

Flanged Linear Bushings

Medium Type

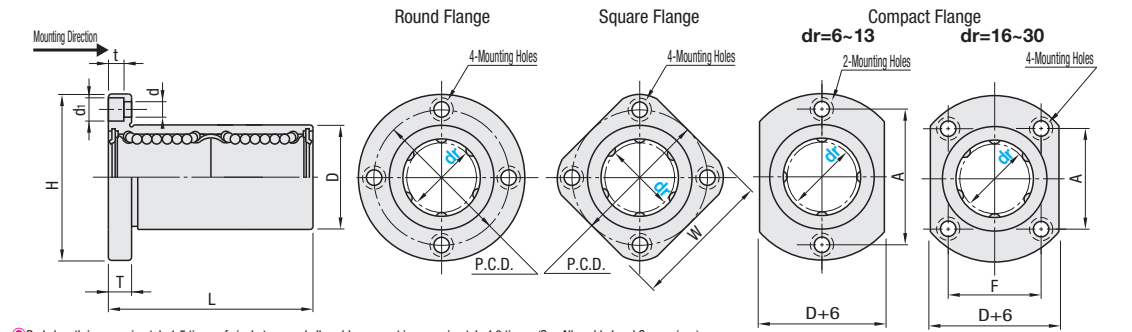
= For customers selecting MISUMI original specifications =
The part enclosed in the red frame is as per standard specifications (Outer cylinder EN 1.3505 Equiv. equivalent, Retainer resin).
Consider these specifications while selecting the product.

■Features: Easy to assemble with bolt-on flanges.

MISUMI Original



Type			Outer Cylinder			Balls	Retainer	Ambient Operating Temp.	Accessory
Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material	Material		
LHFRD	LHFS	LHFC	EN 1.3505 Equiv.	58HRC~	-	EN 1.3505 Equiv.	Plastic (Duracon M90 Equiv.)	-20~80°C	Seal Material Nitrile Rubber (-20~120°C)
LHFRDM	LHFSM	LHFCM	EN 1.3505 Equiv.	58HRC~	Electroless Nickel Plating	EN 1.4125 Equiv.	Plastic (Duracon M90 Equiv.)	-20~80°C	Seal Material Nitrile Rubber



Body length is approximately 1.5 times of single type, and allowable moment is approximately 4.3 times. (See Allowable Load Comparison)

Part Number		D Tolerance		L	H	T	d	d1	t	P.C.D.	W	F	A	Eccentricity (Max)	Rows of Balls	* Perpendicularity	Basic Load Rating			Mass (g)		
Type	dr	Tolerance	No Surface Treatment	Surface Treatment	Tolerance												C (Dynamic) N	Co (Static) N	Allowable Static Moment (N·m)	Round Flange	Square Flange	Compact Flange
LHFRD LHFS LHFC LHFRDM LHFSM LHFCM	6	0	12	0	29	28	5	3.5	6	3.1	20	22	-	20	4	0.015	226	310	1.42	27	21	24
	8	0	15	-0.013	37	32	5	3.5	6	3.1	24	25	-	24	4	0.015	310	452	2.12	47	39	43
	10	0	19	-0.016	47	40	6	4.5	7.5	4.1	29	30	-	29	4	0.015	508	718	4.37	85	65	77
	12	0	21	-0.016	47	42	6	4.5	7.5	4.1	32	32	-	32	4	0.015	634	814	6.2	89	69	81
	13	0	23	-0.021	56	43	6	4.5	7.5	4.1	33	34	-	33	4	0.015	640	826	6.2	109	87	102
	16	0	28	-0.025	65	48	8	5.5	9	5.1	38	37	22	31	5	0.02	1164	1448	13.1	157	132	149
	20	0	32	-0.025	83	54	8	5.5	9	5.1	43	42	24	36	5	0.02	1554	2068	18.3	232	197	219
	25	0	40	-0.019	90	62	10	6.6	11	6.1	51	50	32	40	6	0.02	1725	3068	25.3	481	442	452
	30	0	45	-0.025	90	74	10	6.6	11	6.1	60	58	35	49	6	0.02	2440	3974	42.7	560	482	494
	30	0	45	-0.025	90	74	10	6.6	11	6.1	60	58	35	49	6	0.02	2440	3974	42.7	560	482	494

For Precautions for Use, see P303. Select Height-adjusting Spacers for Flanged Bushings from P330.

