

LOW FRICTION COEFFICIENT
HIGH POSITIONING ACCURACY
HIGH LOAD CAPACITY
QUIET MOVEMENT
LONG TRAVEL LIFE



► **MATERIAL:**

Sleeve & Balls - AISI 52100 Steel
Retainer - Duracon M90

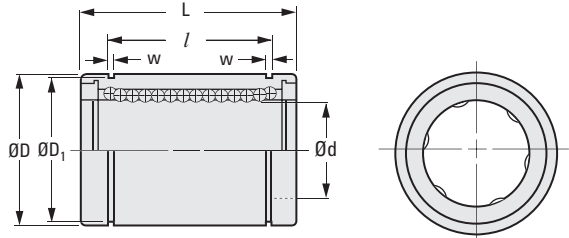
► **SPECIFICATIONS:**

d Tolerance:
3, 4, 5, 8, 10 & 12 mm +0.008/0
16 & 20 mm +0.009/-0.001
25 & 30 mm +0.011/-0.001
40, 50, & 60 mm +0.013/-0.002

D Tolerance:
7, 8, 12 & 16 mm 0/-0.008
19, 22 & 26 mm 0/-0.009
32, 40 & 47 mm 0/-0.011
62 & 75 mm 0/-0.013
90 mm 0/-0.015

L Tolerance:
10 & 12 mm 0/-0.120
22, 25, 29, 32, 36 & 45 mm 0/-0.200
58, 68, 80 & 100 mm 0/-0.300
125 mm 0/-0.400

l Tolerance:
14.5, 16.5, 22, 22.9, 24.9 & 31.5 mm 0/-0.200
44.1, 52.1, 60.6 & 77.6 mm 0/-0.300
101.7 mm 0/-0.400



METRIC COMPONENT

Catalog Number *	Ball Circuit	d Bore	D Dia.	L Length	l Groove Dist.	w Groove Width	D ₁ Groove Dia.	Load Capacity	
								Dynamic N	Static N
** S99LBCM003010 <input type="checkbox"/>	4	3	7	10	—	—	—	69	105
** S99LBCM004012 <input type="checkbox"/>	4	4	8	12	—	—	—	88	127
S99LBCM005022 <input type="checkbox"/>	4	5	12	22	14.5	1.1	11.5	206	265
S99LBCM008025 <input type="checkbox"/>	4	8	16	25	16.5	1.1	15.2	265	402
S99LBCM010029 <input type="checkbox"/>	4	10	19	29	22	1.3	18	372	549
S99LBCM012032 <input type="checkbox"/>	4	12	22	32	22.9	1.3	21	510	784
S99LBCM016036 <input type="checkbox"/>	4	16	26	36	24.9	1.3	24.9	578	892
S99LBCM020045 <input type="checkbox"/>	5	20	32	45	31.5	1.6	30.3	862	1370
S99LBCM025058 <input type="checkbox"/>	6	25	40	58	44.1	1.85	37.5	980	1570
S99LBCM030068 <input type="checkbox"/>	6	30	47	68	52.1	1.85	44.5	1570	2740
S99LBCM040080 <input type="checkbox"/>	6	40	62	80	60.6	2.15	59	2160	4020
S99LBCM050100 <input type="checkbox"/>	6	50	75	100	77.6	2.65	72	3820	7940
S99LBCM060125 <input type="checkbox"/>	6	60	90	125	101.7	3.15	86.5	4700	9800

* To order bearings with no seals, use catalog numbers as they are.
To order bearings with seals at both ends, add "S" to the end of catalog number.
** These part numbers are not available with seals.

LOW FRICTION COEFFICIENT
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 LONG TRAVEL LIFE

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM



> MATERIAL:

Sleeve & Balls - AISI 52100 Steel,
 hardened to HRC 60...64
Retainer & Side Ring - Resin



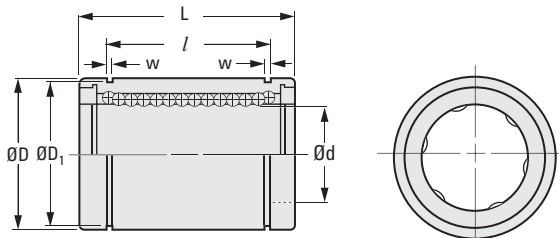
> SPECIFICATIONS:

