

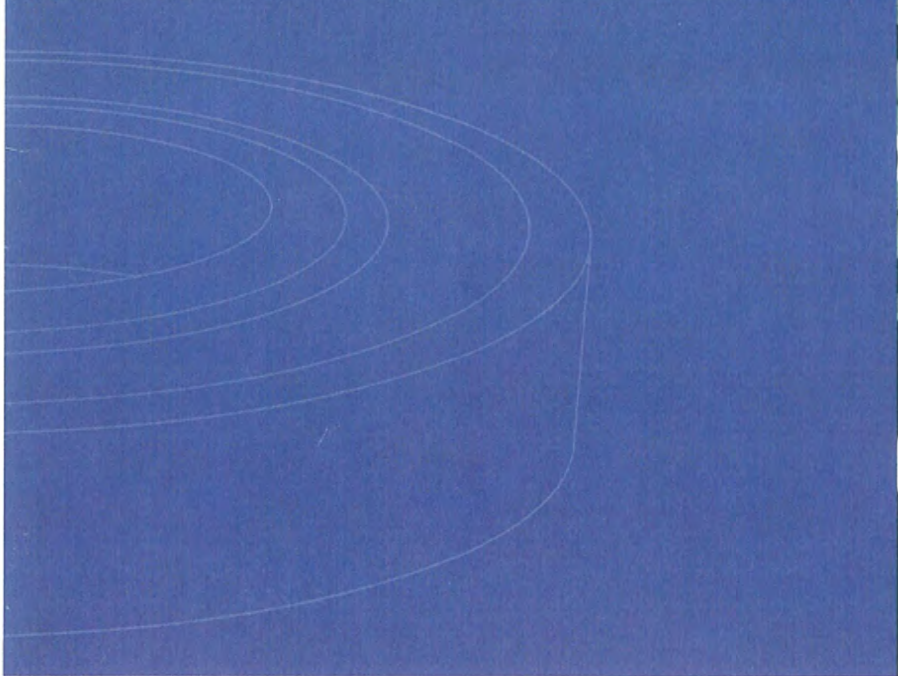
THE LEADER

IN ECONOMICAL

QUALITY ENGINEERED

BEARING

PRODUCTS







SCHATZ BEARING CORPORATION

The **Schatz** name has been part of the American bearing industry for over 90 years. Since 1981, the new Schatz Bearing Corporation has been **committed** to providing you with the very best customer service, engineering expertise, and product reliability anywhere. Our ultimate goal is your complete satisfaction.

When you choose a Schatz bearing product, with it comes the reputation for **precision** and dependability we've maintained for nearly two decades. Much like our bearings, our job is to get your ideas in motion. Quickly. And because we *are* an American company, we know better than anyone how to produce a bearing assembly that meets and exceeds **standardization**. The first time. This allows us more time to provide state-of-the-art solutions, on time, and within your budget.

For information or answers to any questions, please contact your **Schatz Bearing Corporation** representative, or call or write Schatz Bearing Corporation, 16 Fairview Avenue, P.O. Box 1191, Poughkeepsie, NY 12602. Telephone: **914 452 6000**. Fax: **914 452 1660**.

*PLEASE NOTE NEW
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(P)845-452-6000
(F)845-452-1660*

SCHATZ BEARING CORPORATION – AN EQUAL OPPORTUNITY EMPLOYER

It is the policy of SCHATZ BEARING CORPORATION to promote equal employment opportunity through a positive continuing program of specific priorities designed to insure full realization of equal employment opportunities without regard to race, color, religion, sex or national origin.

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SCHATZ BEARING CORPORATION

Schatz Bearing Corporation is unique as a bearing company. In addition to the products listed in our catalogue we have the flexibility to manufacture a wide variety of new sizes. We welcome requests to manufacture other bearing company obsolete bearings and the challenge of unique designs.

Materials:

- SAE 52100
- 440 C-300-304 Stainless Steels
- Carburizing Steels
- Ceramic Rings & Balls and Jewel Balls

Closures:

- Shields
- Seals and Special end caps and assemblies

Other Features:

- Snap wire grooves and wire
- OD notches and pulley grooves

I.

Manufacturing Capability

Schatz Bearing Corporation has been manufacturing quality precision and commercial bearings for the past fourteen years. Our Aircraft Control Pulley bearings and commercial grade bearings are used extensively in American industry and now have gained worldwide acceptance.

Precision ABEC-1 and 3
Aircraft Control Bearings
Functional Precision™
Commercial Grade Unground
Precision Thin Section
Thin Section Unground
Flange and Housed Units
Bearing Assemblies
Precision Profile Bearings with Close Selected Tolerances.**

II.

Size Range

Schatz Bearing Corporation manufactures ball bearings from 3/32" bore to 6.000" OD. Schatz precision thin section products from 1.000" bore to 12.000" OD bore.

** Precision bearings with selected tolerances to ABEC-5 or Better.

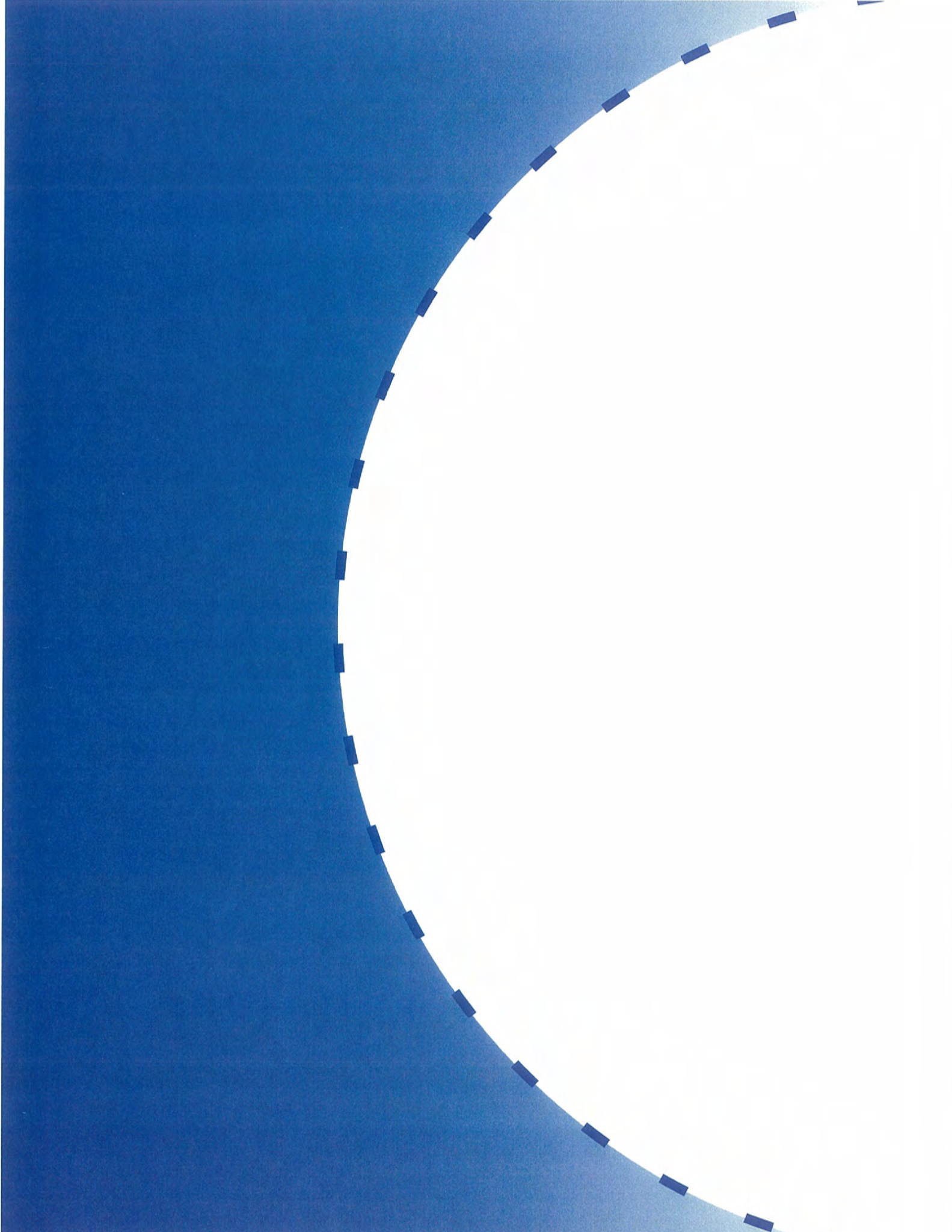
PART NUMBERING SYSTEM

Prefix	Suffix	Explanation
A		Unground commercial single row radial.
AF		Unground commercial single row radial with flange.
AFH		Unground commercial single row radial with flange and hexagon bore.
AFS		Unground commercial single row radial with flange and set screws.
AH		Unground commercial single row radial with hexagon bore.
AP		Small size unground commercial single row radial with close bore and O.D. tolerances.
AS		Unground commercial single row radial with set screws.
ASL		Unground commercial single row radial with set screws and relubricating fitting.
AT		Unground commercial single row thrust.
AXH		Unground commercial single row radial with inner ring extended on one side and hexagon bore.
BM		Ground functional precision single row radial with metric boundary dimensions.
BR		Ground functional precision single row radial with inch boundary dimensions.
BS		Ground functional precision single row radial with standard inch boundary dimensions.
CS		Special designs.



Prefix	Suffix	Explanation
P-K		Aircraft Precision Bearing Series.
PD-K		Aircraft Precision Bearing Series.
KP		Aircraft Precision Bearing Series.
DW		Aircraft Precision Bearing Series.
	F	Commercial bearing shield.
HB		Commercial grade hanger bearing series.
KFH		Unground commercial radial with one piece machined outer ring and two or three piece machined inner ring and hexagon bore.
	L	Buna-n lip type seal for functional precision single row radial.
	LT	Fluorocarbon plastic lip type seal for functional precision single row radial.
	P	Commercial bearing plate closure.
	R	Buna N face contact seal for functional precision single row radial.
	R	Commercial bearing reservoir.
	RT	Fluorocarbon plastic face contact seal for functional precision single row radial.
	S	Commercial bearing felt series.
ST		Schatz thin section bearings.
SM		Special functional precision stamped adapter series.
SRT		Stamped commercial single row radial thrust.
TW		Unground commercial single row radial with flange and seals.
	U	Commercial bearing non-contact metal labyrinth seal.
	UP	Commercial bearing non-contact metal labyrinth seal and plate closure.
W		Special functional precision wide inner ring series.
WE		Special functional precision extended inner ring set screw series.





**SCHATZ PRECISION
BEARINGS**
Light and Extremely light

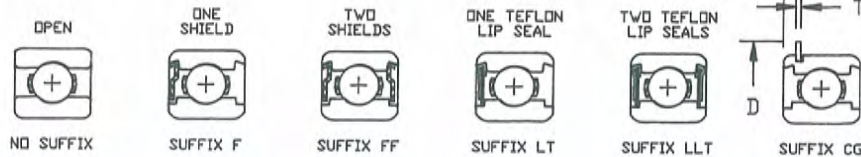
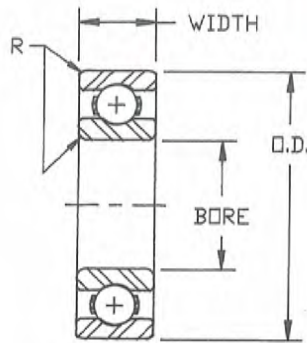
1200 Series	8
1900 Series	9



1200 SERIES

(LIGHT)

Metric, single row, radial, deep groove, non-filling slot bearings.



BEARING NUMBER	BORE		O.D.		WIDTH	BALLS		*	WITH SNAP RING			Basic Rating C at 33%
	Inches (mm)	Tolerance +.0000 to Minus	Inches (mm)	Tolerance +.0000 to Minus	Tolerance +.000 to -.005 Inches (mm)	No.	Size	Radius R Inches	D	T	L	
1200	.3937 (10 mm)	.0003	1.1811 (30 mm)	.0004	0.3543 (9 mm)	7	3/32	0.025	1.359	0.042	0.120	1035
1201	.4724 (12 mm)	.0003	1.2598 (32 mm)	.0005	0.3937 (10 mm)	7	1/64	0.025	1.438	0.042	0.120	1175
1202	.5906 (15 mm)	.0003	1.3780 (35 mm)	.0005	0.4331 (11 mm)	8	3/32	0.025	1.547	0.042	0.120	1340
1203	.6693 (17 mm)	.0003	1.5748 (40 mm)	.0005	0.4724 (12 mm)	8	1/64	0.025	1.750	0.042	0.120	1655
1204	.7874 (20 mm)	.0004	1.8504 (47 mm)	.0005	0.5512 (14 mm)	8	5/16	0.040	2.062	0.042	0.136	2215
1205	.9843 (25 mm)	.0004	2.0472 (52 mm)	.0005	0.5906 (15 mm)	9	5/16	0.040	2.266	0.042	0.136	2430
1206	1.1811 (30 mm)	.0004	2.4409 (62 mm)	.0005	0.6299 (16 mm)	9	13/32	0.040	2.656	0.065	0.190	3870
1207	1.3780 (35 mm)	.0005	2.8346 (72 mm)	.0005	0.6693 (17 mm)	9	15/32	0.040	3.078	0.065	0.190	5005

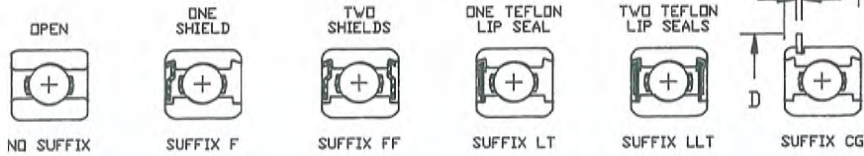
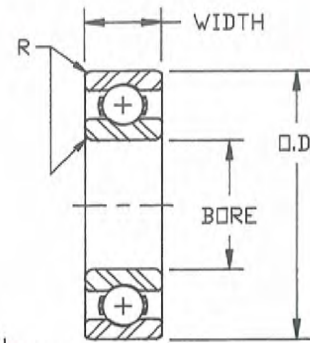
* Maximum shaft or housing fillet which bearing corner will clear.

- Notes:
1. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 2. Check with Schatz Bearing Corporation for current approval status.
 3. Check with Schatz Bearing Corporation's Sales Department for price and availability.

1900 SERIES

(EXTREMELY LIGHT)

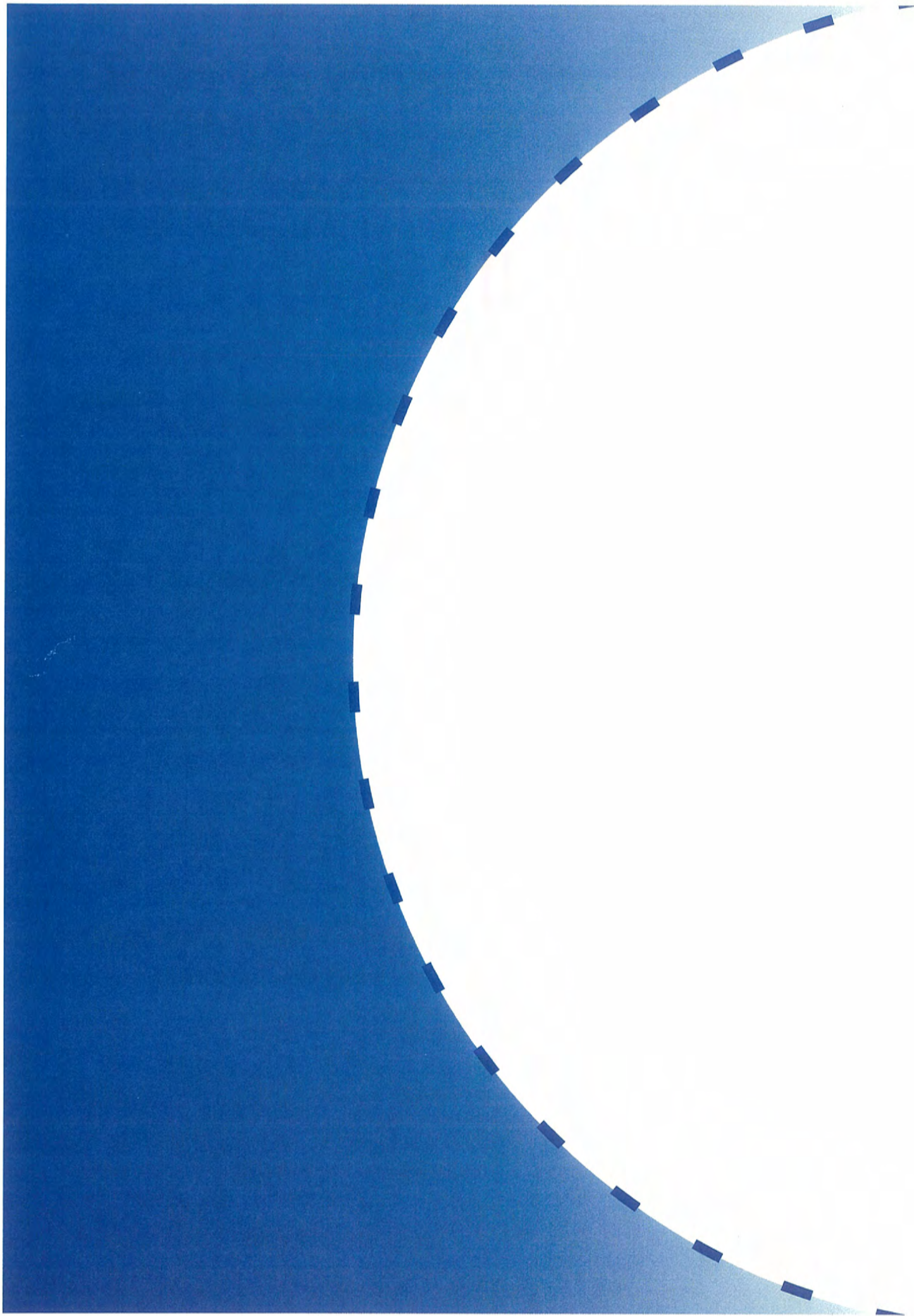
Metric, single row, radial, deep groove, non-filling slot bearings.



BEARING NUMBER	BORE		O.D.		WIDTH	BALLS No. Size	*	WITH SNAP RING			Basic Rating C at 33%
	Inches (mm)	Tolerance +.0000 to Minus	Inches (mm)	Tolerance +.0000 to Minus	Tolerance +.000 to -.005 Inches (mm)			Radius R Inches	D	T	
1900	.3937 (10 mm)	.0003	0.8661 (22 mm)	.0004	0.2362 (6 mm)	9 1/8	0.012	0.984	0.026	0.066	465
1901	.4724 (12 mm)	.0003	0.9449 (24 mm)	.0004	0.2362 (6 mm)	9 3/4	0.012	1.062	0.026	0.066	580
1902	.5906 (15 mm)	.0003	1.1024 (28 mm)	.0004	0.2756 (7 mm)	10 5/32	0.012	1.203	0.031	0.081	750
1903	.6693 (17 mm)	.0003	1.1811 (30 mm)	.0004	0.2756 (7 mm)	11 1/32	0.012	1.281	0.031	0.081	795
1904	.7874 (20 mm)	.0004	1.4567 (37 mm)	.0005	0.3543 (9 mm)	11 3/16	0.012	1.562	0.031	0.096	1105
1905	.9843 (25 mm)	.0004	1.6535 (42 mm)	.0005	0.3543 (9 mm)	11 1/32	0.012	1.750	0.031	0.096	1190
1906	1.1811 (30 mm)	.0004	1.8504 (47 mm)	.0005	0.3543 (9 mm)	14 3/16	0.012	1.953	0.031	0.096	1250
1907	1.3780 (35 mm)	.0005	2.1654 (55 mm)	.0005	0.3937 (10 mm)	13 1/4	0.025	2.281	0.031	0.096	2040

* Maximum shaft or housing fillet which bearing corner will clear.

- Notes:
1. Available with shields or seals.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.