* Perpendicularity of D to flange mounting surface kgf=Nx0.101972

dr	Round Flange		Square Flange		Compact Flange	
	LHFRD	LHFRDM	LHFS	LHFSM	LHFC	LHFCM
6						
8						
10						
12						
13						
16						
20						
25						
30						

Allowable Load Comparison

Type	Basic Dynamic Load Rating	Basic Static Load Rating	Allowable Static Moment
Short	0.7	0.6	Approx. 0.6
Single	1	1	1
Medium	1.4	1.3	Approx. 4.3
Double	1.6	2	Approx. 6
Medium Long	1.6	1.6	Approx. 10
Long	1.6	2	Approx. 21

* "1" represents Single Type for comparison.

Ordering Example
Part Number
LHFS8
LHFS10
LHFS12L (L Type Greased)
Alternative grease types available.
For Days to Ship, Price and Performance, see P304.

Flanged Linear Bushings

Medium, Pilot / Medium, Center Flanged

= For customers selecting MISUMI original specifications =
The products on this page are of standard specifications (Outer cylinder EN 1.3505 Equiv. equivalent, Retainer resin).
Consider these specifications while selecting the product.

■Features: Easy to assemble with bolt-on flanges. The linear bushing does not protrude out on the front side for good space utilization.

MISUMI Original

Medium, Pilot



RoHS10

Type			Outer Cylinder			Balls	Retainer	Ambient Operating Temp.	Accessory
Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material	Material		
LHIRD	LHIS	LHIC	EN 1.3505 Equiv.	58HRC~	-	EN 1.3505 Equiv.	Plastic (Duracon M90 Equiv.)	-20~80°C	Seal Material Nitrile Rubber (-20~120°C)

Mounting Direction

Round Flange

Square Flange

Compact Flange dr=6~13

Compact Flange dr=16~30

Body length is approximately 1.5 times of single type, and allowable moment is approximately 4.3 times. (See Allowable Load Comparison)
For Piloted and Flanged Type application examples, see P307.

Part Number		D Tolerance		L	H	T	d	d1	t	P.C.D.	W	F	A	Eccentricity	Rows of Balls	* Perpendicularity	Basic Load Rating			Mass (g)		
Type	dr	Tolerance	No Surface Treatment	Surface Treatment	Tolerance												C (Dynamic) N	Co (Static) N	Allowable Static Moment (N·m)	Round Flange	Square Flange	Compact Flange
LHIRD LHIS LHIC	6	0	12	0	29	28	5	3.5	6	3.1	20	22	-	20	4	0.015	226	310	1.42	27	21	24
	8	0	15	-0.013	37	32	5	3.5	6	3.1	24	25	-	24	4	0.015	310	452	2.12	47	39	43
	10	0	19	-0.016	47	40	6	4.5	7.5	4.1	29	30	-	29	4	0.015	508	718	4.37	85	65	77
	12	0	21	-0.016	47	42	6	4.5	7.5	4.1	32	32	-	32	4	0.015	634	814	6.2	89	69	81
	13	0	23	-0.016	56	43	6	4.5	7.5	4.1	33	34	-	33	4	0.015	640	826	6.2	109	87	102
	16	0	28	-0.025	65	48	8	5.5	9	5.1	38	37	22	31	5	0.02	1164	1448	13.1	157	132	149
	20	0	32	-0.025	83	54	8	5.5	9	5.1	43	42	24	36	5	0.02	1554	2068	18.3	232	197	219
	25	0	40	-0.019	90	62	10	6.6	11	6.1	51	50	32	40	6	0.02	1725	3068	25.3	481	442	452
	30	0	45	-0.019	90	74	10	6.6	11	6.1	60	58	35	49	6	0.02	2440	3974	42.7	560	482	494
	30	0	45	-0.019	90	74	10	6.6	11	6.1	60	58	35	49	6	0.02	2440	3974	42.7	560	482	494

For Precautions for Use, see P303. Select Height-adjusting Spacers for Flanged Bushings from P330.

