

Flanged Linear Bushings

Long / Long, Pilot

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

Flanged Linear Bushings

Long / Long, Pilot

= 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.

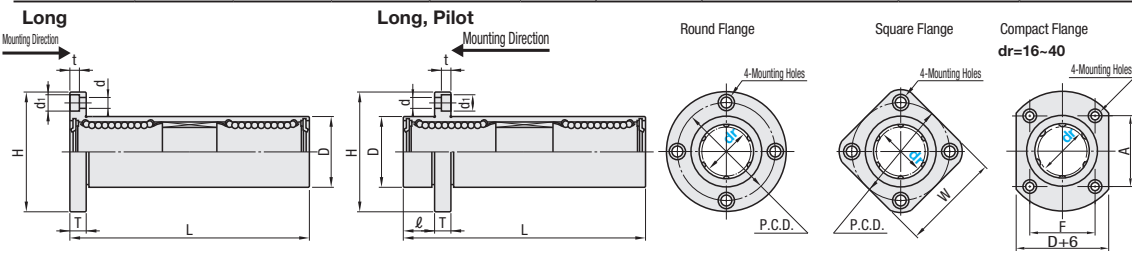
■Features: Easy to assemble with bolt-on flanges. The linear bushing does not protrude out on the front side for good space utilization.

Industry Standard



RoHS10

	Type			Outer Cylinder, Balls		Outer Cylinder	Retainer	Ambient Operating Temp.	Accessory
	Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material		
Long	LHKRNLF	LHKSRLF	-	EN 1.3505 Equiv.	58HRC~	-	Plastic (Duracon M90 Equiv.)	-20~ 80°C	Seal Material Nitrile Rubber (-20~120°C)
	LHKRNLF	LHKSRLF	-			-	Stainless Steel (Stainless Steel)	-20~110°C	
	LHKRLF	LHKSRLF	-			Electroless Nickel Plating	Plastic (Duracon M90 Equiv.)	-20~ 80°C	
	LHKRLF	LHKSRLF	-			Electroless Nickel Plating	Stainless Steel (Stainless Steel)	-20~110°C	
Long, Pilot	LHKIRNLF	LHKISRLF	-	EN 1.4125 Equiv.	56HRC~	-	Plastic (Duracon M90 Equiv.)	-20~120°C	
	LHKIRNLF	LHKISRLF	-			-	Stainless Steel (Stainless Steel)	-20~ 80°C	
	LHKIRLF	LHKISRLF	-			Electroless Nickel Plating	Plastic (Duracon M90 Equiv.)	-20~110°C	
	LHKIRLF	LHKISRLF	-			Electroless Nickel Plating	Stainless Steel (Stainless Steel)	-20~120°C	



dr	Tolerance	D Tolerance		L	Tolerance	L	H	T	d	t	P.C.D.	W	F	A	Eccentricity	Rows of Balls	* Perpendicularity	Basic Load Rating			Mass (g)		
		No Surface Treatment	Surface Treatment															C (Dynamic)	N (Co)	(Static) N	Round Flange	Square Flange	Compact Flange
6	0	15	0.013	49	±0.3	5	32	5	3.5	6	3.1	24	25	-	-	0.020	4	324	529	8.2	66	58	-
8	-0.012	19	0	68	±0.3	6	40	6	4.5	7.5	4.1	29	30	-	-			431	784	16.0	135	117	-
10	-0.012	23	0	82	±0.3	8	48	8	5.5	9	5.1	33	34	-	-			588	1100	27.0	205	189	-
12	-0.015	26	-0.016	86	±0.3	10	54	10	6.6	11	6.1	36	37	-	-			657	1200	40.1	248	228	-
13	-0.015	28	-0.016	92	±0.3	10	54	10	6.6	11	6.1	36	37	-	-	0.025	5	813	1570	42.9	308	286	-
16	-0.015	32	0	105	±0.3	12	62	12	7.5	13	7.1	43	44	-	-			1230	2350	73.5	412	376	386
20	-0.018	40	-0.019	120	±0.3	13	74	13	9	14	8.1	51	52	-	-			1400	2740	98.0	752	714	724
25	-0.018	45	-0.019	167	±0.3	13	82	13	9	14	8.1	56	57	-	-			1560	3140	157	1244	1163	1178
30	-0.018	52	-0.022	184	±0.3	13	96	13	9	14	8.1	60	61	-	-	0.030	6	2490	5490	297	1636	1543	1567
35	-0.021	60	-0.030	200	±0.3	13	101	13	9	14	8.1	67	68	-	-			2650	6270	373	2580	2400	2433
40	-0.021	65	-0.030	230	±0.3	13	101	13	9	14	8.1	83	84	-	-			3430	8040	553	2950	2510	2798