**SCHATZ
PRECISION BEARINGS
AIRCRAFT CONTROL**

B500 Series	12
B500DD Series	13
B5500WZZ Series	14
DPP Series	15
DPP-W Series	16
DW, GDW Series	17
FL Series	18
K Series	19
KP Series	20
KP-A Series	21
KSP, KSP-A Series	22
P Series	23-24

**Ask for the Schatz new
THIN SECTION
BEARING
CATALOGUE**

(EXTRA LIGHT TORQUE TUBE TYPE)

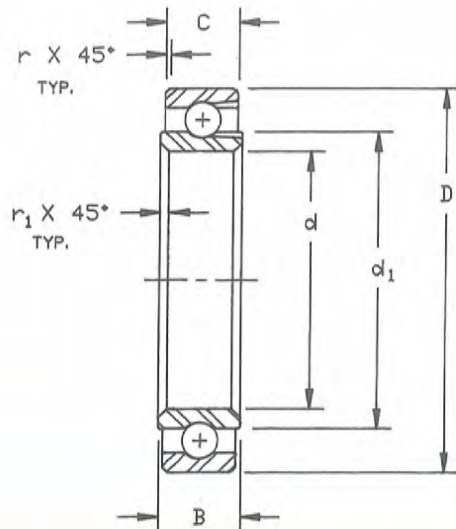
Extra light duty.

Single row, ball.

This series is made of bearing quality chromium-alloy, high carbon steel and is not cadmium plated.

Open Type.

Lubricated with a preservative.



BEARING NUMBER	BORE	OUTSIDE DIAMETER	WIDTHS		d ₁	r ₁ *	r*	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
	d +0.0007 -0.0007 (in.)	D +0.0000 -0.0010 (in.)	B +0.000 -0.005 (in.)	C +0.000 -0.005 (in.)					
B538	0.6250	1.0625	0.281	0.250	0.777	0.015	0.015	3280	1500
B539	0.7500	1.1875	0.281	0.250	0.895	0.015	0.015	3750	1700
B540	0.8750	1.3125	0.281	0.250	1.016	0.015	0.015	4220	1900
B541	1.0625	1.5000	0.281	0.250	1.216	0.015	0.015	5000	2200
B542	1.3125	1.7500	0.281	0.250	1.451	0.015	0.015	5950	2700
B543	1.5625	2.0000	0.281	0.250	1.702	0.015	0.015	6880	3200
B544	1.8125**	2.2500***	0.281	0.250	1.970	0.015	0.015	7980	3600
B545	2.0625**	2.6250***	0.281	0.250	2.286	0.015	0.015	9220	4000
B546	2.3125**	2.8750***	0.281	0.250	2.527	0.015	0.015	10150	4400

* Maximum shaft or housing radius which bearing corners will clear.

** +.0010 in./-.0010 in.

*** +.0000 in./-.0015 in.

- Notes:
1. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

B500DD SERIES

(EXTRA LIGHT TORQUE TUBE TYPE)

Manufactured to MS27646 per MIL-B-7949.

Extra light duty.

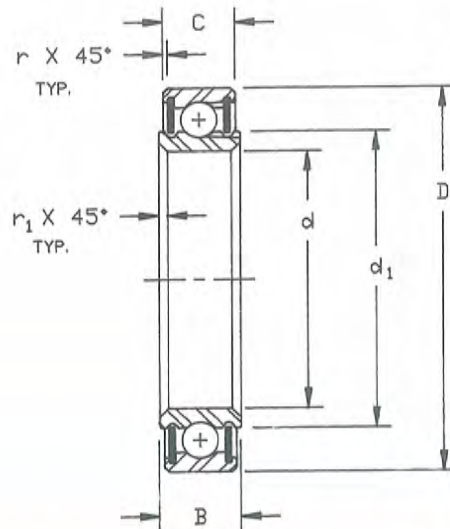
Single row, ball.

Teflon coated fiberglass seals.

All external surfaces except bore and seals are cadmium plated.

Pre-lubricated.

This series is dimensionally interchangeable with the unshielded B500 series.



BEARING NUMBER	MS 27646-	BORE	OUTSIDE DIAMETER	WIDTHS		d ₁	r ₁ *	r*	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
		d	D	B	C					
		+0.0007 -0.0007 (in.)	+0.0000 -0.0010 (in.)	+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	Min. (in.)	(in.)	(in.)		
B538DD	-38	0.6250	1.0625	0.281	0.250	0.777	0.015	0.015	3280	1500
B539DD	-39	0.7500	1.1875	0.281	0.250	0.895	0.015	0.015	3750	1700
B540DD	-40	0.8750	1.3125	0.281	0.250	1.016	0.015	0.015	4220	1900
B541DD	-41	1.0625	1.5000	0.281	0.250	1.216	0.015	0.015	5000	2200
B542DD	-42	1.3125	1.7500	0.281	0.250	1.451	0.015	0.015	5950	2700
B543DD	-43	1.5625	2.0000	0.281	0.250	1.702	0.015	0.015	6880	3200
B544DD	-44	1.8125**	2.2500***	0.281	0.250	1.970	0.015	0.015	7980	3600
B545DD	-45	2.0625**	2.6250***	0.281	0.250	2.286	0.015	0.015	9220	4000
B546DD	-46	2.3125**	2.8750***	0.281	0.250	2.527	0.015	0.015	10150	4400

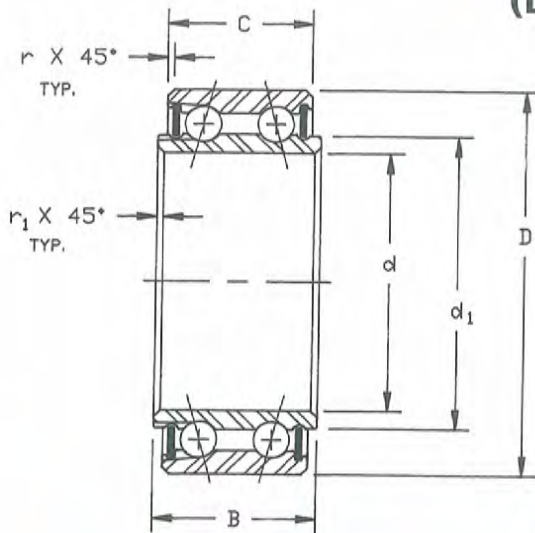
* Maximum shaft or housing radius which bearing corners will clear.

** +0.0010 in./-0.0010 in.

*** +0.0000 in./-0.0015 in.

- Notes:
1. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

(DOUBLE ROW TORQUE TUBE TYPE)



Extra light duty.
Double row, ball.
Teflon coated fiberglass seals.
All external surfaces except bore and
seals are cadmium plated.
Pre-lubricated.

BEARING NUMBER	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1^*	r^*	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
	d + .0000 - .0005 (in.)	D + .0000 - .0005 (in.)	B + .000 - .005 (in.)	C + .000 - .005 (in.)	Min. (in.)	(in.)	(in.)		
B5538WZZ	0.6250	1.0625	0.562	0.500	0.745	0.015	0.015	6250	2060
B5539WZZ	0.7500	1.1875	0.562	0.500	0.865	0.015	0.015	7190	2370
B5540WZZ	0.8750	1.3125	0.562	0.500	0.989	0.015	0.015	8120	2680
B5541WZZ	1.0625	1.5000	0.562	0.500	1.190	0.015	0.015	9690	3200
B5542WZZ	1.3125	1.7500	0.562	0.500	1.430	0.015	0.015	11600	3820
B5543WZZ	1.5625	2.0000	0.562	0.500	1.665	0.015	0.015	13400	4430
B5544WZZ	1.8125**	2.2500***	0.562	0.500	1.935	0.015	0.015	15600	5160
B5545WZZ	2.0625**	2.6250***	0.562	0.500	2.265	0.015	0.015	18100	5980
B5546WZZ	2.3125**	2.8750***	0.562	0.500	2.505	0.015	0.015	20000	6600

* Maximum shaft or housing radius which bearing corners will clear.
** +.0000 in./-.0008 in.
*** +.0000 in./-.0007 in.

- Notes:
1. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

DPP SERIES

(RADIAL TYPE/DOUBLE ROW)

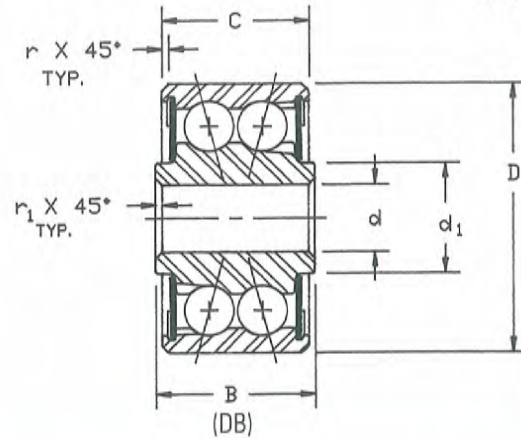
Manufactured to MS27644 per MIL-B-7949.

Double row, ball.

All external surfaces except bore and stainless steel seal retainers are cadmium plated.

Installed with Teflon seals.

Pre-lubricated.



BEARING NUMBER	MS 27644-	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
		d	D	B	C					
		+0.0000 -0.0005 (in.)	+0.0000 -0.0005 (in.)	+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	Approx. (in.)	+0.015 -0.000 (in.)	+0.015 -0.000 (in.)		
DPP3	-3	0.1900	0.7774	0.495	0.473	0.302	0.005	0.018	2950	1700
DPP4	-4	0.2500	0.9014	0.620	0.491	0.410	0.005	0.032	5370	1800
DPP5	-5	0.3125	1.2500	0.745	0.687	0.469	0.015	0.032	11000	4000
DPP6	-6	0.3750	1.4375	0.870	0.794	0.551	0.015	0.032	15760	5300
DPP8	-8	0.5000	1.6875	0.932	0.856	0.735	0.015	0.044	23600	7800
DPP10	-10	0.6250	1.9375	0.995	0.920	0.890	0.015	0.044	28400	9400

- Notes:
1. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

(RADIAL TYPE/DOUBLE ROW)

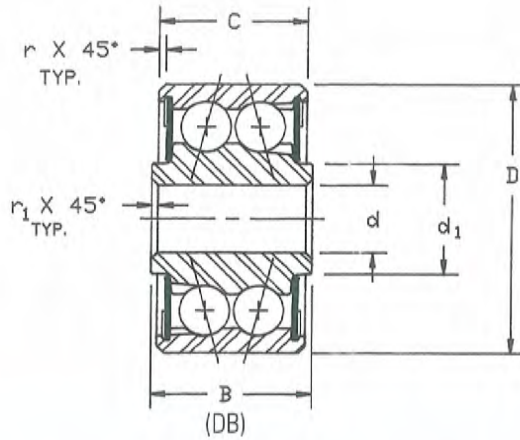
Double row, ball.

All external surfaces except bore and stainless steel seal retainers are cadmium plated.

Installed with Teflon seals.

Pre-lubricated.

Designed for applications requiring high movement rigidity.



BEARING NUMBER	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
	d +0.0000 -0.0005 (in.)	D +0.0000 -0.0005 (in.)	B +0.000 -0.005 (in.)	C +0.000 -0.005 (in.)					
DPP3W	0.1900	0.7774	0.495	0.473	0.297	0.005	0.018	2950	1450
DPP4W	0.2500	0.9014	0.620	0.491	0.405	0.005	0.032	5370	1800
DPP5W	0.3125	1.2500	0.745	0.687	0.548	0.015	0.032	11000	4000
DPP6W	0.3750	1.4375	0.870	0.794	0.603	0.015	0.032	15760	5300
DPP8W	0.5000	1.6875	0.932	0.856	0.730	0.015	0.044	23600	7800
DPP10W	0.6250	1.9375	0.995	0.920	0.945	0.015	0.044	28400	9400

- Notes:
1. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

DW, GDW SERIES

(CONTROL BEARING)

Manufactured to MS27647 per MIL-B-7949.

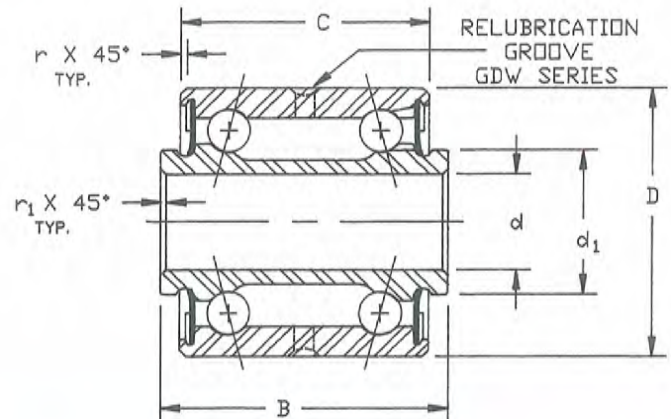
Extra wide, double row, ball.

All external surfaces except bore and stainless steel seal retainers are cadmium plated.

Installed with Teflon seals.

Pre-lubricated.

These series are dimensionally interchangeable except the GDW series can be re-lubricated, through holes and a groove in the outer ring.



BEARING NUMBER	MS 27647-	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Load Rating (lbs.)	Thrust Load Rating (lbs.)
		d +0.000 -0.005 (in.)	D +0.000 -0.005 (in.)	B +0.00 -0.05 (in.)	C +0.00 -0.05 (in.)					
DW4K2*	-4A	0.2500	0.6250	0.562	0.500	0.339	0.005	0.016	1400	500
GDW4K*	-4AG	0.2500	0.6250	0.562	0.500	0.339	0.005	0.016	1400	500
DW4K*	-4	0.2500	0.7500	0.875	0.750	0.380	0.005	0.016	2770	900
GDW4K*	-4G	0.2500	0.7500	0.875	0.750	0.380	0.005	0.016	2770	900
DW4	-	0.2500	0.7500	0.875	0.750	0.375	0.005	0.016	3750	1240
GDW4	-	0.2500	0.7500	0.875	0.750	0.375	0.005	0.016	3750	1240
DW5	-5	0.3125	0.8750	0.938	0.813	0.469	0.005	0.016	5140	1600
GDW5	-5G	0.3125	0.8750	0.938	0.813	0.469	0.005	0.016	5140	1600
DW6	-6	0.3750	1.0625	1.188	1.063	0.573	0.005	0.016	8440	2600
GDW6	-6G	0.3750	1.0625	1.188	1.063	0.573	0.005	0.016	8440	2600
DW8	-8	0.5000	1.4375	1.500	1.375	0.712	0.005	0.032	15520	4700
GDW8	-8G	0.5000	1.4375	1.500	1.375	0.712	0.005	0.032	15520	4700

* Retainer type.

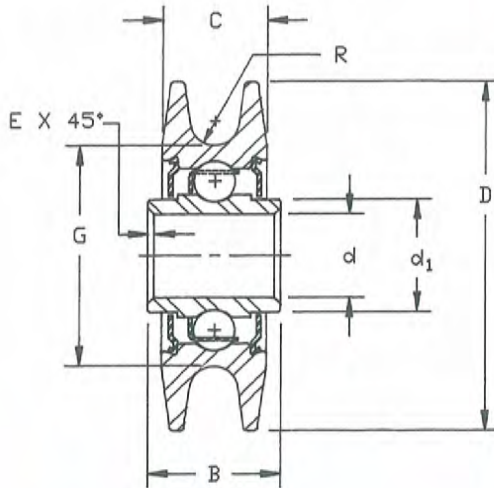
- Notes:
1. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Please contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Please check with Schatz Bearing Corporation for current approval status.
 4. Please check with Schatz Bearing Corporation's Sales Department for price and availability.

Single row Fairlead ball.

All external surfaces except bore and stainless steel shields are cadmium plated.

Installed with stainless steel shields.

Conrad construction for low torque.



BEARING NUMBER	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	E	G	R	Max. Safe Working Load Radial*
	d (in.)	D +.000 -.010 (in.)	B +.000 -.005 (in.)	C +.000 -.005 (in.)					
FL3C3	0.1905 0.1895	.798	0.297	0.234	0.244	Broken Corner	0.510 0.500	0.055 0.052	200
FL3C3-2	0.1905 0.1895	.688	0.297	0.234	0.244	Broken Corner	0.510 0.500	0.055 0.052	200
FL3C3-3****	0.1905 0.1895	.798	0.297	0.234	0.258	Broken Corner	0.510 0.500	0.055 0.052	200
FL3C6	0.1905 0.1895	1.250	0.484	0.350	0.330	0.010	0.750 0.740	0.112 0.109	500
FL3C6-2	0.1905 0.1895	.980***	0.484	0.350	0.330	0.010	0.750 0.740	0.112 0.109	500
FL4C6-2**	0.2500 0.2495	1.000	0.5625	0.500	0.339	0.005	0.600	0.130	200
FL4C8-3****	0.2500 0.2495	1.063	0.348	0.335	0.386	0.005	0.910	0.160	200

* Radial load to obtain 100,000 ft peripheral travel life.

** Double row rigid type bearing. Teflon seals.

*** +.0000 in./-.020 in.

**** Teflon seals.

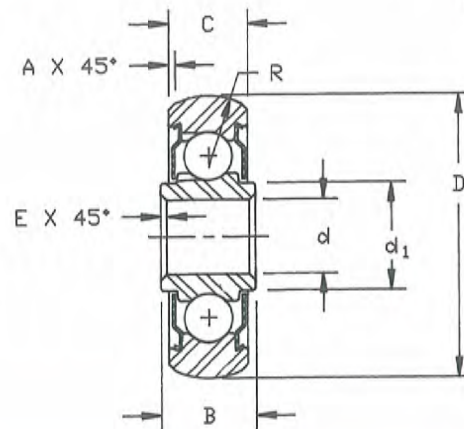
- Notes:
1. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 2. Check with Schatz Bearing Corporation for current approval status.
 3. Check with Schatz Bearing Corporation's Sales Department for price and availability.

K SERIES

Single row, ball.

All external surfaces except bore and seals/shields are cadmium plated.

Available with removable Teflon seals or stainless shields.



BEARING NUMBER	BORE	O.D.	RING WIDTH		d_1 (Approx.)	Max O.D. Radius Ref. R	Inner I.D. E +.015 -.000	Outer O.D. Corner Ref. A	Max. Safe Working Load Radial
	d +.0000 -.0005	D +.0000 -.0020	B +.000 -.005	C +.000 -.005					
K3L2	0.1900	0.687	0.245	0.203	0.275	0.187	0.005	0.020	200
K3L3	0.1900	0.635*	0.245	0.203	0.275	0.550	0.005	0.020	200
K3LR48	0.1900	0.687	0.245	0.203	0.275	3.015	0.005	0.020	200
KP3AR11-2	0.1900	0.718**	0.297	0.265	0.297	0.359	0.005	0.015	300
KP4AR13	0.2500	0.800	0.281	0.219	0.375	0.812	0.005	0.015	400
KP4AR48	0.2500	0.800	0.281	0.219	0.375	3.015	0.005	0.015	400
KP4R16	0.2500	0.901	0.484	0.335	0.390	1.000	0.005	0.015	400
KP4R16-2	0.2500	1.000	0.390	0.335	0.390	1.000	0.005	0.015	500
KP4R16-3	0.2500	0.901	0.390	0.335	0.390	1.000	0.005	0.015	400
KP4R21-2	0.2500	1.312	0.376	0.281	0.616	1.312	0.005	0.015	500
KP4R25-2	0.2500	1.656	0.376	0.315	0.616	1.658	0.005	0.015	500
K8AR4	0.5000	1.250	0.344	0.375	0.610	0.252	0.016	0.015	500

* O.D. tolerance +0.0000/-0.003

** Denotes spherical diameter.

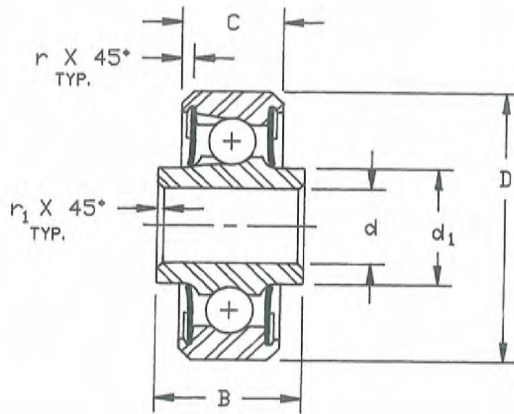
- Notes:
1. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 2. Check with Schatz Bearing Corporation for current approval status.
 3. Check with Schatz Bearing Corporation's Sales Department for price and availability.

