Pillow Block Catalog

RANDALL
INNOVATION IN MOTION

ISO®

Randall Bearings, Inc

P.O. Box 1258
Lima, Ohio 45802

Phone:(419) 223-1075
Fax: (419) 228-0200

RANDALL

RANDALL BEARINGS, INC

P.O. BOX 1258 LIMA, OHIO 45802
(419) 223-1075
FAX NO. (419) 228-0200

Email: Sales@RandallBearings.com

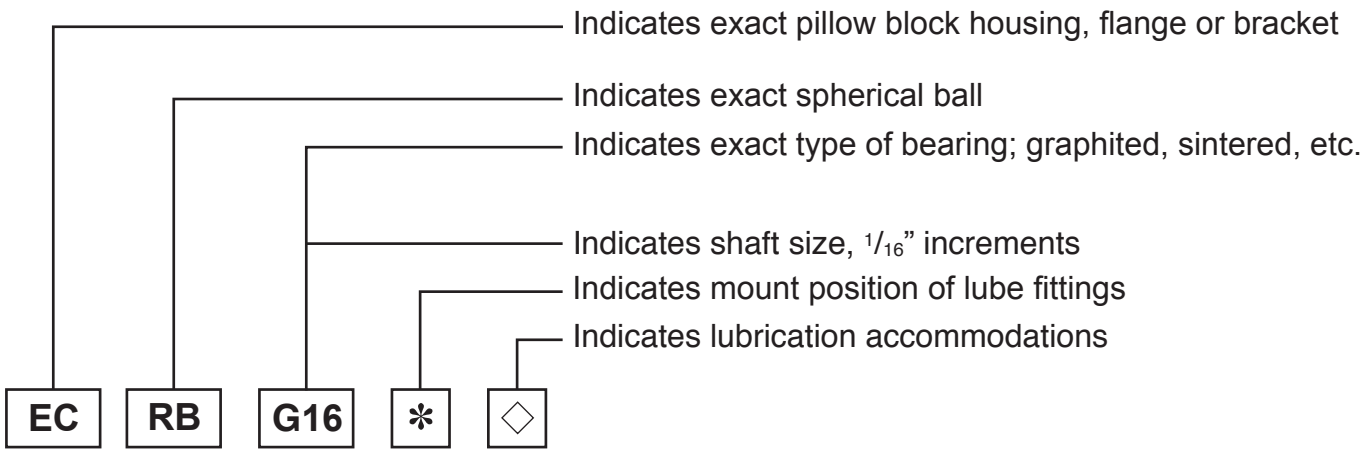
Randall Bearings, Inc. – Lima

Randall Bearings, Inc. – Coldwater

Randall Bearings, Inc. is **ISO 9001 certified** in:

Manufacture, Assembly, Packaging and **Supply** of Custom Machined Parts, Cast Bronze Standard Bushings, Pillow Blocks, Continuous Cast Solid Bronze Bar and Tubular Bronze Bar.

HOW TO READ THE PRODUCT ASSEMBLY NUMBER



* MOUNT POSITIONS OF LUBE FITTINGS

PILLOW BLOCKS		
H		LUBE FITTING OUT TOP
V		LUBE FITTING OUT SIDE
B		LUBE FITTING OUT BOTTOM
X		WHENEVER MOUNT POSITION IS NOT APPLICABLE

◇ LUBRICATION ACCOMMODATIONS

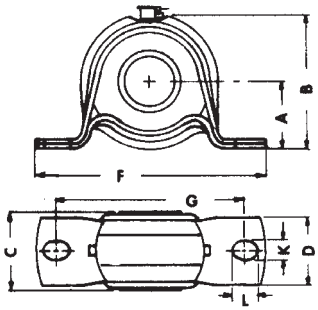
OIL (NOT PRE-LUBRICATED)	A	STANDARD OIL CUP
	E	NO OIL - 1/4" HOLE ONLY
	F	NO OIL - 1/8" NPT HOLE ONLY
GREASE (NOT PRE-LUBRICATED)	B	STANDARD GREASE FITTING
	G	NO GREASE FITTING - 1/4" HOLE ONLY
	H	NO GREASE FITTING - 1/8" NPT HOLE ONLY
PLASTIC E (PRELUBRICATED (SHIPPED FILLED WITH PLASTIC E)	N	NO LUBRICATION PROVISION (SINTERED BEARINGS ONLY)
	D	NO FITTING - 1/8" NPT HOLE ONLY
	C	1/8" NPT PIPE PLUG INSTALLED
	X	WHENEVER NO SUPPLEMENTAL LUBE ACCOMMODATION IS REQUIRED