d Tolerance:
 12 mm +0.008/0
 16 mm +0.009/-0.001
 25 mm +0.011/-0.001

D Tolerance:
 22 & 26 mm 0/-0.009
 40 mm 0/-0.011

L Tolerance:
 32 & 36 mm 0/-0.2
 58 mm 0/-0.3

/ Tolerance:
 22.9 & 24.9 mm 0/-0.2
 44.1 mm 0/-0.3



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METRIC COMPONENT

Catalog Number *	Ball Circuit	d Bore	D O.D.	L Length	/ Groove Dist.	w Groove Width	D ₁ Groove Dia.	Load Capacity	
								Dynamic N	Static N
Standard Type									
S99LSCM012032 <input type="checkbox"/>	5	12	22	32	22.9	1.3	21	640	950
S99LSCM016036 <input type="checkbox"/>	5	16	26	36	24.9	1.3	24.9	720	1120
Heavy-Duty Type									
S99LHCM012032 <input type="checkbox"/>	6	12	22	32	22.9	1.3	21	660	1310
S99LHCM016036 <input type="checkbox"/>	6	16	26	36	24.9	1.3	24.9	800	1480
S99LHCM025058 <input type="checkbox"/>	8	25	40	58	44.1	1.85	37.5	1370	3470

NOTE: To order bearings with no wipers, use catalog numbers as they are.
 To order bearings with wipers, add "WW" to end of catalog number for wipers on both ends.
 * To be discontinued when present stock is depleted.

LOW FRICTION COEFFICIENT
HIGH POSITIONING ACCURACY
HIGH LOAD CAPACITY
QUIET MOVEMENT
LONG TRAVEL LIFE



> MATERIAL:

Sleeve & Balls - AISI 52100 Steel
Retainer - Duracon M90

> SPECIFICATIONS:

d Tolerance:

- 10 & 12 mm +0.008/0
- 16 & 20 mm +0.009/-0.001
- 25 & 30 mm +0.011/-0.001
- 40, 50, & 60 mm +0.013/-0.002

D Tolerance:

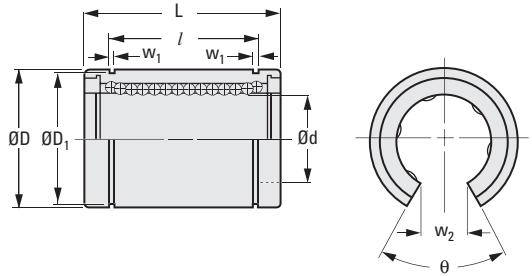
- 19, 22, & 26 mm 0/-0.009
- 32, 40, & 47 mm 0/-0.011
- 62 & 75 mm 0/-0.013
- 90 mm 0/-0.015

L Tolerance:

- 29, 32, 36 & 45 mm 0/-0.200
- 58, 68, 80 & 100 mm 0/-0.300
- 125 mm 0/-0.400

l Tolerance:

- 22, 22.9, 24.9 & 31.5 mm 0/-0.200
- 44.1, 52.1, 60.6 & 77.6 mm 0/-0.300
- 101.7 mm 0/-0.400



METRIC COMPONENT

Catalog Number *	Ball Circuit	d Bore	D O.D.	L Length	l Groove Dist.	w ₁ Groove Width	D ₁ Groove Dia.	w ₂ Slot Width	θ Slot Angle	Load Capacity	
										Dynamic N	Static N
S99LBOM010029 <input type="checkbox"/>	3	10	19	29	22	1.3	18	6.8	80°	372	549
S99LBOM012032 <input type="checkbox"/>	3	12	22	32	22.9	1.3	21	7.5	78°	510	784
S99LBOM016036 <input type="checkbox"/>	3	16	26	36	24.9	1.3	24.9	10	78°	578	892
S99LBOM020045 <input type="checkbox"/>	4	20	32	45	31.5	1.6	30.3	10	60°	862	1370
S99LBOM025058 <input type="checkbox"/>	5	25	40	58	44.1	1.85	37.5	12.5	60°	980	1570
S99LBOM030068 <input type="checkbox"/>	5	30	47	68	52.1	1.85	44.5	12.5	50°	1570	2740
S99LBOM040080 <input type="checkbox"/>	5	40	62	80	60.6	2.15	59	16.8	50°	2160	4020
S99LBOM050100 <input type="checkbox"/>	5	50	75	100	77.6	2.65	72	21	50°	3820	7940
S99LBOM060125 <input type="checkbox"/>	5	60	90	125	101.7	3.15	86.5	27.2	54°	4700	9800

* To order bearings with no seals, use catalog numbers as they are.
To order bearings with seals at both ends, add "S" to end of catalog number.