Manufactured to MS27640 per MIL-B-7949.

All external surfaces except bore, and stainless steel seal retainers are cadmium plated.

Installed with Teflon seals.

Pre-lubricated.



BEARING NUMBER	MS 27640-	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
		d	D	B	C					
		+0.0000 -0.0005 (in.)	+0.0000 -0.0005 (in.)	+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	Approx. (in.)	+0.015 -0.000 (in.)	+0.015 -0.000 (in.)		
KP3L	-3A	0.1900	0.6250	0.245	0.203	0.280	0.005	0.01	1560	700
KP3	-3	0.1900	0.7774	0.297	0.270	0.331	0.005	0.022	1880	900
KP4	-4	0.2500	0.9014	0.484	0.335	0.387	0.005	0.032	2680	1200
KP5	-5	0.3125	1.2500	0.558	0.375	0.469	0.015	0.032	5620	2500
KP6	-6	0.3750	1.4375	0.620	0.469	0.591	0.015	0.032	7910	3500
KP8	-8	0.5000	1.6875	0.620	0.500	0.752	0.015	0.044	11810	5200
KP10	-10	0.6250	1.9375	0.620	0.500	0.850	0.015	0.044	14100	6200

- Notes:
1. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 2. Check with Schatz Bearing Corporation for current approval status.
 3. Check with Schatz Bearing Corporation's Sales Department for price and availability.

KP-A SERIES

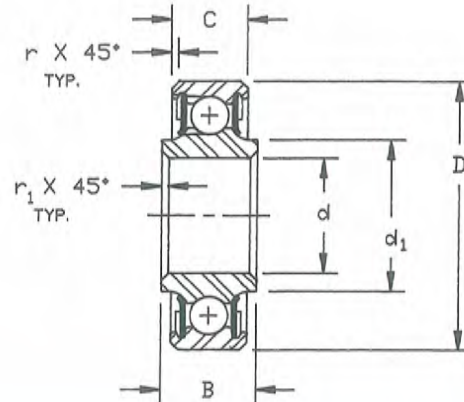
(RADIAL TYPE)

Manufactured to MS27641 per MIL-B-7949.

All external surfaces except bore and stainless steel seal retainers are cadmium plated.

Installed with Teflon seals.

Pre-lubricated.



BEARING NUMBER	MS 27641-	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
		d +0.000 -0.005 (in.)	D +0.000 -0.005 (in.)	B +0.000 -0.005 (in.)	C +0.000 -0.005 (in.)					
KP3A	-3	0.1900	0.6250	0.297	0.234	0.270	0.005	0.016	1560	700
KP4A	-4	0.2500	0.7500	0.281	0.219	0.349	0.005	0.016	1880	900
KP5A	-5	0.3125	0.8125	0.297	0.234	0.428	0.015	0.016	2190	1000
KP6A	-6	0.3750	0.8750	0.313	0.250	0.505	0.015	0.016	2500	1100
KP8A	-8	0.5000	1.1250	0.375	0.313	0.635	0.015	0.016	3910	1700
KP10A	-10	0.6250	1.3750	0.406	0.344	0.760	0.015	0.032	6700	3000
KP12A	-12	0.7500	1.6250	0.437	0.375	0.955	0.015	0.032	8790	3900
KP16A	-16	1.0000	2.0000	0.500	0.438	1.262	0.015	0.032	11900	5200
KP20A	-20	1.2500	2.2500	0.500	0.438	1.512	0.015	0.032	13800	6100

- Notes:
1. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 2. Check with Schatz Bearing Corporation for current approval status.
 3. Check with Schatz Bearing Corporation's Sales Department for price and availability.

KSP, KSP-A SERIES

(SELF-ALIGNING TYPE)

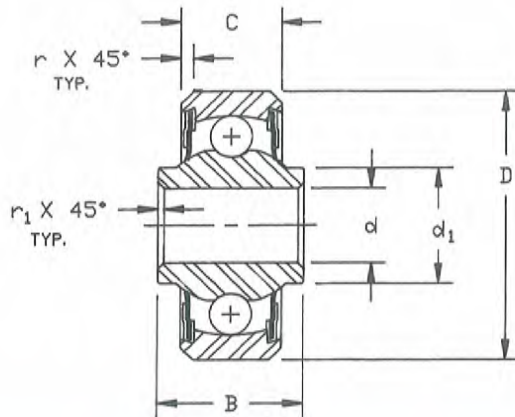
Manufactured to MS27645 per MIL-B-7949.

Single row, ball, self aligning.

All external surfaces except bore and stainless steel seal retainers are cadmium plated.

Warning: Do not allow these bearings to act as misalignment stops.

Pre-lubricated.



BEARING NUMBER	MS 27645-	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
		d	D	B	C					
		+0.000 -0.010 (in.)	+0.000 -0.010 (in.)	+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	Approx. (in.)	+0.015 -0.000 (in.)	+0.015 -0.000 (in.)		
KSP3L	-3A	0.1900	0.6250	0.245	0.203	0.256	0.005	0.016	550	100
KSP4A	-4A	0.2500	0.7500	0.281	0.219*	0.328	0.005	0.016	900	200
KSP5A	-5A	0.3125	0.8125	0.297	0.234	0.389	0.015	0.016	1000	200
KSP6A	-6A	0.3750	0.8750	0.313	0.250	0.462	0.016	0.016	1120	200
KSP3	-3	0.1900	0.7774	0.297	0.270	0.297	0.005	0.022	900	200
KSP4	-4	0.2500	0.9014	0.484	0.335	0.396	0.005	0.032	1410	300
KSP5	-5	0.3125	1.2500	0.558	0.375	0.567	0.015	0.032	2190	300
KSP6	-6	0.3750	1.4375	0.620	0.469	0.612	0.015	0.032	2980	400
KSP8	-8	0.5000	1.6875	0.620	0.500	0.796	0.015	0.044	3670	500
KSP10	-10	0.6250	1.9375	0.813	0.625	0.922	0.015	0.044	5320	600

* .244 ref. over seal.

- Notes:
1. Bearings are self-aligning for 10 degrees in either direction except for KSP4A, KSP5A and KSP6A which are self-aligning for 8 degrees in either direction.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

P SERIES

(PULLEY TYPE)

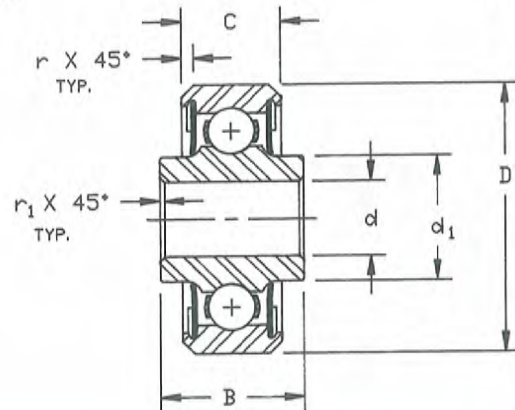
Manufactured to MS21443 per MIL-P-7034 pulleys.

All external surfaces except bore, and stainless steel seal retainers are cadmium plated.

Installed with Teflon seals.

Pre-lubricated.

Retainer type.



BEARING NUMBER	MS 21443-	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
		d	D	B	C					
		+0.0000 -0.0005 (in.)	+0.0000 -0.0005 (in.)	+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	Approx. (in.)	+0.015 -0.000 (in.)	+0.015 -0.000 (in.)		
KP3K	-3B	0.1900	0.7774	0.297	0.270	0.332	0.005	0.024	1090	600
KP3AK	-3A	0.1900	0.6250	0.297	0.234	0.297	0.005	0.016	705	385
KP3AK-2*		0.1900	0.6250	0.625	0.234	0.297	0.005	0.016	705	385
W4AK	-4A	0.2500	0.7500	0.438	0.312	0.372	0.005	0.016	1090	600
KP4K	-4C	0.2500	0.9014	0.484	0.335	0.390	0.005	0.034	1710	800

- Notes:
1. Designed for use in pulleys, the P Series bearings work well in other airframe applications. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

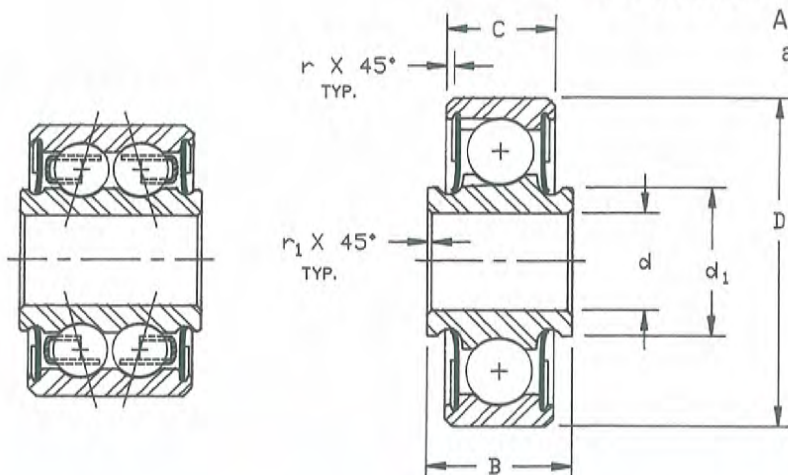
(PULLEY TYPE)

Manufactured to MS21443 per MIL-P-7034 pulleys.

All external surfaces except bore, and stainless steel seal retainers are cadmium plated.

Installed with Teflon seals.

Pre-lubricated.



BEARING NUMBER	MS 21443-	BORE	OUTSIDE DIAMETER	WIDTHS		d_1	r_1	r	Radial Limit Load Rating (lbs.)	Thrust Limit Load Rating (lbs.)
		d	D	B	C					
		+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	+0.000 -0.005 (in.)	Approx. (in.)	+0.015 -0.000 (in.)	+0.015 -0.000 (in.)		
P4K	-4B	0.2500	0.8750	0.438	0.375	0.423	0.005	0.022	1710	800
P5K	-5A	0.3125	0.8750	0.625	0.375	0.455	0.005	0.022	1710	800
PD5K	-5B	0.3125	0.9375	0.625	0.563	0.455	0.005	0.022	3420	1030
P8*		0.5000	1.6875	0.750	0.563	0.768	0.005	0.032	11800	5200
P10K	-10	0.6250	1.1875	0.438	0.375	0.769	0.005	0.022	2440	1100

* Full type – no retainer.

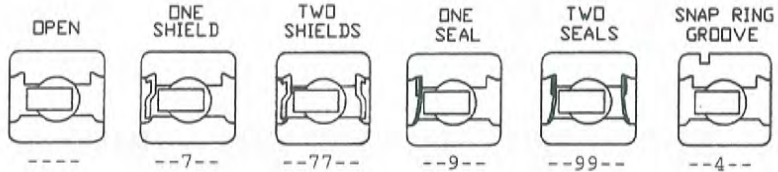
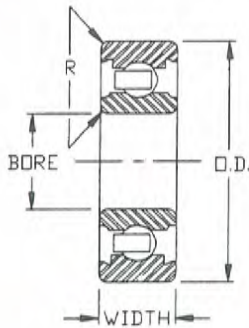
- Notes:
1. Designed for use in pulleys, the P Series bearings work well in other airframe applications. Do not use bearings as track rollers, cam follower rolls or for similar applications.
 2. Contact Schatz Bearing Corporation's Engineering Department for further technical information.
 3. Check with Schatz Bearing Corporation for current approval status.
 4. Check with Schatz Bearing Corporation's Sales Department for price and availability.

**SCHATZ PRECISION
INDUSTRIAL BEARINGS**

Type BR Bearing	26
Type BS Bearing	27
Type W & WE Bearings	28
Type BM Bearing (Metric)	29

TYPE BR BEARINGS

Precision Ground Single Row Radial Ball Bearings.
Special Dimensions and Tolerances Can Also Be Supplied.



To designate bearings with shields, seals or snap rings, the design feature numbers, shown under the illustrations above, are inserted between the alphabetical bearing type prefix and the bearing number. Thus a BR 01 bearing with one shield would be numbered BR 701. With two shields it would be numbered BR 7701, etc.

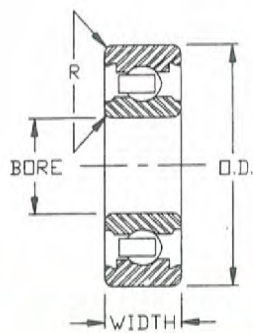
BEARING NUMBER	BORE	O.D.	Tolerance +.0000 To Minus	WIDTH	BALLS		† Radius R Inches	Basic Dynamic Loads Rating in Pounds at 33-1/3 RPM
	+ .0000 - .0005 Inches	Inches		+ .000 - .005 Inches	No.	Diameter Inches		
BR 01	3/16	11/16	.0005	1/4	6	1/8	.012	320
BR 01A	3/16	11/16	.0005	5/16	6	1/8	.012	320
BR 02	1/4	11/16	.0005	1/4	6	1/8	.012	320
BR 02A	1/4	11/16	.0005	5/16	6	1/8	.012	320
BR 03	5/16	7/8	.0005	9/32	7	5/32	.016	520
BR 03A	5/16	7/8	.0005	11/32	7	5/32	.016	520
BR 04	3/8	7/8	.0005	9/32	7	5/32	.016	520
BR 04A	3/8	7/8	.0005	11/32	7	5/32	.016	520
BR 05	5/16	29/32	.0005	5/16	7	5/32	.016	520
BR 06	3/8	29/32	.0005	5/16	7	5/32	.016	520
BR 07	7/16	29/32	.0005	5/16	9	1/8	.016	395
BR 14	3/8	1-1/8	.0005	3/8	8	3/16	.016	750
BR 15	7/16	1-1/8	.0005	3/8	8	3/16	.016	750
BR 16	1/2	1-1/8	.0005	3/8	8	3/16	.016	750
BR 20	7/16	1-3/8	.0005	7/16	8	7/32	.025	1000
BR 21	1/2	1-3/8	.0005	7/16	8	7/32	.025	1000
BR 22	9/16	1-3/8	.0005	7/16	8	7/32	.025	1000
BR 23	5/8	1-3/8	.0005	7/16	8	7/32	.025	1000
BR 28	5/8	1-5/8	.0005	1/2	8	1/4	.031	1275
BR 29	11/16	1-5/8	.0005	1/2	8	1/4	.031	1275
BR 30	3/4	1-5/8	.0005	1/2	8	1/4	.031	1275
BR 33	5/8	1-3/4	.0005	1/2	8	1/4	.031	1275
BR 34	11/16	1-3/4	.0005	1/2	8	1/4	.031	1275
BR 35	3/4	1-3/4	.0005	1/2	8	1/4	.031	1275
BR 38	3/4	2	.0006	9/16	10	1/4	.031	1480
BR 39	13/16	2	.0006	9/16	10	1/4	.031	1480
BR 40	7/8	2	.0006	9/16	10	1/4	.031	1480
BR 41	1	2	.0006	9/16	10	1/4	.031	1480
BR 52	1-1/8	2-1/2	.0006	5/8	11	9/32	.031	1920
BR 54	1-1/4	2-1/2	.0006	5/8	11	9/32	.031	1920
BR 57	1-1/4	2-9/16	.0006	11/16	9	3/8	.040	2865
BR 58	1-5/16	2-9/16	.0006	11/16	9	3/8	.040	2865

† Maximum shaft or housing fillet bearing will clear.

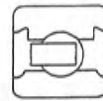
Above BR Series load ratings are for 52100 material, precision ground. Some of our BR Series are also supplied with 12L14 material and the corresponding load ratings are lower. Please consult our engineering department for load and specific data regarding your application.

TYPE BS BEARINGS

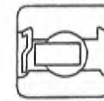
Precision Ground Single Row Radial Ball Bearings.
Special Dimensions and Tolerances Can Also Be Supplied.



OPEN

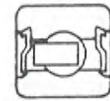


ONE SHIELD



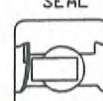
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TWO SHIELDS



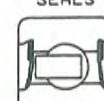
--77--

ONE SEAL



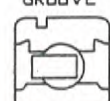
--9--

TWO SEALS



--99--

SNAP RING GROOVE



--4--

BEARING NUMBER	BORE		O.D.		WIDTH		BALLS		Basic Dynamic Load Rating in Pounds at 33 1/3 RPM
	+ .0000 - .0005 Inches	Inches	Tolerance + .0000 To Minus	Open + .000 - .005 Inches	Sealed or Shielded + .000 - .005 Inches	No.	Diameter Inches	† Radius R Inches	
BS 3	3/16	1/2	.0005	.156	.196	7	3/32	.012	120
BS 4	1/4	5/8	.0005	.196	.196	8	3/32	.012	135
BS 4A	1/4	3/4	.0005	7/32	9/32	6	5/32	.016	420
BS 6	3/8	7/8	.0005	7/32	9/32	7	5/32	.016	520
BS 8	1/2	1-1/8	.0005	1/4	5/16	8	3/16	.016	750
BS 10	5/8	1-3/8	.0005	9/32	11/32	8	7/32	.031	1000
BS 12	3/4	1-5/8	.0005	5/16	7/16	8	1/4	.031	1275
BS 14	7/8	1-7/8	.0005	3/8	1/2	9	1/4	.031	1380
BS 16	1	2	.0006	3/8	1/2	10	1/4	.031	1480
BS 18	1-1/8	2-1/8	.0006	3/8	1/2	11	1/4	.031	1565
BS 20	1-1/4	2-1/4	.0006	3/8	1/2	11	1/4	.031	1565

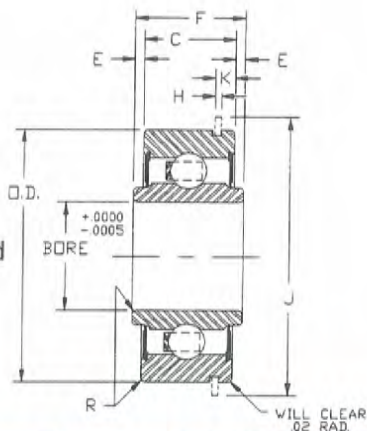
† Maximum shaft or housing fillet bearing will clear.

To designate bearings with shields, seals or snap rings, the design feature numbers, shown under the illustrations above, are inserted between the alphabetical bearing type prefix and the bearing number. Thus a BS 3 bearing with one shield would be numbered BS 73. With two shields it would be numbered BS 773, etc.

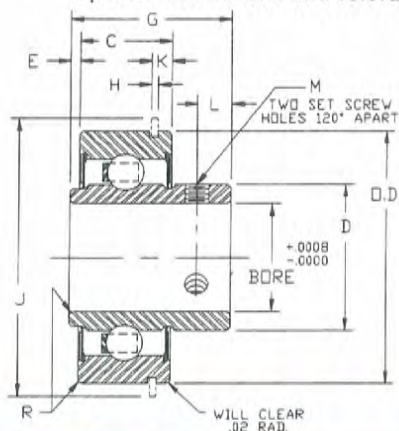
TYPES W AND WE BEARINGS

Precision Ground Single Row Radial Ball Bearings.
Special Dimensions and Tolerances Can Also Be Supplied.

