

Accessories



Metric Ball Bushing Bearings

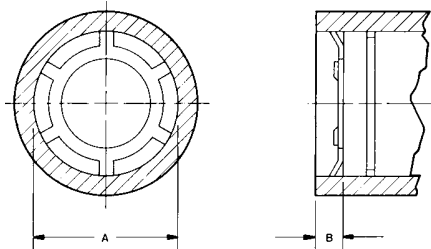
Described here are accessories for Linear Ball Bushing® Bearings and pillow blocks, including retaining rings and external seals.



Retaining Rings

Internal Retaining Rings

Push-in internal retaining rings, as shown, are for use with Metric Ball Bushing® Bearings. Each retaining ring is installed inside the housing bore at each end of the bearing.

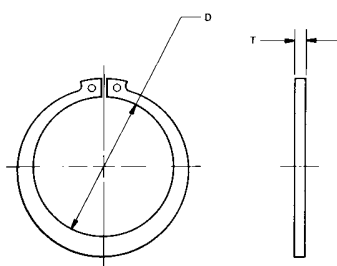


(Dimensions in mm)

Part Number	Use with Ball Bushing Bearing Number	Nominal Shaft Diameter	Nominal Housing Bore A	Minimum End Space required B
PRM08	SPM08 or MAM08	8	16	1.5
PRM12	SPM12 or MAM12	12	22	2.0
PRM16	SSEM16 or MAM16	16	26	2.0
PRM20	SSEM20 or MAM20	20	32	2.0
PRM25	SSEM25 or MAM25	25	40	2.0
PRM30	SSEM30 or MAM30	30	47	2.0
PRM40	SSEM40 or MAM40	40	62	2.5
PRJ16	SSJM16	16	28	2.0
PRJ20	SSJM20	20	32	2.0
PRJ25	SSJM25	25	40	2.0
PRJ30	SSJM30	30	45	2.0
PRJ40	SSJM40	40	60	2.5

External Retaining Rings

External retaining rings are used to form one or two shoulders on the O.D. of the Metric Ball Bushing Bearings.



(Dimensions in mm)

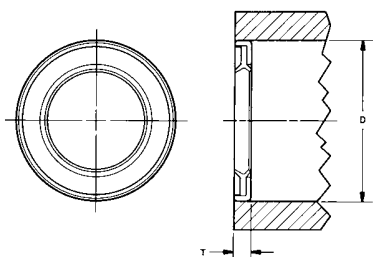
Part Number	Use with Ball Bushing Bearing Number	Nominal Shaft Diameter	T	Free Diameter D
WRM08	SPM08 or MAM08	8	1.00	14.7
WRM12	SPM12 or MAM12	12	1.20	20.5
WRM16	SSEM16 or MAM16	16	1.20	24.2
WRM20	SSEM20 or MAM20	20	1.50	29.6
WRM25	SSEM25 or MAM25	25	1.75	36.5
WRM30	SSEM30 or MAM30	30	1.75	43.5
WRM40	SSEM40 or MAM40	40	2.00	57.8
WRJ16	SSJM16	16	1.50	27.0
WRJ20	SSJM20	20	1.50	30.0
WRJ25	SSJM25	25	1.75	38.0
WRJ30	SSJM30	30	1.75	43.0
WRJ40	SSJM40	40	2.00	57.0

External Seals

External Seals for Closed Metric Ball Bushing Bearings

Double-acting seals for use in fixed diameter housings.

(Dimensions in mm)



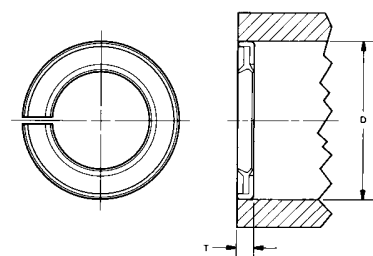
Part Number	Use with Ball Bushing Bearing Number	Nominal Shaft Diameter	T	Nominal Housing Diameter (1) D
SM08	SPM08 or MAM08	8	3.0	16
SM12	SPM12 or MAM12	12	3.0	22
SM16	SSEM16 or MAM16	16	3.0	26
SM20	SSEM20 or MAM20	20	4.0	32
SM25	SSEM25 or MAM25	25	4.0	40
SM30	SSEM30 or MAM30	30	5.0	47
SM40	SSEM40 or MAM40	40	5.0	62

Metric Ball Bushing Bearings

External Seals for Adjustable Metric Ball Bushing Bearings

Double-acting seals for use in adjustable diameter housings. Series ADJ seals have a radial slot through the circumference to facilitate diameter adjustment.

