2	3 3/8	9/16	13/32	2 7/32	1 1/8	52 mm	.208	31/32	M65SR
62PB	1 1/16, 1 1/8, 1 3/16, 1 1/4	1 1/4	4 7/8	3 3/4	9/16	13/32	2 5/8	1 11/32	62 mm	.238	1 3/16	M78SR
72PB	1 1/4, 1 5/16, 1 3/8, 1 7/16	1 5/16	5 3/4	4 1/4	3/4	17/32	3 1/8	1 9/16	62 mm	.238	1 7/32	

PB strap mount pillow blocks are an economical alternative to heavier cast units. Generally used for light duty applications, the unit consists of a two piece separable stamped steel housing with spherical bearing seat.

## Stamped Strap Mount Pillow Blocks Rubber Mount



Part Number	Shaft DIA (inches)	A	B	C	D	E	F	G	H	J	K	LUTCO BEARING
47PBR	1/2, 9/16, 5/8	1"	4 5/32	3	1/2	13/32	2"	1"	40 mm	.156	29/32	
52PBR	3/4	1 1/8	4 1/2	3 3/8	9/16	13/32	2 7/32	1 1/8	47 mm	.208	31/32	M59SR
62PBR	13/16, 7/8, 15/16, 1	1 1/4	4 7/8	3 3/4	9/16	13/32	2 5/8	1 11/32	62 mm	.238	1 3/16	M65SR
72PBR	1 1/16, 1 1/8, 1 3/16, 1 1/4	1 5/16	5 3/4	4 1/8	3/4	17/32	3 1/8	1 9/16	62 mm	.238	1 7/32	M78SR

PBR assemblies have a rubber bearing liner for use in applications requiring minimum vibration and noise proof mounting.

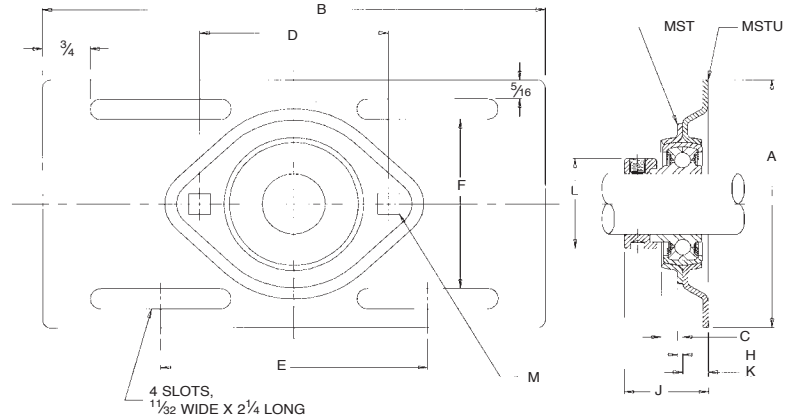
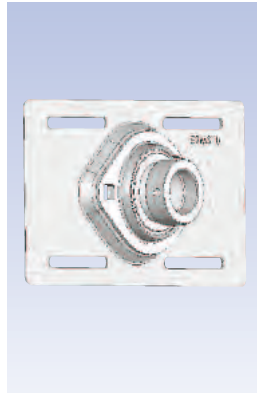
# Stamped Take-Up Units

## MSTU Series

The MSTU pressed steel take-up unit is a light duty, economical assembly for belt tightening and shaft adjustment. It is adaptable either to guide-type or bolt-type methods of mounting.

The MSTU take-up unit requires a standard 2 bolt flangette and is designed to be used with a spherical bearing. Zinc plating is standard on this unit.

- Adjustable to either guide-type or bolt-type method of mounting
- Made to pair with mating 2-bolt flangettes
- Zinc plating is standard corrosion protection
- Accommodates industry standard metric spherical OD bearings
- All units are non-relubricatable



Part Number	Shaft DIA (inches)	INCHES											Radial Load Rating	Unit Wt.	Mating Flangette No.	LUTCO BEARING
		A	B	C	D	E	F	H	J	K	L	M				
52 MSTU	13/16, 7/8, 15/16, 1	4 1/8	8	1 1/32	3	4 1/4	2 13/16	.083	1 5/16	1 3/32	1 1/2	1 1/32	800	1.38	52	M65SR
62 MSTU	1 1/16, 1 1/8, 1 3/16, 1 1/4	4 1/2	8	3/8	3 9/16	4 1/4	3 3/16	.104	1 15/32	7/16	1 3/4	1 3/32	1100	1.93	62	M78SR

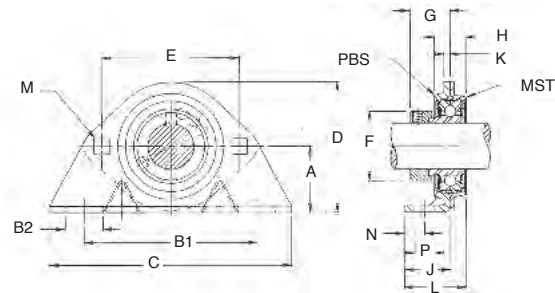
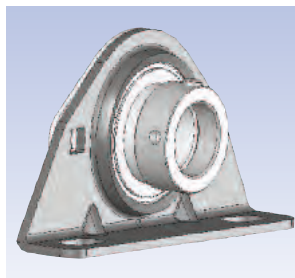
MSTU requires a two bolt flangette as noted. (Must be ordered separately.)

