Housing Units with Lubrication Unit MX

Tall Blocks / Wide Blocks

Lubrication Unit MX realizes maintenance free.

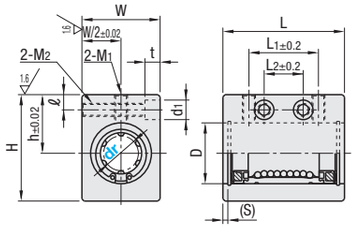
Features: A design that reduces linear bushing assembly steps. Suitable when the distance from the shaft center to load mounting surface needs to be fixed. Width (W dim.) is more compact than Wide Blocks.

MISUMI Original

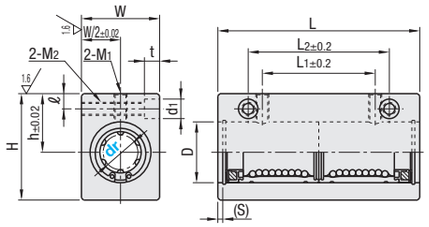
Type		Linear Bushing Used (☞P.332)	Housing		Ambient Operating Temp.
Single	Double		M Material	S Surface Treatment	
LHSS-MX	LHSSW-MX	LMU-MX	Aluminum Alloy	Clear Anodize	-20~80°C

6.3 (1.6) (Housing)

Single



Double



RoHS10

No need to fill with grease prior to use because the product is already filled with lithium soap-based grease in addition to the built-in lubrication unit.

Tall Block Type

Part Number Type	dr	Tolerance Single	Tolerance Double	D	(S)	L Single	L Double	L1 Single	L1 Double	L2 Single	L2 Double	h	W	H	ℓ	M1	M2	d1xt	Basic Load Rating C (Dynamic) N Single	C (Dynamic) N Double	Co (Static) N Single	Co (Static) N Double	Allowable Static Moment (N·m) Single	Allowable Static Moment (N·m) Double	Mass (g) Single	Mass (g) Double	Single LHSS-MX Unit Price 1~9 pc(s).	Single LHSS-MX Volume Discount Rate 10~20 pcs.	Double LHSSW-MX Unit Price 1~9 pc(s).	Double LHSSW-MX Volume Discount Rate 10~20 pcs.
LHSS-MX LHSSW-MX	10	0 -0.009	0 -0.010	19	2.0	45	74	27	36	15	50	19	26	32	6	M6	M5	8x6 (For M4 Screws)	372	588	549	1100	-	7.24	92	166				
	12			21		47	77					20	28	34					412	657	598	1200	-	10.9	103	185				
	16			28	2.3	56	93	32	52	18	65	27	36	49	7		M6	9x7 (For M5 Screws)	775	1230	1180	2350	-	19.7	237	423				
	20	0 -0.010	0 -0.012	32	2.8	64	106	36	58		70	31	42	54	8	M8	M8	11x8 (For M6 Screws)	882	1400	1370	2740	-	26.8	324	584				
	25			40	2.2	85	144	42	80	22	100	37	52	65	9	M10	M10	14x10 (For M8 Screws)	980	1560	1570	3140	-	43.4	672	1239				
	30			45		92	156	44	90		110	40	58	71					1570	2490	2740	5490	-	82.8	843	1545				

For Precautions for Use, see ☞P.303.

kgf=Nx0.101972

For orders larger than indicated quantity, please request a quotation.

Lubrication Unit MX realizes maintenance free.

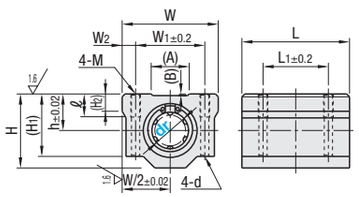
Features: A design that reduces linear bushing assembly steps. Four mounting holes enable solid mounting with the load.

MISUMI Original

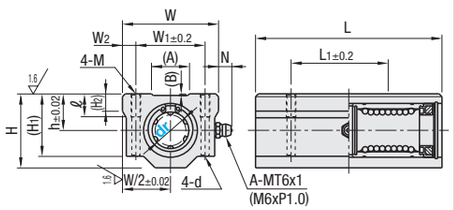
Type		Linear Bushing Used (☞P.332)	Housing		Ambient Operating Temp.
Single	Double		M Material	S Surface Treatment	
LHBB-MX	LHBBW-MX	LMU-MX	Aluminum Alloy	Clear Anodize	-20~80°C

6.3 (1.6) (Housing)

Single



Double



No need to fill with grease prior to use because the product is already filled with lithium soap-based grease in addition to the built-in lubrication unit.