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 LONG TRAVEL LIFE

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> MATERIAL:

Sleeve & Balls - AISI 52100 Steel,
 hardened to HRC 60...64
Retainer & Side Ring - Resin

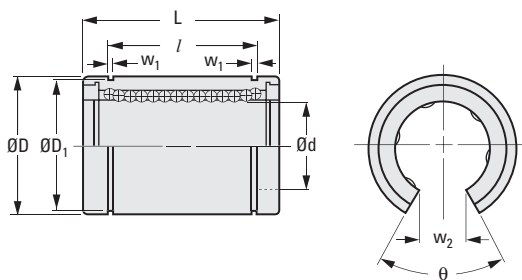
> SPECIFICATIONS:

d Tolerance:
 16 & 20 mm +0.009/-0.001
 25 mm +0.011/-0.001

D Tolerance:
 26 mm 0/-0.009
 32 & 40 mm 0/-0.011

L Tolerance:
 36 & 45 mm 0/-0.2
 58 mm 0/-0.3

l Tolerance:
 24.9 & 31.5 mm 0/-0.2
 44.1 mm 0/-0.3



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METRIC COMPONENT

Catalog Number *	Ball Circuit	d Bore	D O.D.	L Length	l Groove Dist.	w1 Groove Width	D1 Groove Dia.	w2 Slot Width	θ Slot Angle	Load Capacity	
										Dynamic N	Static N
Standard Type											
S99LSZM016036WW	4	16	26	36	24.9	1.3	24.9	1.3	60°	720	1120
S99LSZM020045WW	4	20	32	45	31.5	1.6	30.3	1.6	60°	920	1480
S99LSZM025058WW	5	25	40	58	44.1	1.85	37.5	1.85	60°	1070	1670
Heavy-Duty Type											
S99LHZM012032	4	12	22	32	22.9	1.3	21	1.3	90°	660	1310

NOTE: "WW" at the end of catalog number indicates wipers on both ends.

* To be discontinued when present stock is depleted.

STANDARD TYPE
 LOW FRICTION COEFFICIENT
 HIGH POSITIONING ACCURACY
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 QUIET MOVEMENT
 LONG TRAVEL LIFE



> MATERIAL:

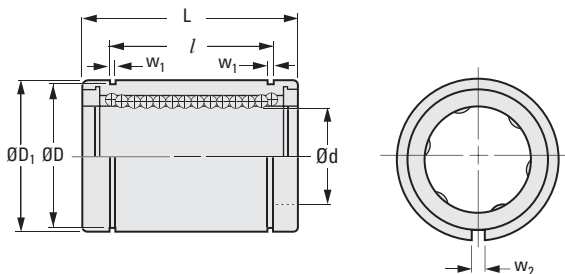
Sleeve & Balls - AISI 52100 Steel,
 hardened to HRC 60...64
Retainer & Side Ring - Resin



> SPECIFICATIONS:

d Tolerance:
 8 & 12 mm +0.008/0
 20 mm +0.009/-0.001

D Tolerance:
 16 mm 0/-0.008
 22 mm 0/-0.009
 32 mm 0/-0.011



METRIC COMPONENT

Catalog Number *	Ball Circuit	d Bore	D O.D.	L Length 0 -0.2	l Groove Dist. 0 -0.2	w ₁ Groove Width	D ₁ Groove Dia.	w ₂ Slot Width	Load Capacity	
									Dynamic N	Static N
S99LSAM008025WW	4	8	16	25	16.5	1.1	15.2	1	280	420
S99LSAM012032WW	5	12	22	32	22.9	1.3	21	1.5	640	950
S99LSAM020045	5	20	32	45	31.5	1.6	30.3	2	920	1480
S99LSAM020045WW	5	20	32	45	31.5	1.6	30.3	2	920	1480

NOTE: "WW" at the end of catalog number indicates wipers on both ends.

* To be discontinued when present stock is depleted.



> BEARING LOAD:

Frelon® lined bearings can tolerate up to 105 kgf/cm² over the portion of the bearing that is carrying the load. These bearings carry 4 to 8 times the load of ball bearings.
A 12 mm Frelon® bearing will carry as much load as a 25 mm ball bearing.

> WEAR RATE:

Although wear rates are affected by surface finish, shaft hardness, length of travel, contamination and lubrication, these bearings last on average 4 to 8 times longer than ball bearings.

> BEARING PV:

P = Pressure in kgf/cm² on the projected area.
V = Velocity of the wear surface in m/min.
The maximum PV is 214 kgf/cm² • m/min.

> BEARING SPEED:

The maximum average speed without lubrication is:
70 cm/sec - continuous
200 cm/sec - intermittent
When lubricated, the maximum speed is 200 cm/sec

> CANTILEVERED LOADS:

The distance between the bearings and the drive source or load should not exceed a maximum ratio of 2:1.

> SHAFT FINISH AND HARDNESS:

A shaft finish with an 0.2 to 0.3 µm R_a and a hardness of HRC 50 is recommended for best results. Acceptable performance can be attained with a finish of 0.2 to 0.4 µm R_a and a minimum hardness of HRC 35. Softer shafting will cause an accelerated wear to both the shaft and the bearings.
Optional liners are available for both nonhardened shafting and for use in food applications.

> RUNNING CLEARANCES:

Precision Series -
approximately 0.025 mm. High precision, similar to a preloaded ball bearing.