"E" SERIES STRAP TYPE WITH LINER

MODEL	STRAP MATERIAL	DIMENSIONAL DATA (INCHES)							
		A	B	C	D	F	G	K	L
EB	18 GA–STEEL	1	2	1 1/4	1 1/8	4	3 1/8	21/64	7/16

SINTERED BRONZE BEARING		
SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH
3/4"	EB-UC-S12-HA	1 1/4"

MODEL EB



RANDALL

RUBBER LINER CUSHIONS THE BEARING
REDUCES NOISE & VIBRATION

VARIATIONS ✻ MOUNT POSITIONS ◇ LUBE FITTINGS										
MODEL	✻	◇	◇	◇	◇	◇	◇	◇	◇	◇
EB	H	A	E	F	B	G	H	N	D	C
SEE PAGE 5 FOR DETAILS										

STANDARD UNITS ARE OIL LUBRICATED WITH OIL CUP EXTENDED AS SHOWN ABOVE.

RANDALL BEARINGS, INC

P.O. BOX 1258 LIMA, OHIO 45802
(419) 223-1075
FAX NO. (419) 228-0200

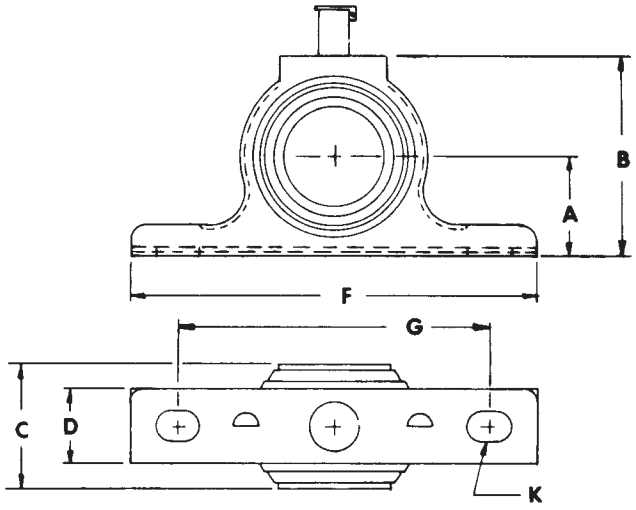
Email: Sales@RandallBearings.com

RANDALL

MODEL	STRAP MATERIAL	DIMENSIONAL DATA (INCHES)						
		A	B	C	D	F	G	K
GL	14 GA–STEEL	$1\frac{5}{8}$	$3\frac{17}{64}$	SEE INDIVIDUAL SHAFT SIZE	$1\frac{1}{4}$	$5\frac{3}{4}$	$4\frac{3}{4}$	$\frac{13}{32} \times \frac{23}{32}$

RANDALL

GRAPHITED CAST BRONZE BEARING		
SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH
$1\frac{1}{4}$"	GL-NE-G20-HA	$2\frac{1}{2}$"
$1\frac{5}{16}$"	GL-NE-G21-HA	$2\frac{1}{2}$"
$1\frac{7}{16}$"	GL-NF-G23-HA	$2\frac{1}{2}$"



MODEL	WITH GROMMET
GL	$\frac{3}{8}$" BOLT DIA. (MAX.)

When grommets are required, add $\frac{1}{8}$" to all height dimensions.

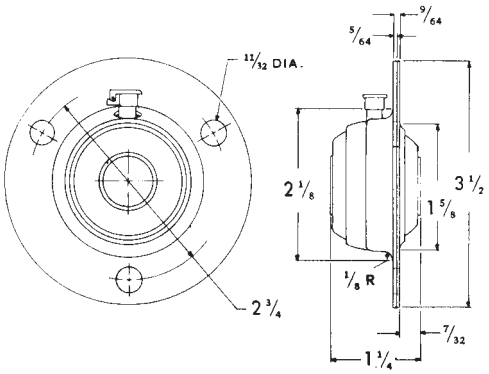
VARIATIONS ✻ MOUNT POSITIONS ◇ LUBE FITTINGS												
MODEL	✻	✻	✻	◇	◇	◇	◇	◇	◇	◇	◇	◇
GL	H	V	B	A	F	B	H	N	D	C		
SEE PAGE 5 FOR DETAILS												

MOUNTING GROMMETS

Vibration and sound absorbing mounting grommets may be specified as an option.

STANDARD UNITS ARE OIL LUBRICATED WITH OIL CUP EXTENDED AS SHOWN ABOVE.