Wide Block Type

Part Number Type	dr	Tolerance Single	Tolerance Double	L Single	L Double	L1 Single	L1 Double	h	H	(H1)	(H2)	W	W1	W2	M	d	ℓ	(A)	(B)	N	Basic Load Rating C (Dynamic) N Single	C (Dynamic) N Double	Co (Static) N Single	Co (Static) N Double	Allowable Static Moment (N·m) Single	Allowable Static Moment (N·m) Double	Mass (g) Single	Mass (g) Double	Single LHBB-MX Unit Price 1~9 pc(s).	Single LHBB-MX Volume Discount Rate 10~20 pcs.	Double LHBBW-MX Unit Price 1~9 pc(s).	Double LHBBW-MX Volume Discount Rate 10~20 pcs.
LHBB-MX LHBBW-MX	10	0 -0.009	0 -0.010	45	78	21	46	13	26	21	8	40	28	6	M5	4.3	12	15.5	0.4	7.5	372	588	549	1100	-	7.24	114	206				
	12			47	81	26	50	15	28	24		42	30.5	5.75				17.5		7	412	657	598	1200	-	10.9	125	233				
	16			56	97	34	60	19	38.5	32.5	9	50	36	7				19.8	0.85	6.5	775	1230	1180	2350	-	19.7	268	450				
	20			64	110	40	70	21	41	35	11	54	40		M6	5.2		21	0.5	7.5	882	1400	1370	2740	-	26.8	310	647				
	25	0 -0.010	0 -0.012	85	148	50	100	26	51.5	42	12	76	54	11	M8	7	18	36	1	4.5	980	1560	1570	3140	-	43.4	717	1339				
	30			92	160	58	110	30	59.5	49	15	78	58	10				39.9	0.75	5.5	1570	2490	2740	5490	-	82.8	891	1665				
	35			102	177	60	120	34	68	54	18	90	70					53		6	1670	2650	3140	6270	-	110	1314	2448				
	40	0 -0.012	0 -0.015	114	199		140	40	78	62	20	102	80	11	M10	8.7	25	61	1.5	5.5	2160	3430	4020	8040	-	147	1873	3526				
	50			138	243	80	160	52	102	80	25	122	100					81			3820	6080	7940	15900	-	397	3821	7256				

For Precautions for Use, see ☞P.303.

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For orders larger than indicated quantity, please request a quotation.

Ordering Example: Part Number — LHSS-MX16, LHBBW-MX25

⊗Various Grease Application Services are not applicable.

Linear Ball Bushings

Single/Double - Flanged Single/Double

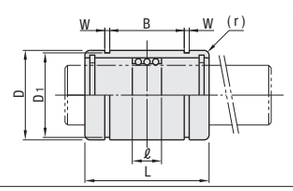
Features: Capable of rotary motion, finite linear motion, and the combination of both.

Industry Standard

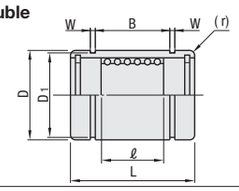
Type	Type	Outer Cylinder M Material	Outer Cylinder H Hardness	Balls M Material	Retainer M Material	Ambient Operating Temp.
Single	LBUS	EN 1.3505 Equiv.	58HRC~	EN 1.3505 Equiv.	EN AW-5052 Equiv.	-20~110°C
Double	LBUW					
Single	SLBUS	EN 1.4125 Equiv.	56HRC~	EN 1.4125 Equiv.		-20~120°C
Double	SLBUW					

* Retaining Ring
M Material: EN 1.4319 Equiv.

Single



Double



RoHS10

Part Number Type	dr	Tolerance Single	Tolerance Double	Maximum Stroke Single	Maximum Stroke Double	Number of Ball Rows Single	Number of Ball Rows Double	ℓ Single	ℓ Double	D	D Tolerance	L	L Tolerance	B	B Tolerance	W	D1	(r)	Basic Load Rating C (Dynamic) N Single	C (Dynamic) N Double	Co (Static) N Single	Co (Static) N Double	Allowable Static Moment (N·m) Single	Allowable Static Moment (N·m) Double	Mass (g) Single	Mass (g) Double	Unit Price LBUS	Unit Price SLBUS	Unit Price LBUW	Unit Price SLBUW
Single LBUS SLBUS	5	0 -0.008		13	6	3	6	5.9	9.4	10	0 -0.009	15	0 -0.12	8	0 -0.4	1.1	9.6	0.4	131	209	106	212	-	1.38	4	5				
	6	0 -0.009		15	7			8.3	12.3	12	0 -0.011	19	0 -0.2	11.3			11.5		210	333	164	328	-	2.18	8	8				
	8			24	8			8.8	16.8	15		24		15.3			14.3		323	512	278	556	-	4.31	15	17				
	10			30	8			10.8	21.8	19	0 -0.013	29		19.4		1.3	18	0.8	499	793	408	815	-	7.24	30	33				
Double LBUW SLBUW	12			32	8			10.4	22.4	21		30		20.4			20		722	1146	579	1157	-	10.9	32	36				
	13			34	10			11.4	23.4	23		32		20.4			22		773	1226	634	1268	-	11.6	45	49				
	16			40	16			12.8	24.8	28		37		23.3		1.6	27		1330	2112	1029	2058	-	19.7	72	79				
	20	0 -0.010		46	28			14.8	23.8	32	0 -0.016	42		27.3			30.5		1609	2554	1517	3035	-	26.8	94	102				

