



## Part Numbering System

**EXAMPLE:** SSRI-418ZZEEA62HA5CXXP25L02P  
 RIF-1438FA7P13LG49U

GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5	GROUP 6	GROUP 7	GROUP 8
MATERIAL	TYPE	BASIC SIZE	SEALS & SHIELDS	MODIFICATIONS	DUPLEX PAIRS	PREMIUM FEATURES	CAGE

<b>SS</b>	<b>RI</b> <b>—</b>	<b>418</b>	<b>ZZ</b>	<b>EEA62</b>			<b>H</b>
	<b>RIF</b> <b>—</b>	<b>1438</b>					<b>F</b>

**SS**=AISI stainless steel (440C)  
**No Code**=Chrome alloy steel (52100)  
**CE**=Chrome alloy steel rings (52100) with ceramic balls  
**SB**=440C Modified  
**SE**=AISI stainless steel rings (440C) with ceramic balls  
**ST**=AISI stainless steel rings (440C) with TiC coated balls  
**XT**=Chrome alloy steel rings (52100) with TiC balls

**RI, R, L**=Radial  
**RIF, RF, LF**=Flanged radial  
**F**=Flanged, tapered O.D.  
**FR**=Duplex pair with one flanged and one unflanged bearing  
**RIFW, RFW, LFW**=Flanged with non-standard flange width  
**MBRI, MBR, MBL**=Inner ring relieved and separable  
**MBRIF, MBRF, MBLF**=Inner ring relieved and separable, flanged outer ring  
**MDRI, MDR, MDL**=Inner ring relieved and non-separable  
**MDRIF, MDRF, MDLF**=Inner ring relieved and non-separable, flanged outer ring  
**MERI, MER, MEL**=Outer ring relieved, and non-separable  
**MERIF, MERF, MELF**=Outer ring relieved, flanged and non-separable  
**MBF**=Inner ring relieved and separable, outer ring flanged and O.D. tapered  
**MDF**=Inner ring relieved and non-separable, outer ring flanged and O.D. tapered  
**Special Size Series:**  
**Z**=(Followed by letter and numbers indicates End Bell)  
**RA**\_\_\_\_=Pulley type assemblies; shaft assemblies; mechanical parts; tape guides; special bearings

**Inch Series**  
 First one or two digits indicates O.D. in 16ths of an inch. The following two or three digits indicate the bore size in a fraction of an inch, the first digit being the numerator and the second or the second and third digits being the denominator.  
**Metric Series** First two digits indicate O.D. in mm. Second two digits indicate I.D. in mm.  
**X**=(following basic size) Indicates special internal design, assigned in numerical sequence i.e. X1, X2, etc.

**Enclosures**  
**Z**=Single metallic shield-removable  
**ZZ**=Double metallic shield-removable  
**ZO**=Single shield on side opposite flange  
**D**=Single rubber seal  
**DD**=Double rubber seal  
**DI**=Single viton seal  
**DDI**=Double viton seal  
**L**=Single glass reinforced PTFE seal  
**LL**=Double glass reinforced PTFE seal  
**LO**=Single seal on side opposite flange  
**LZ**=Glass reinforced PTFE seal and shield with seal on flange side  
**ZL**=Shield and glass reinforced PTFE seal with shield on flange side  
**DZ**=Rubber seal and shield  
**L(L)BP**=Glass reinforced PTFE seal(s) with metal backing plate(s)  
**H**=Single metallic shield non-removable  
**HH**=Double metallic shield non-removable  
**S**=Single rubber seal, non-contact  
**SS**=Double rubber seal, non-contact  
**Q(Q)**=Glass reinforced PTFE seal(s), lip riding  
**Q(Q)4**=Glass reinforced PTFE seal(s) with protective shield(s), lip riding  
**DO, QO**=Single seal on side opposite flange

**Extended Inner Ring**  
**EE**=Both sides  
**E**=One side  
**Special External Dimension**  
**A**\_\_=Larger than standard O.D.  
**A**\_\_\_\_=Semi-standard, larger width and O.D. bearing  
**A**\_\_\_\_=Larger O.D. than standard and special width  
**W**=Wider than standard width  
**Y**=Narrower than standard width  
**N**=Larger or smaller bore than standard  
**G**=Special external groove in bearing  
**B**=Special bore tolerance  
**Special Design**  
**SD**=Special design bearing  
**CV**=Special race curvature

**Duplex**  
**DB**=Back-to-back configuration  
**DF**=Face-to-face configuration  
**DT**=Tandem configuration  
**DU**=Universal duplex.  
 Numbers following letter code indicate mean preload in pounds.  
 If not followed by a number, standard preload is applied.