## Stamped Pillow Block Stand

PBS stamped pillow blocks offer an economical way to meet light duty, moderate speed requirements. Heavy gage, zinc plated steel provides sturdy construction.

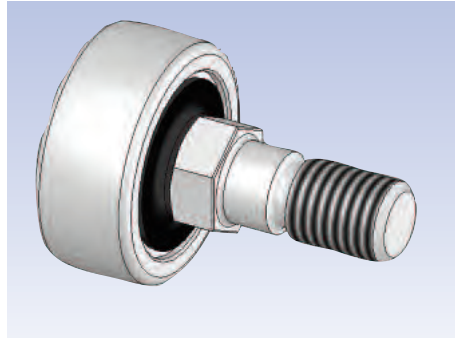
PBS units are made with the same precision bearing seat as furnished with the flangettes to provide an accurate bearing to housing fit. PBS requires a two bolt flangette as noted. Must be ordered separately.

- Made to pair with mating 2-bolt flangette
- Zinc plating is standard corrosion protection
- Accommodates industry standard metric spherical OD bearings
- All units are non-relubricatable



Part Number	Shaft DIA (inches)	INCHES														Mating Flangette No.	Radial Load Lbs.	
		A	B1	B2	C	D	E	F	G	H	J	K	L	M	N			P
40PBS	1/2, 9/16, 5/8	1 3/16	3 5/8	5/8	4 7/8	2 1/32	2 1/2	1 1/8	7/8	9/16	1"	.104	1 9/32	9/32	1 3/32	1 3/32	40	750
47PBS	3/4	1 5/16	3 13/16	5/8	5	2 5/8	2 13/16	1 5/8	59/64	2 1/32	1 1/16	.119	1 3/8	1 1/32	1 5/32	1 3/32	47	900
52PBS	13/16, 7/8, 15/16, 1	1 7/16	3 3/4	1 3/16	5 1/4	2 27/32	3	1 1/2	59/64	1 1/16	1"	.134	1 11/32	1 1/32	7/16	7/16	52	1000
62PBS	1 1/16, 1 1/8, 1 3/16, 1 1/4	1 11/16	4 11/16	7/8	6 1/4	3 11/32	3 9/16	1 47/64	1 3/64	23/32	1 3/16	.134	1 9/16	1 3/32	9/16	9/16	62	1400
72PBS	1 1/4, 1 3/16, 1 3/8, 1 1/2	1 7/8	5	7/8	6 1/2	3 23/32	3 15/16	2 1/8	1 5/32	55/64	1 25/64	.149	1 51/64	1 3/32	37/64	9/16	72	1750

# Unground Ball Cam Followers – Stud Type



*Actual Size: 1.5" OD, 2" length*

Lutco unground ball cam followers are an economical alternative to more expensive precision designs. A large number of applications utilize precision or ground cam followers when unground designs can provide the same rugged durability at a substantial cost savings.

## Construction

Cam followers consist of either one or two complements of balls, machined stud, roll burnished outer and inner raceways and a stamped dust shield.

These units are made with either a cylindrical or spherical OD to accommodate any angular misalignment. Ball bearing construction allows for appreciably more axial loading than equivalent sized roller bearing designs. The integral stud permits cantilever mounting.

## Design Options

Stud mounted cam followers are designed with features such as internal hex sockets or screwdriver slots in the end of the stud to prevent it from turning when the nut is being tightened. Stud shank modifications can also be incorporated into the designs. Heavy duty seals are utilized for harsh environment applications.

## Lubrication

All cam followers are packed with Alpha 2000-HD premium grease. The units are ready for no maintenance operation under most operating conditions. Special greases are available upon request.

## Surface Treatment

Upon request, cam followers may be obtained with zinc plating or black oxide finish on the rolling surface or stud. For these and other modifications, please consult Lutco Engineering.

## Applications

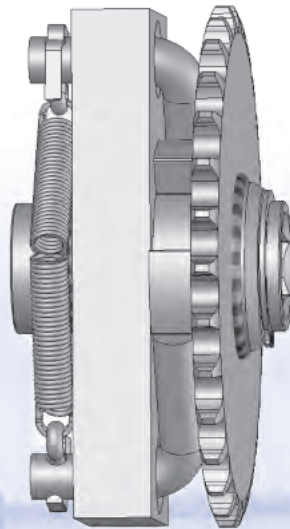
Lutco cam followers are used in a variety of agricultural, material handling and general industry applications.

## Custom Cam Followers

Dimensionally unique cam followers can be obtained if quantities permit economical production. Lutco cam followers are offered in sizes up to 2" OD and 3.5" stud length.

