

Linear Bushing Housing Units

–Open Wide Block Type/Shaft Guide Rails/Linear Guide Units–

Linear Rotary Bushings/Linear Ball Bushings

–Single Type/Double Type–

Open Wide Block Type

CAD Data Folder Name: Linear_Bushings

* All prices are in \$S and subjected to change without prior notice

Single Type **RoHS**

Type	Housing	Bushing-Ball	Retainer	Seal
Single	M	M	H	M
LHOB	LHOBW	Aluminum Alloy (Clear Anodize)	SUJ2 58HRC-	Resin (Durocure MSO or Equivalent) Nitrile Rubber

Double Type

Part Number	Type	dr	h	W	H	L		L ₁	H ₂	N	W ₁	S ₁	ℓ	h ₁	K	Basic Load Rating				Mass (g)	Unit Price Qty. 1-9			
						Single	Double									C (Dynamic)	N (Co)	Static	N		Single	Double	Single	Double
10	Single Type	10	15	36	24	32	65	20	40	7	25	M5	10	6	8.5	80	372	588	549	1100	65	140	64.14	122.00
13	LHOB	13	17	40	28	39	75	26	50	8	28	M5	10	6	8.5	80	510	813	784	1570	100	200	60.14	120.29
16	LHOBW	16	20	45	33	45	85	30	60	9	32	M6	12	10	10	60	774	1230	1180	2350	150	300	78.86	142.43
20	Double Type	20	23	48	39	50	95	35	70	11	40	M6	12	10	10	60	982	1400	1370	2740	200	400	90.96	172.86
25	LHOBW	25	27	60	47	65	130	40	80	14	40	M6	12	10	10	60	880	1560	1570	3140	450	900	121.15	230.43
30	LHOBW	30	33	70	56	70	140	50	100	15	50	M8	18	14	14	50	1570	2490	2490	5490	630	1260	146.57	278.58

For linear bushings, linear shafts with g6 tolerance are recommended. P.103-180

The load rating capacity for Open Wide Block Type decreases when load is applied from the open side (right diagram), such as being used with a vertical shaft or subjected to overhang load. In such a case, please use it after correcting the load rating using with the correction factors shown in the right table. Compensated Rated Load=Basic Rated Load x Correction Factors



Correction Factor	Correction Coefficient
10-16	0.64
20	0.54
25-30	0.57

Shaft Guide Rails

LSGL

Number of the holes for L and Dim. M and Dim. N will be up to Dim. L.

Part Number	D	L Selection	H	W	F	T	B	K	J	h ₁	α	S ₁	P	d	d ₁	h	Unit Price Qty. 1-9								
10	10	200 300 400 500 600	18	32	13.5	4	22	8.9	12.4	4.7	80S°	4.5	100	4.5	8	4.5	1200	1300	1400	1500	1600				
13	13	200 300 400 500 600	21	34	15.0	4.5	25	9.8	15.0	6.0	80S°	5.5	150	6.5	11	6.5	45.14	60.86	66.72	76.72	94.29	107.86			
16	16	300 400 500 600	25	40	17.8	5	30	11.7	18.5	8.0	50S°	6.5	200	6.5	11	6.5	55.95	95.5	95.5	99.29	53.00	66.72	82.00	93.72	
20	20	300 400 500 600	27	45	17.7	5	30	10.0	19.0	8.0	50S°	6.5	200	6.5	11	6.5	39.29	53.00	66.72	82.00	93.72				
25	25	300 400 500 600	33	55	21.0	6	35	12.0	21.5	8.0	50S°	6.5	200	9	14	8.5	-	63.43	80.00	98.43	112.57				
30	30	300 400 500 600	37	60	22.8	7	40	13.0	26.5	10.3	50S°	6.5	200	9	14	8.5	-	76.29	96.00	118.00	135.00				

Linear Guide Units

LSGSB

LSGS2B (2 Blocks)

Number of the holes for M and Dim. N will be up to Dim. L.

Part Number	D	L Selection	H	W	W ₁	W ₂	L ₁	H ₁	B ₁	L ₂	H ₂	ℓ	S ₁	W ₂	B ₂	T	P	d	Basic Load Rating	Mass		
16	16	300 500 800 1000 1500 1800	45	25	2.5	4.5	45	33	32	30	9	12	M5	40	30	5	150	6.5	774	1180	150	2.58
20	20	300 500 800 1000 1500 1800	50	27	1.5	4.8	50	39	35	35	11	12	M6	45	30	5	150	6.5	882	1370	200	3.49
25	25	300 500 800 1000 1500 1800	60	33	2.5	6.0	65	47	40	40	14	14	M6	55	35	6	200	6.5	980	1570	450	5.31
30	30	300 500 800 1000 1500 1800	70	37	5	7.0	70	56	50	50	15	18	M8	60	40	7	270	6.5	1570	2740	630	7.39

Part Number	Type	D	L Selection	Unit Price Qty. 1-9
16	LSGSB	16	300 500 800 1000 1500 1800	182.29
20	LSGSB	20	300 500 800 1000 1500 1800	234.29
25	LSGSB	25	300 500 800 1000 1500 1800	286.29
30	LSGSB	30	300 500 800 1000 1500 1800	348.29