* Perpendicularity of D to flange mounting surface kgf=Nx0.101972

■Features: Easy to assemble with bolt-on flanges. A load can be placed near the center of the bushing, evenly distributing the load and space.

MISUMI Original

Medium, Center Flanged



RoHS10

Type			Outer Cylinder			Balls	Retainer	Ambient Operating Temp.	Accessory
Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material	Material		
LHMRD	LHMS	LHMC	EN 1.3505 Equiv.	58HRC~	-	EN 1.3505 Equiv.	Plastic (Duracon M90 Equiv.)	-20~80°C	Seal Material Nitrile Rubber (-20~120°C)

Mounting Direction

Round Flange

Square Flange

Compact Flange dr=6~13

Compact Flange dr=16~30

Body length is approximately 1.5 times of single type, and allowable moment is approximately 4.3 times. (See Allowable Load Comparison)
For Center Flanged Type application examples, see P314.

Part Number		D Tolerance		L	H	T	d	d1	t	P.C.D.	W	F	A	Eccentricity	Rows of Balls	* Perpendicularity	Basic Load Rating			Mass (g)		
Type	dr	Tolerance	No Surface Treatment	Surface Treatment	Tolerance												C (Dynamic) N	Co (Static) N	Allowable Static Moment (N·m)	Round Flange	Square Flange	Compact Flange
LHMRD LHMS LHMC	6	0	12	0	29	28	5	3.5	6	3.1	20	22	-	20	4	0.015	226	310	1.42	27	21	24
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	10	0	19	-0.016	47	40	6	4.5	7.5	4.1	29	30	-	29	4	0.015	508	718	4.37	85	65	77
	12	0	21	-0.016	47	42	6	4.5	7.5	4.1	32	32	-	32	4	0.015	634	814	6.2	89	69	81
	13	0	23	-0.016	56	43	6	4.5	7.5	4.1	33	34	-	33	4	0.015	640	826	6.2	109	87	102
	16	0	28	-0.025	65	48	8	5.5	9	5.1	38	37	22	31	5	0.02	1164	1448	13.1	157	132	149
	20	0	32	-0.025	83	54	8	5.5	9	5.1	43	42	24	36	5	0.02	1554	2068	18.3	232	197	219
	25	0	40	-0.019	90	62	10	6.6	11	6.1	51	50	32	40	6	0.02	1725	3068	25.3	481	442	452
	30	0	45	-0.019	90	74	10	6.6	11	6.1	60	58	35	49	6	0.02	2440	3974	42.7	560	482	494
	30	0	45	-0.019	90	74	10	6.6	11	6.1	60	58	35	49	6	0.02	2440	3974	42.7	560	482	494

For Precautions for Use, see P303. Select Height-adjusting Spacers for Flanged Bushings from P330.

* Perpendicularity of D to flange mounting surface kgf=Nx0.101972

Allowable Load Comparison

Type	Basic Dynamic Load Rating	Basic Static Load Rating	Allowable Static Moment
Short	0.7	0.6	Approx. 0.6
Single	1	1	1
Medium	1.4	1.3	Approx. 4.3
Double	1.6	2	Approx. 6
Medium Long	1.6	1.6	Approx. 10
Long	1.6	2	Approx. 21

* "1" represents Single Type for comparison.

dr	Unit Price					
	Medium, Pilot			Medium, Center Flanged		
	Round Flange	Square Flange	Compact Flange	Round Flange	Square Flange	Compact Flange
6	LHIRD	LHIS	LHIC	LHMRD	LHMS	LHMC
8						
10						
12						
13						
16						
20						
25						
30						

Ordering Example
Part Number
LHIRD12
LHMS16
LHMS12L (L Type Greased)
LHMRD16G (G Type Greased)
LHMS20H (H Type Greased)
Alternative grease types available.
For Days to Ship, Price and Performance, see P304.