## GATHERING CHAIN IDLER SPROCKET

This 8-tooth idler sprocket uses a riveted assembly design instead of welded. This enables Lutco to provide hardened teeth to improve durability of the sprocket assembly. It also incorporates a stamped debris shield to protect the seals and bearing from contamination, improving life of the assembly.

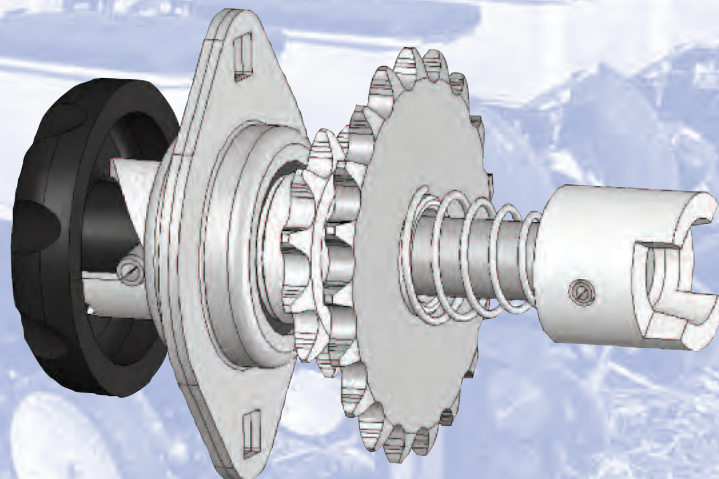


## RATCHETING SPROCKET ASSEMBLY

This ratcheting sprocket assembly demonstrates Lutco's breadth of capabilities in forming, stamping, machining, welding, and assembly. Lutco's engineering capabilities were used in the design of the product and manufacturing processes to optimize quality, cost, and performance.

## BALL BEARING SPROCKET ASSEMBLIES

This integrated assembly combines 19 and 11 tooth stamped sprockets affixed to a machined shaft, a 2-bolt centerflange bearing assembly, a powdered metal coupler, a plastic handle and spring actuated locking system. This item demonstrates Lutco's ability to offer a completely integrated product.



## ANGULAR CONTACT BEARINGS

This semi-precision bearing is designed for applications where a combination of radial and thrust loads are present and, therefore, thrust and/or radial load carrying capability is required. This bearing is an ideal alternative to the traditional cup and cone tapered roller bearing. Because of its ability to accept a significant amount of press fit, the need to machine the housing bore is eliminated. An integral seal on the outboard end also eliminates the need for an external seal.

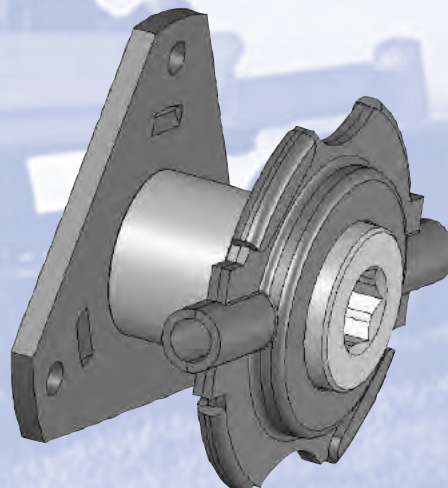


## STAMPED IDLER SPROCKETS

This family of products features an unground ball bearing captured by welded stamped sprocket halves. The arrangement provides an economical solution to more expensive machined or riveted units.

## TRUNNION BEARINGS

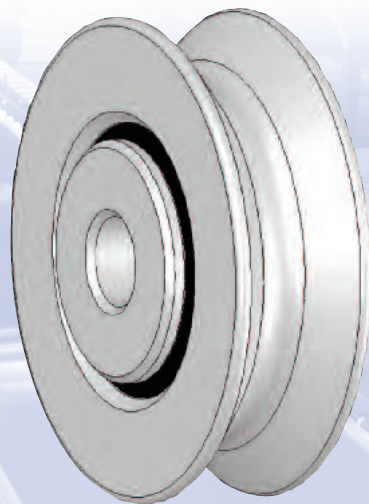
This economical product family incorporates a hex bore extended inner race mounted to a triangular plate and a bearing assembly captured in a trunnion style housing. Trunnion bearings are used in snowblower drive systems.





## NEEDLE BEARING TRACK ROLLER

This track roller assembly utilizes a needle roller bearing for greater load carrying capacity in a more compact design compared to a traditional ball bearing. The low cost unground housing is machined from high strength steel and plated for corrosion protection.

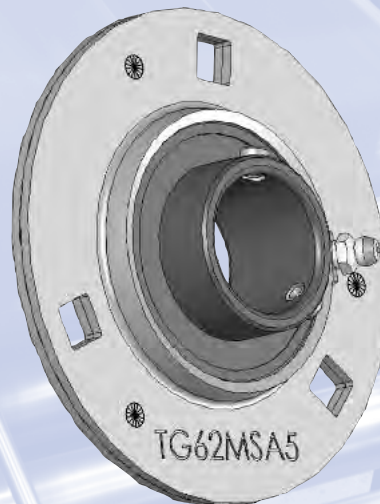


## CABLE GUIDE

This machined unit features a 2-piece pressed together inner race and land riding seals for protection against debris.