Standard Series -
approximately 0.075 mm. Excellent for parallel shaft applications, similar to a typical ball bearing.

> LUBRICATION:

Frelon lined bearings are self-lubricating. Additional lubrication reduces friction up to 50%, minimizes wear, reduces heat, allows greater speed, and extends wear life.
Acceptable lubrication includes 3-in-1 oils, way lube oils and petroleum-based greases.
DO NOT USE PTFE FLUOROCARBON AND/OR SILICONE OILS, GREASE, SPRAY, OR WD40.

> NO CATASTROPHIC FAILURE:

No shaft scoring or shock load damage.
Liner dampens shock loads and vibration. These bearings provide more surface contact area than ball bearings.
No corrosion or rust.
No temperature induced bearing seizure.
Temperature range of -240°C to +260°C. Operates with consistent friction and load bearing characteristics throughout temperature range. Liner allows heat to dissipate through the shell.

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PRECISION SERIES
CLOSED OR OPEN
SELF-LUBRICATING
LOW COST



► MATERIAL:

Body - Aluminum, Anodized
Liner - Bonded Frelon®

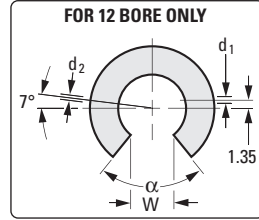
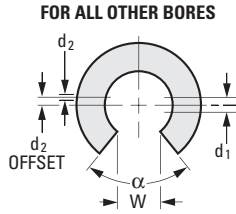
► SPECIFICATIONS:

d Tolerance:

- 5 mm +0.028/+0.010
- 8 & 10 mm +0.035/+0.013
- 12 & 16 mm +0.043/+0.016
- 20, 25 & 30 mm +0.053/+0.020
- 40 mm +0.064/+0.025

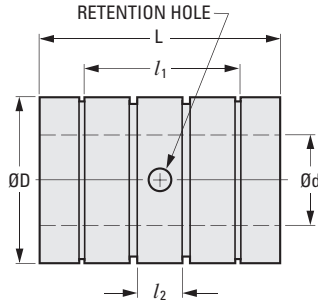
D Tolerance:

- 12 & 16 mm 0/-0.018
- 19, 22 & 26 mm 0/-0.021
- 32, 40 & 47 mm 0/-0.025
- 62 mm 0/-0.030



► APPLICABLE RETAINING RINGS AND O-RINGS

Bearing Reference (Closed or Open Series)	Catalog Numbers	
	Retaining Ring	O-Ring
S99AP □ M05F012022	MD0471MQB012	A 6R11ML009713
S99AP □ M08F016025	MD0471MQB016	A 6R11ML013017
S99AP □ M10F019029	MD0471MQB019	A 6R11ML015520
S99AP □ M12F022032	MD0471MQB022	A 6R11ML017525
S99AP □ M16F026036	MD0471MQB026	A 6R11ML021525
S99AP □ M20F032045	MD0471MQB032	A 6R11ML027525
S99AP □ M25F040058	MD0471MQB040	A 6R11ML035525
S99AP □ M30F047068	MD0471MQB047	A 6R11ML042526
S99AP □ M40F062080	MD0471MQB062	A 6R11ML056035



METRIC COMPONENT

Catalog Number *	d Bore F8	D Dia. h7	L 0 -0.254	Slot (Open Series)		l ₁ Retaining Space	l ₂ O-Ring Spacing	Max. Load N
				W Slot Width	α Slot Angle			
S99AP □ M05F012022	5	12	22	3.2	60°	12	5	1135
S99AP □ M08F016025	8	16	25	5.1	60°	14	5.33	2055
S99AP □ M10F019029	10	19	29	6.4	60°	19.4	5.63	2985
S99AP □ M12F022032	12	22	32	7.6	78°	20	6	3950
S99AP □ M16F026036	16	26	36	10.4	78°	22	8	5930
S99AP □ M20F032045	20	32	45	10.8	60°	28	10	9265
S99AP □ M25F040058	25	40	58	13.2	60°	40	12.5	14935
S99AP □ M30F047068	30	47	68	14.2	72°	48	15	21010
S99AP □ M40F062080	40	62	80	19.5	72°	56	20	32955

* To complete catalog number, specify C for Closed Series and Z for Open Series.

