

# Flanged Linear Bushings (Single with Pilot)

Compact / Tapped Type

**Flanged Linear Bushings (Single with Pilot) – Compact Type**

Type			Outer Cylinder			Balls	Retainer	Ambient Operating Temp.	Accessories
Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material	Material		
LHIRK	LHISK	LHICK	52100 Bearing Steel	58 HRC min.	—	52100 Bearing Steel	Plastic (Duracon M90 Equivalent)	-20~80°C	Seal Material Nitrile Rubber (-20~120°C)

ⓘ For Piloted and Flanged Type application examples, see P.385.

kgf=Nx0.101972

dr	Tol.	D		L	ℓ	H	T	d	d <sub>1</sub>	t	r	P.C.D.	W	F	A	Eccentricity	Rows of Balls	*Perpendicularity	Basic Load Rating		Mass(g)				
		To.	0																C (Dynamic) N	Co (Static) N	Round Flange	Square Flange	Compact Flange		
6		10	0	19	±0.3	5	25	5	3.5	6	3.1	3	19	20	—	19	0.012	6	0.012	131	155	18	14	15	
8	0	13	0	24		28	5	3.5	6	3.1	3	3	22	23	—	22				235	277	27	22	24	24
10	-0.009	17	-0.013	29		35	6	4.5	7.5	4.1	3.75	3	27	27	—	27				368	433	52	41	46	46
12		19	0	30		38	6	4.5	7.5	4.1	3.75	3	30	29	—	30				381	449	64	50	55	55
16		26	-0.016	37		44	6	4.5	7.5	4.1	3.75	3	36	34	24	27				608	716	96	77	83	83

ⓘ For Precautions for Use, see P.369. ⓘ For linear bushings, hardened shafts with g6 tolerance are recommended. P.202-288  
\*Perpendicularity of D part to flange mounting surface

**Flanged Linear Bushings (Single with Pilot) – Tapped Type**

Type			Outer Cylinder			Balls	Retainer	Ambient Operating Temp.	Accessories
Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material	Material		
LHITR	LHITS	LHITC	52100 Bearing Steel	58 HRC min.	—	52100 Bearing Steel	Plastic (Duracon M90 Equivalent)	-20~80°C	Seal Material Nitrile Rubber (-20~120°C)

ⓘ For Precautions for Use, see P.369. ⓘ For linear bushings, hardened shafts with g6 tolerance are recommended. P.202-288  
\*Perpendicularity of D part to flange mounting surface

kgf=Nx0.101972

dr	Tol.	D		L	ℓ	H	T	M	P.C.D.	W	F	A	Eccentricity	Rows of Balls	*Perpendicularity	Basic Load Rating		Mass(g)				
		To.	0													C (Dynamic) N	Co (Static) N	Round Flange	Square Flange	Compact Flange		
6		12	0	19	±0.3	5	28	M3	20	22	—	20	0.012	4	0.012	206	265	24	18	21		
8	0	15	-0.013	24		32	5	3.5	M3	24	25	—				24	265	380	37	29	33	33
10	-0.009	19	0	29		40	6	4.5	M4	29	30	—				29	372	549	72	52	64	64
12		21	0	30		42	6	4.5	M4	32	32	—				32	412	598	76	57	68	68
16		28	-0.016	37		48	6	4.5	M4	38	37	22				31	775	1180	120	104	112	112
20	0	32	0	42	54	8	6.6	M5	43	42	24	36	882	1370	180	145	167	167				
25	-0.012	40	-0.019	49	62	8	6.6	M5	51	50	32	40	980	1570	340	300	325	325				
30	-0.010	45	-0.019	64	74	10	6.6	M6	60	58	35	49	1570	2740	470	375	388	388				

ⓘ For Precautions for Use, see P.369. ⓘ For linear bushings, hardened shafts with g6 tolerance are recommended. P.202-288  
\*Perpendicularity of D part to flange mounting surface

**Part Number Example**

Part Number  
LHIRK12 (L Type Greased)  
LHIRK12L (G Type Greased)  
LHIRK12G (G Type Greased)  
LHIRK12H (H Type Greased)

ⓘ Alternative grease types available.