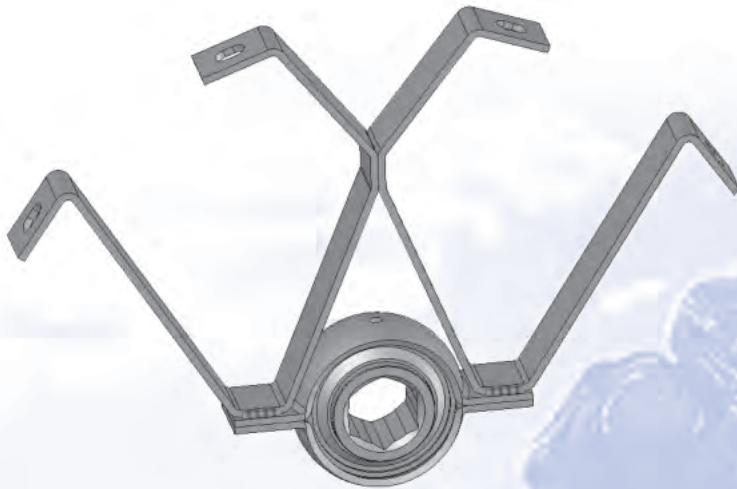
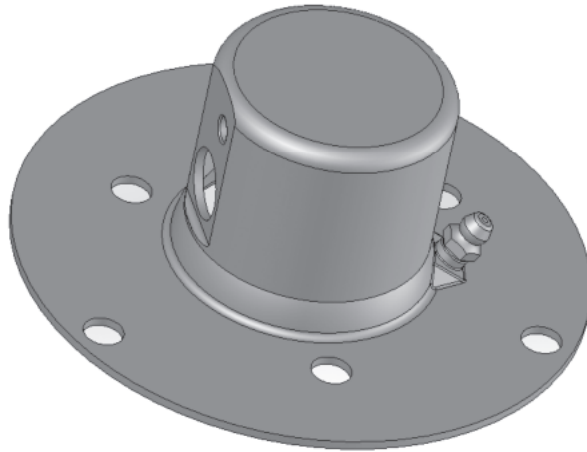
## CENTERFLANGE BEARINGS

This family of products features an unground ball bearing captured by welded stamped flangettes. The arrangement provides an economical alternative to riveted designs. Parts can be supplied with or without a grease fitting.



## SPEED SENSOR HOUSING

This flange with an integrated sensor housing uses Lutco's deep-draw capability to manufacture the flange and sensor housing in a single part. This simplifies the assembly processes, reduces the number of parts, improves robustness/durability of the unit, and eliminates that risk of contamination inherent in multi-part assemblies. This unit can be provided with or without a grease fitting.

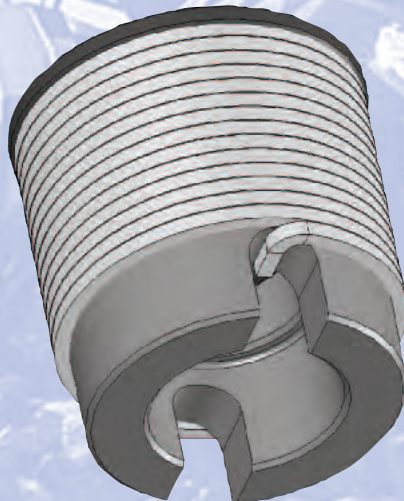


## STAMPED AUGER SUPPORT

This grain auger support represents a Lutco concept optimized to meet customer needs and taken to a production design. Improvements over the existing cast unit includes reduced surface area, lighter weight, lower cost, simpler/more rugged design, and fewer parts enabling simpler assembly.

## LINEAR ACTUATOR BRAKE ASSEMBLY

Brake assemblies consist of a full complement of steel balls, a flanged raceway and a square cross section spring. The steel balls take up thrust loads while enabling the two brake halves to rotate relative to each other. The spring acts as a braking mechanism.



# Load Ratings

## For LUTCO Radial Bearings

### Load Rating and Fatigue Life

Load ratings printed in the LUTCO catalog have been established from years of experience in the use of unground bearings. Load ratings are based on ninety percent of the group surviving for 500 hours. Environment, shock loading, sealing, temperature, lubrication, heat, configuration of ball tracks and speeds under load, all directly influence bearing life. Printed ratings are to be used only as a guide in the design for a given application. We advise field testing in order to assure the suitability of a bearing for a particular application. We do not recommend accelerated testing, as it may not be representative of actual field conditions.

### Basic Radial Load Rating

The load ratings are based on the following formula for unground radial ball bearings:

$$P = \frac{KZD^2}{5}$$

P = Safe working load in lbs.  
 K = RPM constant for safe loads  
 Z = Number of balls  
 D = Ball diameter expressed in eighths of an inch  
     1/8" = 1    3/16" = 1.5  
     1/4" = 2    5/16" = 2.5  
     3/8" = 3

K values for various RPM

RPM	K
10	79.70
50	58.25
100	44.40
200	33.15
300	30.20
400	26.80
500	25.20
600	23.40
700	22.00

Above values are for inner race turning.  
For outer race turning, multiply by .85

### Thrust Capacity

All LUTCO ball bearings will sustain a thrust load of 50% of the rated radial load. (The combined radial and thrust load should not exceed the indicated radial load.) It is suggested that if there is a question regarding the LUTCO bearing capacity for a specific application, please call the factory.

