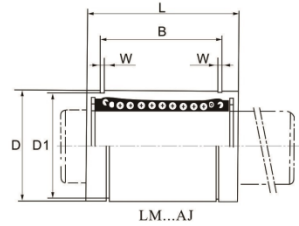


STARK MOTION TECHNOLOGIES





Linear bearing series
LM...UU



LM...UU

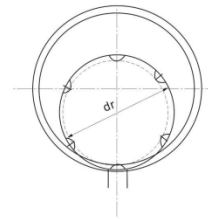


LM...UU-OP

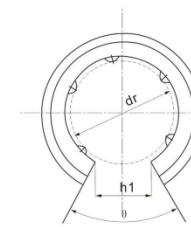


LM...UU-AJ

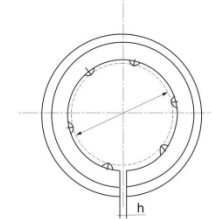
Linear bearing series
LM...UU



LM...UU



LM...UU-OP



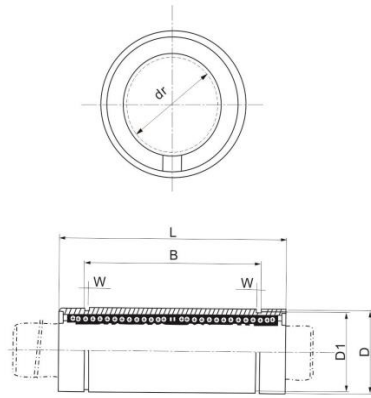
LM...UU-AJ

LM...UU	(Type)	No. of ball rows	g	Adjustment	gf	Open	(main)			
							g	dr		D
								P	μm	μm
LM 3UU	4	1.35	-	-	-	3			7	0
LM 4UU	4	1.9	-	-	-	4	0	-0.005	8	-0.009
LM 5UU	4	4	LM 5UUAJ	-	-	5			10	
LM 6UU	4	7.6	LM 6UUAJ	7.5	-	6			12	
LM 8SUU	4	10.4	LM 8SUUAJ	10	-	8			15	0
LM 8UU	4	15	LM 8UUAJ	14.7	-	8	0	-0.006	15	-0.011
LM 10UU	4	29.5	LM 10UUAJ	29	-	10			19	
LM 12UU	5	31.5	LM 12UUAJ	31	LM 12UUOP	12			21	0
LM 13UU	5	43	LM 13UUAJ	42	LM 13UUOP	13			23	-0.013
LM 16UU	5	69	LM 16UUAJ	68	LM 16UUOP	16			28	
LM 20UU	5	87	LM 20UUAJ	85	LM 20UUOP	20			32	
LM 25UU	6	220	LM 25UUAJ	216	LM 25UUOP	25	0	-0.007	40	-0.016
LM 30UU	6	250	LM 30UUAJ	245	LM 30UUOP	30			45	
LM 35UU	6	390	LM 35UUAJ	384	LM 35UUOP	35			52	
LM 40UU	6	585	LM 40UUAJ	579	LM 40UUOP	40	0	-0.008	60	-0.019
LM 50UU	6	1580	LM 50UUAJ	1560	LM 50UUOP	50			80	
LM 60UU	6	2000	LM 60UUAJ	1820	LM 60UUOP	60	0	-0.009	90	-0.022
LM 80UU	6	4520	LM 80UUAJ	4300	LM 80UUOP	80	0	-0.015	120	
LM 100UU	6	86	LM 100UUAJ	8540	LM 100UUOP	100	0	-0.010	150	-0.025

mm	Dimensions(mm)											Radial (max) μm	Load rating		Type
	L	Length		W	D ₁	h	h ₁	θ	Eccentricity μm	C _N	Co _N				
		μm	B												
10		-	-	-	-	-	-	-	4	8	-2	88.2	108	LM 3UU	
12	0	-0.12	-	-	-	-	-	-	4	8	-3	88.2	127	LM 4UU	
15		10.2		1.1	9.6	-	6	-	4	8	-3	167	206	LM 5UU	
19		13.5		1.1	11.5	1	-	-	8	12	-5	206	265	LM 6UU	
17		11.5		1.1	14.3	1	-	62°	8	12	-5	175	225	LM 8SUU	
24		17.5		1.1	14.3	1	-	-	8	12	-5	265	402	LM 8UU	
29	0	-0.2		1.3	18	1	-	-	8	12	-5	373	549	LM 10UU	
30		23	0	1.3	20	1.5	8	80°	8	12	-5	412	598	LM 12UU	
32		23		1.3	22	1.5	9	80°	8	12	-7	510	775	LM 13UU	
37		26.5		1.6	27	1.5	11	80°	8	12	-7	775	1180	LM 16UU	
42		30.5		1.6	30.5	1.5	11	60°	10	15	-9	863	1370	LM 20UU	
59		41		1.85	38	2	12	50°	10	15	-9	980	1570	LM 25UU	
64		44.5		1.85	43	2.5	15	50°	10	15	-9	1570	2750	LM 30UU	
70		49.5		2.1	49	2.5	17	50°	12	20	-13	1670	3140	LM 35UU	
80	0	-0.3	0	2.1	57	3	20	50°	12	20	-13	2160	4020	LM 40UU	
100		74		2.6	76.5	3	25	50°	12	20	-13	3820	7940	LM 50UU	
110		85		3.15	86.5	3	30	50°	17	25	-16	4710	10000	LM 60UU	
140		105.5		4.15	116	3	40	50°	17	25	-16	7350	16000	LM 80UU	
175	0	-0.4	0	4.15	145	3	50	50°	20	30	-20	14100	38400	LM 100UU	