W400 No Snap Ring
W500 Snap Ring Mounted



WE400 No Snap Ring
WE500 Snap Ring Mounted



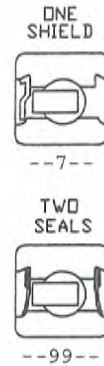
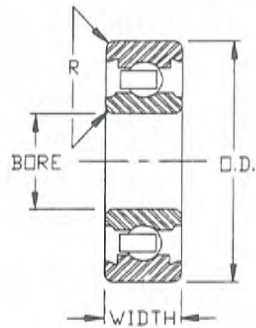
BEARING NUMBER (see note above)		BORE	O.D.	O.D. TOL. +.0000 to Minus	+ .000 - .005	+ .000 - .005	+ .000 - .005	+ .000 - .005	H	J	
					C	D	E	F	G		
W408	WE408	1/2	1-3/4	.0005	5/8	1.02	1/16	3/4	1.092	.042	1-59/64
W409	WE409	9/16	1-3/4	.0005	5/8	1.02	1/16	3/4	1.092	.042	1-59/64
W410	WE410	5/8	1-3/4	.0005	5/8	1.02	1/16	3/4	1.092	.042	1-59/64
W411	WE411	11/16	1-3/4	.0005	5/8	1.02	1/16	3/4	1.092	.042	1-59/64
W412	WE412	3/4	1-3/4	.0005	5/8	1.02	1/16	3/4	1.092	.042	1-59/64
W413	WE413	13/16	2	.0006	5/8	1.33	1/16	3/4	1.179	.042	2-5/32
W414	WE414	7/8	2	.0006	5/8	1.33	1/16	3/4	1.179	.042	2-5/32
W415	WE415	15/16	2	.0006	5/8	1.33	1/16	3/4	1.179	.042	2-5/32
W416	WE416	1	2	.0006	5/8	1.33	1/16	3/4	1.179	.042	2-5/32
W417	WE417	1-1/16	2-9/16	.0006	3/4	1.57	1/16	7/8	1.417	.065	2-49/64
W418	WE418	1-1/8	2-9/16	.0006	3/4	1.57	1/16	7/8	1.417	.065	2-49/64
W419	WE419	1-3/16	2-9/16	.0006	3/4	1.57	1/16	7/8	1.417	.065	2-49/64
W420	WE420	1-1/4	2-9/16	.0006	3/4	1.57	1/16	7/8	1.417	.065	2-49/64

BEARING NUMBER (see note above)		BORE	O.D.	O.D. TOL. +.0000 to Minus	K	L	M	† R	Balls No.	Balls Dia.	Basic Dynamic Load Rating at 33-1/3 RPM
W408	WE408	1/2	1-3/4	.0005	.136	.233	10-32	.031	8	1/4	1275
W409	WE409	9/16	1-3/4	.0005	.136	.233	10-32	.031	8	1/4	1275
W410	WE410	5/8	1-3/4	.0005	.136	.233	10-32	.031	8	1/4	1275
W411	WE411	11/16	1-3/4	.0005	.136	.233	10-32	.031	8	1/4	1275
W412	WE412	3/4	1-3/4	.0005	.136	.233	10-32	.031	8	1/4	1275
W413	WE413	13/16	2	.0006	.136	.261	10-32	.031	10	1/4	1480
W414	WE414	7/8	2	.0006	.136	.261	10-32	.031	10	1/4	1480
W415	WE415	15/16	2	.0006	.136	.261	10-32	.031	10	1/4	1480
W416	WE416	1	2	.0006	.136	.261	10-32	.031	10	1/4	1480
W417	WE417	1-1/16	2-9/16	.0006	.190	.261	1/4-28	.040	9	3/8	2865
W418	WE418	1-1/8	2-9/16	.0006	.190	.261	1/4-28	.040	9	3/8	2865
W419	WE419	1-3/16	2-9/16	.0006	.190	.261	1/4-28	.040	9	3/8	2865
W420	WE420	1-1/4	2-9/16	.0006	.190	.261	1/4-28	.040	9	3/8	2865

† Maximum shaft or housing fillet bearing will clear.

TYPE BM BEARINGS (METRIC)

Precision Ground Single Row Radial Ball Bearings.
Special Dimensions and Tolerances Can Also Be Supplied.

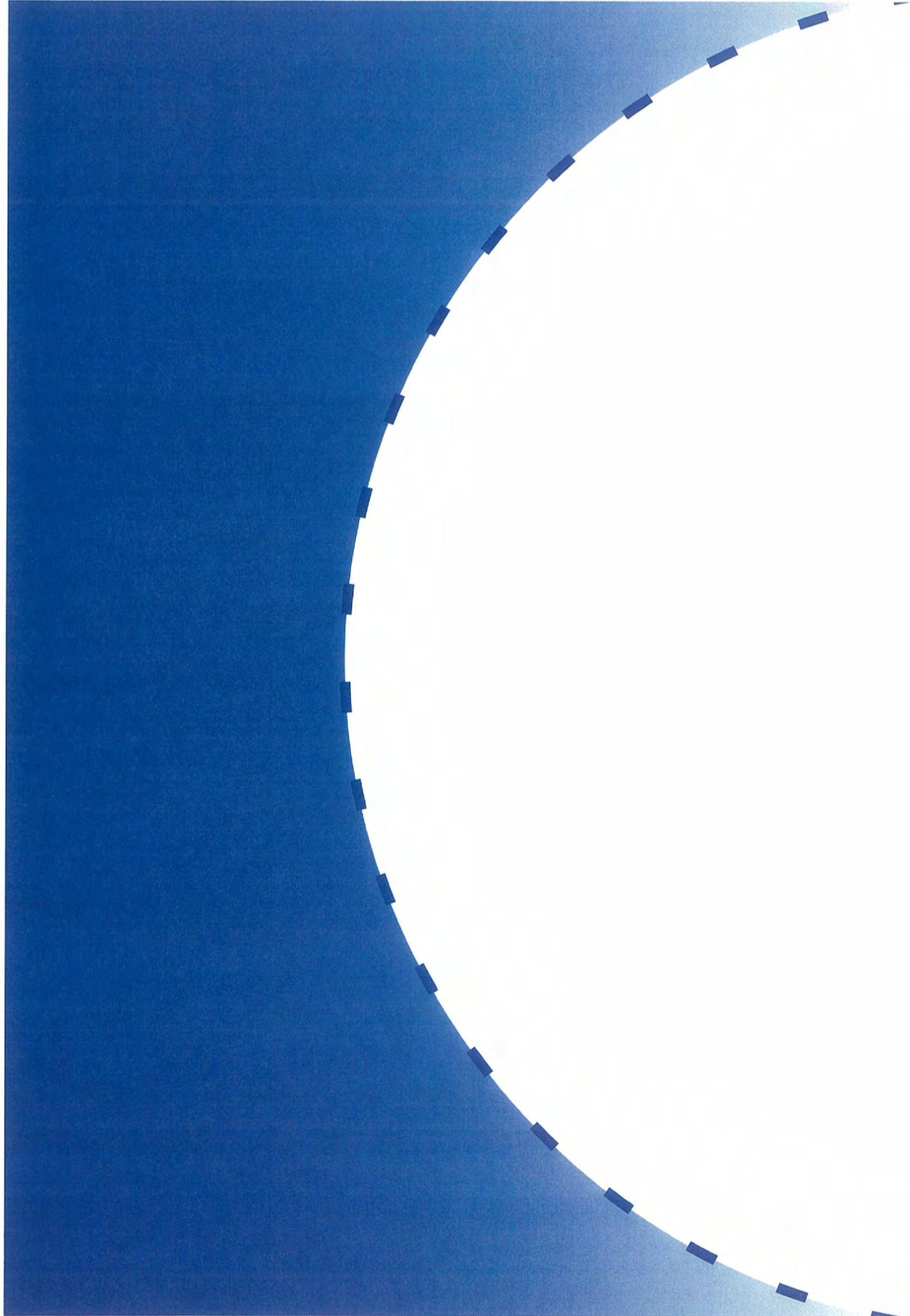


BEARING NUMBER	BORE		O.D.		WIDTH		BALLS		† Radius R Inches	Basic Dynamic Load Rating in Pounds at 33-1/3 RPM
	MM	+0.000 -.0005 Inches	MM	+0.000 -.0005 Inches	MM	+0.00 -.005 Inches	Diameter No.	Diameter Inches		
BM 34	4	.1575	16	.6299	5	.1969	6	1/8	.012	280
BM 35	5	.1969	19	.7480	6	.2362	6	9/64	.012	350
BM 36	6	.2362	19	.7480	6	.2362	6	9/64	.012	350
BM 37	7	.2756	22	.8661	7	.2756	7	5/32	.012	485
BM 38	8	.3150	22	.8661	7	.2756	7	5/32	.012	485
BM 39	9	.3543	26	1.0236	8	.3150	7	3/16	.025	665
BM 200	10	.3937	30	1.1811	9	.3543	7	7/32	.025	880
BM 201	12	.4724	32	1.2593	10	.3937	7	15/64	.025	1000
BM 202	15	.5906	35	1.3780	11	.4331	8	7/32	.025	1000
BM 203	17	.6693	40	1.5748	12	.4724	8	17/64	.025	1405
BM 204	20	.7874	47	1.8504	14	.5512	8	5/16	.040	1880
BM 205	25	.9843	52	2.0472*	15	.5906	9	5/16	.040	2065
BM 206	30	1.1811	62	2.4409*	16	.6299	9	3/8	.040	2865

† Maximum shaft or housing fillet bearing will clear.

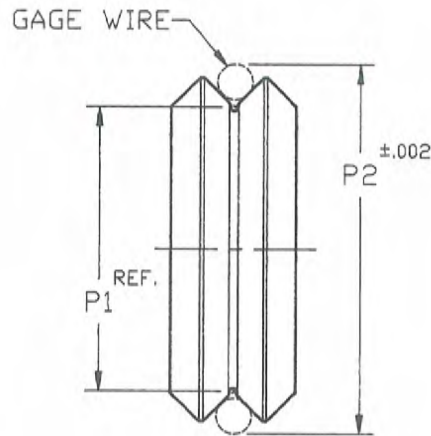
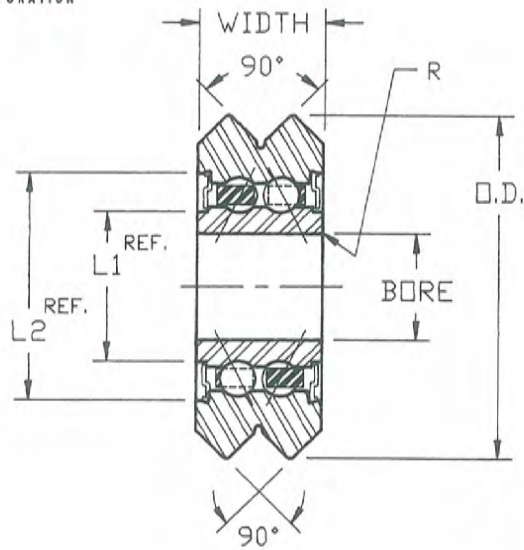
* O.D. Tol. +.0000 -.0006

To designate bearings with shields, seals or snap rings, the design feature numbers, shown under the illustrations above, are inserted between the alphabetical bearing type prefix and the bearing number. Thus a BM 34 bearing with one shield would be numbered BM 734. With two shields it would be numbered BM 7734, etc.



**INDUSTRIAL GUIDE WHEELS
FOR PRECISION LINEAR
MOTION**

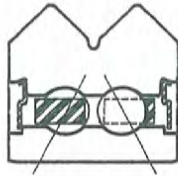
Guide Wheel	32
Bearings for Linear Motion	33
Guide Wheel Bushings	34
Guide Wheel Applications	35



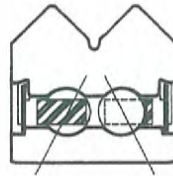
BEARING NUMBER	INTER-CHANGE NUMBER	BASIC BEARING DIMENSIONS						PROFILE DIMENSIONS		
		BORE +0.000 -0.003	O.D. ±.005	WIDTH +0.000 -0.005	L1 LAND	L2 LAND	R WILL CLEAR RADIUS	P1	P2	GAGE WIRE DIA.
CS3923	W1									
CS3923X1	W1X	.1875	.771	.3100	.314	.564	.012	.625	.851	.0937
CS3923X2	W1SSX									
CS3913	W2									
CS3913X1	W2X	.3750	1.210	.4375	.530	.797	.012	1.000	1.302	.1250
CS3913X2	W2SSX									
CS3925	W3									
CS3925X1	W3X	.4724	1.803	.6250	.640	1.005	.024	1.500	1.953	.1875
CS3925X2	W3SSX									
CS3926	W4									
CS3926X1	W4X	.5906	2.360	.7500	.878	1.395	.024	2.000	2.604	.2500
CS3926X2	W4SSX									

BEARINGS FOR LINEAR MOTION

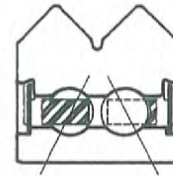
Schatz Double V Precision Ball Bearings



CS-----
SAE: 52100
TWO SHIELDS
(REF: W)



CS-----X1
SAE: 52100
TWO SEALS
(REF: WX)



CS-----X2
AISI 440C
TWO SEALS
(REF: WSSX)

SAE: 52100 DOUBLE V GUIDE WHEEL CAPACITY

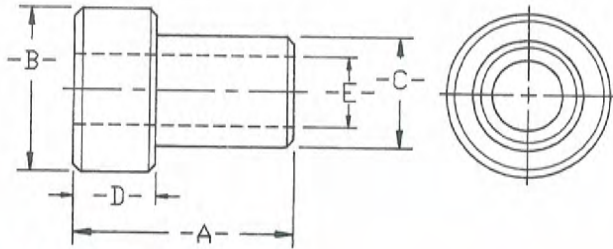
BEARING NUMBER	INTER-CHANGE NUMBER	DYNAMIC RADIAL CAPACITY, LBS*				THRUST CAPACITY LBS.	STATIC RADIAL CAPACITY LBS.
		33.3 RPM	100 RPM	500 RPM	1000 RPM		
CS3923	W1	349	240	140	110	60	240
CS3913	W2	730	485	285	225	120	605
CS3925	W3	1335	920	540	430	530	907
CS3926	W4	2050	1400	810	645	650	1230

AISI 440C DOUBLE V GUIDE WHEEL CAPACITY

BEARING NUMBER	INTER-CHANGE NUMBER	DYNAMIC RADIAL CAPACITY, LBS*				THRUST CAPACITY LBS.	STATIC RADIAL CAPACITY LBS.
		33.3 RPM	100 RPM	500 RPM	1000 RPM		
CS3923X2	W1SSX	310	215	125	98	54	200
CS3913X2	W2SSX	560	388	228	180	88	450
CS3925X2	W3SSX	1070	740	430	345	426	700
CS3926X2	W4SSX	1590	1125	645	515	508	950

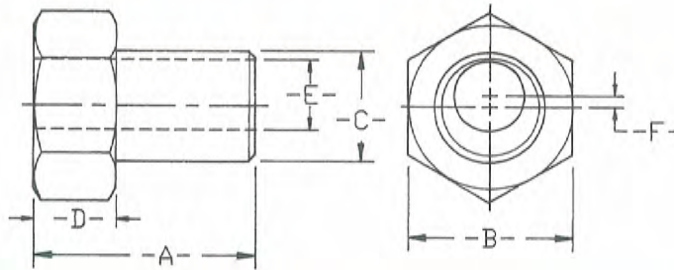
*RATINGS ARE BASED ON AN AVERAGE LIFE OF 2600 HOURS.

CONSULT SCHATZ ENGINEERING DEPARTMENT FOR BEARING LIFE AND LOAD RATINGS AT SPECIFIC APPLICATION LOADS AND SPEEDS.



STATIONARY BUSHING

BEARING NUMBER	INTER-CHANGE NUMBER	STATIONARY BUSHING DIMENSIONS				
		A	B	C	D	E
RBS-23	B1	.550	7/16	.1873	.250	.140
RBS-13	B2	.706	9/16	.3748	.281	.250
RBS-25	B3	.990	3/4	.4722	.375	.312
RBS-26	B4	1.177	7/8	.5904	.437	.375



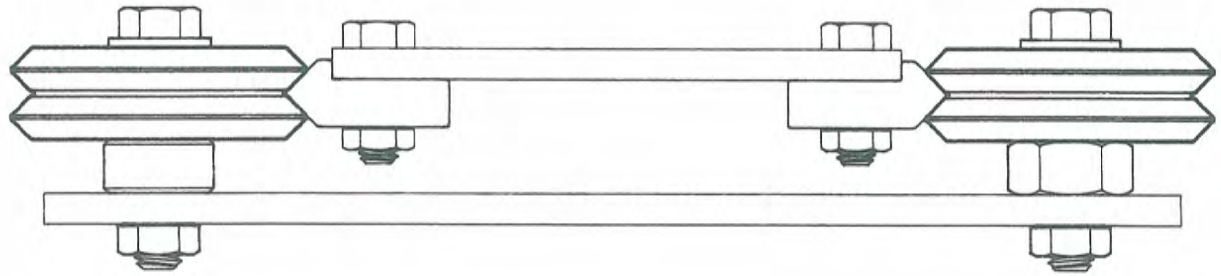
ADJUSTABLE BUSHING

BEARING NUMBER	INTER-CHANGE NUMBER	ADJUSTABLE BUSHING DIMENSIONS					
		A	B	C	D	E	F
RBA-23	BX1	.550	7/16	.1873	.250	.140	.012
RBA-13	BX2	.706	9/16	.3748	.281	.250	.024
RBA-25	BX3	.990	3/4	.4722	.375	.312	.042
RBA-26	BX4	1.177	7/8	.5904	.437	.375	.060

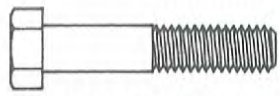
MATERIAL: LEADED SCREW STOCK
ZINC PLATED TO RESIST CORROSION
ALSO AVAILABLE IN STAINLESS STEEL

GUIDE WHEEL APPLICATIONS

Schatz Double V Linear Motion Products



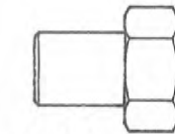
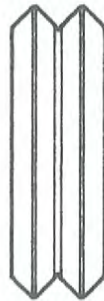
SCHATZ
DOUBLE V
PRECISION BEARING