3 BOLT OFFSET FLANGE "B" SERIES



MODEL BA

GRAPHITED CAST BRONZE BEARING		
SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH
1"	BA-UR-G16-MA	1 1/4"

VARIATIONS

✻ MOUNT POSITIONS ◇ LUBE FITTINGS

MODEL	✻	◇	◇	◇	◇	◇	◇	◇	◇	◇
BA	M	A	E	F	B	G	H	N	D	C

SEE PAGE 5 FOR DETAILS

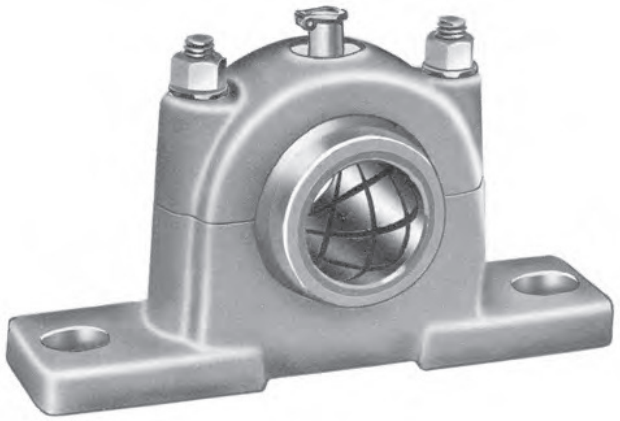
STANDARD UNITS ARE OIL LUBRICATED WITH OIL CUP EXTENDED AS SHOWN ABOVE.

CAST IRON PILLOW BLOCKS AND SPLIT BEARING PILLOW BLOCKS

"P" SERIES

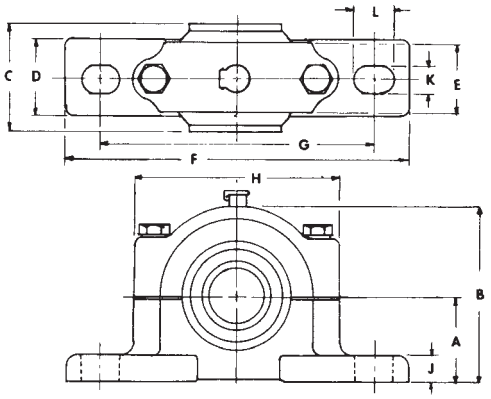
GRAPHITED CAST BRONZE BEARING

SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH	SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH
3/4"	PB-NC-G12-HA	1 1/2"	1 7/16"	PE-NF-G23-HA	2 1/2"
7/8"	PB-NC-G14-HA	1 1/2"	1 1/2"	PE-NF-G24-HA	2 1/2"
15/16"	PB-NB-G15-HA	1 1/2"	2"	PJ-NJ-G32-HA	5"
1"	PB-NB-G16-HA	1 1/2"	2 3/16"	PJ-NJ-G35-HA	5"
1 3/16"	PC-ND-G19-HA	2"			
1 1/4"	PE-NE-G20-HA	2 1/2"			
1 5/16"	PE-NE-G21-HA	2 1/2"			



DIMENSIONAL DATA (INCHES)

MODEL	A	B	C	D	E	F	G	H	J	K	L
PB	1 3/8	2 3/4	1 1/2	1 1/4	1	5 3/8	4 3/8	3 1/8	5/16	7/16	5/8
PC	1 5/8	3 1/8	2	1 1/2	1 5/16	5 7/8	4 3/4	3 5/8	3/8	7/16	9/16
PE	2	3 11/16	2 1/2	1 3/4	1 9/16	7 3/16	6	4 1/16	1/2	9/16	3/4
PG	2 3/8	4 5/8	4	2 1/4	1 7/8	8 3/4	6 5/8	5 1/4	9/16	9/16	1
PJ	2 3/4	5 3/8	5	2 13/16	2 1/2	11 1/4	9 1/4	6 1/2	3/4	7/8	1 1/8
PK	3 1/8	6 7/32	6	3 1/16	2 3/4	12 3/16	10	7 5/16	15/16	7/8	1 5/16



VARIATIONS

✻ Mount Positions ◇ Lube Fittings

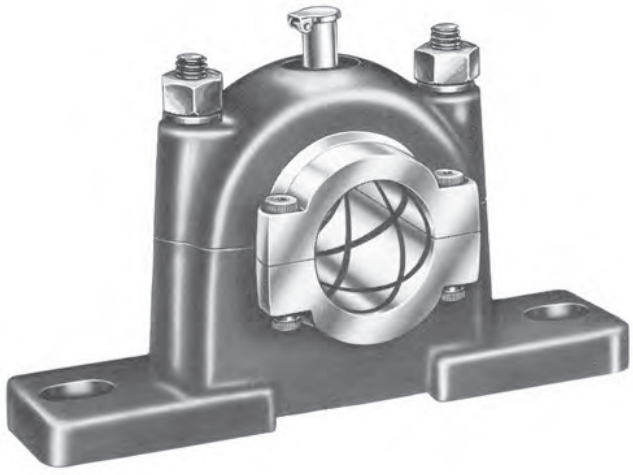
MODEL	✻	◇	◇	◇	◇	◇	◇
PB	H	A	F	B	H	D	C
PC	H	A	F	B	H	D	C
PE	H	A	F	B	H	D	C
PG	H	A	F	B	H	D	C
PH	H	A	F	B	H	D	C
PJ	H	A	F	B	H	D	C
PK	H	A	F	B	H	D	C

SEE PAGE 5 FOR DETAILS

NOTE: These models contain identical cast iron housings with bronze split bearing cartridges. (As shown.)