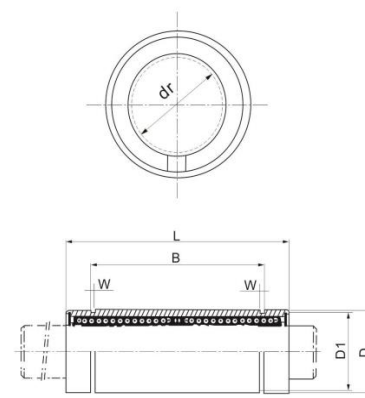
Linear bearing series
LM...LUU



LM...LUU

LM...LUU	Type		(main)			
	No. of ball rows	gf	dr mm	D		
				μm	mm	μm
LM 3LUU	4	3	3		7	
LM 4LUU	4	4	4		8	
LM 5LUU	4	8	5		10	0 -0.013
LM 6LUU	4	16	6		12	
LM 8LUU	4	31	8	0 -0.010	15	
LM 10LUU	4	62	10		19	
LM 12LUU	4	80	12		21	0 -0.016
LM 13LUU	4	90	13		23	
LM 16LUU	5	145	16		28	
LM 20LUU	5	180	20		32	
LM 25LUU	6	440	25	0 -0.012	40	0 -0.019
LM 30LUU	6	580	30		45	
LM 35LUU	6	795	35		52	
LM 40LUU	6	1170	40	0 -0.015	60	0 -0.022
LM 50LUU	6	3100	50		80	
LM 60LUU	6	3500	60	0 -0.020	90	0 -0.025

Linear bearing series
LME...LUU



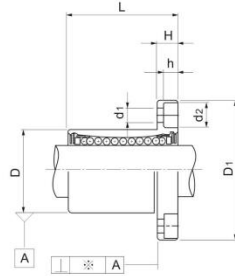
LME...LUU

Dimensions(mm)		W	D ₁	Eccentricity (max) μm	Radial (max) μm	Basic Load rating	
L	B					C	C ₀
mm	μm	mm	μm	N	N	N	N
19		-	-	10	-2	139	216
23		-	-	10	-3	139	254
29		20		10	-3	263	412
35		27	0 -0.4	11.5	-5	324	529
45		35		14.3	-5	431	784
55	0 -0.3	44		18	-5	588	1100
57		46	0 -0.4	20	-5	657	1200
61		46		22	-7	814	1570
70		53		27	-7	1230	2350
80		61		30.5	-9	1400	2750
112		82		38	-9	1560	3140
123		89		43	-9	2490	5490
135		99	0 -0.4	49	-13	2650	6270
154	-0.4	121	-0.4	57	-13	3430	8040
192		148		76.5	-13	6080	15900
211		170		86.5	-16	7650	20000

1N=0.102kgf



Flange linear bearing series
LMF...UU LMK...UU
LMH...UU



LMF...UU

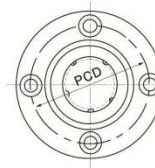


LMK...UU

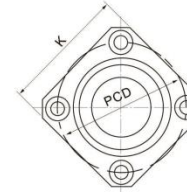


LMH...UU

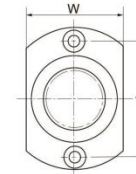
Flange linear bearing series
LMF...UU LMK...UU
LMH...UU



LMF...UU



LMK...UU



LMH...UU

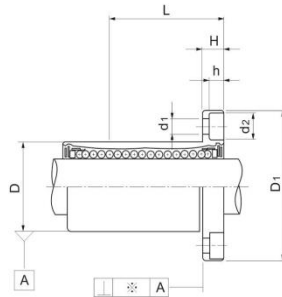
Round	Squareness	Oval	No. of ball rows	★ (gf)	Radial (max) (μm)	Basic Load Rating		Dr (mm)	ID (μm)
						C (N)	Co (N)		
LMF 6UU	LMK 6UU	LMH6UU	4	26.5	-5	200	260	6	
LMF 8UU	LMK 8UU	-	4	34	-5	170	220	8	
LMF 8UU	LMK 8UU	LMH8UU	4	40	-5	260	400	8	
LMF 10UU	LMK 10UU	LMH10UU	4	78	-5	370	540	10	⁰ / ₋₉
LMF 12UU	LMK 12UU	LMH12UU	4	76	-5	410	590	12	
LMF 13UU	LMK 13UU	LMH13UU	4	94	-7	500	770	13	
LMF 16UU	LMK 16UU	LMH16UU	5	134	-7	770	1170	16	
LMF 20UU	LMK 20UU	LMH20UU	5	180	-9	860	1370	20	
LMF 25UU	LMK 25UU	LMH25UU	6	340	-9	980	1560	25	⁰ / ₋₁₀
LMF 30UU	LMK 30UU	LMH30UU	6	460	-9	1560	2740	30	
LMF 35UU	LMK 35UU	-	6	795	-13	1660	3130	35	
LMF 40UU	LMK 40UU	-	6	1054	-13	2150	4010	40	⁰ / ₋₁₂
LMF 50UU	LMK 50UU	-	6	2200	-13	3820	7950	50	
LMF 60UU	LMK 60UU	-	6	2960	-16	4700	9990	60	⁰ / ₋₁₅
LMF 80UU	LMK 80UU	-	6	5800	-20	7350	16000	80	
LMF 100UU	LMK 100UU	-	6	10600	-30	14100	34800	100	⁰ / ₋₂₀