MOUNTING
BOLT



WASHER



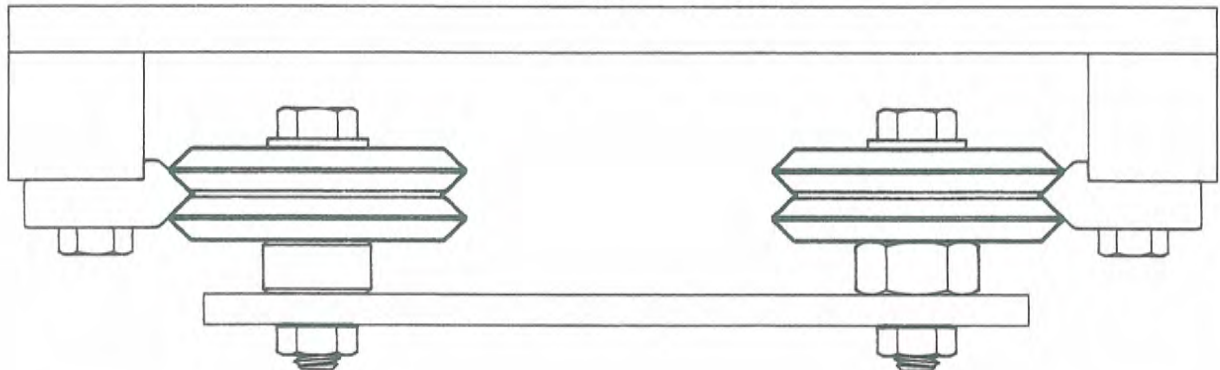
ADJUSTABLE
BUSHING

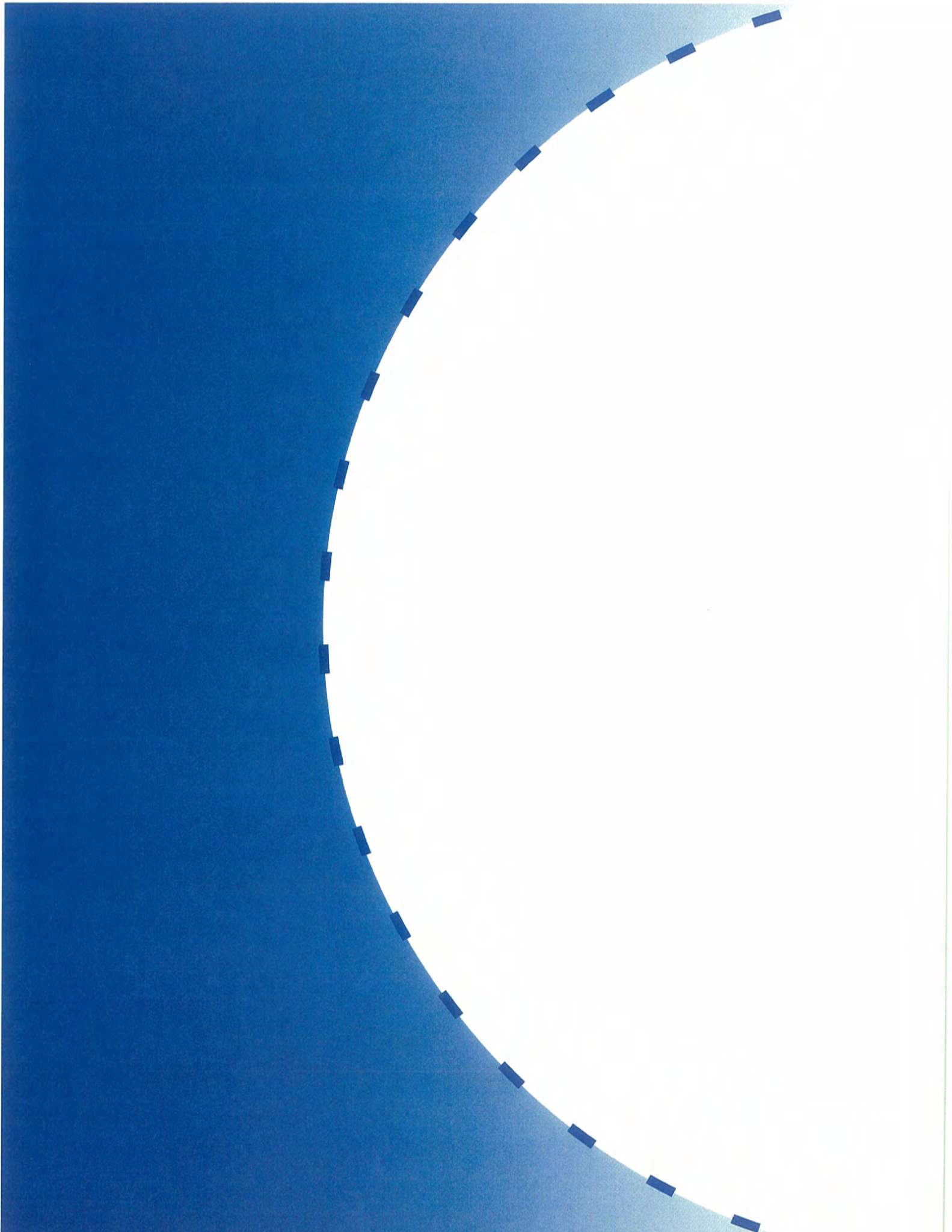


MOUNTING
NUT



TRACK RAIL

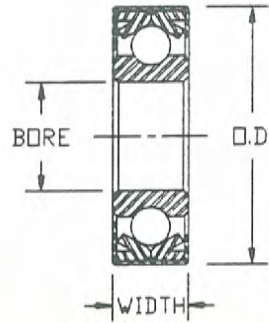




**FUNCTIONAL PRECISION,
UNGROUND, SEMI-GROUND
SERIES**

A	38 - 40
AF	41 - 42
AH, AFH, KFH	43
AFS	44
AT	45
TW	46
HB	47
SM	48

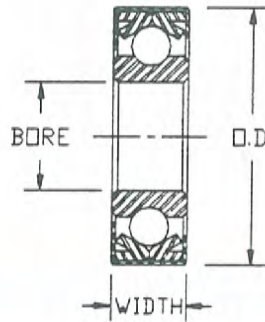
Unground Single Row Radial Ball Bearings.



BEARING NUMBER	BORE	O.D.	WIDTH	BALLS		Load Rating in Pounds 500 RPM
	+0.005 -0.000	±.002	±.010	No.	Dia	
A 0616	3/32	1/2	3/16	8	3/32	15
A 0820	1/8	5/8	3/16	9	1/8	35
A 1218	3/16	9/16	3/16	11	3/32	20
A 1220	3/16	5/8	3/16	13	3/32	25
A 1222	3/16	11/16	1/4	10	1/8	35
A 1224	3/16	3/4	1/4	11	1/8	40
A 1228	3/16	7/8	1/4	13	1/8	45
A 1622	1/4	11/16	1/4	10	1/8	35
A 1624	1/4	3/4	1/4	11	1/8	40
A 1626	1/4	13/16	1/4	11	1/8	40
A 1628	1/4	7/8	1/4	13	1/8	45
A 1629	1/4	29/32	5/16	11	5/32	60
A 1632	1/4	1	5/16	10	3/16	80
A 1634	1/4	1-1/16	1/4	13	5/32	70
A 2028	5/16	7/8	1/4	13	1/8	45
A 2029	5/16	29/32	5/16	15	1/8	55
A 2030	5/16	15/16	5/16	15	1/8	55
A 2032	5/16	1	5/16	13	5/32	70
A 2034	5/16	1-1/16	1/4	13	5/32	70
A 2034B	5/16	1-1/16	3/8	14	5/32	75
A 2428	3/8	7/8	1/4	14	1/8	50
A 2429	3/8	29/32	5/16	15	1/8	55
A 2430	3/8	15/16	5/16	15	1/8	55
A 2432	3/8	1	5/16	13	5/32	70
A 2434	3/8	1-1/16	1/4	13	5/32	70
A 2434B	3/8	1-1/16	3/8	14	5/32	75
A 2436	3/8	1-1/8	3/8	15	5/32	80
A 2438	3/8	1-3/16	3/8	13	3/16	105
A 2440	3/8	1-1/4	3/8	13	3/16	105
A 2441	3/8	1-9/32	5/16	13	3/16	105

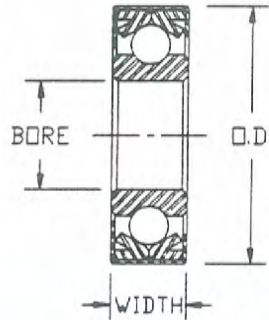
TYPE A BEARINGS

Unground Single Row Radial Ball Bearings.



BEARING NUMBER	BORE	O.D.	WIDTH	BALLS		Load Rating in Pounds 500 RPM
	+0.005 -0.000	±.002	±.010	No.	Dia	
A 2829	7/16	29/32	5/16	15	1/8	55
A 2830	7/16	15/16	5/16	15	1/8	55
A 2834A	7/16	1-1/16	3/8	14	5/32	75
A 2836	7/16	1-1/8	3/8	15	5/32	80
A 2841	7/16	1-9/32	5/16	13	3/16	105
A 2844	7/16	1-3/8	7/16	15	3/16	120
A 2846	7/16	1-7/16	1/2	11	1/4	155
A 3236	1/2	1-1/8	3/8	15	5/32	80
A 3238	1/2	1-3/16	3/8	13	3/16	105
A 3240	1/2	1-1/4	3/8	13	3/16	105
A 3241	1/2	1-9/32	5/16	13	3/16	105
A 3244	1/2	1-3/8	7/16	15	3/16	120
A 3248	1/2	1-1/2	7/16	17	3/16	135
A 3250	1/2	1-9/16	7/16	13	1/4	185
A 3252	1/2	1-5/8	3/8	13	1/4	185
A 3252A	1/2	1-5/8	1/2	13	1/4	185
A 3256	1/2	1-3/4	9/16	14	1/4	195
A 3644	9/16	1-3/8	7/16	15	3/16	120
A 3646	9/16	1-7/16	1/2	16	3/16	125
A 4040	5/8	1-1/4	5/16	17	5/32	95
A 4044	5/8	1-3/8	7/16	15	3/16	120
A 4048	5/8	1-1/2	7/16	17	3/16	135
A 4052	5/8	1-5/8	3/8	13	1/4	185
A 4052A	5/8	1-5/8	1/2	13	1/4	185
A 4064	5/8	2	1/2	13	5/16	285
A 4448	11/16	1-1/2	7/16	17	3/16	135
A 4850	3/4	1-9/16	7/16	19	3/16	150
A 4852	3/4	1-5/8	1/2	19	3/16	150
A 4852A	3/4	1-5/8	3/8	19	3/16	150

Unground Single Row Radial Ball Bearings.

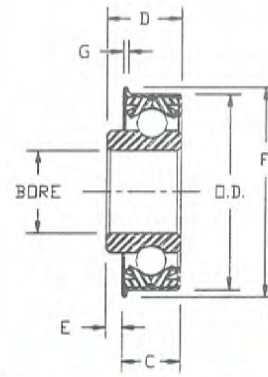


BEARING NUMBER	BORE	O.D.	WIDTH	BALLS		Load Rating in Pounds 500 RPM
	+0.005 -0.000	±.002	±.010	No.	Dia	
A 4856	3/4	1-3/4	9/16	14	1/4	195
A 4864	3/4	2	1/2	13	5/16	285
A 4867A	3/4	2-5/64	5/8	14	5/16	310
A 5260	13/16	1-7/8	1/2	16	1/4	225
A 5660	7/8	1-7/8	1/2	16	1/4	225
A 5664	7/8	2	1/2	13	5/16	285
A 5667A	7/8	2-5/64	5/8	14	5/16	310
A 5668	7/8	2-1/8	5/8	15	5/16	330
A 5672	7/8	2-1/4	5/8	13	11/32	345
A 6064	15/16	2	1/2	17	1/4	240
A 6464	1	2	1/2	17	1/4	240
A 6468	1	2-1/8	5/8	15	5/16	330
A 6472	1	2-1/4	5/8	15	5/16	330
A 6480	1	2-1/2	5/8	14	3/8	445
A 6488	1	2-3/4	5/8	16	3/8	510
A 7264	1-1/8	2	1/2	24	3/16	190
A 7272	1-1/8	2-1/4	5/8	19	1/4	265
A 7274	1-1/8	2-5/16	5/8	18	9/32	320
A 7280	1-1/8	2-1/2	5/8	17	5/16	375
A 7284	1-1/8	2-5/8	11/16	18	5/16	395
A 7674	1-3/16	2-5/16	5/8	18	9/32	320
A 8074	1-1/4	2-5/16	5/8	21	1/4	295
A 8080A	1-1/4	2-1/2	11/16	17	5/16	375
A 8084	1-1/4	2-5/8	11/16	18	5/16	395
A 8088	1-1/4	2-3/4	5/8	16	3/8	510
A 8880	1-3/8	2-1/2	11/16	23	1/4	325
A 9688	1-1/2	2-3/4	5/8	20	5/16	440
A 10499	1-5/8	3-3/32	11/16	19	3/8	600
A 128108	2*	3-3/8	3/4	23	11/32	610

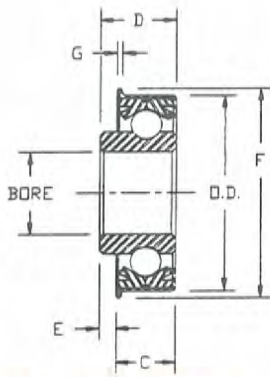
* Bore Tol. +.010 to -.000

TYPE AF BEARINGS

Unground Single Row Radial Ball Bearings With Flange.
(For Sealed Version See TW Series.)



BEARING NUMBER	BORE	O.D.	WIDTH		EXT.	FLANGE		BALLS		RATING
	+005 -000	±.002	C	D	E	F	G	No.	Dia.	Load in Lbs. 500 RPM
AF 0816A	.112	1/2	3/16	7/32	1/32	9/16	.04	8	3/32	15
AF 1220	3/16	5/8	3/16	13/64	1/64	23/32	.04	9	1/8	30
AF 1222	3/16	11/16	1/4	5/16	1/16	25/32	.04	10	1/8	35
AF 1622	1/4	11/16	1/4	5/16	1/16	25/32	.04	10	1/8	35
AF 1624	1/4	3/4	1/4	5/16	1/16	53/64	.04	11	1/8	40
AF 1628	1/4	7/8	1/4	5/16	1/16	31/32	.04	13	1/8	45
AF 1629	1/4	29/32	5/16	3/8	1/16	1-1/32	.04	11	5/32	60
AF 2028	5/16	7/8	1/4	5/16	1/16	31/32	.04	13	1/8	45
AF 2029	5/16	29/32	5/16	3/8	1/16	1-1/32	.04	15	1/8	55
AF 2034	5/16	1-1/16	3/8	7/16	1/16	1-3/16	.05	14	5/32	75
AF 2129	21/64	29/32	11/32	7/16	3/32	1-1/32	.04	15	1/8	55
AF 2429	3/8	29/32	5/16	11/32	1/32	1-1/32	.04	15	1/8	55
AF 2429A	3/8	29/32	5/16	3/8	1/16	1-1/32	.04	15	1/8	55
AF 2429B	3/8	29/32	11/32	7/16	3/32	1-1/32	.04	15	1/8	55
AF 2434	3/8	1-1/16	3/8	7/16	1/16	1-3/16	.05	14	5/32	75
AF 2436	3/8	1-1/8	3/8	7/16	1/16	1-1/4	.06	15	5/32	80
AF 2444	3/8	1-3/8	7/16	15/32	1/32	1-17/32	.06	10	1/4	140
AF 2448	3/8	1-1/2	7/16	1/2	1/16	1-39/64	.07	10	17/64	160
AF 2829	7/16	29/32	5/16	3/8	1/16	1-1/32	.04	15	1/8	55
AF 2829A	7/16	29/32	11/32	7/16	3/32	1-1/32	.04	15	1/8	55
AF 2834	7/16	1-1/16	3/8	7/16	1/16	1-3/16	.05	14	5/32	75
AF 2844	7/16	1-3/8	7/16	9/16	1/8	1-17/32	.06	10	1/4	140
AF 3236	1/2	1-1/8	3/8	7/16	1/16	1-1/4	.06	15	5/32	80
AF 3238	1/2	1-3/16	3/8	7/16	1/16	1-1/4	.06	17	5/32	95
AF 3240	1/2	1-1/4	3/8	7/16	1/16	1-11/32	.06	13	3/16	105
AF 3242	1/2	1-5/16	3/8	7/16	1/16	1-13/32	.06	13	3/16	105
AF 3244	1/2	1-3/8	7/16	1/2	1/16	1-17/32	.06	15	3/16	120
AF 3244A	1/2	1-3/8	7/16	9/16	1/8	1-17/32	.06	15	3/16	120
AF 3248	1/2	1-1/2	7/16	15/32	1/32	1-39/64	.07	12	1/4	170
AF 3250	1/2	1-9/16	7/16	9/16	1/8	1-23/32	.07	13	1/4	185
AF 3250A	1/2	1-9/16	7/16	21/32	7/32	1-23/32	.07	13	1/4	185
AF 3252	1/2	1-5/8	1/2	9/16	1/16	1-13/16	.07	13	1/4	185
AF 3252A	1/2	1-5/8	1/2	1	1/2	1-13/16	.07	13	1/4	185
AF 3256	1/2	1-3/4	9/16	5/8	1/16	1-29/32	.08	14	1/4	195
AF 3260	1/2	1-7/8	1/2	5/8	1/8	2-1/32	.09	16	1/4	225
AF 3268	1/2	2-1/8	5/8	3/4	1/8	2-1/4	.08	15	5/16	330



Continued From Page 41 **TYPE AF BEARINGS**

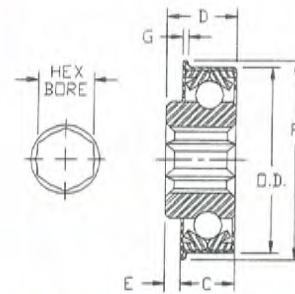
Unground Single Row Radial Ball Bearings With Flange.
(For Sealed Version See TW Series.)

BEARING NUMBER	BORE	O.D.	WIDTH		EXT.	FLANGE		BALLS		RATING
	+0.005 -0.000	±.002	C	D	E	F	G	No.	Dia.	Load in Lbs. 500 RPM
AF 3352	33/64	1-5/8	1/2	9/16	1/16	1-13/16	.07	13	1/4	185
AF 3644	9/16	1-3/8	7/16	1/2	1/16	1-17/32	.06	15	3/16	120
AF 3644A	9/16	1-3/8	7/16	9/16	1/8	1-17/32	.06	15	3/16	120
AF 3648	9/16	1-1/2	7/16	1/2	1/16	1-39/64	.07	17	3/16	135
AF 3656	9/16	1-3/4	9/16	5/8	1/16	1-29/32	.09	14	1/4	195
AF 4040	5/8	1-1/4	3/8	7/16	1/16	1-11/32	.06	22	1/8	75
AF 4044	5/8	1-3/8	7/16	1/2	1/16	1-17/32	.06	15	3/16	120
AF 4044A	5/8	1-3/8	7/16	9/16	1/8	1-17/32	.06	15	3/16	120
AF 4048	5/8	1-1/2	7/16	1/2	1/16	1-39/64	.07	17	3/16	135
AF 4048A	5/8	1-1/2	7/16	9/16	1/8	1-39/64	.07	17	3/16	135
AF 4050	5/8	1-9/16	7/16	9/16	1/8	1-23/32	.07	13	1/4	185
AF 4052	5/8	1-5/8	1/2	9/16	1/16	1-13/16	.07	13	1/4	185
AF 4056	5/8	1-3/4	9/16	5/8	1/16	1-29/32	.08	14	1/4	195
AF 4067A	.629	2-5/64	5/8	7/8	1/4	2-7/32	.08	14	5/16	310
AF 4448	11/16	1-1/2	7/16	1/2	1/16	1-39/64	.07	17	3/16	135
AF 4844	3/4	1-3/8	7/16	1/2	1/16	1-17/32	.06	25	1/8	140
AF 4850	3/4	1-9/16	7/16	15/32	1/32	1-23/32	.07	19	3/16	150
AF 4856	3/4	1-3/4	9/16	5/8	1/16	1-29/32	.08	14	1/4	195
AF 4860	3/4	1-7/8	1/2	9/16	1/16	2-1/32	.09	12	5/16	265
AF 4864	3/4	2	1/2	9/16	1/16	2-3/16	.09	13	5/16	285
AF 4868	3/4	2-1/8	5/8	7/8	1/4	2-1/4	.08	15	5/16	330
AF 4872	3/4	2-1/4	5/8	7/8	1/4	2-7/16	.09	13	11/32	345
AF 4874	3/4	2-5/16	5/8	7/8	1/4	2-15/32	.10	13	3/8	410
AF 4980	49/64	2-1/2	5/8	7/8	1/4	2-41/64	.10	14	3/8	445
AF 5098	25/32	3.064	3/4	1	1/4	3-1/4	.13	12	1/2	675
AF 5660	7/8	1-7/8	1/2	5/8	1/8	2-1/32	.09	16	1/4	225
AF 5680	7/8	2-1/2	5/8	7/8	1/4	2-41/64	.10	14	3/8	445
AF 6464	1	2	1/2	5/8	1/8	2-3/16	.09	17	1/4	240
AF 6468	1	2-1/8	5/8	7/8	1/4	2-1/4	.08	15	5/16	330
AF 6472	1	2-1/4	5/8	7/8	1/4	2-7/16	.09	15	5/16	330
AF 6474	1	2-5/16	5/8	7/8	1/4	2-15/32	.10	13	3/8	410
AF 6480	1	2-1/2	5/8	7/8	1/4	2-41/64	.10	14	3/8	445
AF 7280FA*	1-1/8	2-1/2	21/32	7/8	7/32	2-41/64	.10	17	5/16	375
AF 8080	1-1/4	2-1/2	5/8	7/8	1/4	2-41/64	.10	17	5/16	375
AF 8098	1-1/4	3.064	3/4	7/8	1/8	3-1/4	.13	15	7/16	645
AF 8098A	1-1/4	3.064	3/4	1	1/4	3-1/4	.13	15	7/16	645
AF 8880	1-3/8	2-1/2	5/8	7/8	1/4	2-41/64	.10	23	1/4	325
AF 9698	1-1/2	3.064	3/4	7/8	1/8	3-1/4	.13	18	3/8	570

* Closed Both Sides

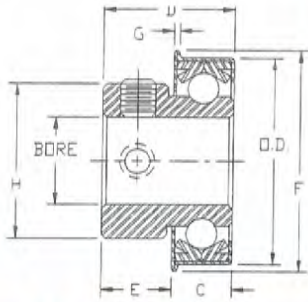
TYPES AH, AFH & KFH BEARINGS

Unground Single Row Radial Ball Bearings
With Hexagon Bores and Flanges.
See Prefix and Suffix Page for Full
Bearing Number Identification.