### Wheel RPM.

To calculate RPM of a wheel when miles per hour and wheel diameter are known:

$$RPM = \frac{MPH \times 5280}{60 (3.1416) \frac{\text{wheel dia. in inches}}{12}}$$

Simplifying,

$$RPM = \frac{336.12 \times \text{miles per hour}}{\text{wheel dia. in inches}}$$

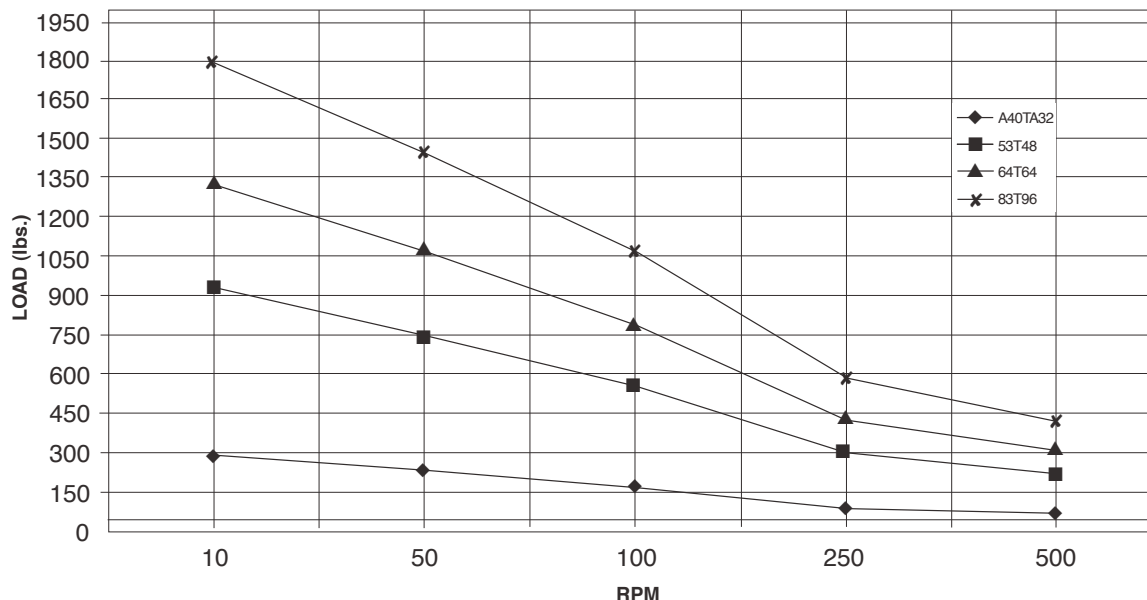
To calculate RPM of a wheel when linear feet per minute and wheel diameter are known:

$$RPM = \frac{\text{feet per minute}}{(3.1416) \frac{\text{wheel dia. in inches}}{12}}$$