1N=0.102kgf

		Dimensions (mm)										Type	
	D	D ₁		H	PCD	K	W	A	F	Verticality (μm)	d ₁ × d ₂ × h		
(mm)	(μm)	(mm)	(μm)	(mm)	(μm)								
12		19		28	5	20	22	18	20	-	12	3.4×6.5×3.3	LMF/K/H6UU
15	⁰ / ₋₁₁	17		32	5	24	25	-	-	-	12	3.4×6.5×3.3	LMF/K/H8SUU
15		24		32	5	24	25	21	24	-	12	3.4×6.5×3.3	LMF/K/H8UU
19		29		40	6	29	30	25	29	-	12	4.5×8×4.4	LMF/K/H10UU
21	⁰ / ₋₁₃	30	⁰ / _{-0.2}	42	6	32	32	27	32	-	12	4.5×8×4.4	LMF/K/H12UU
23		32		43	6	33	34	29	33	-	12	4.5×8×4.4	LMF/K/H13UU
28		37		48	6	38	37	34	31	22	12	4.5×8×4.4	LMF/K/H16UU
32		42		54	8	43	42	38	36	24	15	5.5×9.5×5.4	LMF/K/H20UU
40	⁰ / ₋₁₆	59		62	8	51	50	46	40	32	15	5.5×9.5×5.4	LMF/K/H25UU
45		64		74	10	60	58	51	49	35	15	6.6×11×6.5	LMF/K/H30UU
52		70	⁰ / _{-0.3}	82	10	67	64	-	-	-	20	6.6×11×6.5	LMF/K/H35UU
60	⁰ / ₋₁₉	80		96	13	78	75	-	-	-	20	9×14×8.6	LMF/K/H40UU
80		100		116	13	98	92	-	-	-	20	9×14×8.6	LMF/K/H50UU
90	⁰ / ₋₂₂	110	⁰ / _{-0.3}	134	18	112	106	-	-	-	25	11×17.5×10.8	LMF/K/H60UU
120	⁰ / ₋₂₅	140	⁰ / ₋₃₀₀	164	18	142	136	-	-	-	30	11×17×11.1	LMF/K/H80UU
150	⁰ / ₋₂₉	175	⁰ / _{-0.5}	200	20	175	170	-	-	-	40	14×20×13.1	LMF/K/H100UU



Flange long type linear bearing series
LMF...LUU LMK...LUU
LMH...LUU



Flange long type linear bearing series
LMF...LUU LMK...LUU
LMH...LUU



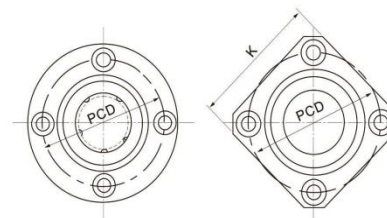
LMF...LUU



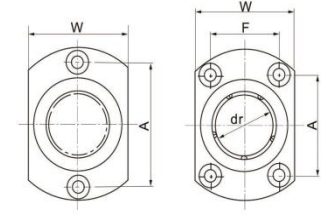
LMK...LUU



LMH...LUU



LMK...LUU



LMH...LUU

Type			No. of ball rows	Weight (gf)	Radial (max) (μm)	Basic Load rating			ID (μm)
R.F.L	Q.F.L	O.F.L				C (N)	Co (N)	Dr (mm)	
LMF 6LUU	LMK 6LUU	LMH 6LUU	4	31	-3	320	520	6	
LMF 8LUU	LMK 8LUU	LMH 8LUU	4	51	-3	430	780	8	
LMF 10LUU	LMK 10LUU	LMH 10LUU	4	98	-4	580	1100	10	
LMF 12LUU	LMK 12LUU	LMH 12LUU	4	110	-4	650	1200	12	0
LMF 13LUU	LMK 13LUU	LMH 13LUU	4	130	-4	810	1570	13	-10
LMF 16LUU	LMK 16LUU	LMH 16LUU	4	190	-6	1230	2350	16	
LMF 20LUU	LMK 20LUU	LMH 20LUU	5	260	-6	1400	2750	20	
LMF 25LUU	LMK 25LUU	LMH 25LUU	5	540	-6	1560	3140	25	
LMF 30LUU	LMK 30LUU	LMH 30LUU	6	680	-8	2490	5490	30	0
LMF 35LUU	LMK 35LUU	-	6	1020	-8	2650	6470	35	-12
LMF 40LUU	LMK 40LUU	-	6	1570	-10	3430	8040	40	0
LMF 50LUU	LMK 50LUU	-	6	3600	-13	6080	15900	50	-15
LMF 60LUU	LMK 60LUU	-	6	4500	-13	7650	20000	60	0