BEARING NUMBER	BORE		O.D.		WIDTH		EXT. E	FLANGE		BALLS		Load Rating in Pounds 500 RPM
	+0.005 +0.010	±0.002	±0.010		C	D		Dia. F	Th'k. G	No.	Dia.	
AFH 2028	5/16	7/8	1/4	15/32◆	1/8	3-1/32	.04	13	1/8	45		
AFH 2029	5/16	29/32	11/32	7/16	3/32	1-1/32	.04	15	1/8	55		
AFH 2036	5/16	1-1/8	3/8	1/2	1/8	1-1/4	.06	13	5/32	80		
KFH 2037A	5/16	1.148	13/32	19/32	3/16	1-1/4	.06	13	3/16	105		
AFH 2436	3/8	1-1/8	3/8	1/2	1/8	1-1/4	.06	15	5/32	80		
KFH 2437A	3/8**	1.148	13/32	5/8	7/32	1-1/4	.06	13	3/16	105		
AFH 2444	3/8	1-3/8	7/16	3/4	5/16	1-17/32	.06	10	1/4	140		
AFH 2836	7/16	1-1/8	3/8	1/2	1/8	1-1/4	.06	15	5/32	80		
KFH 2837A	7/16	1.148	13/32	15/32	1/16	1-1/4	.06	16	5/32	90		
AFH 2840	7/16	1-1/4	3/8	17/32	5/32	1-11/32	.06	13	3/16	105		
AFH 2844	7/16	1-3/8	7/16	9/16	1/8	1-17/32	.06	10	1/4	140		
AFH 2848	7/16	1-1/2	7/16	1/2	1/16	1-39/64	.07	11	17/64	175		
AFH 2848A	7/16	1-1/2	7/16	5/8	3/16	1-39/64	.07	12	1/4	170		
AFH 2848B	7/16	1-1/2	7/16	11/16	1/4	1-39/64	.07	12	1/4	170		
AFH 2848C	7/16	1-1/2	7/16	37/64	9/64	1-39/64	.07	12	1/4	170		
AFH 2848F	7/16	1-1/2	15/32	5/8	5/32	1-39/64	.07	12	1/4	170		
AFH 2848FB	7/16	1-1/2	15/32	23/32	1/4	1-39/64	.07	12	1/4	170		
AFH 2848HH	7/16	1-1/2	7/16	37/64	9/64	1-39/64	.07	12	1/4	170		
AFH 2848UP	7/16@	1-1/2	19/32	25/32	3/16	1-39/64	.07	12	1/4	170		
AFH 2852	7/16	1-5/8	1/2	9/16	1/16	1-13/16	.07	13	1/4	185		
AFH 2856	7/16	1-3/4	9/16	11/16	1/8	1-29/32	.08	14	1/4	195		
AFH 2860U	7/16	1-7/8	11/16	15/16	1/4	2-1/32	.09	16	1/4	225		
AFH 2868	7/16	2-1/8	5/8	3/4	1/8	2-1/4	.08	15	5/16	330		
AFH 3248	1/2	1-1/2	7/16	11/16	1/4	1-39/64	.07	12	1/4	170		
AFH 3248F	1/2	1-1/2	15/32	23/32	1/4	1-39/64	.07	12	1/4	170		
AFH 3650	9/16	1-9/16	7/16	11/16	1/4	1-23/32	.07	13	1/4	185		
AFH 3667A	9/16	2-5/64	5/8	7/8	1/4	2-1/4	.08	14	5/16	310		
AFH 3680	9/16	2-1/2	5/8	7/8	1/4	2-41/64	.10	14	3/8	445		
AFH 3680SP	9/16	2-1/2	27/32	1-3/32	1/4	2-11/16	.10	14	3/8	445		
AFH 4056	5/8	1-3/4	9/16	13/16	1/4	1-29/32	.08	14	1/4	195		
AFH 4074	5/8	2-5/16	5/8	7/8	1/4	2-15/32	.10	13	3/8	410		
AH 4472U*	11/16	2-1/4	13/16	1-1/16	1/4	-	-	12	3/8	380		
AFH 4472	11/16	2-1/4	5/8	7/8	1/4	2-7/16	.09	13	11/32	345		
AFH 4474	11/16	2-5/16	5/8	7/8	1/4	2-15/32	.10	13	3/8	410		
AH 4474UP*	11/16@	2-5/16	27/32	1-7/32	3/8	-	-	13	3/8	410		
AH 4474UR*	11/16@	2-5/16	27/32	1-7/32	3/8	-	-	13	3/8	410		
AFH 4864	3/4	2	1/2	3/4	1/4	2-3/16	.09	17	1/4	240		
AFH 6898	1-1/6Δ	3.064	3/4	1	1/4	3-1/4	.13	15	7/16	645		
AH 6898UP*	1-1/16Δ	3.064	1-3/64	1-19/64	1/4	-	-	15	7/16	645		

* These bearings do not have flanges.
 Δ Bore tolerance +.008 to +.015
 @ Full hex. All others have broached corners only.
 ◆ Inner Ring extends both sides.



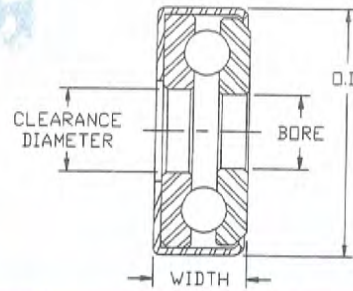
TYPE AFS BEARINGS

Unground Single Row Radial Ball Bearings
With Flanges, Extended Inner Rings and Set Screws.

BEARING NUMBER	BORE +.010 -.000	O.D. ±.002	WIDTH ±.010		EXTENSION		FLANGE		BALLS		Load Rating at 500 RPM		
			C	D	E	H	F	G	Set Screw	No.		Dia.	
AFS 1622	1/4	11/16	1/4	5/8	3/8	9/16	25/32	.04	10	32	10	1/8	35
AFS 1628	1/4	7/8	1/4	5/8	3/8	5/8	31/32	.04	10	32	13	1/8	45
AFS 2029	5/16	29/32	5/16	11/16	3/8	3/4	1-1/32	.04	10	32	15	1/8	55
AFS 2429	3/8	29/32	5/16	11/16	3/8	3/4	1-1/32	.04	10	32	15	1/8	55
AFS 2434	3/8	1-1/16	3/8	3/4	3/8	13/16	1-3/16	.05	10	32	14	5/32	75
AFS 2436	3/8	1-1/8	3/8	3/4	3/8	7/8	1-1/4	.06	10	32	15	5/32	80
AFS 2834	7/16	1-1/16	3/8	3/4	3/8	13/16	1-3/16	.05	10	32	14	5/32	75
AFS 2838	7/16	1-3/16	3/8	3/4	3/8	7/8	1-1/4	.06	10	32	17	5/32	95
AFS 3236	1/2	1-1/8	3/8	3/4	3/8	7/8	1-1/4	.06	10	32	15	5/32	80
AFS 3238	1/2	1-3/16	3/8	3/4	3/8	7/8	1-1/4	.06	10	32	17	5/32	95
AFS 3240	1/2	1-1/4	3/8	3/4	3/8	7/8	1-11/32	.06	10	32	13	3/16	105
AFS 3242	1/2	1-5/16	3/8	3/4	3/8	7/8	1-13/32	.06	10	32	13	3/16	105
AFS 3244	1/2	1-3/8	7/16	15/16	1/2	1-1/8	1-17/32	.06	1/4	20	15	3/16	120
AFS 3248	1/2	1-1/2	7/16	15/16	1/2	1	1-39/64	.07	1/4	20	12	1/4	170
AFS 3250	1/2	1-9/16	7/16	15/16	1/2	1-1/8	1-23/32	.07	1/4	20	13	1/4	185
AFS 3644	9/16	1-3/8	7/16	15/16	1/2	1-1/8	1-17/32	.06	1/4	20	15	3/16	120
AFS 3648	9/16	1-1/2	7/16	15/16	1/2	1-1/8	1-39/64	.07	1/4	20	17	3/16	135
AFS 4044	5/8	1-3/8	7/16	15/16	1/2	1-1/8	1-17/32	.06	1/4	20	15	3/16	120
AFS 4048	5/8	1-1/2	7/16	15/16	1/2	1-1/8	1-39/64	.07	1/4	20	17	3/16	135
AFS 4052	5/8	1-5/8	1/2	1	1/2	1-1/8	1-13/16	.07	1/4	20	13	1/4	185
AFS 4850	3/4	1-9/16	7/16	15/16	1/2	1-1/4	1-23/32	.07	1/4	20	19	3/16	150
AFS 4852	3/4	1-5/8	1/2	1	1/2	1-1/4	1-13/16	.07	1/4	20	19	3/16	150
AFS 4856	3/4	1-3/4	9/16	1-1/16	1/2	1-1/4	1-29/32	.08	1/4	20	14	1/4	195
AFS 4860	3/4	1-7/8	1/2	1	1/2	1-1/4	2-1/32	.09	1/4	20	12	5/16	265
AFS 4864	3/4	2	1/2	1	1/2	1-3/8	2-3/16	.09	1/4	20	13	5/16	285
AFS 4867A	3/4	2-5/64	5/8	1-1/8	1/2	1-1/2	2-7/32	.08	1/4	20	14	5/16	310
AFS 4868	3/4	2-1/8	5/8	1-1/8	1/2	1-1/2	2-1/4	.08	1/4	20	15	5/16	330
AFS 4872	3/4	2-1/4	5/8	1-1/8	1/2	1-1/2	2-7/16	.09	1/4	20	13	11/32	345
AFS 5664	7/8	2	1/2	1	1/2	1-1/2	2-3/16	.09	1/4	20	17	1/4	240
AFS 5667A	7/8	2-5/64	5/8	1-1/8	1/2	1-1/2	2-7/32	.08	1/4	20	14	5/16	310
AFS 5668	7/8	2-1/8	5/8	1-1/8	1/2	1-1/2	2-1/4	.08	1/4	20	15	5/16	330
AFS 5680	7/8	2-1/2	5/8	1-1/4	5/8	1-3/4	2-41/64	.104	5/16	18	14	3/8	445
AFS 6072	15/16	2-1/4	5/8	1-1/8	1/2	1-1/2	2-7/16	.09	1/4	20	15	5/16	330
AFS 6464	1	2	1/2	1	1/2	1-1/2	2-3/16	.09	1/4	20	17	1/4	240
AFS 6468	1	2-1/8	5/8	1-1/8	1/2	1-1/2	2-1/4	.08	1/4	20	15	5/16	330
AFS 6472	1	2-1/4	5/8	1-1/8	1/2	1-1/2	2-7/16	.09	1/4	20	15	5/16	330
AFS 6480	1	2-1/2	5/8	1-1/4	5/8	1-3/4	2-41/64	.10	5/16	18	14	3/8	445
AFS 6481	1	2-17/32	5/8	1-1/4	5/8	1-13/16	2-23/32	.10	5/16	18	16	11/32	425
AFS 6498	1	3.064	3/4	1-1/2	3/4	2-1/4	3-1/4	.13	3/8	16	15	7/16	645
AFS 7681	1-3/16	2-17/32	5/8	1-1/4	5/8	1-13/16	2-23/32	.10	5/16	18	16	11/32	425
AFS 8081	1-1/4	2-17/32	5/8	1-1/4	5/8	1-7/8	2-23/32	.10	5/16	18	18	5/16	395
AFS 8098	1-1/4	3.064	3/4	1-1/2	3/4	2-1/4	3-1/4	.13	3/8	16	15	7/16	645
AFS 8898	1-3/8	3.064	3/4	1-1/2	3/4	2-1/4	3-1/4	.13	3/8	16	15	7/16	645
AFS 9298	1-7/16	3.064	3/4	1-1/2	3/4	2-1/4	3-1/4	.13	3/8	16	15	7/16	645
AFS 9698	1-1/2	3.064	3/4	1-1/2	3/4	2-1/4	3-1/4	.13	3/8	16	18	3/8	570

TYPE AT BEARINGS

Unground Single Row Thrust Ball Bearings.



BEARING NUMBER	BORE		O.D. ±.002 Inches	WIDTH ±.010 Inches	BALLS		Load Rating in Pounds at 500 RPM
	+ .005 - .000 Inches	Clearance Diameter Inches			No.	Dia.	
AT 1622	.251 .252	9/32	11/16	1/4	11	1/8	215
AT 1627	1/4	9/32	27/32	21/64	10	5/32	310
AT 2227	11/32	3/8	27/32	21/64	14	1/8	235
AT 2434A	3/8	13/32	1-3/64	23/64	14	5/32	350
AT 2527A	25/64*	13/32	53/64	19/64	14	1/8	235
AT 2634A	13/32	7/16	1-3/64	23/64	14	5/32	350
AT 2834A	7/16	15/32	1-3/64	23/64	14	5/32	350
AT 2928A	29/64	31/64	55/64	9/32	15	1/8	245
AT 3232	1/2	17/32	1	11/32	11	3/16	445
AT 3241A	1/2	17/32	1-17/64	7/16	10	1/4	725
AT 3643	9/16	19/32	1-11/32	7/16	11	1/4	745
AT 4036	5/8	21/32	1-1/8	11/32	16	5/32	365
AT 4046A	5/8	21/32	1-27/64	29/64	12	1/4	815
AT 4152	41/64*	41/64	1-5/8	1/2	15	7/32	670
AT 4248	21/32*	21/32	1-1/2	1/2	13	1/4	730
AT 4750	47/64	49/64	1-9/16	9/16	14	1/4	825
AT 4844	3/4*	25/32	1-3/8	1/2	17	3/16	530
AT 4846	.752*	49/64	1-7/16♦	.627♦	13	1/4	730
AT 4850	3/4	25/32	1-9/16	1/2	14	1/4	825
AT 4853	3/4	25/32	1-21/32	35/64	15	1/4	845
AT 4853A	3/4*	25/32	1-21/32	9/16	15	1/4	845
AT 4856	3/4	25/32	1-3/4	17/32	15	1/4	845
AT 5352	53/64*^	49/64	1-5/8	1/2	14	1/4	825
AT 5354A	53/64	55/64	1.665	17/32	15	1/4	845
AT 5644	7/8*	29/32	1-3/8	5/16	27	1/8	300
AT 5650	7/8*	29/32	1-9/16	19/32	14	1/4	825
AT 5661A	7/8	29/32	1-57/64	19/32	17	1/4	880
AT 5750**	57/64*	29/32	1-9/16	19/32	14	1/4	825
AT 6356	63/64	1	1-3/4	5/8	16	1/4	860
AT 6463	1	1-1/32	1-31/32	5/8	18	1/4	900
AT 6465A	1	1-1/32	2-1/64	41/64	14	5/16	1215
AT 6556	1-1/64	1-1/32	1-3/4	5/8	16	1/4	860
AT 6863	1-1/16	1-3/32	1-31/32	5/8	18	1/4	900
AT 6964	1-5/64	1-7/64	2	5/8	15	5/16	1265
AT 7267	1-1/8	1-5/32	2-3/32	5/8	20	1/4	940
AT 7270	1-1/8*	1-9/64	2-3/16	5/8	20	1/4	940
AT 7277A	1-1/8	1-5/32	2-25/64	11/16	17	5/16	1320
AT 7667	1-3/16	1-7/32	2-3/32	5/8	20	1/4	940
AT 8064	1-1/4	1-9/32	2	5/8	20	1/4	940
AT 8075	1-1/4	1-9/32	2-11/32	5/8	23	1/4	985
AT 8081A	1-1/4	1-9/32	2-33/64	45/64	18	5/16	1345
AT 8475	1-5/16	1-11/32	2-11/32	5/8	23	1/4	985
AT 8879	1-3/8	1-13/32	2-15/32	5/8	23	1/4	985
AT 8879A	1-3/8	1-13/32	2-15/32	.760	23	1/4	985
AT 9279	1-7/16	1-15/32	2-15/32	5/8	23	1/4	985
AT 9683	1-1/2	1-17/32	2-19/32	5/8	25	1/4	1010

* Bore ±.003

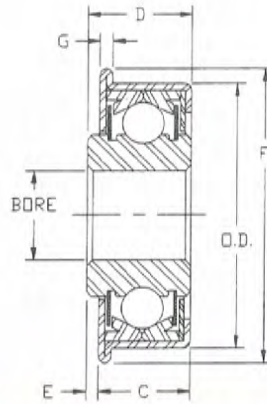
**Has oil hole in case.

^ Bore is larger than clearance diameter.

♦ ±.005

TYPE TW BEARINGS

Unground Single Row Radial Ball Bearings
With Flanges and Synthetic Rubber Seals.
(Sealed Version of Schatz AF Series.)

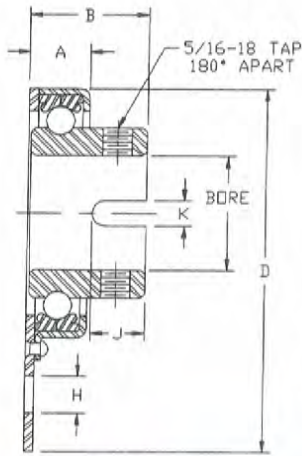


BEARING NUMBER	BORE		O.D.		WIDTH		EXTENSION		FLANGE		BALLS		Load Rating In Pounds at 500 RPM
	+0.005 -0.000 Inches	±.002 Inches	C ±.020 Inches	D ±.010 Inches	E Inches	Diameter F Inches	Thickness G Inches	No.	Dia.				
TW 1	3/8	1-1/8	3/8	7/16	1/16	1-1/4	.06	15	5/32	80			
TW 2	1/2	1-1/8	3/8	7/16	1/16	1-1/4	.06	15	5/32	80			
TW 3	1/2	1-3/16	3/8	7/16	1/16	1-1/4	.06	17	5/32	95			
TW 4	1/2	1-1/4	3/8	7/16	1/16	1-11/32	.06	13	3/16	105			
TW 5	1/2	1-5/16	3/8	7/16	1/16	1-13/32	.06	13	3/16	105			
TW 6	1/2	1-3/8	7/16	1/2	1/16	1-17/32	.06	15	3/16	120			
TW 7	5/8	1-3/8	7/16	1/2	1/16	1-17/32	.06	15	3/16	120			
TW 8	1/2	1-1/2	7/16	1/2	1/16	1-39/64	.07	12	1/4	170			
TW 9	9/16	1-1/2	7/16	1/2	1/16	1-39/64	.07	17	3/16	135			
TW 10	5/8	1-1/2	7/16	1/2	1/16	1-39/64	.07	17	3/16	135			
TW 11	1/2	1-9/16	7/16	1/2	1/16	1-23/32	.07	13	1/4	185			
TW 12	5/8	1-9/16	7/16	1/2	1/16	1-23/32	.07	13	1/4	185			
TW 13	1/2	1-5/8	1/2	9/16	1/16	1-13/16	.07	13	1/4	185			
TW 14	9/16	1-5/8	1/2	9/16	1/16	1-13/16	.07	13	1/4	185			
TW 15	1/2	1-3/4	9/16	5/8	1/16	1-29/32	.08	15	1/4	210			
TW 16	9/16	1-3/4	9/16	5/8	1/16	1-29/32	.08	15	1/4	210			
TW 17	5/8	1-3/4	9/16	5/8	1/16	1-29/32	.08	15	1/4	210			
TW 18	3/4	1-3/4	9/16	5/8	1/16	1-29/32	.08	15	1/4	210			
TW 19	1/2	1-7/8	1/2	9/16	1/16	2-1/32	.09	12	5/16	265			
TW 20	9/16	1-7/8	1/2	9/16	1/16	2-1/32	.09	12	5/16	265			
TW 21	5/8	1-7/8	1/2	9/16	1/16	2-1/32	.09	12	5/16	265			
TW 22	7/8	1-7/8	1/2	9/16	1/16	2-1/32	.09	16	1/4	225			
TW 23	3/4	2	1/2	9/16	1/16	2-3/16	.09	13	5/16	285			
TW 24	15/16	2	1/2	9/16	1/16	2-3/16	.09	17	1/4	240			
TW 25	1	2	1/2	9/16	1/16	2-3/16	.09	17	1/4	240			
TW 26	3/4	2-1/4	5/8	3/4	1/8	2-7/16	.09	13	11/32	345			
TW 27	7/8	2-1/4	5/8	3/4	1/8	2-7/16	.09	15	5/16	330			
TW 28	1	2-1/4	5/8	3/4	1/8	2-7/16	.09	15	5/16	330			
TW 29	1	2-1/2	5/8	3/4	1/8	2-41/64	.10	14	3/8	445			
TW 30	1-1/4	2-1/2	5/8	3/4	1/8	2-41/64	.10	17	5/16	375			

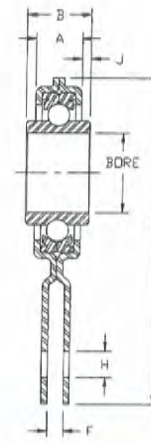
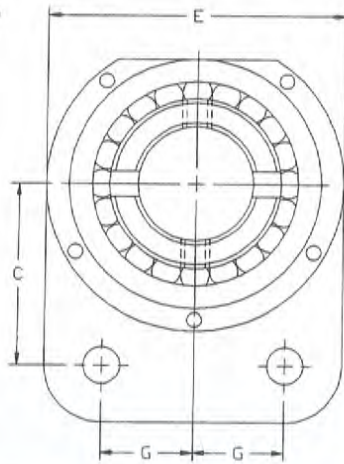
TYPE HB BEARINGS

Unground Single Row Radial Ball Bearings For Hanger Type Mounting.