All contain graphited bronze split bearing cartridges which may be replaced with ease in all models without removing the shaft.

SPLIT BEARING PILLOW BLOCK



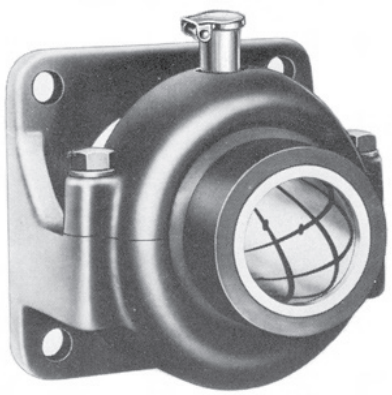
GRAPHITED CAST BRONZE BEARING

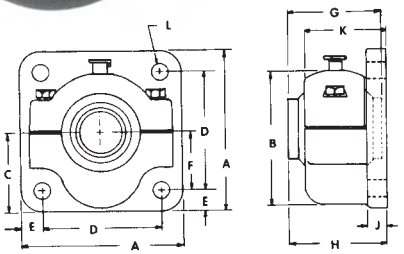
SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH	SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH
1"	PC-LA-G16-HA	2 5/8"	1 3/4"	PG-LH-G28-HA	4 1/2"
1 3/16"	PC-LC-G19-HA	2 5/8"	2 3/16"	PJ-LL-G35-HA	5 1/2"
1 1/4"	PC-LD-G20-HA	2 5/8"	2 7/16"	PK-LM-G39-HA	6"
1 7/16"	PE-LE-G23-HA	3"	2 11/16"	PK-LN-G43-HA	6"
1 1/2"	PE-LF-G24-HA	3"			
1 11/16"	PG-LG-G27-HA	4 1/2"			

- Readily available replacement cartridges may be installed with ease.
- Matched halves are precision doweled.

STANDARD UNITS ARE OIL LUBRICATED WITH OIL CUP EXTENDED AS SHOWN ABOVE.

"R & S" SERIES Cast Iron Flange Bearing & Split Flange Bearing





MODEL	DIMENSIONAL DATA (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
RB	3 15/16	3 3/8	1 31/32	2 13/16	19/32	1 3/8	2	2 5/16	17/32	2 1/16	29/64
RC	4 5/16	3 23/32	2 5/32	3 1/4	17/32	1 5/8	2 1/2	2 5/8	17/32	2 3/16	29/64
RE	4 5/8	4	2 5/16	3 5/8	1/2	1 13/16	3	3 5/16	17/32	2 15/16	33/64
RF	5 3/8	4 29/32	2 11/16	4 1/8	5/8	2 1/16	4 1/2	4 3/4	9/16	3 21/32	37/64
RG	5 5/8	5 5/16	2 13/16	4 3/8	5/8	2 3/16	5	5 1/4	9/16	4	37/64
RH	6 1/2	5 7/8	3 1/4	5 3/16	21/32	2 19/32	5	5 3/8	11/16	4 1/8	41/64

GRAPHITED CAST BRONZE BEARING					
SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH	SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH
3/4"	RB-MB-G12-MA	2"	1 7/16"	RE-MG-G23-MA	3"
7/8"	RB-MB-G14-MA	2"	1 1/2"	RF-MH-G24-MA	4 1/2"
15/16"	RB-MC-G15-MA	2"	1 11/16"	RF-MH-G27-MA	4 1/2"
1"	RB-MC-G16-MA	2"	1 3/4"	RF-MH-G28-MA	4 1/2"
1 3/16"	RC-MF-G19-MA	2 1/2"	1 15/16"	RG-MK-G31-MA	5"
1 1/4"	RE-MG-G20-MA	3"	2"	RH-NJ-G32-MA	5"
1 5/16"	RE-MG-G21-MA	3"	2 3/16"	RH-NJ-G35-MA	5"

VARIATIONS

✻ Mount Positions ◇ Lube Fittings

MODEL	✻	◇	◇	◇	◇	◇	◇
RB	M	A	F	B	H	D	C
RC	M	A	F	B	H	D	C
RE	M	A	F	B	H	D	C
RF	M	A	F	B	H	D	C
RG	M	A	F	B	H	D	C
RH	M	A	F	B	H	D	C