For Precautions for Use, see P.303. * Perpendicularity of D part to flange mounting surface kgf=Nx0.101972
Mounting holes of long type are on the opposite direction. For Piloted and Flanged Type application examples, see P.307.

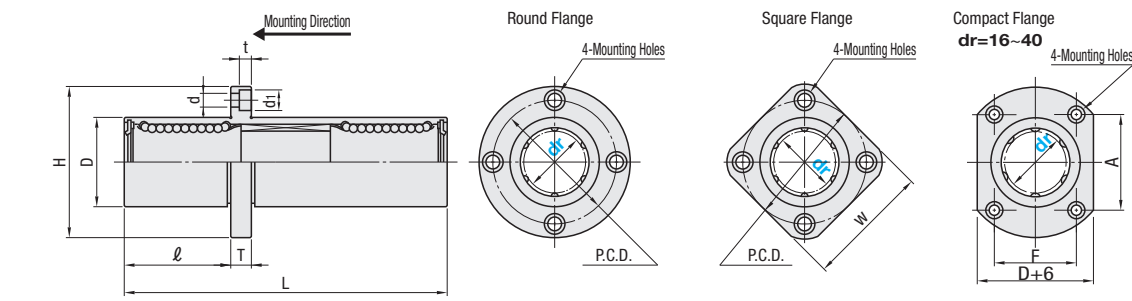
■Features: Easy to assemble with bolt-on flanges. A load can be placed near the center of the bushing, evenly distributing the load and space.

MISUMI Original



RoHS10

	Type			Outer Cylinder, Balls		Outer Cylinder	Retainer	Ambient Operating Temp.	Accessory
	Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material		
Long	LHKMRNLF	LHKMSRLF	-	EN 1.3505 Equiv.	58HRC~	-	Plastic (Duracon M90 Equiv.)	-20~ 80°C	Seal Material Nitrile Rubber (-20~120°C)
	LHKMRNLF	LHKMSRLF	-			-	Stainless Steel (Stainless Steel)	-20~110°C	
	LHKMRLF	LHKMSRLF	-			Electroless Nickel Plating	Plastic (Duracon M90 Equiv.)	-20~ 80°C	
	LHKMRLF	LHKMSRLF	-			Electroless Nickel Plating	Stainless Steel (Stainless Steel)	-20~110°C	
Long, Pilot	LHKIRNLF	LHKISRLF	-	EN 1.4125 Equiv.	56HRC~	-	Plastic (Duracon M90 Equiv.)	-20~120°C	
	LHKIRNLF	LHKISRLF	-			-	Stainless Steel (Stainless Steel)	-20~ 80°C	
	LHKIRLF	LHKISRLF	-			Electroless Nickel Plating	Plastic (Duracon M90 Equiv.)	-20~110°C	
	LHKIRLF	LHKISRLF	-			Electroless Nickel Plating	Stainless Steel (Stainless Steel)	-20~120°C	