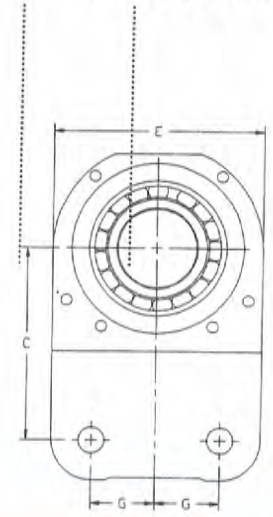
Also Available With Shields and Grease.



HB100



HB200



BEARING NUMBER	Bore Size	A	B	C	D	E	G	H	J	K	Notes
HB 100	1-1/4	41/64	1-9/32	2	4	3-1/4	1	13/32	37/64	9/32	1
HB 101	13/16	41/64	1-9/32	2	4	3-1/4	1	13/32	37/64	9/32	1, 2, 3
HB 102	1-1/4	41/64	1-9/32	2	4	3-1/4	1	13/32	37/64	9/32	1, 3
HB 103	1-1/4	41/64	1-17/64	2	4	3-1/4	1	13/32	37/64	9/32	1, 2, 3
HB 104	1-1/4	41/64	1-9/32	2	4	3-1/4	1	13/32	-	-	4
HB 105	1-1/4	41/64	1-9/32	2	4	3-1/4	1	13/32	-	-	3, 4
HB 106	1-1/4	41/64	1-9/32	2	4	3-1/4	1	13/32	37/64	9/32	3

1. No set screw holes
2. Inner ring extension reversed from illustration
3. Stainless steel balls
4. No inner ring notches; set screw holes 90 degrees apart
5. 2 sets screw holes 180 degrees apart

NOTES: The above sizes are available in single & double closures. For other bore sizes contact Sales Department.

Load ratings for the above bearings at 500 RPM is 440 pounds radial.

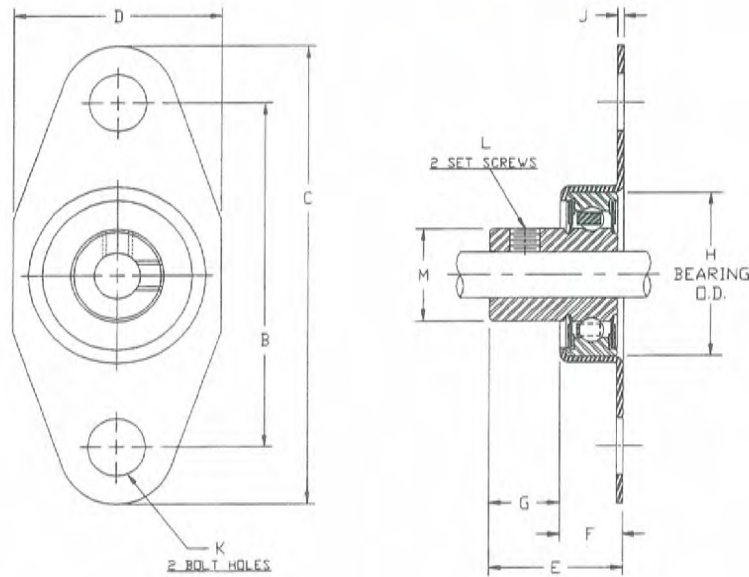
BEARING NUMBER	Bore Size	A	B	C	D	E	F	G	H	J	Notes
HB 200FF	1-1/4	23/32	1	3	5-7/64	3-1/4	1/4	1	13/32	9/64	1
HB 201FF	1-1/4	23/32	1	3	5-7/64	3-1/4	1/4	1	13/32	9/64	1, 2
HB 202FF	1-1/4	23/32	1-7/16	3	5-7/64	3-1/4	1/4	1	13/32	37/64	3
HB 203FF	1-1/4	23/32	1-7/16	3	5-7/64	3-1/4	1/4	1	13/32	37/64	2, 3
HB 204FF	1.252	23/32	1-1/4	3	5-7/64	3-1/4	1/4	1	13/32	25/64	6
HB 205FF	1-1/4	23/32	1-7/16	3	5-7/64	3-1/4	1/4	1	13/32	37/64	4
HB 207FF	1-1/4	23/32	1-7/16	3	5-7/64	3-1/4	1/4	1	13/32	37/64	2, 3, 5

1. Inner ring extended equally both sides
2. Stainless steel balls
3. 9/32 wide x 35/64 deep notch on long extension side of inner ring
4. 1/4 X 20 tapped holes on long inner ring extension 90 degrees apart
5. 2-1/4 X 20 tapped holes 180 degrees apart on long I.R. extension side
6. 5/32 wide x 21/64 deep notch on long extension side of inner ring

NOTES: Load ratings for the above bearings at 500 RPM is 375 pounds radial.

SM SERIES ADAPTER UNITS

Single Row Radial Flange Mounted Sealed.



Dimensions in inches – Ratings in pounds

UNIT NUMBER	Basic Bearing Number	Shaft Size Inches	B	C	D	E	F	G	Bearing O.D. H	J	Hole Size K	L
SM 04	M 04	1/4	1-7/8	2-1/2	1-1/8	11/16	11/32	11/32	29/32	.035	5/16	8-32
SM 05	M 05	5/16	1-7/8	2-1/2	1-1/8	11/16	11/32	11/32	29/32	.035	5/16	8-32
SM 06	M 06	3/8	1-7/8	2-1/2	1-1/8	11/16	11/32	11/32	29/32	.035	5/16	8-32
SM 08	M 08	1/2	2-7/8	3-3/4	1-7/8	1-1/8	11/16	7/16	1-5/8	.065	7/16	1/4-28
SM 09	M 09	9/16	2-7/8	3-3/4	1-7/8	1-1/8	11/16	7/16	1-5/8	.065	7/16	1/4-28
SM 10	M 10	5/8	2-7/8	3-3/4	1-7/8	1-1/8	11/16	7/16	1-5/8	.065	7/16	1/4-28
SM 12	M 12	3/4	3-1/4	4-1/8	2-1/4	1-1/8	11/16	7/16	2	.065	7/16	10-32
SM 14	M 14	7/8	3-1/4	4-1/8	2-1/4	1-1/8	11/16	7/16	2	.065	7/16	10-32
SM 16	M 16	1	3-1/4	4-1/8	2-1/4	1-1/8	11/16	7/16	2	.065	7/16	10-32

UNIT NUMBER	Basic Bearing Number	M	Basic Dynamic Load Rating at 33-1/3 RPM
SM 04	M 04	.56	395
SM 05	M 05	.56	395
SM 06	M 06	.56	395
SM 08	M 08	1.02	1275
SM 09	M 09	1.02	1275
SM 10	M 10	1.02	1275
SM 12	M 12	1.33	1480
SM 14	M 14	1.33	1480
SM 16	M 16	1.33	1480



**CONVEYOR BEARINGS
AND STUB SHAFTS**

**Special Conveyor
Application Bearings: 52**

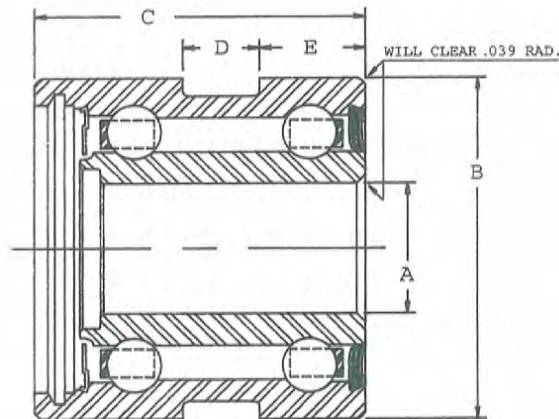
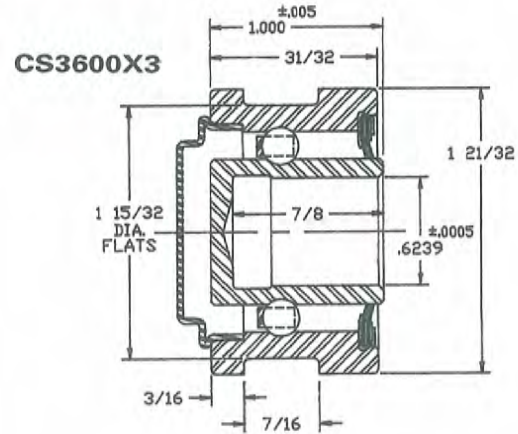
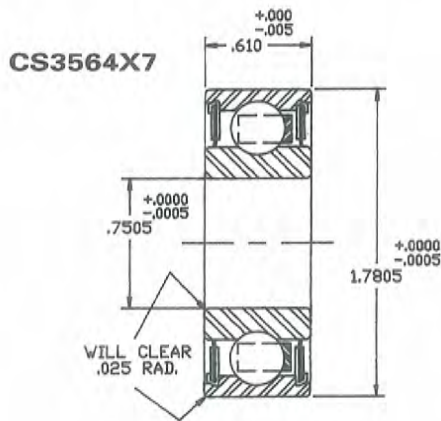
**Stub Shafts;
Single-End and
Double-End 53**

SPECIAL CONVEYOR APPLICATION BEARINGS

Precision Ground Single Row Radial, Synthetic Sealed Conveyor Bearings. Other Types Also Available. Consult Schatz Sales Department.

Conveyor Bearing Specialists
52100, Carburized or Stainless Steels
Round, Hexagonal or Threaded Bores

Corrosion Preventing Coatings – Black Oxide-Zinc-Cadmium & other platings
Special Lubricants, Seals & Shields
Special Designs



	A	B	C	D	E
BEARING NUMBER	+0.0000	+0.0000	+0.000	+0.000	+0.000
	-0.0006	-0.0010	-0.005	-0.010	-0.010
CS3962	.750	1.9685	1.875	7/16	19/32
CS3989	1.1811	2.5197	2.250	9/16	19/32

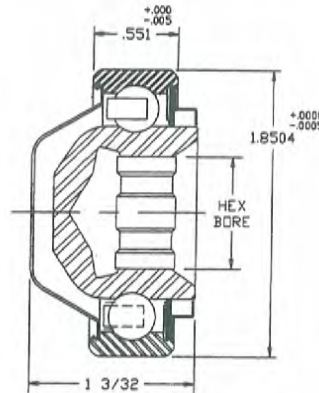
CONVEYOR BEARING

Precision Ground Single Row Radial Conveyor Roll Bearing.
Heavy Duty, Double-Lip Synthetic Rubber Seal.



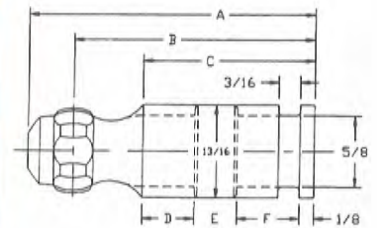
RADIAL CAPACITY
1232 lbs radial @ 33 1/3 RPM
860 lbs radial @ 100 RPM
493 lbs radial @ 500 RPM

****CS3574X6**



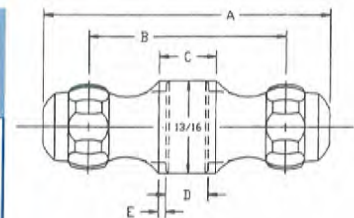
SINGLE-END STUB SHAFTS

SHAFT NUMBER	A	B	C	D	E	F
SE 1-3/8	1-3/8	63/64	3/8			
SE 1-15/16	1-15/16	1-35/64	15/16			
SE 1-15/16A	1-15/16	1-35/64	15/16	1/8	3/8	5/16
SE 2-1/2	2-1/2	2-7/64	1-1/2			
SE 2-1/2A	2-1/2	2-7/64	1-1/2	19/32	3/8	13/32
SE 3	3	2-39/64	2			
SE 4-1/8	4-1/8	3-47/64	3-1/8			