Catalog Number (Ref.)	Effective Surface Area cm ²	Retention Hole		
		d ₁	d ₂	d ₂ Offset
S99AP □ M05F012022	1.1	2.2	-	-
S99AP □ M08F016025	2	3	-	-
S99AP □ M10F019029	2.9	3	-	-
S99AP □ M12F022032	3.8	3	3	7°
S99AP □ M16F026036	5.8	2.2	3	0
S99AP □ M20F032045	9	2.2	3	0
S99AP □ M25F040058	14.5	3	3	-1.51
S99AP □ M30F047068	20.4	3	3	2
S99AP □ M40F062080	32	3	3	1.5

STANDARD SERIES
CLOSED OR OPEN
SELF-LUBRICATING
LOW COST

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> MATERIAL:

Body - Aluminum, Anodized
 liner - Bonded Frelon®



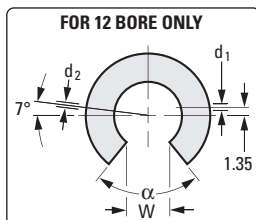
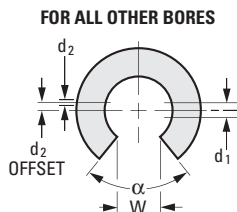
> SPECIFICATIONS:

d Tolerance:

5 mm +0.078/+0.060
8 & 10 mm +0.085/+0.063
12 & 16 mm +0.093/+0.066
20, 25 & 30 mm +0.129/+0.096
40 mm +0.166/+0.127

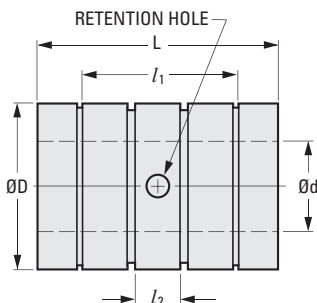
D Tolerance:

12 & 16 mm 0/-0.018
19, 22 & 26 mm 0/-0.021
32, 40 & 47 mm 0/-0.025
62 mm 0/-0.030



> APPLICABLE RETAINING RINGS AND O-RINGS

Bearing Reference (Closed or Open Series)	Catalog Numbers	
	Retaining Ring	O-Ring
S99AS□M05F012022	MD0471MQB012	A 6R11ML009713
S99AS□M08F016025	MD0471MQB016	A 6R11ML013017
S99AS□M10F019029	MD0471MQB019	A 6R11ML015520
S99AS□M12F022032	MD0471MQB022	A 6R11ML017525
S99AS□M16F026036	MD0471MQB026	A 6R11ML021525
S99AS□M20F032045	MD0471MQB032	A 6R11ML027525
S99AS□M25F040058	MD0471MQB040	A 6R11ML035525
S99AS□M30F047068	MD0471MQB047	A 6R11ML042526
S99AS□M40F062080	MD0471MQB062	A 6R11ML056035



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METRIC COMPONENT

Catalog Number *	d Bore	D Dia. h7	L 0 -0.254	Slot (Open Series)		l ₁ Retaining Space	l ₂ O-Ring Spacing	Max. Load N
				W Slot Width	α Slot Angle			
S99AS□M05F012022	5	12	22	3.2	60°	12	5	1135
S99AS□M08F016025	8	16	25	5.1	60°	14	5.33	2055
S99AS□M10F019029	10	19	29	6.4	60°	19.4	5.63	2985
S99AS□M12F022032	12	22	32	7.6	78°	20	6	3950
S99AS□M16F026036	16	26	36	10.4	78°	22	8	5930
S99AS□M20F032045	20	32	45	10.8	60°	28	10	9265
S99AS□M25F040058	25	40	58	13.2	60°	40	12.5	14935
S99AS□M30F047068	30	47	68	14.2	72°	48	15	21010
S99AS□M40F062080	40	62	80	19.5	72°	56	20	32955

* To complete catalog number, specify **C** for **Closed Series** and **Z** for **Open Series**.

Catalog Number (Ref.)	Effective Surface Area cm ²	Retention Hole		
		d ₁	d ₂	d ₂ Offset
S99AS□M05F012022	1.1	2.2	—	—
S99AS□M08F016025	2	3	—	—
S99AS□M10F019029	2.9	3	—	—
S99AS□M12F022032	3.8	3	3	7°
S99AS□M16F026036	5.8	2.2	3	0
S99AS□M20F032045	9	2.2	3	0
S99AS□M25F040058	14.5	3	3	-1.51
S99AS□M30F047068	20.4	3	3	2
S99AS□M40F062080	32	3	3	1.5

SELF-LUBRICATING
PRECISION OR STANDARD
THIN-WALLED
LOW COST

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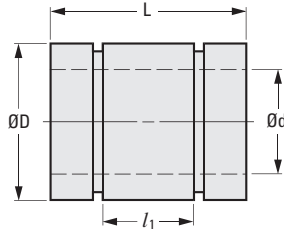
> MATERIAL:

Body - Aluminum, Anodized
Liner - Bonded Frelon®



> SPECIFICATION:

D Tolerance:
12 & 17 mm 0/-0.018
19 to 28 mm 0/-0.021
35 & 40 mm 0/-0.025
52 & 62 mm 0/-0.3