dr	Tolerance	D Tolerance		L	Tolerance	L	H	T	d	t	P.C.D.	W	F	A	Eccentricity	Rows of Balls	* Perpendicularity	Basic Load Rating			Mass (g)		
		No Surface Treatment	Surface Treatment															C (Dynamic)	N (Co)	(Static) N	Round Flange	Square Flange	Compact Flange
6	0	15	0.013	49	±0.3	5	32	5	3.5	6	3.1	24	25	-	-	0.020	4	324	529	8.2	66	58	-
8	-0.012	19	0	68	±0.3	6	40	6	4.5	7.5	4.1	29	30	-	-			431	784	16.0	135	117	-
10	-0.012	23	0	82	±0.3	8	48	8	5.5	9	5.1	33	34	-	-			588	1100	27.0	205	189	-
12	-0.015	26	-0.016	86	±0.3	10	54	10	6.6	11	6.1	36	37	-	-			657	1200	40.1	248	228	-
13	-0.015	28	-0.016	92	±0.3	10	54	10	6.6	11	6.1	36	37	-	-	0.025	5	813	1570	42.9	308	286	-
16	-0.015	32	0	105	±0.3	12	62	12	7.5	13	7.1	43	44	-	-			1230	2350	73.5	412	376	386
20	-0.018	40	-0.019	120	±0.3	13	74	13	9	14	8.1	51	52	-	-			1400	2740	98.0	752	714	724
25	-0.018	45	-0.019	167	±0.3	13	82	13	9	14	8.1	56	57	-	-			1560	3140	157	1244	1163	1178
30	-0.018	52	-0.022	184	±0.3	13	96	13	9	14	8.1	60	61	-	-	0.030	6	2490	5490	297	1636	1543	1567
35	-0.021	60	-0.030	200	±0.3	13	101	13	9	14	8.1	67	68	-	-			2650	6270	373	2580	2400	2433
40	-0.021	65	-0.030	230	±0.3	13	101	13	9	14	8.1	83	84	-	-			3430	8040	553	2950	2510	2798

For Precautions for Use, see P.303. * Perpendicularity of D part to flange mounting surface kgf=Nx0.101972

Part Number		Unit Price Long											
Type	dr	Round Flange				Square Flange				Compact Flange			
(Round Flange)	6	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF
(Round Flange)	8	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF
(Round Flange)	10	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF
(Round Flange)	12	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF
(Round Flange)	13	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF	LHKRNLF	LHKRLF
(Square Flange)	16	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF
(Square Flange)	20	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF
(Square Flange)	25	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF
(Square Flange)	30	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF	LHKSRLF	LHKISRLF
(Compact Flange)	35	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF
(Compact Flange)	40	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF	LHKCNLF	LHKICLF

Part Number		Unit Price Long with Pilot											
Type	dr	Round Flange				Square Flange				Compact Flange			
(Round Flange)	6	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF
(Round Flange)	8	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF
(Round Flange)	10	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF
(Round Flange)	12	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF
(Round Flange)	13	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF	LHKIRNLF	LHKIRLF
(Square Flange)	16	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF
(Square Flange)	20	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF
(Square Flange)	25	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF
(Square Flange)	30	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF	LHKISRLF
(Compact Flange)	35	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF
(Compact Flange)	40	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF	LHKICNLF	LHKICLF

Part Number		Unit Price											
Type	dr	Round Flange					Square Flange					Compact Flange	
(Round Flange)	(EN 1.3505 Equiv.) (EN 1.4125 Equiv.)	LHKMRNL	LHKMRL	LHKMRNLF	LHKMRLF	SLHKMRLFS	LHKMSNL	LHKMSL	LHKMSNLF	LHKMSLF	SLHKMSLFS	LHKMCNL	LHKMCL
	LHKMRNL	SLHKMRLFS											
	LHKMRNLF												
	LHKMRL												
	LHKMRLF												
(Square Flange)													
	LHKMSNL	SLHKMSLFS											
	LHKMSNLF												
	LHKMSL												
	LHKMSLF												
(Compact Flange)													
	LHKMCNL												
	LHKMCL												