SEE PAGE 5 FOR DETAILS

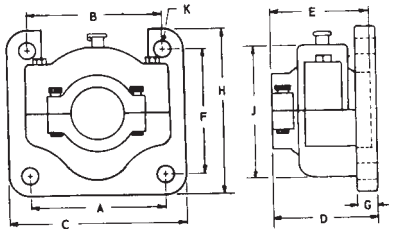
VARIATIONS

✻ Mount Positions ◇ Lube Fittings

MODEL	✻	◇	◇	◇	◇	◇	◇
SA	M	A	F	B	H	D	C
SB	M	A	F	B	H	D	C
SC	M	A	F	B	H	D	C
RH	M	A	F	B	H	D	C

SEE PAGE 5 FOR DETAILS

Split Flange Bearing



MODEL	DIMENSIONAL DATA (INCHES)									
	A	B	C	D	E	F	G	H	J	K
SA	3 1/4	3 1/2	4 1/2	2 11/16	2 5/8	3 1/4	17/32	4 5/16	3 3/8	29/64
SB	3 5/8	3 5/8	4 5/8	3 5/16	3	3 5/8	17/32	4 5/8	3 7/8	33/64
SC	4 1/8	5 1/4	6 5/8	4 3/4	4 1/2	4 1/8	5/8	5 7/16	4 7/8	37/64
RH	SEE RH IN ABOVE CHART									

GRAPHITED CAST BRONZE BEARING					
SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH	SHAFT SIZE	ASSEMBLY NUMBER STD. LUBE	BEARING LENGTH
1"	SA-LA-G16-MA	2 5/8"	1 11/16"	SC-LG-G27-MA	4 1/2"
1 3/16"	SA-LC-G19-MA	2 5/8"	1 3/4"	SC-LH-G28-MA	4 1/2"
1 1/4"	SA-LD-G20-MA	2 5/8"	2 3/16"	RH-LL-G35-MA	5 1/2"
1 7/16"	SB-LE-G23-MA	3"			
1 1/2"	SB-LF-G24-MA	3"			

"S" SERIES housings are designed with the cross bar on the flange eliminated in order that the entire assembly may be installed anywhere along a shaft without shaft removal.

2 3/16" SHAFT SIZE UTILIZES STANDARD "R" SERIES HOUSING WITH CROSS BAR ON THE FLANGE.

All contain graphited bronze split bearing cartridges which may be replaced with ease in all models without removing the shaft.

MATCHED HALVES ARE PRECISION DOWELED.

STANDARD UNITS ARE OIL LUBRICATED WITH OIL CUP EXTENDED AS SHOWN ABOVE.

ACCESSORIES

PART NO.	USED WITH CARTRIDGE	SPHERICAL O.D. OF CARTRIDGES WITHOUT LINER	SPHERICAL O.D. OF CARTRIDGES WITH LINER
0045	Y SERIES	7/8"	1 1/16"
0055	W SERIES	1 1/8"	1 5/16"
045	V SERIES	1 5/8"	1 13/16"
145	U SERIES	1 11/16"	1 27/32"
LL 2	S SERIES	2"	2 1/4"
245	R SERIES	2 1/4"	2 17/32"
1145	U SERIES	2 1/4"	1 57/64"

VIBRATION DAMPERS
(Static Conducting)

- CUSHIONS BEARING
- REDUCES NOISE

MOUNTING GROMMET

GROMMET PART NO.	ANGLE WASHER PART NO.	APPLICABLE HOUSING
1400	1401	GA
2400	1401	GG
3400	3401	GL

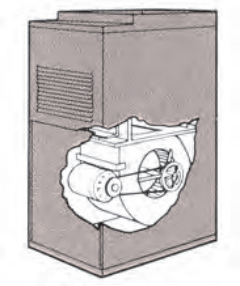
PLASTIC "E" LUBRICANT TUBES

Randall bearings pre-lubricated with PLASTIC "E" are customarily furnished with 1/8" pipe plug in the ball assembly. If necessary to replenish the supply of lubricant, collapsible tubes of PLASTIC "E" are available. NOTE: The special lubricant should be used only on bearing modified for its use.