> APPLICABLE O-RINGS

Bearing Reference (Precision or Standard)	Catalog Number
S99B □ CM06F012022	—
S99B □ CM08F015024	A 6R11ML011819
S99B □ CM10F017026	A 6R11ML014116
S99B □ CM12F019028	A 6R11ML016015
S99B □ CM14F021028	A 6R11ML018015
S99B □ CM16F024030	A 6R11ML021116
S99B □ CM20F028030	A 6R11ML025015
S99B □ CM25F035040	A 6R11ML030525
S99B □ CM30F040050	A 6R11ML035525
S99B □ CM40F052060	A 6R11ML046035
S99B □ CM50F062070	A 6R11ML056035

METRIC COMPONENT

Catalog Number *	d Bore	Bore Tolerance		D h7	L 0 -0.254	l ₁ O-Ring Spacing	Max. Load N	Effective Surface Area cm ²
		Precision Series	Standard Series					
S99B □ CM06F012022	6	+0.028/+0.010	+0.078/+0.060	12	22	—	1360	1.3
S99B □ CM08F015024	8	+0.035/+0.013	+0.085/+0.063	15	24	10	1975	1.9
S99B □ CM10F017026	10	+0.035/+0.013	+0.085/+0.063	17	26	12	2675	2.6
S99B □ CM12F019028	12	+0.043/+0.016	+0.093/+0.066	19	28	14	3460	3.4
S99B □ CM14F021028	14	+0.043/+0.016	+0.093/+0.066	21	28	14	4035	3.9
S99B □ CM16F024030	16	+0.043/+0.016	+0.093/+0.066	24	30	14	4940	4.8
S99B □ CM20F028030	20	+0.020/+0.053	+0.129/+0.096	28	30	14	6175	6
S99B □ CM25F035040	25	+0.020/+0.053	+0.129/+0.096	35	40	22	10295	10
S99B □ CM30F040050	30	+0.020/+0.053	+0.129/+0.096	40	50	30	15445	15
S99B □ CM40F052060	40	+0.064/+0.025	+0.166/+0.127	52	60	40	24715	24
S99B □ CM50F062070	50	+0.064/+0.025	+0.166/+0.127	62	70	50	36045	35

* To complete catalog number, specify **P** for Precision Series and **S** for Standard Series.

SELF-LUBRICATING
CORROSION- AND DIRT-RESISTANT
LIGHTWEIGHT
MAINTENANCE-FREE
VIBRATION DAMPENING
SECURED BY RETAINING RING (NOT INCLUDED)

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM



► **MATERIAL:**

J® Polymer

► **OPERATING TEMPERATURE:**

Continuous: -14°C to +90°C

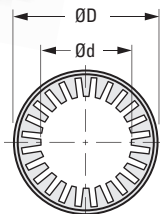
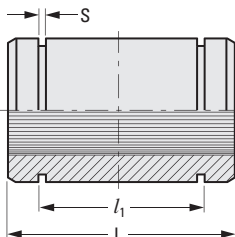
Intermittent: up to +120°C

► **SHAFT REQUIREMENTS:**

Hard anodized aluminum, 8-16 RMS surface finish. Other materials such as stainless steel, ceramic, case-hardened steel & chrome plated steel can be used, but if hardness is below HRC 50 and surface finish is outside 8-16 RMS, overall service life may be affected.

Recommended for use with Catalog Number:

S40AW6M..., See pg. 3-7



► **SPECIFICATIONS:**

d Tolerance:

8 mm +0.061/+0.025

10 to 16 mm +0.075/+0.032

20 to 30 mm +0.092/+0.040

40 mm +0.112/+0.050

50 mm +0.134/+0.060

D Tolerance:

16 mm 0/-0.018

19 to 26 mm 0/-0.021

32 to 47 mm 0/-0.025

62 & 75 mm 0/-0.030

► **APPLICABLE RETAINING RINGS**

Bearing Reference	Catalog Numbers
	Retaining Ring
S99GSPM0816025	—
S99GSPM1019029	MD0471MQB019
S99GSPM1222032	MD0471MQB022
S99GSPM1628036	MD0471MQB026
S99GSPM2032045	MD0471MQB032

Bearing Reference	Catalog Numbers
	Retaining Ring
S99GSPM2540058	MD0471MQB040
S99GSPM3047068	MD0471MQB047
S99GSPM4062080	MD0471MQB062
S99GSPM5075100	MD0471MQB075

METRIC COMPONENT

Catalog Number	d Bore	D Dia. h7	L Length 0 -0.3	l ₁ Groove Distance +0.2 0	S Groove Width +0.1 0	Load Capacity		Weight g
						Dynamic N	Static N	
S99GSPM0816025	8	16	25	16.2	1.1	249	1748	9
S99GSPM1019029	10	19	29	21.6	1.3	360	2535	14
S99GSPM1222032	12	22	32	22.6	1.3	476	3558	21
S99GSPM1628036	16	26	36	24.6	1.3	716	5035	28
S99GSPM2032045	20	32	45	31.2	1.6	1121	7873	49
S99GSPM2540058	25	40	58	43.7	1.85	1810	12686	108
S99GSPM3047068	30	47	68	51.7	1.85	2549	17846	162
S99GSPM4062080	40	62	80	60.3	2.15	3999	27997	334
S99GSPM5075100	50	75	100	77.3	2.65	6250	43748	579