(Dimensions in mm)

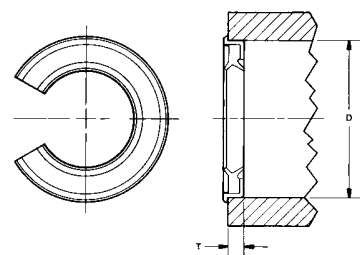


Part Number	Use with Ball Bushing Bearing Number	Nominal Shaft Diameter	T	Nominal Housing Diameter (1) D
SM08ADJ	SPM08 or MAM08	8	3.0	16
SM12ADJ	SPM12 or MAM12	12	3.0	22
SM16ADJ	SSEM16 or MAM16	16	3.0	26
SM20ADJ	SSEM20 or MAM20	20	4.0	32
SM25ADJ	SSEM25 or MAM25	25	4.0	40
SM30ADJ	SSEM30 or MAM30	30	5.0	47
SM40ADJ	SSEM40 or MAM40	40	5.0	62

External Seals for Open Metric Ball Bushing Bearings

Double-acting seals for use in open type housings.

(Dimensions in mm)



Part Number	Use with Ball Bushing Bearing Number	Nominal Shaft Diameter	T	Free Diameter D
SM120PN	SPM12 or MAM12	12	3.20	22
SM160PN	SSEM16 or MAM16	16	3.20	26
SM200PN	SSEM20 or MAM20	20	4.20	32
SM250PN	SSEM25 or MAM25	25	4.20	40
SM300PN	SSEM30 or MAM30	30	5.15	47
SM400PN	SSEM40 or MAM40	40	5.15	62

(1) For use in tolerance zones up to H7.

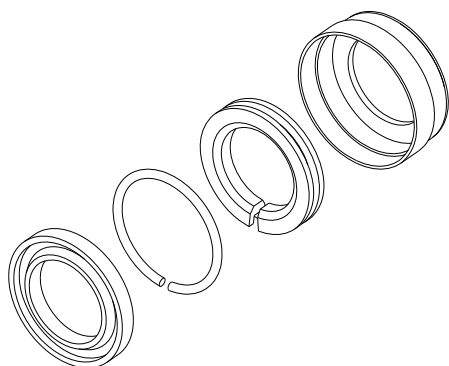
Accessories



Described here are accessories for Linear Ball Bushing® Bearings and pillow blocks, including retaining rings, external seals, integral seals and resilient mounts.



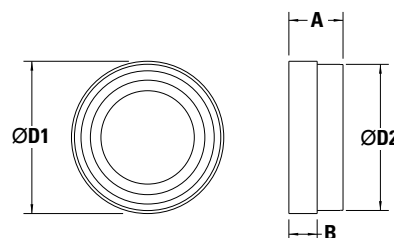
Lube for Life Mod Kits



Lube for Life modification kits provide continuous bearing lubrication and enhanced protection for a broad range of applications. The Lube for Life attachments consist of a section of oil-saturated polymer actively compressed by a contact spring, inside a standard pillow block seal. Mod Kits are for use with non self-lubricating Super and Super Smart Ball Bushing® Bearing pillow blocks. Each Mod Kit includes two Lube for Life cartridges and assembly instructions.

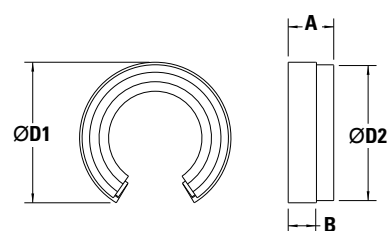
Closed Type Cartridges (Dimensions in inches)

Nominal LinearRace Diameter	Part Number	D1	D2	A	B
.500	MODKIT8-L4L	.94	.888	.45	.23
.750	MODKIT12-L4L	1.32	1.252	.46	.24
1.000	MODKIT16-L4L	1.63	1.565	.58	.30
1.250	MODKIT20-L4L	2.08	2.004	.78	.42
1.500	MODKIT24-L4L	2.46	2.379	.79	.43



Open Type Cartridges (Dimensions in inches)