**MC**=Premium ball & race finish for specific applications

**CR**=Ribbon PTFE coated  
**F**=Full ball complement  
**H**=Crown, land piloted  
**J**=Crown, acetal  
**JM**=Full type, acetal  
**JN**=Full type, molded acetal  
**KB**=Crown phenolic, paper base  
**KC**=Crown, phenolic, linen base  
**KF**=Crown phenolic, linen, non keyhole type outer land piloting  
**KG**=Crown phenolic, paper base, outer land piloted  
**KM**=Full type, phenolic, linen base  
**KN**=Full type, phenolic, paper base  
**M4**=Full type, polyimide  
**M5**=Crown, polyimide  
**R**=Ribbon, land piloted  
**RD**=Ribbon, ball piloted  
**SL**=Slug, PTFE  
**T1**=Crown, specialty material  
**TT**=Toroids, PTFE

# PART NUMBERING

Authorized Distributor  
 Jamaica Miniature Bearings  
 CA Phone: (805) 523-2500  
 PA Phone: (215) 661-8590



GROUP 9	GROUP 10	GROUP 11	GROUP 12	GROUP 13	GROUP 14
ABEC TOLERANCE	DIMENSIONAL CODING	RADIAL PLAY	TORQUE	LUBRICANT	PACKAGING
<b>A5</b> <b>A7</b>	<b>CXX</b>	<b>P25</b> <b>P13</b>		<b>LO2</b> <b>LG49</b>	<b>P</b> <b>U</b>
<p><b>A1</b>=ABEC 1*</p> <p><b>A3</b>=ABEC 3, 3P</p> <p><b>A5</b>=ABEC 5, 5P, 5T</p> <p><b>A7</b>=ABEC 7, 7P, 7T</p> <p><b>A9</b>=ABEC 9, 9P</p> <p><b>Note:</b> Selected ABEC 9 tolerances are available on all sizes. Please consult factory.</p> <p>*A1 miniature and instrument bearings of both the metric and inch configurations meet the tolerances of ABMA Standard 20 for ABEC 1 metric series bearings.</p>	<p><b>CXX</b>=I.D. and O.D. calibration in .0001 increments</p> <p><b>CXX</b>=O.D. coding only, .0001 increments</p> <p><b>CX0</b>=I.D. coding only, .0001 increments</p> <p><b>C44</b>=I.D. and O.D. calibration in .000050 increments</p> <p><b>C04</b>=O.D. coding only, .000050 increments</p> <p><b>C40</b>=I.D. coding only, .000050 increments</p>	<p><b>P</b>= Followed by two, three, or four numbers indicates the radial play limits in ten thousandths of an inch. Example: P25 indicates radial play of .0002" to .0005".</p> <p><b>PC__</b>=Nominal contact angle in degrees</p> <p><b>PA__</b>=Nominal axial play</p> <p><b>Example:</b> PA015 indicates axial play of .0015</p>	<p><b>T</b>= Followed by a number indicates maximum starting torque in hundreds of mg. mm. Example: T15 indicates a maximum starting torque of 1500 mg. mm.</p> <p><b>RT</b>= Followed by a number indicates maximum running torque in hundreds of mg. mm. Example: RT15 indicates a maximum running torque of 1500 mg. mm.</p>	<p>Lubricant letter codes are followed by a number to indicate specific type.</p> <p><b>BC</b>=Following lubricant code indicates barrier coating</p> <p><b>LB</b>=Mixture of oil and solvent</p> <p><b>LD</b>=Dry--no lubrication</p> <p><b>LF</b>=Dry film</p> <p><b>LG</b>=Greases</p> <p><b>LM</b>=Mixture of oil and grease</p> <p><b>LO</b>=Oils</p> <p><b>LY</b>=Expanded list of oils and greases</p> <p><b>Grease Plate Code</b> (follows lubricant code)</p> <p><b>GPL</b>=light</p> <p><b>GPM</b>=medium</p> <p><b>GPH</b>=heavy</p>	<p><b>No Code</b>=Plastic sealed vial</p> <p><b>B</b>=Individual boxes</p> <p><b>E</b>=Individual pack per MIL-B-22191</p> <p><b>K</b>=Kraft foil package</p> <p><b>KB</b>=Kraft bag and box</p> <p><b>P</b>=Pill pack</p> <p><b>PB</b>=Pill pack and box</p> <p><b>U</b>=Unit pack</p> <p><b>UB</b>=Unit pack and box</p>

### IMPORTANT NOTE:

The NHBB numbering system identifies ball bearing size and design. This system is not a guide to create a customized ball bearing. Please use the numbering system to decipher the basic bearing numbers listed in this catalog, or to define a number given to you by a representative of NHBB. Please consult a member of the NHBB sales or engineering staff to help you design a new bearing or to interchange another manufacturer's part number.