SELF-LUBRICATING
CORROSION- AND DIRT-RESISTANT
MAINTENANCE-FREE
VIBRATION DAMPENING



► **MATERIAL:**

Body - Aluminum, Anodized
Bearing - J® Polymer

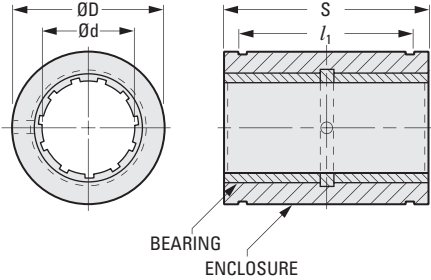
► **OPERATING TEMPERATURE:**

Continuous: -14°C to +90°C
Intermittent: up to +120°C

► **SHAFT REQUIREMENTS:**

Hard anodized aluminum, 8-16 RMS surface finish. Other materials such as stainless steel, ceramic, case-hardened steel & chrome plated steel can be used, but if hardness is below HRC 50 and surface finish is outside 8-16 RMS, overall service life may be affected.

Recommended for use with Catalog Number:
S40AW6M..., See pg. 3-7



► **SPECIFICATIONS:**

d Tolerance:
10 to 16 mm +0.088/+0.030
20 & 25 mm +0.091/+0.030
30 mm +0.110/+0.040
40 mm +0.115/+0.040
50 mm +0.130/+0.050

D Tolerance:
19 to 26 mm 0/-0.021
32 to 47 mm 0/-0.025
62 & 75 mm 0/-0.030

► **APPLICABLE RETAINING RINGS**

Bearing Reference	Catalog Numbers
	Retaining Ring
S99GLPM101929	MD0471MQB019
S99GLPM122232	MD0471MQB022
S99GLPM162636	MD0471MQB026
S99GLPM203245	MD0471MQB032
S99GLPM254058	MD0471MQB040
S99GLPM304768	MD0471MQB047
S99GLPM406280	MD0471MQB062
S99GLPM5075A0	MD0471MQB075

METRIC COMPONENT

Catalog Number	d Bore	D Dia. h7	S Length	l ₁ Retaining Ring Spacing	Load Capacity	
					Dynamic N	Static N
S99GLPM101929	10	19	29	21.6	725	5075
S99GLPM122232	12	22	32	22.6	961	6721
S99GLPM162636	16	26	36	24.6	1441	10080
S99GLPM203245	20	32	45	31.2	2251	15751
S99GLPM254058	25	40	58	43.7	3625	25372
S99GLPM304768	30	47	68	51.7	5098	35696
S99GLPM406280	40	62	80	60.3	7998	55998
S99GLPM5075A0	50	75	100	77.3	12499	87496

EQUIVALENT TO THE STANDARD FOR
 RECIRCULATING BALL BEARING
 SELF-LUBRICATING
 OPEN, ANODIZED ALUMINUM HOUSING
 FOR SUPPORTED SHAFTS
 MAINTENANCE-FREE
 SECURE BEARING WITH SET SCREWS
 (NOT INCLUDED)

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM



> MATERIAL:

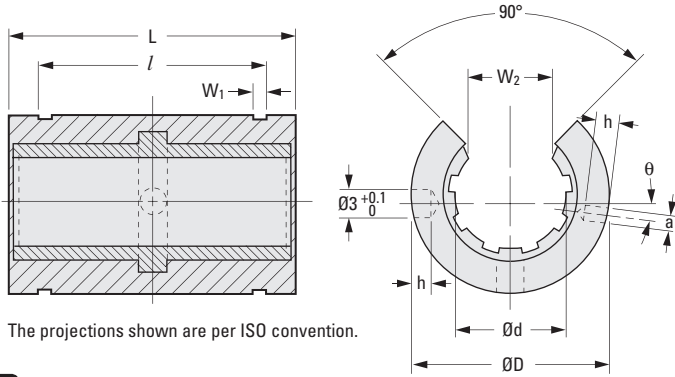
Body - Aluminum, Anodized
Bearing - J® Polymer

> SPECIFICATIONS:

d Tolerance:
 10 to 16 mm +0.088/+0.030
 20 & 25 mm +0.091/+0.030
 30 mm +0.110/+0.040
 40 mm +0.115/+0.040
 50 mm +0.130/+0.050