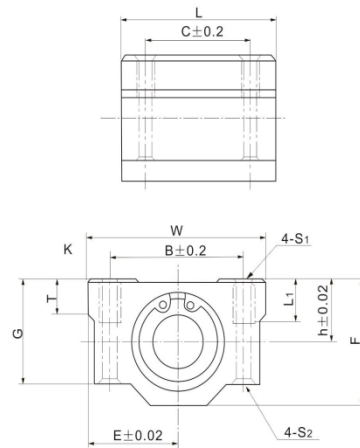
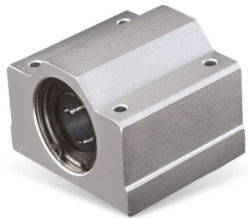
Note: Choose nickelge also
 ★: Standard data

1N=0.102kgf

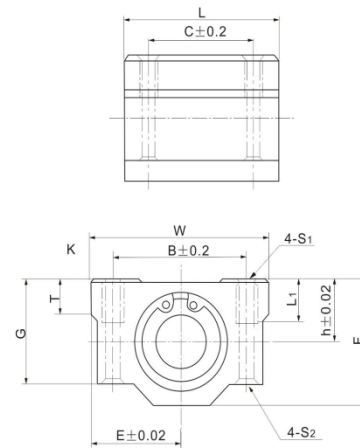
Dimensions (mm)														Type
(mm)	D (μm)	(mm)	L (μm)	D1 (mm)	(μm)	H	PCD	K	W	A	F	Vertically (μm)	d1 × d2 × h	
12		35		28		5	20	22	18	20	-	15	3.4×6.5×3.3	LMF/K/H6LUU
15	0 -13	45		32		5	24	25	21	24	-	15	3.4×6.5×3.3	LMF/K/H8LUU
19		55		40		6	29	30	25	29	-	15	4.5×8×4.4	LMF/K/H10LUU
21		57		42		6	32	32	27	32	-	15	4.5×8×4.4	LMF/K/H12LUU
23	0 -16	61	0 -0.2	43		6	33	34	29	33	-	15	4.5×8×4.4	LMF/K/H13LUU
28		70		48	0 -0.200	6	38	37	34	31	22	15	4.5×8×4.4	LMF/K/H16LUU
32		80		54		8	43	42	38	36	24	20	5.5×9.5×5.4	LMF/K/H20LUU
40	0	112		62		8	51	50	46	40	32	20	5.5×9.5×5.4	LMF/K/H25LUU
45	0 -19	123		74		10	60	58	51	49	35	20	6.6×11×6.5	LMF/K/H30LUU
52	0	135		82		10	67	64	-	-	-	25	6.6×11×6.5	LMF/K/H35LUU
60	0 -22	151	0	96		13	78	75	-	-	-	25	9×14×8.6	LMF/K/H40LUU
80	0	192	0 -0.3	116	0 -0.300	13	98	92	-	-	-	25	9×14×8.6	LMF/K/H50LUU
90	0 -25	209		134		18	112	106	-	-	-	25	11×17.5×10.8	LMF/K/H60LUU



Linear motion ball slide units series
SCS...UU



Linear motion ball slide units series
SCS...LUU



Unit Designation	T	h	E	W	L	F	G	B	C	K	S1	S2	L1	Designation	Slide bush		Weight (g)
															Basic load rating		
															dynamic CoN	static CoN	
SCS6UU	6	9	15	30	25	18	15	20	15	5	M4	3.4	8	LM6 UU	206	265	34
SCS8UU	6	11	17	34	30	22	18	24	18	5	M4	3.4	8	LM8 UU	274	392	52
SCS10UU	8	13	20	40	35	26	21	28	21	6	M5	4.3	12	LM10 UU	372	549	92
SCS12UU	8	15	21	42	36	28	24	30.5	26	5.75	M5	4.3	12	LM12 UU	510	784	102
SCS13UU	8	15	22	44	39	30	24.5	33	26	5.5	M5	4.3	12	LM13 UU	510	784	120
SCS16UU	9	19	25	50	44	38.5	32.5	36	34	7	M5	4.3	12	LM16 UU	774	1180	200
SCS20UU	11	21	27	54	50	41	35	40	40	7	M6	5.2	12	LM20 UU	882	1370	255
SCS25UU	12	26	38	76	67	51.5	42	54	50	11	M8	7	18	LM25 UU	980	1570	600
SCS30UU	15	30	39	78	72	59.5	49	58	58	10	M8	7	18	LM30 UU	1570	2740	735
SCS35UU	18	34	45	90	80	68	54	70	60	10	M8	7	18	LM35 UU	1670	3140	1100
SCS40UU	20	40	51	102	90	78	62	80	60	11	M10	8.7	25	LM40 UU	2160	4020	1590
SCS50UU	25	52	61	122	110	102	80	100	80	11	M10	8.7	25	LM50 UU	3820	7940	3340
SCS60UU	30	58	66	132	122	114	94	108	90	12	M10	10.7	25	LM60 UU	4700	10000	4270