For Precautions for Use, see ☞P.303. Select Height-adjusting Spacers for Flanged Bushings from ☞P.303.

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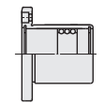
Features: Capable of rotary motion, finite linear motion, and the combination of both. Bolt-on flange offers assembly convenience.

Industry Standard

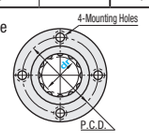
Type	Type Round Flange	Type Compact Flange	Outer Cylinder M Material	Outer Cylinder H Hardness	Balls M Material	Retainer M Material	Ambient Operating Temp.
Single	LBHR	LBHC	EN 1.3505 Equiv.	58HRC~	EN 1.3505 Equiv.	EN AW-5052 Equiv.	-20~110°C
Double	LBHRW	LBHCW					

* Retaining Ring
M Material: EN 1.4319 Equiv.

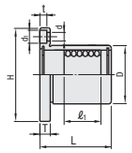
Single Type



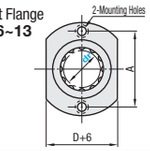
Round Flange



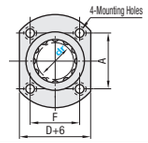
Double Type



Compact Flange dr=6~13



dr=16, 20



RoHS10

dr	Tolerance	Maximum Stroke Single	Maximum Stroke Double	Number of Ball Rows Single	Number of Ball Rows Double	ℓ1 Single	ℓ1 Double	D	D Tolerance	L	L Tolerance	H	T	d	d1	t	P.C.D.	F	A	Eccentricity	* Perpendicularity	Basic Load Rating C (Dynamic) N Single	C (Dynamic) N Double	Co (Static) N Single	Co (Static) N Double	Allowable Static Moment (N·m) Single	Allowable Static Moment (N·m) Double
6	0 -0.009	15	7	3	6	8.3	12.3	12	0 -0.013	19	±0.3	28	5	3.5	6	3.1	20	-	20	0.012	0.012	210	333	164	328	-	2.18
8		24	8			8.8	16.8	15		24		32					24	-	24			323	512	278	556	-	4.31
10		30	8			10.8	21.8	19		29		40					29	-	29			499	793	408	815	-	7.24
12		32	8			10.4	22.4	21		30		42	6	4.5	7.5	4.1	32	-	32			722	1146	579	1157	-	10.9
13		34	10			11.4	23.4	23		32		43					33	-	33			773	1226	634	1268	-	11.6
16		40	16			12.8	24.8	28		37		48					38	22	31			1330	2112	1029	2058	-	19.7
20	0 -0.010	46	28			14.8	23.8	32	0 -0.019	42		54	8	5.5	9	5.1	43	24	36	0.015	0.015	1609	2554	1517	3035	-	26.8

For Precautions for Use, see ☞P.303.

* Perpendicularity of D to flange mounting surface

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Single

Part Number Type	dr	Unit Price LBHR	Unit Price LBHC	Mass (g) Round	Mass (g) Compact
LBHR LBHC	6			23	20
	8			41	37
	10			71	63
	12			67	59
	13			87	80
	16			119	111
	20			176	163

Double

Part Number Type	dr	Unit Price LBHRW	Unit Price LBHCW	Mass (g) Round	Mass (g) Compact
LBHRW LBHCW	6			24	21
	8			43	39
	10			74	66
	12			71	63
	13			91	84
	16			126	118
	20			184	171

Ordering Example: Part Number — LBHR10

Features and Precautions for Use for Linear Ball Bushings

(Product Specifications)

- Motion mechanism utilizing rolling balls, capable of linear and rotary motion.
- The bearing balls and the rolling surface are in point contact relationship enabling low friction rolling motion.
- Compatible with linear bushings, and load is evenly distributed.
- O.D. tolerance g6 shafts (☞P.101~189) can be used with the linear ball bushings. When using preload, O.D. tolerance h5 shafts are recommended.

(Precautions for Use)

- Since the balls do not recirculate, its stroke capability is finite.