Simplifying,

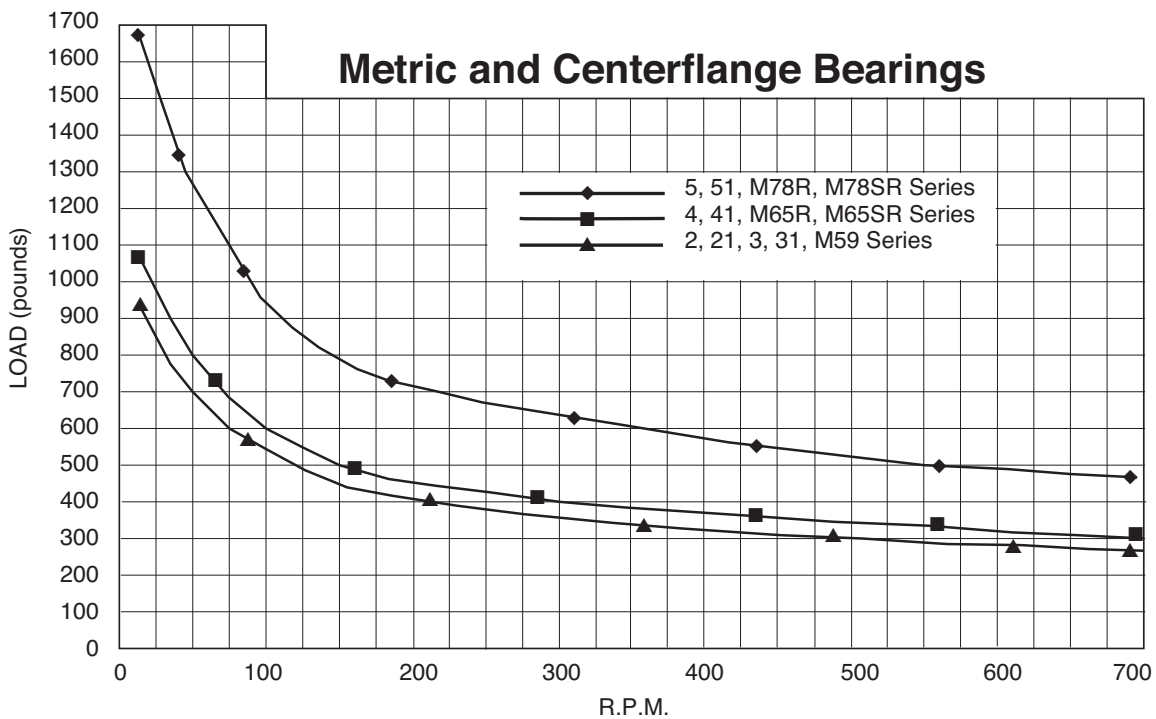
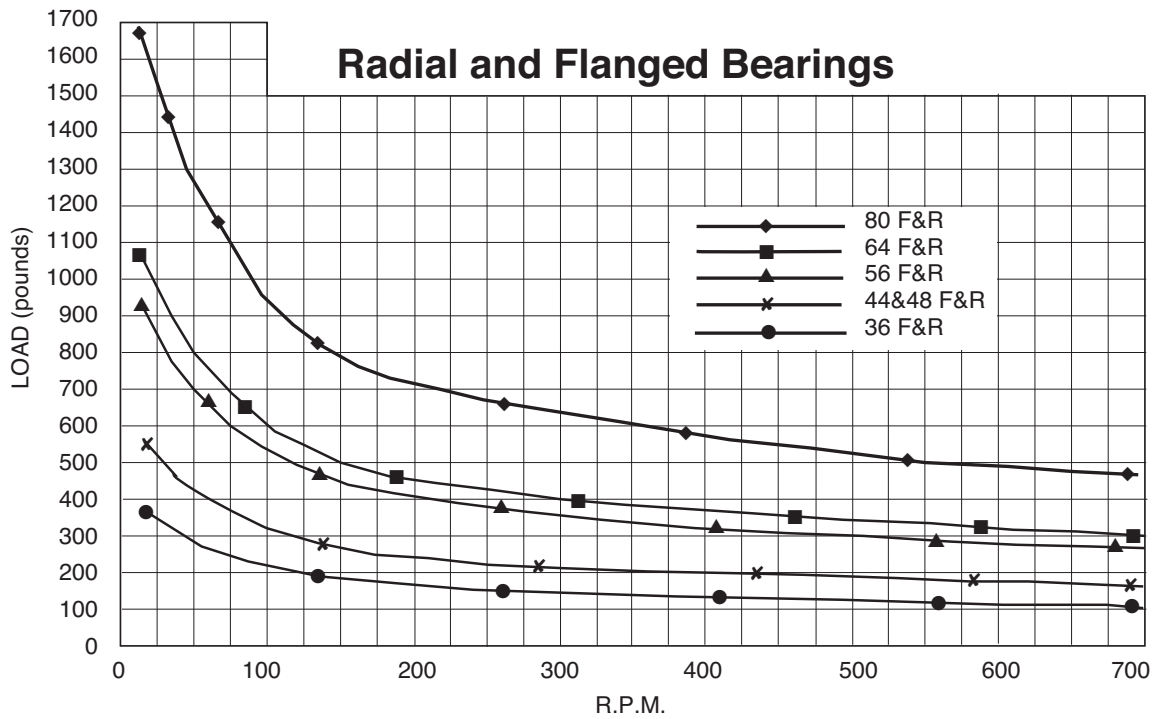
$$RPM = \frac{3.82 \times \text{feet per minute}}{\text{wheel dia. in inches}}$$

## Thrust Bearings



The information contained in this catalog is intended only as a guide for bearing selection. As there are many variables that impact bearing performance, it is recommended that actual application testing be undertaken to assure required life and performance.

# Radial Load Ratings



Charts to be used as a guide only. Consult factory for higher RPM. Above charts are for inner race turning. For outer race turning, multiply by .85.

# Interchange Table

## LUTCO UNGROUND RADIAL SERIES, FULL BALL COMPLEMENT INTERCHANGE

LUTCO	Nice	General	Schatz
28R16MP	400-4	21404-01	A1628
28R24MP	400-6	21481-01	A2428
36R24MP	—	21846-01	A2436
36R28MP	407-21	21817-01	A2836
36R32MP	407-22	21803-01	A3236
44R32MP	408-28	22213-01	A5244
44R40MP	410-30	22211-01	A4044
48R32MP	400-31	22405-01	A3248
48R40MP	400-33	22407-01	A4048
56R32MP	—	22801-01	A3256
56R48MP	—	22807-01	A4856
64R48MP	—	23201-01	A4864
64R64MP	416-41	23210-01	A6464