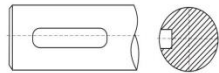
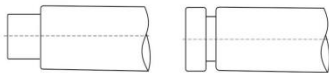
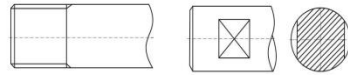
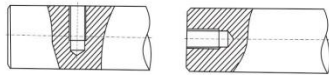
Unit Designation	T	h	E	W	L	F	G	B	C	K	S1	S2	L1	Designation	Slide bush		Weight (g)
															Basic load rating		
															dynamic CoN	static CoN	
SCS8LUU	6	11	17	34	58	22	18	24	42	5	M4	3.4	8	LM8UU×2	274	392	0.1
SCS10LUU	8	13	20	40	68	26	21	28	45	6	M5	4.3	12	LM10UU×2	372	549	0.18
SCS12LUU	8	15	21	42	70	28	24	30.5	50	5.75	M5	4.3	12	LM12UU×2	510	784	0.20
SCS13LUU	8	15	22	44	75	30	24.5	33	50	5.5	M5	4.3	12	LM13UU×2	510	784	0.23
SCS16LUU	9	19	25	50	85	38.5	32.5	36	60	7	M5	4.3	12	LM16UU×2	774	1180	0.39
SCS20LUU	11	21	27	54	96	41	35	40	70	7	M6	5.2	12	LM20UU×2	882	1370	0.49
SCS25LUU	12	26	38	76	130	51.5	42	54	100	11	M8	7	18	LM25UU×2	980	1570	1.165
SCS30LUU	15	30	39	78	140	59.5	49	58	110	10	M8	7	18	LM30UU×2	1570	2740	1.43
SCS35LUU	18	34	45	90	155	68	54	70	120	10	M8	7	18	LM35UU×2	1670	3140	2.13
SCS40LUU	20	40	51	102	175	78	62	80	140	11	M10	8.7	25	LM40UU×2	2160	4020	3.09
SCS50LUU	25	52	61	122	215	102	80	100	160	11	M10	8.7	25	LM50UU×2	3820	7940	6.53
SCS60LUU	30	58	66	132	240	114	94	108	180	12	M12	10.7	25	LM60UU×2	4700	10000	9.29



Linear Shaft.....

AXIS DIMENSIONS

- Material: GCR15...S45[#]
- Hardness: HRC62+2 (SUS45[#] : HRC58)
- Surface Hard-thickness : 0.8~2.5mm
- Surface roughness:0.8S~1.6S
- Straightness : 80 μ m/1000mm
- Roundness: (Not over)3.0 μ m(Rmax)

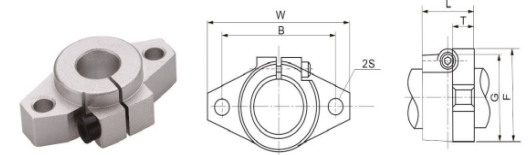
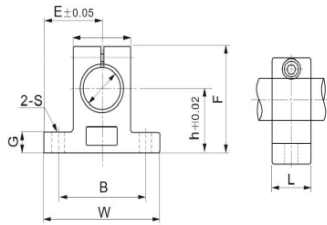


D (mm)	Shaft (G6)		Dimensions (mm)												Weight		
	(μ m)		100	200	300	400	500	600	700	800	1000	1200	1300	1500		2000	
φ3	-0.003		○	○	○	○	○	○	○	○	○	○	○	○	○	○	0.06
φ4	-0.01		○	○	○	○	○	○	○	○	○	○	○	○	○	○	0.1
φ5			○	○	○	○	○	○	○	○	○	○	○	○	○	○	0.15
φ6	-0.004		○	○	○	○	○	○	○	○	○	○	○	○	○	○	0.23
φ8	-0.012		○	○	○	○	○	○	○	○	○	○	○	○	○	○	0.4
φ10	-0.005		○	○	○	○	○	○	○	○	○	○	○	○	○	○	0.62
φ12	-0.014		○	○	○	○	○	○	○	○	○	○	○	○	○	○	0.89
φ13			○	○	○	○	○	○	○	○	○	○	○	○	○	○	1.04
φ14	-0.006		○	○	○	○	○	○	○	○	○	○	○	○	○	○	1.22
φ15	-0.017		○	○	○	○	○	○	○	○	○	○	○	○	○	○	1.4
φ16			-	○	○	○	○	○	○	○	○	○	○	○	○	○	1.58
φ17			-	○	○	○	○	○	○	○	○	○	○	○	○	○	1.8
φ20			-	○	○	○	○	○	○	○	○	○	○	○	○	○	2.47
φ25	-0.007		-	○	○	○	○	○	○	○	○	○	○	○	○	○	3.85
φ30	-0.020		-	○	○	○	○	○	○	○	○	○	○	○	○	○	5.55
φ35			-	-	○	○	○	○	○	○	○	○	○	○	○	○	7.55
φ40	-0.009		-	-	-	-	○	○	○	○	○	○	○	○	○	○	9.87
φ45	-0.025		-	-	-	-	○	○	○	○	○	○	○	○	○	○	12.5
φ50			-	-	-	-	○	○	○	○	○	○	○	○	○	○	15.5
φ60	-0.010		-	-	-	-	-	-	-	○	○	○	○	○	○	○	22.2
φ80	-0.029		-	-	-	-	-	-	-	-	○	○	○	○	○	○	39.6





