


Linear Ball Bushings

Single/Double - Flanged Single/Double

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

Industry Standard

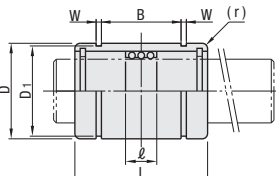


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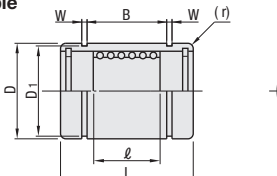
Type	Type	Outer Cylinder		Balls	Retainer	Ambient Operating Temp.
		Material	Hardness	Material	Material	
Single	LBUS	EN 1.3505 Equiv.	58HRC~	EN 1.3505 Equiv.	EN AW-5052 Equiv.	-20~110°C
Double	LBWU	EN 1.3505 Equiv.	58HRC~	EN 1.3505 Equiv.	EN AW-5052 Equiv.	-20~110°C
Single	SLBUS	EN 1.4125 Equiv.	56HRC~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

* Retaining Ring
M Material: EN 1.4319 Equiv.

Single



Double





Part Number	Maximum Stroke	Number of Ball Rows		ℓ		D		L		B	W	D ₁	(r)	Basic Load Rating				Allowable Static Moment		Mass (g)		Unit Price								
		Single	Double	Single	Double	Single	Double	Tolerance	Tolerance	Tolerance	Tolerance	Single	Double	Single	Double	Single	Double	Single	Double	Single	Double	LBUS	SLBUS	LBWU	SLBWU					
Single LBUS SLBUS	0 -0.008	13	6	3	6	5.9	9.4	10	0	-0.009	15	0	-0.12	8	9.6	131	209	106	212	-	1.38	4	5							
						8.3	12.3	12	0	19	11.3	1.1	11.5	0.4	210	333	164	328	-	2.18	8	8								
						8.8	16.8	15	-0.011	24	15.3	14.3	323	512	278	556	-	4.31	15	17										
						10.8	21.8	19	0	29	19.4	18	499	793	408	815	-	7.24	30	33										
						10.4	22.4	21	0	30	20.4	1.3	20	722	1146	579	1157	-	10.9	32	36									
Double LBWU SLBWU	0 -0.009	34	10	3	6	11.4	23.4	23	-0.013	32	20.4	0	-0.4	1.3	20	773	1226	634	1268	-	11.6	45	49							
						12.8	24.8	28	0	37	23.3	1.6	27	1330	2112	1029	2058	-	19.7	72	79									
						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**. kgf=Nx0.10192

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

Industry Standard

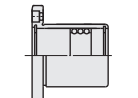



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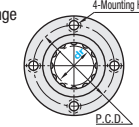
Type	Type		Outer Cylinder		Balls	Retainer	Ambient Operating Temp.
	Round Flange	Compact Flange	Material	Hardness	Material	Material	
Single	LBHR	LBHC	EN 1.3505 Equiv.	58HRC~	EN 1.3505 Equiv.	EN AW-5052 Equiv.	-20~110°C
Double	LBHRW	LBHCW	EN 1.3505 Equiv.	58HRC~	EN 1.3505 Equiv.	EN AW-5052 Equiv.	-20~110°C

* Retaining Ring
M Material: EN 1.4319 Equiv.

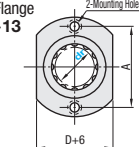
Single Type



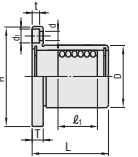
Round Flange



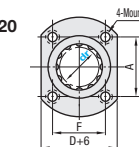
Compact Flange
dr=6-13



Double Type



dr=16, 20



dr	Maximum Stroke		Number of Ball Rows		ℓ_1		D		L		H	T	d	d ₁	t	P.C.D.	F	A	Eccentricity	* Perpendicularity	Basic Load Rating				Allowable Static Moment		
	Tolerance	Single	Double	Single	Double	Single	Double	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	Tolerance	C (Dynamic)	N (Co)	Static	Single	Double	Single	Double
6	0 -0.009	15	7	3	6	8.3	12.3	12	0	19	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	-0.013	24	32	32	32	24	-	24	323	512	278	556	-	4.31					
10		30	8			10.8	21.8	19	29	40	40	40	40	29	-	29	499	793	408	815	-	7.24					
12		32	8			10.4	22.4	21	0	30	42	42	42	32	-	32	722	1146	579	1157	-	10.9					
13		34	10			11.4	23.4	23	-0.016	32	43	43	43	33	-	33	773	1226	634	1268	-	11.6					
16	40	16	12.8	24.8	28	37	48	48	48	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	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**. kgf=Nx0.10192

Single

Part Number	dr	Unit Price	Mass (g)		
Type		LBHR	LBHC	Round	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	dr	Unit Price	Mass (g)		
Type		LBHRW	LBHCW	Round	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.