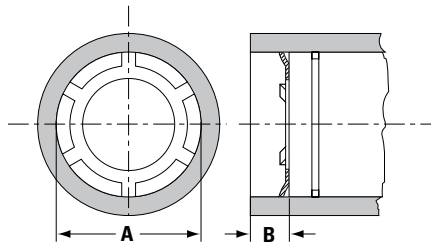
Nominal LinearRace Diameter	Part Number	D1	D2	A	B
.500	MODKIT8OPN-L4L	.94	.888	.43	.31
.750	MODKIT12OPN-L4L	1.32	1.252	.43	.30
1.000	MODKIT16OPN-L4L	1.63	1.565	.49	.30
1.250	MODKIT20OPN-L4L	2.08	2.004	.78	.42
1.500	MODKIT24OPN-L4L	2.46	2.379	.79	.43



Retaining Rings

Internal Retaining Rings (Type PR)

Push-in retaining rings, as shown, are for use with Super Smart, Super and Precision Steel Ball Bushing closed type bearings. Each retaining ring is installed inside the housing bore at each end of the Ball Bushing bearing.



(Dimensions in inches)

Part Number	Use with Ball Bushing bearing Part Number	Nominal Housing Bore A	Minimum End Space required B
PR250	SUPER4 or 4812 ⁽¹⁾	.500	.060
PR375	SUPER6 or 61014 ⁽¹⁾	.625	.060
PR500	SUPER8 or 81420 ⁽¹⁾	.875	.080
PR625	SSU10 or SUPER10 or 101824 ⁽¹⁾	1.125	.080
PR750	SSU12 or SUPER12 or 122026 ⁽¹⁾	1.250	.080
PR1000	SSU16 or SUPER16 or 162536 ⁽¹⁾	1.563	.080
PR1250	SSU20 or SUPER20 or 203242 ⁽¹⁾	2.000	.080
PR1500	SSU24 or SUPER24 or 243848 ⁽¹⁾	2.375	.100
PR2000	SUPER32 or 324864 ⁽¹⁾	3.000	.100

⁽¹⁾Applies to A and XA Type Precision Steel Ball Bushing Bearings

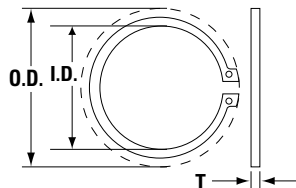
External Retaining Rings (Types C and W)

Type W: External retaining rings fit into the retaining ring grooves on the outside diameter of Super Smart, Super and Precision Steel Ball Bushing Bearings to provide external mounting retention. Available in standard and stainless steel versions.

Type C: External retaining rings fit into the retaining ring grooves on the outside diameter of Super Smart, Super and Precision Steel Ball Bushing Bearings (Open and Closed Type) to provide external mounting retention. Available in standard and stainless steel versions.

(Dimensions in inches)

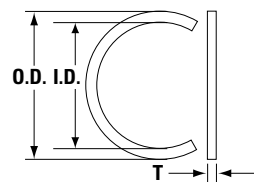
External Retaining Rings (Type W)



Standard Steel Part Number	Stainless Steel Part Number	Use with Ball Bushing Bearing Part Number	T	Installed Clearance O.D.	Free Diameter I.D.
-	W125SS	INST258SS ⁽¹⁾	.025	.52	.281
-	W187SS	INST369SS ⁽¹⁾	.025	.59	.338
W250	W250SS	SUPER4 or 4812 ⁽¹⁾	.035	.74	.461
W375	W375SS	SUPER6 or 61014 ⁽¹⁾	.035	.87	.579
W500	W500SS	SUPER8 or 81420 ⁽¹⁾	.042	1.16	.810
W625	W625SS	SSU10 or SUPER10 or 101824 ⁽¹⁾	.050	1.49	1.041
W750	W750SS	SSU12 or SUPER12 or 122026 ⁽¹⁾	.050	1.62	1.156
W1000	W1000SS	SSU16 or SUPER16 or 162536 ⁽¹⁾	.062	2.01	1.446
W1250	-	SSU20 or SUPER20 or 203242 ⁽¹⁾	.062	2.49	1.850
W1500	-	SSU24 or SUPER24 or 243848 ⁽¹⁾	.078	2.93	2.197
W2000	-	SUPER32 or 324864 ⁽¹⁾	.093	3.44	2.775
W2500	-	406080 ⁽¹⁾	.109	4.33	3.468
W3000	-	487296 ⁽¹⁾	.109	5.18	4.223
W4000	-	6496128 ⁽¹⁾	.125	6.66	5.631