**Application Example**

Flanged Linear Bushings Tapped Type can be screw tightened from above.

# Flanged Linear Bushings (Double with Pilot)

Standard Type

**Flanged Linear Bushings (Double with Pilot) – Standard Type**

RoHS 10

Type			Outer Cylinder			Balls	Retainer	Ambient Operating Temp.	Accessories
Round Flange	Square Flange	Compact Flange	Material	Hardness	Surface Treatment	Material	Material		
LHIRW	LHISW	LHICW	52100 Bearing Steel	58 HRC min.	—	52100 Bearing Steel	Plastic (Duracon M90 Equivalent)	-20~80°C	Seal Material Nitrile Rubber (-20~120°C)
LHIRWF	LHISWF	LHICWF					Stainless Steel (JIS SUS)	-20~110°C	
LHIRWM	LHISWM	LHICWM					Electroless Nickel Plating	-20~80°C	
LHIRWMF	LHISWMF	LHICWMF	440C Stainless Steel Equivalent	56 HRC min.	—	Plastic (Duracon M90 Equivalent)	-20~80°C		
SLHIRW	SLHISW	SLHICW				Stainless Steel (JIS SUS)	-20~110°C		
SLHIRWS	SLHISWS	SLHICWS				Stainless Steel (JIS SUS)	-20~120°C		

dr	Tol.	D Tolerance		L	ℓ	H	T	d	d <sub>1</sub>	t	P.C.D.	W	F	A	Eccentricity	Rows of Balls	*Perpendicularity	Basic Load Rating		Allowable Static Moment (N·m)	Mass(g)			
		No Surface Treatment	Surface Treatment															C (Dynamic) N	Co (Static) N		Round Flange	Square Flange	Compact Flange	
6		12	0	35	5	28	5	3.5	6	3.1	20	22	—	20	0.015	4	0.015	324	529	2.18	31	25	28	
8	0	15	-0.013	45		32	5	3.5	6	3.1	3	24	25	—				24	431	784	4.31	51	43	47
10	-0.010	19	0	55		40	6	4.5	7.5	4.1	3	29	30	—				29	588	1100	7.24	98	78	90
12		21	0	57		42	6	4.5	7.5	4.1	3	32	32	—				32	657	1200	10.9	110	90	102
13		23	-0.016	61		43	6	4.5	7.5	4.1	3	33	34	—				33	813	1570	11.6	130	108	123
16		28	0	70	48	8	5.5	9	5.1	3	38	37	22	31	1230	2350	19.7	190	165	182				
20	0	32	0	80	54	8	5.5	9	5.1	3	43	42	24	36	1400	2740	26.8	260	225	247				
25	-0.012	40	-0.019	112	62	8	5.5	9	5.1	3	51	50	32	40	1560	3140	43.4	540	500	525				
30		45	0	123	74	10	6.6	11	6.1	3	60	58	35	49	2490	5490	82.8	680	590	645				
35	0	52	0	135	82	10	6.6	11	6.1	3	67	64	38	55	2650	6270	110	1020	930	945				
40	-0.015	60	-0.022	151	96	13	9	14	8.1	3	78	75	45	64	3430	8040	147	1570	1380	1423				
50		80	-0.030	192	116	13	9	14	8.1	3	98	92	56	80	6080	15900	397	3600	3400	3437				

ⓘ For Precautions for Use, see P.369. ⓘ For linear bushings, hardened shafts with g6 tolerance are recommended. P.202-288  
ⓘ Height-Adjusting Spacers for Flanged Bushings can be chosen from P.384.  
\*Perpendicularity of D part to flange mounting surface

**Part Number Example**

Part Number  
LHIRW8 (L Type Greased)  
LHIRW8L (G Type Greased)  
LHIRW8G (G Type Greased)  
LHIRW8H (H Type Greased)

ⓘ Alternative grease types available.

**Application Example**

Flanged Linear Bushings