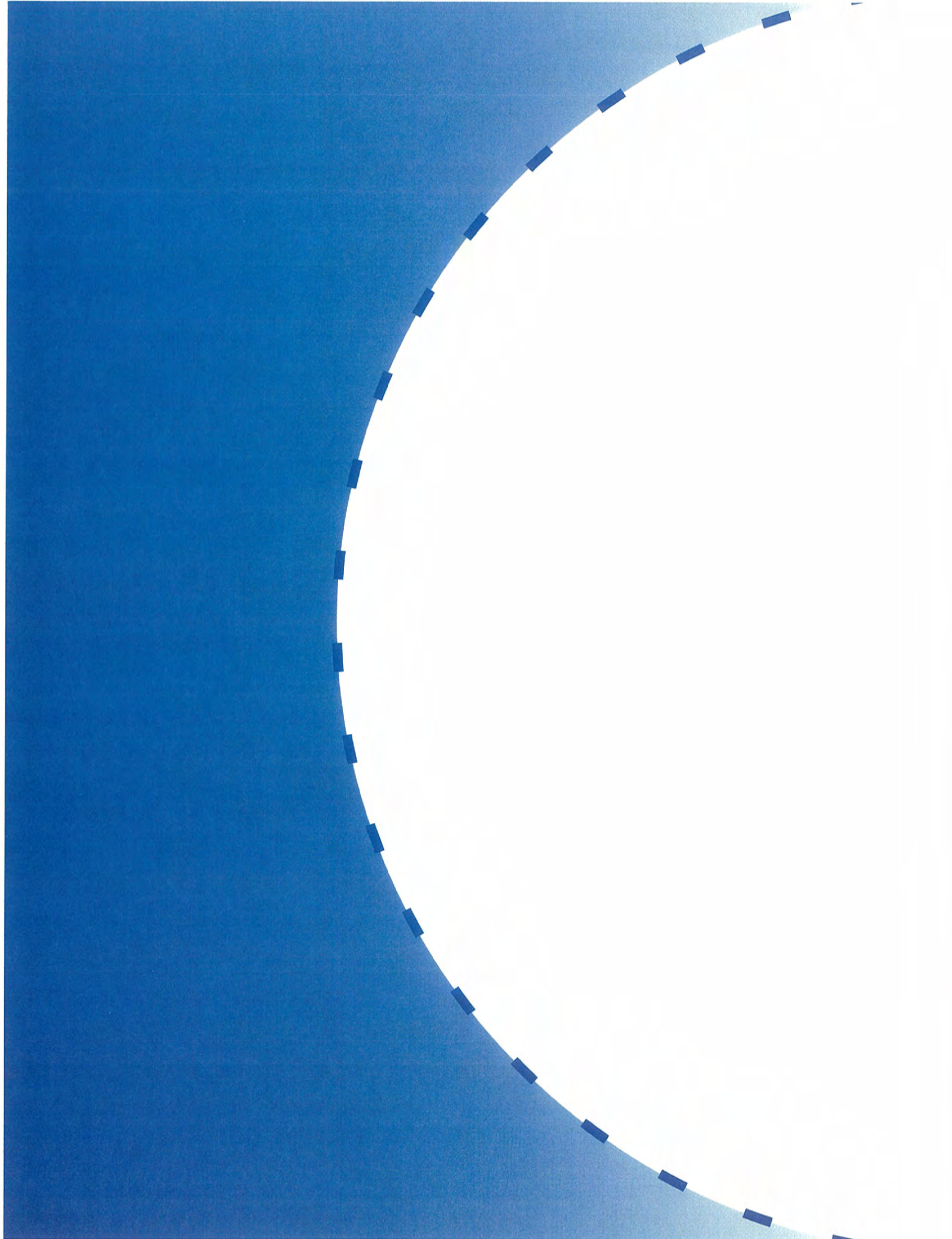


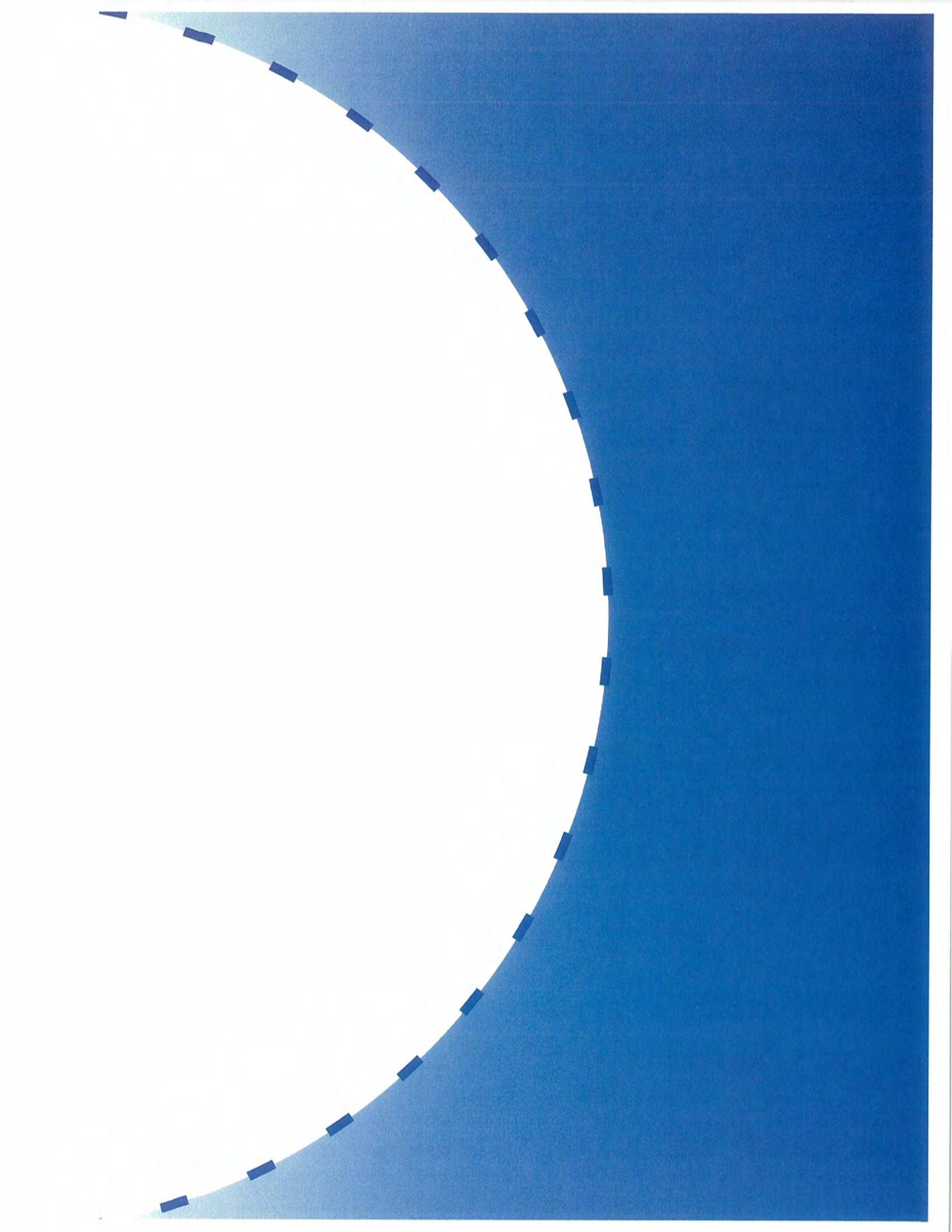
DOUBLE-END STUB SHAFTS

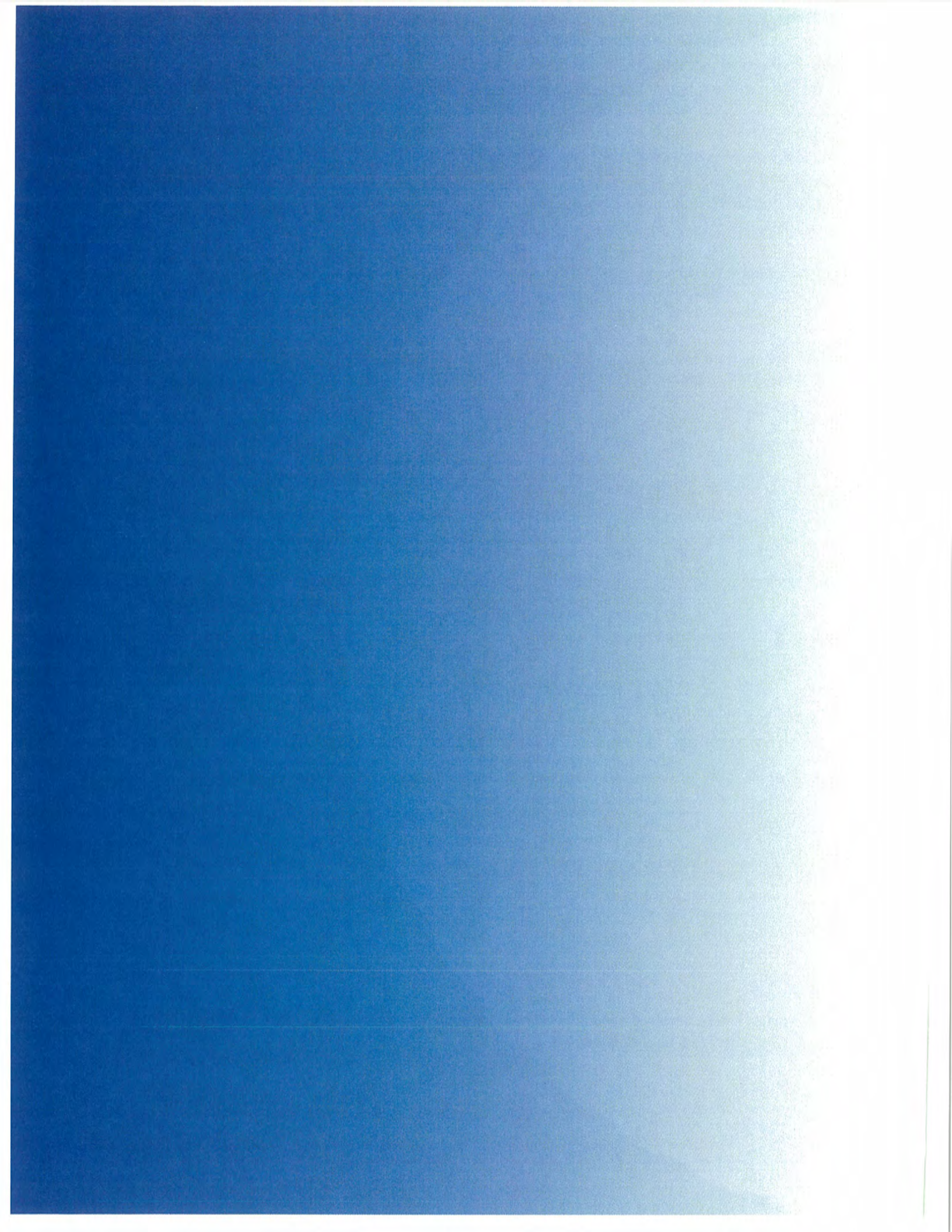
SHAFT NUMBER	A	B	C	D	E
DE 2-1/2	2-1/2	1-23/32	1/2		
DE 2-9/16	2-9/16	1-25/32	9/16		
DE 2-5/8	2-5/8	1-27/32	5/8		
DE 2-5/8A	2-5/8	1-27/32		3/8	1/8
DE 2-3/4	2-3/4	1-31/32	3/4		
DE 3	3	2-7/32	1		
DE 3-3/32	3-3/32	2-5/16	1-3/32		
DE 3-3/32A	3-3/32	2-5/16		3/8	23/64
DE 3-9/16A	3-9/16	2-25/32		3/8	19/32
DE 4	4	3-7/32	2		
DE 4-5/32	4-5/32	3-3/8	2-5/32		



**Also available for high temperature applications with steel cage & high-temp grease. Order as CS3574X9







**BALL BEARING
ENGINEERING DATA**

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BEARING ENGINEERING

BEARING APPLICATION ENGINEERING

Factors To Consider When Selecting Bearings:

A.

Choice of materials (steel):

Schatz Bearing Corporation manufactures ball bearings in a wide variety of industry standard quality bearing steels.

Bearing Steel	Properties
SAE 52100 Chrome Steel	High fatigue life and high capacities
AISI 440C Stainless Steel	Slightly lower capacities Corrosion resistant
300 Series Stainless Steel	Low or non-magnetic properties Lower capacity corrosion resistant
12L14 Steel	52100 and 440C are through hardened Rc 60-64 & Rc 58-62 respectively. 12L14 Bearing material is case hardened and is an economical steel where lighter loads and lower speeds are present.

(see bearing materials section for additional information).

B.

Tolerances

One determines tolerances by application requirements concerning ID & OD Fits, noise levels and accuracy of rotating members needed. Generally, the tighter the tolerances the closer the attention to raceway finish, noise levels and other geometric parameters. ABEC-1 through ABEC-9 standards should generally cover most applications. SCHATZ manufactures ABEC-1 through ABEC-5 bearings. In addition, Schatz also manufactures a line of commercial grade ball bearings in a separate manufacturing process.

C.

Separators (ball cage or retainer)

The steel stamped crown retainer is most widely used for general purpose applications. Other types of steel retainers or separators such as the ribbon retainer is also used. Plastic retainers are also used and where application speed is high many use special steel and non-metallic retainers.

BEARING ENGINEERING

D.

Closures

Metal shields are the most common closures. They reduce lubricant leakage and prevent most contaminants from entering the bearing.

Seals made of many different materials (synthetic rubber, teflon, viton, etc.) provide the optimum protection against lubricant leakage and contaminants entering the bearing. However, the starting and running torque will be considerably higher for sealed bearings versus shielded bearings of the same type. Variations of materials and seals contact (lighter seal drag) will modify the torque and other conditions mentioned above.

E.

Radial Play

The internal radial clearance or looseness in a ball bearing is referred to as "radial play." This clearance is geometrically related to both axial play and contact angle. Radial play, axial play and the contact angle are all important design criteria. If axial load and high speed exist in a given application, then greater than normal radial play should be used. If loading is only in the radial direction and if axial play needs to be controlled, then less than normal radial play can be considered. Many factors can influence the design of the clearances and internal geometry of a ball bearing. (Please consult our engineering department for assistance).

F.

Miscellaneous Checklist

- Dynamic load, Static load, preloads, shock loads.
- Torque requirements (starting, running).
- Temperature requirements; ambient, operational.
- Speed: RPM constant, intermittent.
- Lubrication: Grease, oil, other.
- Precision requirements.

* Please consult the Schatz Application Engineering Department for ABMA standard load, capacity, and speed data.

BEARING ENGINEERING

LOAD RATINGS

Load ratings listed in this catalogue have been determined from industry standard ABMA and ANSI data used for rolling element anti-friction ball bearings.

To calculate life in hours for ball bearings to include application speed in RPM use the following standard equation:

$$L_{10} = \frac{16667}{S} * \left(\frac{C_e}{P} \right)^3$$

C_e = BASIC DYNAMIC RATING (IN CATALOGUE)

P = APPLIED LOAD

S = SPEED IN RPM

L_{10} = LIFE IN HOURS

Load-Life and Speed Formulas

Based on ABMA calculated and empirical data several formulas can be used to determine the important interrelated application parameters of speed, loads and bearing life.

The following formula will aid you in selecting the appropriate bearing. However, we suggest you discuss your application with the Schatz engineering department. We can aid you by discussing the exact load spectrum the selected bearing will endure in your application (peak loading, shock loading, vibration, thermal or fit-up concerns, etc):

$$L_r = L_b \left(\frac{C}{P} \right)^3$$

Substituting L_r for L_{10}

Where $L_r = L_{10}$ life in revolutions

$L_b = 1,000,000$ revolutions, bearing life

C = catalogue dynamic rating

P = application applied load.

We can modify the above two equations for conditions of combined loading, limiting speeds and variations of loads and speeds by using speed and life derating multipliers. Please consult the Schatz engineering department in this regard.

BEARING ENGINEERING

Bearing Materials:

For a wide range of ball bearing applications the standard material used is SAE 52100 bearing steel. This material selection yields the L10 value with a one (1.0) multiplier. Other material selections would yield as listed below:

52100 Vacuum Degassed	= 1.5
440C Stainless Steel	= 1.0
440C CEVM	= 3.0
M50 CEVM	= 8.0

Schatz Aircraft Bearings

Schatz wide ranges of approved bearings are manufactured to industry standards. Most bearing sizes are MS and/or FAA PMA approved. Additionally, many are approved to specific aircraft company specifications. Please consult Schatz sales or engineering for a complete list of approved sizes.

Schatz Standard Precision Bearings

Catalogue capacity ratings are specific. Radial capacity "C" type bearings are shown to have the radial load capacity as shown. Thrust and light moment loads additionally can be applied to Schatz "C" type bearings in combination. Consult Schatz engineering for specific combination load data.

Other types of Schatz Bearings offered

The type "X" thin section bearings (raceway geometry is two 30 degree angles forming a gothic arch shape).

Generally Schatz "X" type can be used where combined thrust and moment loads are present.

The four point contact or "X" type bearings are also candidates when single or reversing thrust loads are present and when moment loading is a consideration. Where radial loads are also present limiting the application RPM is a concern. For a further discussion of combined loading of these types of bearings consult the Schatz engineering department.

Schatz Angular Contact Bearings

Duplex or matched pairs are offered and can be supplied to meet a specific preload. The standard matched sets DB, DF and DT can be supplied. Consult Schatz engineering for a discussion of the best arrangement for your application.

BEARING ENGINEERING

Closures (seals and shields)

Seals and shields are available in the following materials:

Seals

Buna-N
Buna-N with molded in steel insert
Teflon (TFE/FEP)
Teflon / Fiberglass impregnated
Phenolic Resin
Mylar

Cages

Molded Nylon
Pressed Steel
Pressed Stainless Steel
Phenolic Resin Laminate
Machined Bronze
Machined Brass
Silicone Bronze
Machined Steel
Machine Plated Steel

Shields

Stainless Steel
Nylon
Low Carbon Steel

- Special materials and custom designed seals and shields are available upon request.

BEARING ENGINEERING

LUBRICATION DATA & SELECTION GUIDE

General Information:

Schatz Bearing Corporation uses numerous mil-spec greases and oils. Although many bearing applications use general purpose greases and oils, we recommend discussing your application with our engineering department. The following chart lists a few grease and oil selections.

GREASES

Manufacturer	Mil Spec.	Trade Name	Operating Range F°
MOBIL OIL	MIL-G23827	MOBIL 27	-65 / +325
BRAYCOTE 627S		BRAYCOTE 627S	-100 / +300
ROYAL LUBE		ROYCO 27A	-100 / +300
SHELL OIL		AEROSHELL #14	-65 / +250
SHELL OIL	BMS-3-24	AEROSHELL #16	
TEXACO OIL CO.		TEXACO EP	-65 / +250
SHELL OIL	MIL-G23827A	AEROSHELL #7	-100 / +300
EXXON	MIL-G23827	BEACON 325	-100 / +300
AMERICAN OIL CO.		SUPERMIL,ASU72832	-100 / +250
MOBIL OIL	MIL-G81322A	MOBIL 28	-65 / +350
SHELL OIL		AEROSHELL #22	-80 / +350
CHEVRON OIL CO.	MIL-G3545C	BRB-2	-20 / +350
CHEVRON OIL CO.	MIL-G3545G	SRI-2	-20 / +350
EXXON	MIL-G3545C	ANDOK 260	-20 / +250
SHELL OIL	MIL-G3545C	AEROSHELL #5	-20 / +300
SHELL OIL	BMS-33	AEROSHELL #33	
DU PONT	MIL-G27617	KRYTOX 240AA +AB	-30 / +450
DU PONT	MIL-G27617A	KRYTOX 240AC	-30 / +550

OILS

Manufacturer	Mil Spec.	Trade Name	Operating Range F°
ROYAL LUBE	MIL-L6085	ROYCO 885	-65 / +365
SHELL OIL	MIL-L6085A	AEROSHELL #12	-70 / +300
EXXON		UNIVISP12	-75 / +300
TENNECO		ANDEROL L401D	-75 / +260

When specified we supply a general purpose preservative coating on our bearings in place of a grease or oil lube.



BEARING APPLICATION DATA FORM

Application name

Bearing Bore (I.D.)

O.D.

Width

RPM

% of Time

Operating Temp. Range

Radial Load

% of Time

Thrust Load

% of Time

Moment Load

% of Time

Combined Loads

% of Time

Special Conditions

Seals

Shields

Coatings

Grease

Oil

Special Packaging

Bearing Life Needed (Hrs.)

Schatz Bearing Selection:

Bearing Type

Schatz P/N

Capacity

Closures

Lube

Theoretical Life (Hrs.)

BEARING INSTALLATION & MAINTENANCE

Contamination

Special care should be taken with all ball and roller bearings to ensure a clean environment for assembly into your applications. Dust, dirt, grit, metal chips and corrosive liquids should be removed from any work area involved in a bearing assembly operation. The above mentioned contaminants once introduced into the bearing cavity, along with the grease or oil will eventually create a lapping type compound which accelerates the wear and ultimately early bearing failure. It is also beneficial to lightly oil the bearing surfaces to ease installation and to minimize scoring.

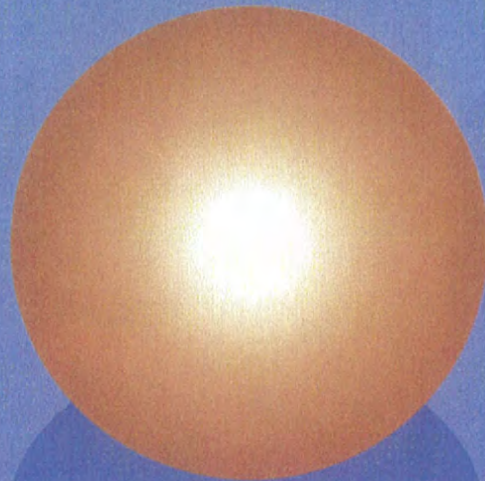
Installation

In addition to proper precautions mentioned above and using a clean assembly area we also must consider using tools and fixtures free from chips, dirt and burrs. Proper installation of bearings assumes their assembly by pressure on the full circumference of the ring to be press fitted. As an example, when press fitting the outer ring into a housing apply pressure to the outer ring only. Pushing on the inner ring may severely damage the bearing.

When using an arbor press care should be taken to use a suitable tool which contacts the entire 360 degrees of the ring to be press fitted. All dimensions for mating surfaces, shaft diameter, housing bores, fillet sizes and shoulder squareness should be carefully checked and verified they are to specification.

****General Note****

All bearings when not in use should be stored with all surfaces coated with a light oil or preservative and wrapped securely against contamination.



The contents of this catalogue have been carefully checked for accuracy. However, Schatz can not be held responsible for errors or omissions.

Most items listed in this catalogue are presently being manufactured and are available from stock. Please consult the sales department, as certain items may not always be available as stock items.

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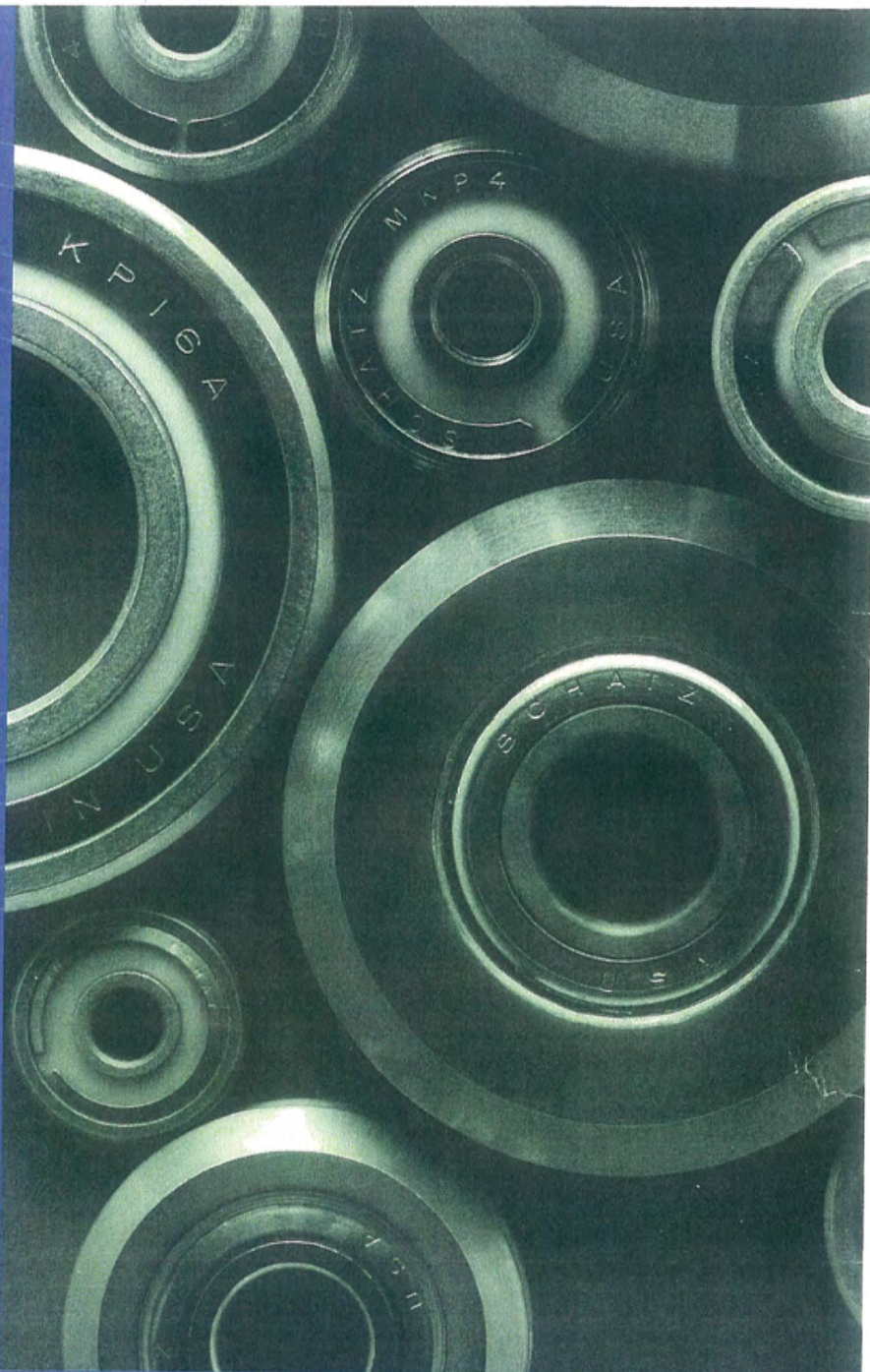
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