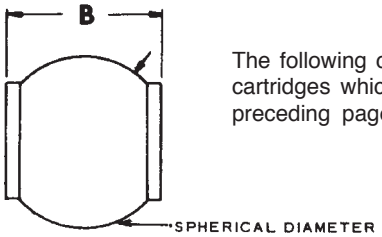
RANDALL

BEARING KITS

KIT NO.	SHAFT SIZE	CARTRIDGE NO.	LINER NO.	LUBRICATION
1	5/8"	XX-VA-S10-XA	045	OIL
2	3/4"	XX-VC-G12-XA	045	OIL
3	3/4"	XX-VC-G12-XC	045	PERMANENT TYPE
4	5/8"	XX-VA-S10-XC	045	PERMANENT TYPE
5	5/8"	XX-UB-G10-XA	145	OIL
6	3/4"	XX-UD-G12-XA	145	OIL
7	3/4"	XX-UD-G12-XC	145	PERMANENT TYPE
8	5/8"	XX-UB-G10-XC	145	PERMANENT TYPE
9	1"	XX-SD-G16-XA	LL2	OIL
10	3/4"	XX-VC-D12-XA	045	OIL
11	3/4"	XX-VC-D12-XC	045	PERMANENT TYPE
12	1"	XX-SD-G16-XC	LL2	PERMANENT TYPE
13	1"	XX-RB-G16-XA	245	OIL
14	1"	XX-UR-G12-XA	145	OIL
15	1"	XX-UR-G16-XC	145	PERMANENT TYPE
16	1"	XX-RB-G16-XC	245	PERMANENT TYPE



BEARING CARTRIDGES



The following cartridges may be ordered by number. These are standard cartridges which are also incor-porated in standard pillow blocks on the preceding pages.

RANDALL

CAST IRON CARTRIDGE SERIES	SHAFT SIZE	CARTRIDGE ASSEMBLY NUMBER	DIMENSIONAL DATA	
			A SPHERICAL DIAMETER	B LENGTH
N	3/4	XX-NC-G12-XA	2	1 1/2
	7/8	XX-NC-G14-XA	2	1 1/2
	15/16	XX-NB-G15-XA	2	1 1/2
	1	XX-NB-G16-XA	2	1 1/2
	1 3/16	XX-ND-G19-XA	2 3/8	2
	1 1/4	*XX-NE-G20-XA	2 5/8	2 1/2
	1 5/16	*XX-NE-G21-XA	2 5/8	2 1/2
	1 7/16	*XX-NF-G23-XA	2 5/8	2 1/2
	1 1/2	*XX-NF-G24-XA	2 5/8	2 1/2
	1 3/4	XX-NG-G28-XA	3 3/8	4
	2	XX-NJ-G32-XA	4 1/4	5
	2 3/16	XX-NJ-G35-XA	4 1/4	5

STEEL CARTRIDGE SERIES	SHAFT SIZE	CARTRIDGE ASSEMBLY NUMBER	DIMENSIONAL DATA	
			A SPHERICAL DIAMETER	B LENGTH
M	3/4	XX-MB-G12-XA	2 3/8	2
	7/8	XX-MB-G14-XA	2 3/8	2
	15/16	XX-MC-G15-XA	2 3/8	2
	1	XX-MC-G16-XA	2 3/8	2
	1 3/16	XX-MF-G19-XA	2 5/8	2 1/2
	1 1/4	XX-MG-G20-XA	3 1/4	3
	1 5/16	XX-MG-G21-XA	3 1/4	3
	1 7/16	XX-MG-G23-XA	3 1/4	3
	1 1/2	XX-MH-G24-XA	3 3/4	4 1/2
	1 11/16	XX-MH-G27-XA	3 3/4	4 1/2
	1 3/4	XX-MH-G28-XA	3 3/4	4 1/2
	1 5/16	XX-MK-G31-XA	4	5
L	1	XX-LA-G16-XA	2 3/8	2 5/8
	1 3/16	XX-LC-G19-XA	2 3/8	2 5/8
	1 1/4	XX-LD-G20-XA	2 3/8	2 5/8
	1 7/16	XX-LE-G23-XA	2 5/8	3
	1 1/2	XX-LF-G24-XA	2 5/8	3
	1 11/16	XX-LG-G27-XA	3 3/8	4 1/2
	1 3/4	XX-LH-G28-XA	3 3/8	4 1/2
	2 3/16	XX-LL-G35-XA	4 1/4	5 1/2
	2 7/16	XX-LM-G39-XA	4 11/16	6
	2 11/16	XX-LN-G43-XA	4 11/16	6

PLEASE NOTE:
The last letter of each assembly number indicates the standard lubrication provided.
Page 4 illustrates the code letter in detail.

*NE and NF BALLS ARE STEEL

VARIATIONS

✻ Mount Positions ◇ Lube Fittings

MODEL	✻	◇	◇	◇	◇	◇	◇	◇	◇	◇
YW	X	N								
VUSX	X	A	E	F	B	G	H	N	D	C
QPNML	X	A	F	B	H	D	C			
K	X	X								

SEE PAGE 5 FOR DETAILS

RANDALL

Bearing Material Specifications

Randall Sleeve Bearing Pillow Blocks are available with the following bearing materials.