CAD Data Folder Name: Linear_Bushings

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Linear Rotary Bushings **RoHS**

LHR (With Seal)

Select a shaft with h5 tolerance. (Applicable to DKC with shaft h5 tolerance P.103-180)

- Outer Cylinder: SUJ2, 58HRC-, Nitrile Rubber
- Retainer: Linear Motion Part, Resin, Light Alloy
- Seal: Nitrile Rubber

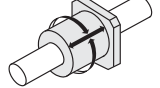
Part Number	Type	dr	Tolerance	D	L	H	W	T	P.C.D.	d	d ₁	t	Basic Load Rating		Allowable Rotational Speed min ⁻¹	Mass (g)	Unit Price		
													C (Dynamic)	N (Co)			Static	N	Qty. 1-9
12	LHR	12	0	32	36	54	42	8	43	5.5	9	5.1	510	785	500	180	123.00	120.57	
16	LHR	16	-0.009	40	45	62	50	8	51	5.5	9	5.1	775	1175	500	280	154.00	150.86	
20	LHR	20	0	45	50	74	58	10	60	6.6	11	6.1	883	1373	400	420	195.58	191.72	
25	LHR	25	-0.010	52	67	82	64	10	67	6.6	11	6.1	981	1569	400	680	245.15	240.29	
30	LHR	30	-0.010	60	74	96	75	13	78	9	14	8.1	1569	2740	400	990	310.29	304.15	

Order Example: Part Number LHR25

Days to Ship: 3 Days

Price: P.91

Features
 • Bushing provides smooth infinite linear and rotary motions.
 • High rigidity enables uses under high or unbalanced load.



Linear Ball Bushings

Type	Type	Outer Cylinder	Ball	Retainer	Operating Ambient Temperature
Single	LBUS	SUJ2	58HRC-	SUJ2	-20~110°C
Double	LBUW	SUJ2	58HRC-	SUJ2	-20~110°C
Single	SLBUS	SUS440C Equivalent	56HRC-	SUS440C Equivalent	-20~120°C
Double	SLBUW	SUS440C Equivalent	56HRC-	SUS440C Equivalent	-20~120°C

Retaining Rings: LBUR, SK5, Black Oxide, LBUW, SUS301

Part Number	Type	dr	Tolerance	Maximun Strokes		Rows of Balls	ℓ	D		L	B	W	D ₁	(r)	Basic Load Rating				Mass (g)	Unit Price Qty. 1-9						
				Single	Double			Single	Double						Single	Double	Single	Double		Single	Double	Single	Double	Single	Double	
5	Single Type	5	0.008	13	6	3	5.9	9.4	10	0.009	15	0	8	9.6	1.1	11.5	131	209	106	212	4	5	10.29	23.71	13.43	30.86
6	LBUS	6	0	15	7	3	8.3	12.3	12	0	19	11.3	14.3	0.4	1.3	20	210	333	164	328	8	8	11.43	26.43	14.86	34.29
8	LBUW	8	0	24	8	3	8.8	16.8	15	-0.011	24	15.3	18.3	0	1.3	20	323	512	278	556	15	17	11.29	26.00	14.71	33.71
10	SLBUS	10	0	30	8	3	10.8	21.8	19	0	29	19.4	22.4	0	1.3	20	499	793	408	815	30	33	11.57	26.57	15.00	34.57
12	Double Type	12	-0.009	32	8	3	10.4	22.4	21	0	30	20.4	23.4	-0.4	1.3	20	722	1146	579	1157	32	36	12.00	27.57	15.57	35.86
13	LBUW	13	0	34	10	3	11.4	23.4	23	-0.013	32	20.4	24	0	1.3	20	773	1226	634	1268	45	49	12.86	29.57	16.71	38.43
16	SLBUW	16	0	40	16	3	12.8	24.8	28	0	37	23.3	26.3	0.8	1.6	27	1330	2112	1029	2058	72	79	14.86	34.00	19.29	44.29
20	SLBUW	20	-0.010	46	28	3	14.8	23.8	32	-0.016	42	27.3	30.3	1.6	30.5	100	1609	2554	1517	3035	94	102	19.29	44.29	25.00	57.57

Order Example: Part Number LBUS12

Days to Ship: 3 Days

Price: P.91

Features
 • Linear and rotary motions are made possible with this roller bearing that uses balls.
 • Point contact between balls and rolling surface provides low frictional rolling motion.
 • Compatible with linear bushings. The lode is equally applied to linear bushings.
 • For linear ball bushings, linear shafts with outer diameter tolerance g6 shafts
 • P.103-180 are available.
 • If it is to be used with preload, outer diameter tolerance h5 (DKC) is recommended.

Notes
 • Retainer travel is limited to twice the allowable travel range of outer cylinder.
 • 80% of the max. stroke in the table is recommended for travel distance.

Example: Use for short stroke with rotary motion.