Linear motion ball slide units series SH...A SHF...



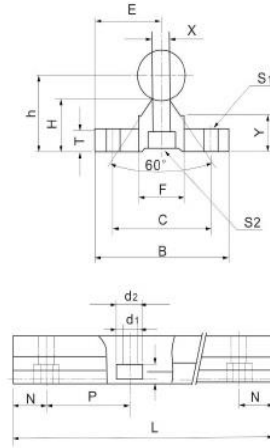
Support Designation	Shaft Dimensions	Dimensions (mm)								Locking Bolt	Clamping Bolt	Weight (g)
		h	E	W	F	G	P	B	S			
SH8A	8	20	21	42	32.8	6	18	32	5.5	M4	M5	24
SH10A	10	20	21	42	32.8	6	18	32	5.5	M4	M5	24
SH12A	12	23	21	42	38	6	20	32	5.5	M4	M5	30
SH13A	13	23	21	42	38	6	20	32	5.5	M4	M5	30
SH16A	16	27	24	48	44	8	25	38	5.5	M4	M5	40
SH20A	20	31	30	60	51	10	30	45	6.6	M5	M6	70
SH25A	25	35	35	70	60	12	38	56	6.6	M6	M6	130
SH30A	30	42	42	84	70	12	44	64	9	M6	M8	180
SH35A	35	50	49	98	85	15	50	74	11	M8	M10	270
SH40A	40	60	57	114	96	15	60	90	11	M8	M10	420
SH50A	50	70	63	126	120	18	74	100	14	M12	M12	750
SH60A	60	80	74	148	136	18	90	120	14	M12	M12	1100

◆SHF

Bearings number	Shaft diametre	Dimensions (mm)								Locking bolt	Clamping bolt	Weight (g)
		W	L	T	F	G	B	S				
SHF10	10	43	10	5	24	20	32	5.5	M4	M5	13	
SHF12	12	47	13	7	28	25	36	5.5	M4	M5	20	
SHF13	13	47	13	7	28	25	36	5.5	M4	M5	20	
SHF16	16	50	16	8	31	28	40	5.5	M4	M5	27	
SHF20	20	60	20	8	37	34	48	7	M5	M6	40	
SHF25	25	70	25	10	42	40	56	7	M5	M6	60	
SHF30	30	80	30	12	50	46	64	9	M6	M8	110	
SHF35	35	92	35	14	58	50	72	12	M8	M10	380	
SHF40	40	102	40	16	67	56	80	12	M10	M10	510	
SHF50	50	122	50	19	83	70	96	14	M12	M12	890	
SHF60	60	140	60	23	95	82	112	14	M12	M12	1500	



Linear motion ball slide units series
SBR...

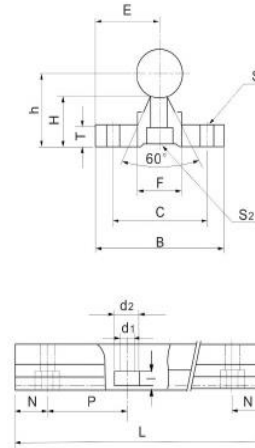


Support Designation	Shaft Dimensions	Dimensions (mm)										S2 d1×d2×l	Weight (g/m)
		E	h	B	H	T	F	X	Y	C	S1		
SBR12	φ12	15	22.5	30	16.5	4	12	6	12	22	φ4.5	4.5×8×4.5	0.8
SBR16	φ16	20	25	40	17.8	5	18.5	8	11.7	30	φ5.5	5.5×9.5×5.4	1.00
SBR20	φ20	22.5	27	45	17.7	5	19	8	10	30	φ5.5	5.5×9.5×5.4	1.07
SBR25	φ25	27.5	33	55	21	6	21.5	8	12	35	φ6.6	6.6×11×6.5	1.50
SBR30	φ30	30	37	60	22.8	7	26.5	10.3	13	40	φ6.6	6.6×11×6.5	1.90
SBR35	φ35	32.5	43	65	26.5	8	28	13	15.5	45	φ9	9×14×8.6	2.45
SBR40	φ40	37.5	48	75	29.5	9	38	15.5	17	55	φ9	9×14×8.6	3.25
SBR50	φ50	47.5	62	95	38.8	11	45	20	21	70	φ11	11×17.5×10.8	5.26