Δ Housing Bore Tolerance:
 19 to 26 mm +0.021/0
 32 to 47 mm +0.025/0
 62 & 75 mm +0.030/0

Recommended for use with
 Catalog Number:
S40AW6M..., See pg. 3-7

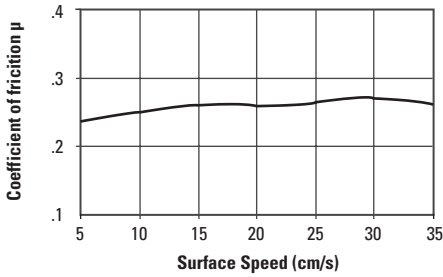


METRIC COMPONENT

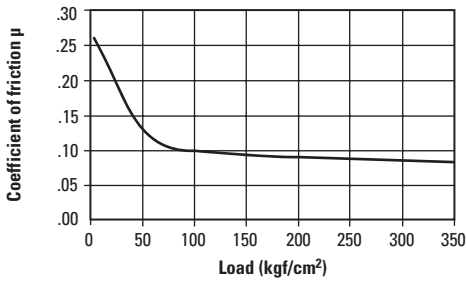
Catalog Number	d Bore	D Δ Dia.	L Length ± 0.3	l Groove Distance	W ₁ Groove Width	W ₂	a +0.1 0
S99GLZM1019029	10	19	29	21.6	1.3	7.3	—
S99GLZM1222032	12	22	32	22.6	1.3	9	3
S99GLZM1626036	16	26	36	24.6	1.3	11.6	2.2
S99GLZM2032045	20	32	45	31.2	1.6	12	2.2
S99GLZM2540058	25	40	58	43.7	1.85	14.5	3
S99GLZM3047068	30	47	68	51.7	1.85	16.6	3
S99GLZM4062080	40	62	80	60.3	2.15	21	3
S99GLZM5075100	50	75	100	77.3	2.65	25.5	5

Catalog Number (Ref.)	θ	h 0 -0.5	Load Capacity					
			Dynamic p = 51 kgf / cm ²			Static p = 356.8 kgf / cm ²		
			0°	90°	180°	0°	90°	180°
S99GLZM1019029	—	1.2	163	112	44	1141	766	308
S99GLZM1222032	7°	1.2	215	142	54	1510	999	377
S99GLZM1626036	—	1.2	323	222	89	2266	1560	623
S99GLZM2032045	—	1.2	505	404	202	3540	2832	1416
S99GLZM2540058	-4.3°	1.5	815	663	342	5704	4646	2396
S99GLZM3047068	4.9°	2	1146	955	512	8025	6684	3584
S99GLZM4062080	2.8°	2	1798	1530	854	12588	10714	5993
S99GLZM5075100	3.8°	2	2810	2413	1377	19670	16919	13769

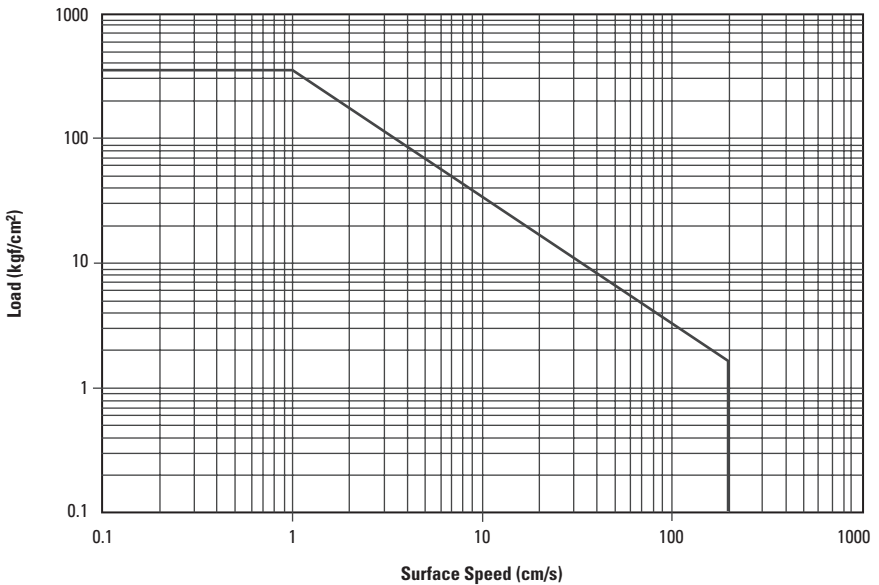




Graph 1: Coefficient of friction of J[®] Polymer as a result of the surface speed; $p = 7.6 \text{ kg/cm}^2$



Graph 2: Coefficient of friction of J[®] Polymer as a result of load, $v = 1 \text{ cm/s}$



Graph 3: Permissible $p \times v$ value for J[®] Polymer running dry against steel shaft, at 20° C