## LUTCO UNGROUND FLANGED SERIES, FULL BALL COMPLEMENT INTERCHANGE

LUTCO	Nice	General	Schatz
36F20MP	5507	32017-01	—
36F24MP	5368	32004-01	AF2436
36F32MP	5491	32108-01	AF3236
44F32MP	5881	32420-01	AF3244
44F40MP	5273	32421-01	AF4044
44LF48MP	—	32423-01	—
48F32MP	5327	32703-01	AF3248
48F40MP	5659	32704-01	AF4048
56F32MP	—	33006-01	AF3256
56F48MP	5891	33103-01	AF4856
64F48MP	5875	33408-01	AF4864
64F64MP	5418	33409-01	AF6464

## LUTCO THRUST BEARINGS: BANDED, UNGROUND FULL COMPLEMENT INTERCHANGE

LUTCO	Nice	General	Schatz
27T16	601	4450-00	AT1627
28T29	602 <sup>3</sup> / <sub>4</sub>	4453-00	AT2928A
32T32	603 <sup>1</sup> / <sub>4</sub>	4455-00	AT3232
33T24	602	4451-00	AT2434A
36T40	605	4457-00	AT4036
A40TA32	603	4454-00	AT3241A
46T40	606	4458-00	AT4046A
53T48	607	4459-00	AT4853
56T65	610 <sup>1</sup> / <sub>4</sub>	4464-00	AT6556
60T56	608	4460-00	AT5661A
63T64	610	4463-00	AT6463
63T68	611	4465-00	AT6863
64T64	609	4462-00	AT6465A
64TN64	609	4462-00	AT6465A
67T72	613	4466-00	AT7267
83T96	621	4475-00	AT9683
84T81D	—	—	—
94T128	—	—	—
99T112	—	4477-00	—
107T128	—	4480-00	—

# Interchange Table

## LUTCO FLANGETTE INTERCHANGE

LUTCO	MANITOU	TIMKEN	FEDERAL MOGUL	SKF	INA	NTN	Canimex
40MST-ZP	40M-2ZP	40MST	40MSTW	PFT40	40MST	PFL203	PFL3Z(40M2-Z)
40MS-ZP	40MM-3ZP	40MS	40MSW	PF40		PF203	PF3Z(40MM3-Z)
47MST-ZP	47M-2ZP	47MST	47MSTW	PFT47	47MST	PFL204	PFL4Z(47M2-Z)
47MS-ZP	47MM-3ZP	47MS	47MSW	PF47		PF204	PF4Z(47MM3-Z)
47MSTR-ZP	47MM-3TZP	47MSTR	47MSTRW	PFD47	47MSTR		
T52MST-ZP	52M-2ZP	52MST	52MSTW	PFT52	52MST	PFL205	PFL5Z(52M2-Z)
52MST-3ZP	52M-2BZP	52MST-3					
52MS-ZP	52MM-3ZP	52MS	52MSW	PF52		PF205	PF5Z(52MM3-Z)
52MS-2ZP	52MM-3EZP	52MS-2					
T52MSTR-ZP	52MM-3TZP	52MSTR	52MSTRW	PFD52	52MSTR		PF5ZT(52MM3T-Z)
G52MSA-ZP	52MM-3GZP	G52MSA	G52MS		52MSA		PF5ZG(52MM3G-Z)
G52MSB-ZP	52MM-3GPZP	G52MSB	52MSA		52MSB		
62MST-ZP	62M-2ZP	62MST	62MSTW	PFT62	62MST	PFL206	PFL6Z(62M2-Z)
62MST-2ZP	62M-2BZP	62MST-3					
62MS-ZP	62MM-3ZP	62MS	62MSW	PG62		PF206	PF6Z(62MM3-Z)
62MS-2ZP	62MM-4ZP	62MS-2					
62MS-4ZP	62MM-3BZP						
T62MSTR-ZP	62MM-3TZP	62MSTR	62MSTRW	PFD62	62MSTR		PF6ZT(62MM3T-Z)
TG62MSA-ZP	62MM-3GZP	G62MSA	G62MS		62MSA		PF6ZG(62MM3G-Z)
G62MSA-3ZP	62MM-3G-3ZP	G62MSA-3					
TG62MSB-ZP	62MM-3GPZP	G62MSB	62MSA		62MSB		PF6ZGP(62MM3GP-Z)
G62MSB-3ZP	62MM-3GP-3ZP	G62MSB-3					
72MS-ZP	72MM-3ZP	72MS	72MSW	PF72		PF207	PF7Z(72MM3-Z)
72MS-5ZP	72MM-4ZP	72MS-5					
72MS-7ZP	72MM-3CZP						
72MST-ZP	72M-2ZP	72MST	72MSTW	PFT72	72MST	PFL207	PFL7Z(72M2-Z)
72MST-3ZP	72M-2BZP						
T72MSTR-ZP	72MM-3TZP	72MSTR		PFD72			
TG72MSA-ZP	72MM-3GZP	G72MSA			72MSA		PF7ZG(72MM3G-Z)
TG72MSB-ZP	72MM-3GPZP	G72MSB			72MSB		PF7ZGP(72MM3GP-Z)
80MS-ZP	80MM-4ZP	80MS		PF80			PF8-4Z(80MM4-Z)
T80MS-SZP	80MM-4SQZP		80MSW				
G80MSA-ZP	80MM-4GZP	G80MSA			80MSA		
TG80MSA-SZP			G80MS				
G80MSB-ZP	80MM-4GPZP	G80MSB			80MSB		
TG80MSB-SZP			80MSA				
85MS-ZP	85MM-4ZP	85MS					
T85MS-SZP	85MM-4BSQZP		85MSW				
G85MSA-ZP	85MM-4GZP	G85MSA			85MSA		
G85MSA-SZP			G85MS				
G85MSB-ZP	85MM-4GPZP	G85MSB			85MSB		
G85MSB-SZP			85MSA				
87MS-SZP			87MSW				
90MS-ZP	90MM-4ZP	90MS	90MSW				
G90MSA-ZP	90MM-4GZP	G90MSA	G90MS		90MSA		
G90MSB-ZP	90MM-4GPZP	G90MSB	90MSA		90MSB		
100MS-ZP	100MM-4ZP	100MS	100MSW				
G100MSA-ZP	100MM-4GZP	G100MSA	G100MS		100MSA		
G100MSB-ZP	100MM-4GPZP	G100MSB	100MSA		100MSB		