CAST BRONZE SPECIFICATIONS

Randall graphited pillow block bearing bronze is produced in accordance with this specification and is designated as Randall S-1 bronze. S-1 is equivalent to SAE CA 932; CDA 932; ASTMB 505-932; QQC 390 ALLOY E7

CHEMICAL	PERCENTAGES	
	MINIMUM	MAXIMUM
COPPER	81.00	85.00
TIN	6.25	7.50
LEAD	6.00	8.00
ZINC	2.00	4.00
NICKEL	.00	.50
IRON	.00	.20
ALUMINUM	.00	.005
SILICON	.00	.005
PHOSPHORUS	.00	.15
ANTIMONY	.00	.35

PHYSICAL

TENSILE STRENGTH	30,000 PSI MINIMUM
YIELD STRENGTH	20,000 PSI MINIMUM
% ELONGATION	12% MINIMUM
HARDNESS	ROCKWELL E 58
DENSITY	.316-.320 LB/in^3

DESIGN DATA

MAXIMUM UNIT PRESSURE LOAD	4,000 PSI
COMPREHENSIVE STRENGTH (1/8" SAMPLE)	30,000 PSI (PERMANENT SET .001")
COMPREHENSIVE STRENGTH (1" SAMPLE)	18,000 PSI (PERMANENT SET .001")
MODULUS OF ELASTICITY	12 x 10^6 PSI
CO-EFFICIENT OF THERMAL EXPANSION	10 x 10^{-6} IN/IN/DEG F

These dependable bearing have been serving industry for many years, with millions in operation today. Randall pioneered their development and has improved them to their present dependable state. Randall graphited cast bronze provides the safety of double lubrication that allows for occasional maintenance error and reduces early failure. Graphite geed pugs meter the precise amount of lubricant required for full-film hydrodynamic lubrication and the graphited grooves insure even distribution throughout the bore. All bore sizes are held to a precision tolerance of .0008 inch.

SINTERED BRONZE SPECIFICATIONS

CHEMICAL	PERCENTAGES	
	MINIMUM	MAXIMUM
COPPER	86.25	90.50
TIN	9.50	10.50

PHYSICAL

ULTIMATE TENSILE STRENGTH	13,000 PSI
YIELD POINT IN COMPRESSION (0.2% OFFSET)	16,500 PSI
ELONGATION (% IN ONE INCH)	2.5
POROSITY (% MINIMUM)	18
ROCKWELL HARDNESS	H-50

Randall sintered pillow block bearings are of the finest quality sintered bronze produced for pillow block use.

Equivalent specifications are ASTMB438-73, GRADE 1 TYPE 2; and SAE 841 (old #SAE TYPE 1, CLASS A)

Randall also provides economical sintered bronze bearing pillow blocks. The porous bronze wall feeds the lubricant directly to the bore from Randall's DEEP-WELL reservoirs, metering lubricant flow according to need. Available at lower cost, sintered bronze bearing pillow blocks are excellent for innumerable applications where double lubrication is not essential. All sintered bearing bores are sized to within .0012 inch.

CARBON SPECIFICATION

MAXIMUM OPERATING TEMPERATURES	750°
COMPREHENSIVE STRENGTH	26,000 PSI
TRANSVERSE STRENGTH	13,000 PSI
HARNESS SHORE	60/70
DRY CO-EFFICIENT FRICTION	.17
CO-EFFICIENT THERMAL EXPANSION	3.2 IN/IN/°F x 10^{-6}

All bores are finished INDIVIDUALLY per application due to shaft expansion at elevated temperatures. These bearings provide excellent results at temperatures up to 750° F. NOTE: When ordering, ALWAYS INDICATE MAXIMUM OPERATING TEMPERATURE!

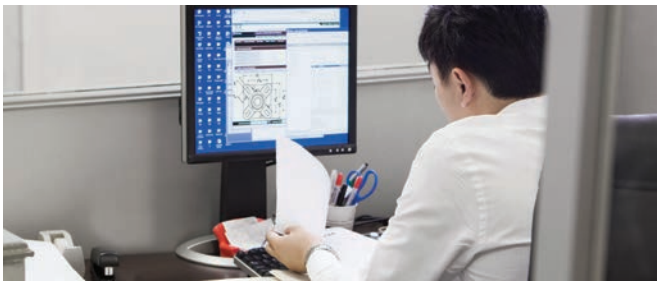
Randall provides carbon-graphite bearing pillow blocks for use in special applications where supplemental lubrication cannot be provided. Boundary lubrication permits a low, dry co-efficient of friction. Carbon bushings are interference fit into solid-cored, cast-iron balls ...providing complete bearing support and self alignment simultaneously. These bearing cartridges are available incorporated into sturdy, economical steel housings or heavy duty cast iron housings.

