Part Number Notation

Self-Aligning Linear Bushing	LM	ES	16	UU	OP	–	N	S

Samick Linear Bushing

Standards
Metric series (mm) : ES
Inch series (inch) : BS

Nominal Shaft Diameter
Metric series (mm) : 10~50mm
Inch Series : #4~#32

Seal
No Seal : Blank
One Side Seal : U
Both Side Seal : UU

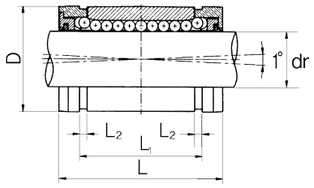
Type
Standard type : Blank
Open type (for support rail) : OP

Corrosion resistance type
No-plaiting (Standard) : Blank
Ball plate nickel plaiting : N
Stainless steel ball plate : M*
Ball plate Chrome plaiting : C

Ball type (by corrosion resistance)
High carbon bearing steel ball (standard) : Blank
Stainless steel ball : S

* LME10, LME12 and LMBS4, LMBS6, LMBS8 only with stainless steel ball plate

| LMES Self-Aligning Linear Bushing |



Self-Aligning inear Bushing	LMES	20	UU	–	N	S

Nominal Shaft Diameter

Seal
No Seal : Blank
One Side Seal : U
Both Side Seal : UU

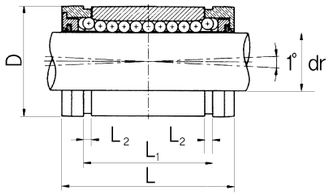
Corrosion resistance type
No-plaiting (Standard) : Blank
Ball plate nickel plaiting : N
Ball plate Chrome plaiting : C
Stainless steel ball plate : M****

Ball type(by corrosion resistance)
High carbon bearing steel ball (standard) : Blank
Stainless steel ball : S

PART NUMBER	DIAMETER dr.	TOLERANCE	D*	L ±0.2	L_1 ±0.2	L_2 min	BASIC LOAD RATING(N) DYNAMIC**(C)	STATIC**(Co)	NO. OF BALL CIRCUIT	WEIGHT (gf)
LMES10	10	+0.008	19	29	21.7	1.35	750	550	5	17
LMES12	12	0	22	32	22.7	1.35	1230	1100	5	23
LMES16	16	+0.009	26	36	24.7	1.35	1550	1250	5	28
LMES20	20	+0.001	32	45	31.3	1.65	2580	1670	6	61
LMES25	25	+0.011	40	58	43.8	1.9	3800	2750	6	122
LMES30	30	+0.001	47	68	51.8	1.9	4710	2800	6	185
LMES40	40	+0.013	62	80	60.4	2.2	6500	5720	6	360
LMES50	50	+0.002	75	100	77.4	2.7	11460	7940	6	580

* Based on nominal housing bore
** Dynamic load rating is based on the nominal life of 50km. In case of 100km, C on the table need to be divided by 1.26
Ex) LM12's 50km basis dynamic load rating C = 410N
LM12's 100km basis dynamic load rating C_{100} = 410 / 1.26 = 325.40N
*** Dimension : mm
**** LMES10, LMES12 only with stainless steel ball plate

| LMES_OP Self-Aligning Linear Bushing |



Self-Aligning inear Bushing LMES	20	UU	OP	–	N	S

Nominal Shaft Diameter

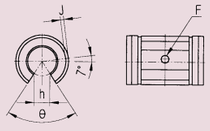
Seal
No Seal : Blank
One Side Seal : U
Both Side Seal : UU

Open type linear bushing

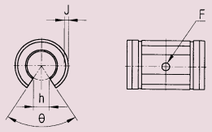
Corrosion resistance type
No-plaiting (Standard) : Blank
Ball plate nickel plaiting : N
Ball plate Chrome plaiting : C
Stainless steel ball plate : M****

Ball type (by corrosion resistance)
High carbon bearing steel ball (standard) : Blank
Stainless steel ball : S

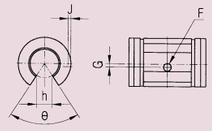
PART NUMBER	DIAMETER dr.	TOLERANCE	D*	L ±0.2	L1 ±0.2	L2 min	h	θ	F	G	J	BASIC LOAD RATING(N) DYNAMIC(C)	STATIC(Co)	NO. OF BALL CIRCUIT	WEIGHT (gf)
LMES12 OP	12	+0.008 0	22	32	22.7	1.35	6.5	66	3	–	0.7	1290	1260	4	18
LMES16 OP	16	0.009	26	36	24.7	1.35	9	68	3	–	0.7	1640	1320	4	22
LMES20 OP	20	+0.001	32	45	31.3	1.65	9	55	3	–	0.9	2630	1720	5	51
LMES25 OP	25	+0.011	40	58	43.8	1.9	11.5	57	3	1.5	1.4	3910	2850	5	102
LMES30 OP	30	+0.001	47	68	51.8	1.9	14	57	3	2	2.2	4850	2900	5	155
LMES40 OP	40	+0.013 +0.001	62	80	60.4	2.2	19.5	56	3	1.5	2.7	8700	5900	5	300
LMES50 OP	50		75	100	77.4	2.7	22.5	54	5	2.5	2.3	11700	8100	5	480