## LUTCO STAMPED PILLOW BLOCK INTERCHANGE

40PB-ZP	40PB-ST-ZP	40PB		P40	40B/T	PP203	
40PBS-ZP	40MPB-STAND-ZP	40PBS			40PBS		
47PB-ZP	47MPB-ST-ZP	47PB		P47	47B/T	PP204	
47PBS-ZP	47MPB-STAND-ZP	47PBS			47PBS		
52PB-ZP	52MPB-ST-ZP	52PB		P52	52B/T	PP205	
52PBS-ZP	52MPB-STAND-ZP	52PBS			52PBS		
62PB-ZP	62MPB-ST-ZP	62PB		P62	62B/T	PP206	
62PBS-ZP	62MPB-STAND-ZP	62PBS			62PBS		
72PB-ZP	72MPB-ST-ZP	72PB		P72	72B/T	PP207	
72PBS-ZP	72MPB-STAND-ZP	72PBS			72PBS		

# Conversion Tables

LUTCO TWO BOLT SELF-ALIGNING FLUSHMOUNT UNIT INTERCHANGE		
Shaft	LUTCO	Timken
3/4"	31SAFLMRA012RRB	VFMST 3/4"
7/8"	41SAFLMRA014RRB	VFMST 7/8"
1"	41SAFLMRA100RRB	VFMST 1"
1 3/16"	51SAFLMRA103RRB	VFMST 1 3/16"
1 1/4"	51SAFLMRA13RRB2	VFMST 1 1/4"
1 7/16"	61SAFLMRA107RRB	VFMST 1 7/16"

## Conversion Tables

FRACTIONS	DECIMALS	MILLIMETERS	FRACTIONS	DECIMALS	MILLIMETERS
1/64	.0156	0.396	33/64	.5156	13.096
1/32	.0312	0.793	35/64	.5312	13.493
3/64	.0469	1.190	37/64	.5469	13.890
1/16	.0625	1.587	39/64	.5625	14.287
5/64	.0781	1.984	41/64	.5781	14.684
3/32	.0937	2.381	43/64	.5937	15.081
7/64	.1094	2.778	45/64	.6094	15.478
1/8	.1250	3.175	47/64	.6250	15.875
9/64	.1406	3.571	49/64	.6406	16.271
5/32	.1562	3.968	51/64	.6562	16.668
11/64	.1719	4.365	53/64	.6719	17.065
3/16	.1875	4.762	55/64	.6875	17.462
13/64	.2031	5.159	57/64	.7031	17.859
7/32	.2187	5.556	59/64	.7187	18.256
15/64	.2344	5.953	61/64	.7344	18.653
1/4	.2500	6.350	63/64	.7500	19.050
17/64	.2656	6.746	1	.7656	19.446
9/32	.2812	7.143		.7812	19.843
19/64	.2969	7.540		.7969	20.240
5/16	.3125	7.937		.8125	20.637
21/64	.3281	8.334		.8281	21.034
11/32	.3437	8.731		.8437	21.431
23/64	.3594	9.128		.8594	21.828
3/8	.3750	9.525		.8750	22.225
25/64	.3906	9.921		.8906	22.621
13/32	.4062	10.318		.9062	23.018
27/64	.4219	10.715		.9219	23.415
7/16	.4375	11.112		.9375	23.812
29/64	.4531	11.509		.9531	24.209
15/32	.4687	11.906		.9687	24.606
31/64	.4844	12.303		.9844	25.003
1/2	.5000	12.700		1.0000	25.400

Millimeter (mm) conversion: 1mm = .03937"	
35mm = 1.378"	72mm = 2.835"
40mm = 1.575"	80mm = 3.150"
47mm = 1.850"	85mm = 3.346"
52mm = 2.047"	90mm = 3.543"
62mm = 2.441"	100mm = 3.937"