⁽¹⁾Applies to A, XA and OPN Type Precision Steel Ball Bushing Bearings

External Retaining Rings (Type C)



Standard Steel Part Number	Stainless Steel Part Number	Use with Ball Bushing Bearing Part Number	T	Installed O.D.	Installed I.D.
C250	C250SS	SUPER4 or 4812 ⁽¹⁾	.035	.55	.469
C375	C375SS	SUPER6 or 61014 ⁽¹⁾	.035	.673	.591
C500	C500SS	SUPER8 or 81420 ⁽¹⁾	.042	.923	.825
C625	C625SS	SSU10 or SUPER10 or 101824 ⁽¹⁾	.050	1.18	1.068
C750	C750SS	SSU12 or SUPER12 or 122026 ⁽¹⁾	.050	1.301	1.183
C1000	C1000SS	SSU16 or SUPER16 or 162536 ⁽¹⁾	.062	1.62	1.475
C1250	-	SSU20 or SUPER20 or 203242 ⁽¹⁾	.062	2.04	1.895
C1500	-	SSU24 or SUPER24 or 243848 ⁽¹⁾	.078	2.448	2.25

⁽¹⁾Applies to A, XA and OPN Type Precision Steel Ball Bushing Bearings

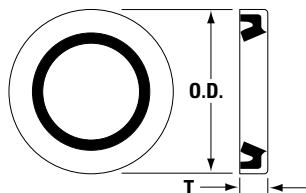


External Seals

Seals for Fixed Diameter Housings

Double-acting seals for Super Smart, Super and Precision Steel closed type Ball Bushing® Bearings. Standard and stainless versions. Sizes 1 1/2 inch and above use spring fingers to reinforce sealing capability, which could add to seal drag. Standard and stainless steel versions.

(Dimensions in inches)



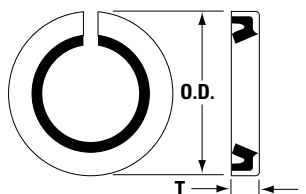
Standard Steel Seal Part Number	Stainless Steel Seal Part Number	Use with Ball Bushing Bearing Part Number	Nominal LinearRace Diameter	T	O.D.
S250	S250SS	SUPER4 or 4812 ⁽¹⁾	.250	.125	.504
S375	S375SS	SUPER6 or 61014 ⁽¹⁾	.375	.125	.629
S500	S500SS	SUPER8 or 81420 ⁽¹⁾	.500	.125	.879
S625	S625SS	SSU10 or SUPER10 or 101824 ⁽¹⁾	.625	.125	1.129
S750	S750SS	SSU12 or SUPER12 or 122026 ⁽¹⁾	.750	.125	1.254
S1000	S1000SS	SSU16 or SUPER16 or 162536 ⁽¹⁾	1.000	.187	1.567
S1250	-	SSU20 or SUPER20 or 203242 ⁽¹⁾	1.250	.375	2.004
S1500	-	SSU24 or SUPER24 or 243848 ⁽¹⁾	1.500	.375	2.379
S2000	-	SUPER32 or 324864 ⁽¹⁾	2.000	.375	3.004
S2500	-	406080 ⁽¹⁾	2.500	.375	3.756
S3000	-	487296 ⁽¹⁾	3.000	.500	4.506
S4000	-	6496128 ⁽¹⁾	4.000	.500	6.006

⁽¹⁾Applies to A and XA Precision Steel Ball Bushing Bearings

Seals for Adjustable Housing

Double-acting seals for Super Smart, Super and Precision Steel Ball Bushing Bearings. Seals have a radial slot through the circumferences to facilitate diameter adjustment. Standard and stainless steel versions.

(Dimensions in inches)



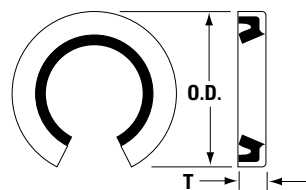
Standard Steel Seal Part Number	Stainless Steel Seal Part Number	Use with Ball Bushing Bearing Part Number	Nominal LinearRace Diameter	T	O.D.
ADJS500	ADJS500SS	SUPER8 or 81420 ⁽²⁾	.500	.125	.879
ADJS625	ADJS625SS	SSU10 or SUPER10 or 101824 ⁽²⁾	.625	.125	1.129
ADJS750	ADJS750SS	SSU12 or SUPER12 or 122026 ⁽²⁾	.750	.125	1.254
ADJS1000	ADJS1000SS	SSU16 or SUPER16 or 162536 ⁽²⁾	1.000	.187	1.567
ADJS1250	-	SSU20 or SUPER20 or 203242 ⁽²⁾	1.250	.375	2.004
ADJS1500	-	SSU24 or SUPER24 or 243848 ⁽²⁾	1.500	.375	2.379
ADJS2000	-	SUPER32 or 324864 ⁽²⁾	2.000	.375	3.004
ADJS2500	-	406080 ⁽²⁾	2.500	.375	3.756
ADJS3000	-	487296 ⁽²⁾	3.000	.500	4.506
ADJS4000	-	6496128 ⁽²⁾	4.000	.500	6.006