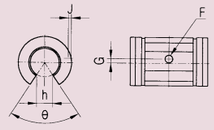
LMES12-OP



LMES16-OP, LMES20-OP



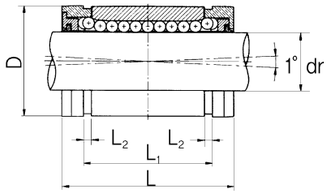
LMES25-OP



LMES30-OP, LMES40-OP, LMES50-OP

* Based on nominal housing bore
** Dynamic load rating is based on the nominal life of 50km. In case of 100km, C on the table need to be divided by 1.26
Ex) LM12's 50km basis dynamic load rating C = 410N
LM12's 100km basis dynamic load rating C_{100} = 410 / 1.26 = 325.40N
*** Dimension : mm
**** LMES12 only with stainless steel ball plate

| LMBS Self-Aligning Linear Bushing |



Self-Aligning inear Bushing	LMBS	20	UU	–	N	S

Nominal Shaft Diameter

Seal
No Seal : Blank
One Side Seal : U
Both Side Seal : UU

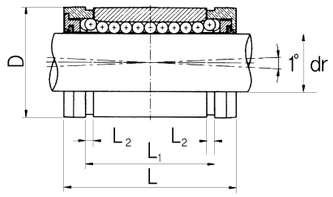
Corrosion resistance type
No-plaiting (Standard) : Blank
Ball plate nickel plaiting : N
Ball plate Chrome plaiting : C
Stainless steel ball plate : M****

Ball type (by corrosion resistance)
High carbon bearing steel ball (standard) : Blank
Stainless steel ball : S

PART NUMBER	DIAMETER dr.	TOLERANCE	D*	L	L1	L2 min	BASIC LOAD RATING(N) DYNAMIC(lbf)	STATIC(lbf)	NO. OF BALL CIRCUIT	WEIGHT (lbf)
LMBS4	0.2500	0 -0.0005	0.5000	0.750/0.735	0.511/0.501	0.039	57	49	4	0.01
LMBS6	0.3750		0.6250	0.875/0.860	0.699/0.689	0.039	78	66	4	0.02
LMBS8	0.5000		0.8750	1.250/1.230	1.032/1.012	0.050	210	190	4	0.05
LMBS10	0.6250		1.1250	1.500/1.480	1.105/1.095	0.056	290	340	5	0.08
LMBS12	0.7500		1.2500	1.625/1.605	1.270/1.250	0.056	500	430	6	0.14
LMBS16	1.0000	0 -0.0006	1.5625	2.250/2.230	1.884/1.864	0.070	820	780	6	0.29
LMBS20	1.2500		2.0000	2.625/2.600	2.004/1.984	0.068	1240	1270	6	0.40
LMBS24	1.5000		2.3750	3.000/2.970	2.410/2.390	0.086	1510	1540	6	0.80
LMBS32	2.0000	0 -0.008	3.0000	4.000/3.960	3.193/3.163	0.105	2230	2580	6	1.38

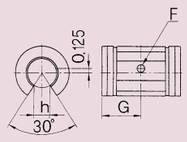
* Based on nominal housing bore
** Dynamic load rating is based on the nominal life of 50km. In case of 100km, C on the table need to be divided by 1.26
Ex) LM12's 50km basis dynamic load rating C = 410N
LM12's 100km basis dynamic load rating C_{100} = 410 / 1.26 = 325.40N
*** Dimension : inch
**** LMBS4, 6, 8 only with stainless steel ball plate

| LMBS_OP Self-Aligning Linear Bushing |

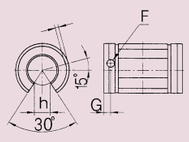


Self-Aligning inear Bushing LMBS	20	UU	OP	–	N	S	
Nominal Shaft Diameter							
Seal	No Seal : Blank One Side Seal : U Both Side Seal : UU						
Open type linear bushing							
Corrosion resistance type	No-plaiting (Standard) : Blank Ball plate nickel plaiting : N Ball plate Chrome plaiting : C Stainless steel ball plate : M****						
Ball type (by corrosion resistance)	High carbon bearing steel ball (standard) : Blank Stainless steel ball : S						

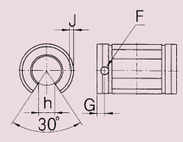
PART NUMBER	DIAMETER dr.	TOLERANCE	D*	L	L1	F	G	J	L2 min	h	BASIC LOAD RATING(N) DYNAMICC(lbf)	STATICC o(lbf)	NO. OF BALL CIRCUIT	WEIGHT (lbf)
LMBS8 OP	8	0 / -0.0005	0.8750	1.250/1.230	1.032	0.14	0.63	Thru	0.050	0.32	210	190	3	0.03
LMBS10 OP	10		1.1250	1.500/1.480	1.105	0.11	0.13	0.039	0.056	0.38	320	340	4	0.06
LMBS12 OP	12		1.2500	1.625/1.605	1.270	0.14	0.13	0.059	0.056	0.43	510	430	5	0.11
LMBS16 OP	16		1.5625	2.250/2.230	1.884	0.14	0.13	0.047	0.070	0.56	830	780	5	0.21
LMBS20 OP	20	0 / -0.0006	2.0000	2.625/2.600	2.004	0.20	0.19	0.090	0.068	0.63	1250	1270	5	0.35
LMBS24 OP	24		2.3750	3.000/2.970	2.410	0.20	0.19	0.090	0.086	0.75	1520	1540	5	0.67
LMBS32 OP	32	0 / -0.0008	3.0000	4.000/3.960	3.193	0.27	0.31	Thru	0.105	1.00	2250	2580	5	1.10



LMBS08-OP



LMBS10-OP



LMBS12-OP through LMBS32-OP

* Based on nominal housing bore

** Dynamic load rating is based on the nominal life of 50km. In case of 100km, C on the table need to be divided by 1.26
Ex) LM12's 50km basis dynamic load rating C = 410N
LM12's 100km basis dynamic load rating C_{100} = 410 / 1.26 = 325.40N

*** Dimension : inch

**** LMBS8OP only with stainless steel ball plate