Support Rail Stand Lengths and Dimensions

Designation	SBR 16	SBR 20	SBR 25	SBR 30	SBR 35	SBR 40	SBR 50
Standard Length L	190	340	250	450	460	460	470
	340	640	450	850	660	660	670
	640	940	850	1250	860	860	870
	940	1240	1250	1450	1060	1060	1270
N	20	20	25	25	30	30	35
P	150	150	200	200	200	200	200
Max.length	6000	6000	6000	1850	6000	6000	6000

Linear motion ball slide units series
TBR...



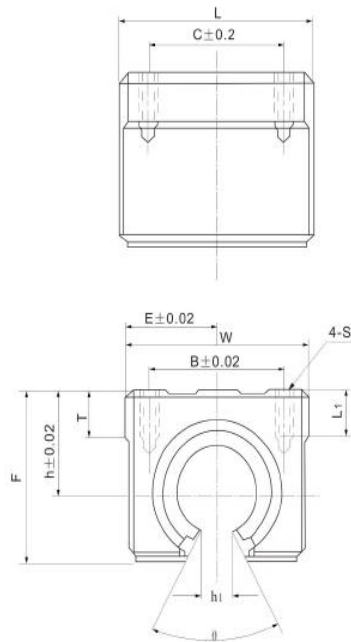
Support Designation	Shaft Dimensions	Dimensions (mm)										S2 d1×d2×l	Weight (g/m)
		E	h	B	H	T	F	C	S1				
TBR16	φ16	25	22.14	50	14.96	6	18.71	37	φ5.5	5.5×9.5×5.4	1.10		
TBR20	φ20	27.5	29.01	55	19.37	8	18.96	40	φ5.5	5.5×9.5×5.4	1.80		
TBR25	φ25	32.5	31.97	65	20.14	10	20	45	φ6.6	6.6×11×6.5	2.05		
TBR30	φ30	37.5	36.52	75	22.45	12	22.96	55	φ6.6	6.6×11×6.5	2.80		

Support Rail Stand Lengths and Dimensions

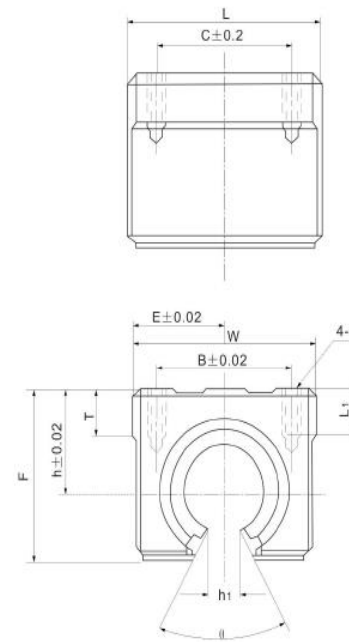
Designation	TBR 16	TBR 20	TBR 25	TBR 30
Standard Length L	190	340	250	450
	340	640	450	850
	640	940	850	1250
	940	1240	1250	1450
N	20	20	25	25
P	150	150	200	200
Max.length	6000	6000	6000	6000



Linear motion ball slide units series
SBR...UU



Linear motion ball slide units series
SBR...LUU

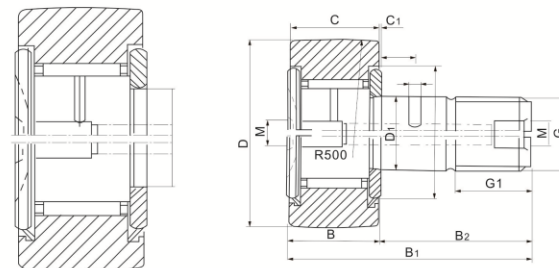


Unit Designation	Dimensions (mm)												Slide bush			Weight (g)
	h	E	W	L	F	h ₁	θ	B	C	S	L ₁	T	Designation	Basic load rating		
														dynamic CN	static CON	
SBR10UU	15	18	36	32	24	6	80°	25	20	M5	10	7	LM10UU-OP	350	500	63
SBR12UU	15	18	40	39	24	6	80°	28	20	M5	10	7	LM12UU-OP	372	549	65
SBR13UU	17	20	40	39	27.6	8.5	80°	28	28	M5	10	8	LM13UU-OP	510	784	100
SBR16UU	20	22.5	45	45	33	10	80°	32	30	M5	12	9	LM16UU-OP	774	1180	150
SBR20UU	23	24	48	50	39	10	60°	35	35	M6	12	11	LM20UU-OP	882	1370	200
SBR25UU	27	30	60	65	47	11.5	50°	40	40	M6	12	14	LM25UU-OP	980	1570	450
SBR30UU	33	35	70	70	56	14	50°	50	50	M8	18	15	LM30UU-OP	1570	2740	630
SBR35UU	37	40	80	80	63	16	50°	55	55	M8	18	18	LM35UU-OP	1670	3140	925
SBR40UU	42	45	90	90	72	19	50°	65	65	M10	20	20	LM40UU-OP	2160	4020	1330
SBR50UU	53	60	120	110	92	23	50°	94	80	M10	20	25	LM50UU-OP	3820	7940	3000