⁽²⁾Applies to ADJ type Precision Steel Ball Bushing Bearings

Seals for Open Type Housing

Double-acting seals for Super Smart, Super and Precision Steel Ball Bushing Open Type bearings. Standard and stainless steel versions.

(Dimensions in inches)



Standard Steel Seal Part Number	Stainless Steel Seal Part number	Use with Open Type Ball Bushing Bearing Part Number	Nominal LinearRace Diameter	T	O.D.
OPNS500	OPNS500SS	SUPER8OPN or 81420 ⁽³⁾	.500	.125	.879
OPNS625	OPNS625SS	SSU10OPN or SUPER10OPN or 101824 ⁽³⁾	.625	.125	1.129
OPNS750	OPNS750SS	SSU12OPN or SUPER12OPN or 122026 ⁽³⁾	.750	.125	1.254
OPNS1000	OPNS1000SS	SSU16OPN or SUPER16OPN or 162536 ⁽³⁾	1.000	.187	1.567
OPNS1250	-	SSU20OPN or SUPER20OPN or 203242 ⁽³⁾	1.250	.375	2.004
OPNS1500	-	SSU24OPN or SUPER24OPN or 243848 ⁽³⁾	1.500	.375	2.379
OPNS2000	-	SUPER32OPN or 324864 ⁽³⁾	2.000	.375	3.004
OPNS2500	-	406080 ⁽³⁾	2.500	.375	3.756
OPNS3000	-	487296 ⁽³⁾	3.000	.500	4.506
OPNS4000	-	6496128 ⁽³⁾	4.000	.500	6.006

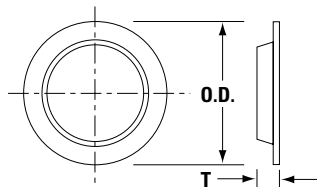
⁽³⁾Applies to OPN type Precision Steel Ball Bushing Bearings

Integral Seals

Seals for Sealed Super Ball Bushing Bearings (Closed Type)

Double-acting replacement seals for the Sealed Super Ball Bushing Bearing.

(Dimensions in inches)

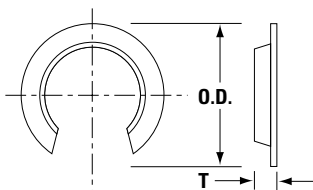


Part number	Use with Super Ball Bushing Bearing Number	Nominal LinearRace Diameter	T	O.D.
S500-DD	SUPER8-DD	.500	.120	.770
S625-DD	SUPER10-DD	.625	.120	1.010
S750-DD	SUPER12-DD	.750	.120	1.110
S1000-DD	SUPER16-DD	1.000	.180	1.390

Seals for Sealed Super Ball Bushing Bearings (Open Type)

Double-acting replacement seals for the Sealed Super Ball Bushing Bearing.

(Dimensions in inches)

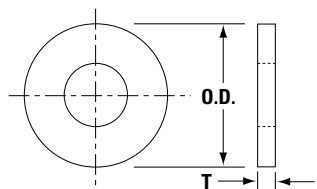


Part Number	Use with Super Ball Bushing Bearing Number	Nominal LinearRace Diameter	T	O.D.
S500PN-DD	SUPER80PN-DD	.500	.120	.770
S6250PN-DD	SUPER100PN-DD	.625	.120	1.010
S7500PN-DD	SUPER120PN-DD	.750	.120	1.110
S1000PN-DD	SUPER160PN-DD	1.000	.180	1.390

Felt Seals for Closed Type Ball Bushing Bearings

Felt seals for Super Smart, Super and Precision Steel closed type Ball Bushing Bearings. Felt seals reduce drag for applications where reduced friction is critical. Felt seals provide minimal protection from the ingress of contamination. Use PR type external retaining rings for retention.