RANDALL

Shafting Recommendations

The shaft should be round and straight, free from rust, scale, nicks or burrs. Improved surface finishes such as from grinding and polishing, or burnishing in the bearing area, result in longer life and better operating characteristics. The bore sizes in Randall bearings were determined to provide proper running clearance when used with shafting of recognized commercial tolerances. The use of premium grade shafting allows clearance equal to that recommended for precision spindle practice, while regular shafting allows clearance equal to that used for general machine parts.

Premium shafting is recommended for all applications and is MANDATORY for all applications utilizing PLASTIC "E" LUBRICATION.



Premium Shafting

FINISH
Ground and Polished 16 Micro-Inch or Better

TOLERANCE	PLUS .000 MINUS .001	Up thru 1 1/2"
	PLUS .000 MINUS .0015	1 9/16" thru 2 7/16"
	PLUS .000 MINUS .002	2 1/2" thru 2 11/16"

Regular Shafting

FINISH
Smooth and Clean

TOLERANCE	PLUS .000 MINUS .002	Up thru 1"
	PLUS .000 MINUS .003	1 1/16" thru 2"
	PLUS .000 MINUS .004	2 1/16" thru 2 11/16"

Randall standard bore tolerances

OTHER CLEARANCES AND TOLERANCES AVAILABLE TO CUSTOMER SPECIFICATION

SINTERED BRONZE BEARINGS STANDARD FINISHED CORE TOLERANCE	NORMAL SHAFT SIZE	GRAPHITED CAST BRONZE BEARINGS STANDARD FINISHED BORE TOLERANCE
.2506/ .2503	1/4	
.3131/ .3128	5/16	
.3757/ .3754	3/8	
.4382/ .4379	7/16	
.5017/ .5005*	1/2	.5013/ .5005
.6267/ .6255**	5/8	.6263/ .6255
.7520/ .7508	3/4	.7516/ .7508
.8770/ .8758	7/8	.8766/ .8758
.9395/ .9398	15/16	.9391/ .9398
1.0020/ 1.0008	1	1.0016/ 1.0008
1.1895/ 1.1883	1 3/16	1.1891/ 1.1883
1.2522/ 1.2510	1 1/4	1.2518/ 1.2510
	1 5/16	1.3143/ 1.3135
	1 7/16	1.4393/ 1.4385
	1 1/2	1.5023/ 1.515
	1 11/16	1.6898/ 1.6890
	1 3/4	1.7523/ 1.7515
	1 15/16	1.9400/ 1.9392
	2	2.0028/ 2.0020
	2 3/16	2.1903/ 2.1895
	2 7/16	2.4405/ 2.4397
	2 11/16	2.6905/ 2.6897

*MINIATURE IS .5010/.5005
**MINIATURE IS .6261/.6256

CONSULT RANDALL'S ENGINEERING STAFF FOR YOUR PARTICULAR NEEDS

ISO 220 Grade Oil used in pillow blocks
Bolt torque = 50 inch-pounds for cap tightening

OIL OR GREASE LUBRICATION RECOMMENDATIONS

OIL LUBRICATED BEARINGS

Randall oil lubricated bearings leave the factory with a minimum amount of oil suited to normal conditions in their large, felt-packed reservoirs. It is mandatory that oil be added to the bearing before operation begins and that the oil cup be refilled several times during the first few days to bring the oil reserve up to near capacity. When this condition has been reached, it is unnecessary to add any more oil for approximately 1,000 hours of operation, barring of course, high bearing temperatures which might prematurely exhaust the supply.

It is advisable to make a few checks for excessive bearing temperatures during the first maintenance periods since this will show whether the bearing is getting sufficient lubrication, as well as reveal signs of improper operating conditions or faulty installation.

Oil drippage will often result from over oiling or from using too light an oil; detergent additives also promote this undesirable action. Should this condition prevail in spite of close adherence to the lubricating instructions, it would be permissible under the circumstances, to apply the next heavier weight oil of the same grade without damaging the bearing. We recommend the use of industrial type mineral oils or automotive crankcase oils, excepting those designated detergent, heavy duty or compounded.

For given operating temperatures, the viscosities should correspond to the specifications of the SAE for the ranges listed below:
80º - 100º F SAE 50
40º - 70º F SAE 30
0º - 30º F SAE 10W
-30º - 0º F Low Temperature Oil, Texaco Capella B or equivalent

GREASE LUBRICATED BEARINGS

When grease lubrication is preferred, specify “For Grease Lubrication” on your order. Such bearings must be specifically modified at the factory and are supplied with a standard hydraulic grease fitting. Conventional pressure gun type greases suited to the operating conditions are satisfactory. These bearings are not pre-lubricated by Randall, and lubricant must be added.

RANDALL