(Dimensions in inches)



Standard Felt Seal Part Number	Use with Ball Bushing Bearing Part Number	Nominal LinearRace Diameter	T	O.D.
FS250	SUPER4 or 4812 ⁽¹⁾	.250	.125	.500
FS375	SUPER6 or 61014 ⁽¹⁾	.375	.125	.625
FS500	SUPER8 or 81420 ⁽¹⁾	.500	.125	.875
FS625	SSU10 or SUPER10 or 101824 ⁽¹⁾	.625	.125	1.125
FS750	SSU12 or SUPER12 or 122026 ⁽¹⁾	.750	.125	1.250
FS1000	SSU16 or SUPER16 or 162536 ⁽¹⁾	1.000	.125	1.563
FS1250	SSU20 or SUPER20 or 203242 ⁽¹⁾	1.250	.188	2.000
FS1500	SSU24 or SUPER24 or 243848 ⁽¹⁾	1.500	.188	2.375
FS2000	SUPER32 or 324864 ⁽¹⁾	2.000	.188	3.000

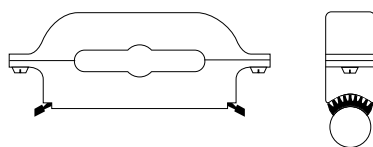
⁽¹⁾Applies to A, XA and ADJ Type Precision Steel Ball Bushing Bearings

⁽¹⁾Applies to A, XA and ADJ type Precision Steel Ball Bushing Bearings

Seals for RoundWay Linear Roller Bearings

Standard seals for both single and dual types.

(Dimensions in inches)



Seal Number	Nominal LinearRace Diameter	Overall Length L	Overall Width W	Overall Height from Centerline of LinearRace H
RS16	1.000	5.00	1.00	2.25
RS24	1.500	6.50	1.38	3.25
RS32	2.000	8.50	1.88	4.25
RS48	3.000	13.00	2.63	6.50
RS64	4.000	17.00	3.38	8.50

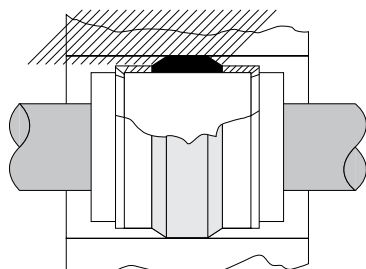
RoundWay Bearing Replacement Parts

RoundWay Bearing Part Number	RoundWay Roller Assembly All Bearing Types	RoundWay Eccentric Trunnion Pin Bearing Types A, S, V	RoundWay Eccentric Trunnion Pin Bearing Type B	RoundWay Eccentric Trunnion Pin Bearing Type C	RoundWay Bearing Race
RW8x	R124A8	R112A	R138A	R130A	R366C
RW16x	R124A16	R113A	R139A	R131A	R367C
RW24x	R124A24	R114A	R140A	R132A	R368C
RW32x	R124A32	R115A	R141A	R133A	R369C
RW48x	R124A48	R201A	R212A	R218A	R370C
RW64x	R124A64	R202A	R213A	R219A	R371C

Resilient Mounts

Resilient Ball Bushing® Bearing Mounts for Ease of Installation

Used with Precision Steel Ball Bushing Bearings Type A and XA. Resilient Ball Bushing Bearing mounts are sometimes used when absolute rigidity is not essential and where a slightly larger housing bore can be accommodated. The self-aligning feature of these mounts guarantee uniform load distribution over the entire length of the load carrying balls and compensates for slight errors in housing bores and parallel 60 Case® LinearRace® alignment. The mount consists of a band of resilient material that can be easily mounted to the outside diameter of the Ball Bushing Bearing. After it is installed in the housing bore, it provides permanent resilient, self-aligning support for the bearing. Resilient mounts consist of one rubber ring, two spacers and two retaining rings. Ball Bushing Bearings must be purchased separately.



(Dimensions in inches)

Resilient Mount Assembly Part Number	Use with Ball Bushing Bearing Number	Nominal LinearRace Diameter	Recommended Housing Bore ±.005
RSL250	A or XA4812	.250	.625
RSL375	A or XA61014	.375	.750
RSL500	A or XA81420	.500	1.000
RSL625	A or XA101824	.625	1.313
RSL750	A or XA122026	.750	1.438
RSL1000	A or XA162536	1.000	1.813
RSL1250	A or XA203242	1.250	2.313
RSL1500	A or XA243848	1.500	2.750