Unit Designation	Dimensions (mm)												Slide bush			Weight (g)
	h	E	W	L	F	h ₁	θ	B	C	S	L ₁	T	Designation	Basic load rating		
														dynamic CN	static CON	
SBR16LUU	20	22.5	45	85	33	10	80°	32	60	M5	12	9	LM16UU-OP×2	1548	2360	300
SBR20LUU	23	24	48	96	39	10	60°	35	70	M6	12	11	LM20UU-OP×2	1764	2740	400
SBR25LUU	27	30	60	130	47	11.5	50°	40	100	M6	12	14	LM25UU-OP×2	1960	3140	900
SBR30LUU	33	35	70	140	56	14	50°	50	110	M8	18	15	LM30UU-OP×2	3140	5480	1260
SBR40LUU	42	45	90	175	72	19	50°	65	140	M10	20	20	LM40UU-OP×2	4320	8040	2660
SBR50LUU	53	60	120	215	92	23	50°	94	160	M10	160	20	LM50UU-OP×2	7640	15880	6000



wheel and pin bearing series



Bearings number	Dimensions(mm)											
	D*	C	D ₁	G	G ₁	B max	B ₁ max	B ₂	B ₃	C ₁	rs min	
KR13	KRV13	13	9	5	M5×0.8	7	10	23	13		0.5	0.3
KR16	KRV16	16	11	6	M6×1	8	12.2	28.2	16		0.6	0.3
KR19	KRV19	19	11	8	M8×1.25	10	12.2	32.2	20		0.6	0.3
KR22	KRV22	22	12	10	M10×1.25	12	13.2	36.2	23		0.6	0.3
KR26	KRV26	26	12	10	M10×1.25	12	13.2	36.2	23		0.6	0.3
KR30	KRV30	30	14	12	M12×1.5	13	15.2	40.2	25	6	0.6	0.6
KR32	KRV32	32	14	12	M12×1.5	13	15.2	40.2	25	6	0.6	0.6
KR35	KRV35	35	18	16	M16×1.5	17	19.6	52.1	32.5	8	0.8	0.6
KR40	KRV40	40	20	18	M18×1.5	19	21.6	58.2	36.5	8	0.8	1
KR47	KRV47	47	24	20	M20×1.5	21	25.6	66.1	40.5	9	0.8	1
KR52	KRV52	52	24	20	M20×1.5	21	25.6	66.1	40.5	9	0.8	1
KR62	KRV62	62	29	24	M24×1.5	25	30.6	80.1	49.5	11	0.8	1
KR72	KRV72	72	29	24	M24×1.5	25	30.6	80.1	49.5	11	0.8	1
KR80	KRV80	80	35	30	M30×1.5	32	37	100	63	15	1	1
KR85	KRV85	85	35	30	M30×1.5	32	37	100	63	15	1	1
KR90	KRV90	90	35	30	M30×1.5	32	37	100	63	15	1	1

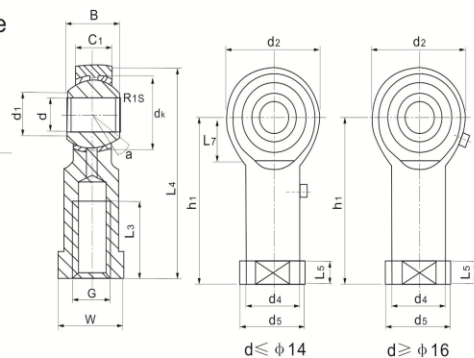
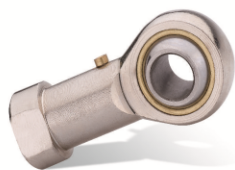
●Note:when bearing of series KR,KRV with eccentric, then designation of bearing KRE,KRVE.

Eccentric (e)	Load ratings		Limits of speed (rpm)	Weight (g)	old designation		Designation
	Dynamic C	Static C ₀					
0.25	280	180	29000	16	NAKD13	NAKD13V	CF5
0.25	270	170	25000	18	NAKD16	NAKD16V	CF6
0.25	300	210	20000	28	NAKD19	NAKD19V	CF8
0.3	410	320	17000	44	NAKD22	NAKD22V	CF10
0.3	410	320	17000	58	NAKD26	NAKD26V	CF10-1
0.3	590	450	14000	87	NAKD30	NAKD30V	CF12
0.3	590	450	14000	90	NAKD32	NAKD32V	CF12-1
0.35	850	760	10000	169	NAKD35	NAKD35V	CF16
0.35	1180	1220	8500	247	NAKD40	NAKD40V	CF18
0.35	1630	1690	7000	386	NAKD47	NAKD47V	CF20-1
0.35	1630	1690	7000	461	NAKD52	NAKD52V	CF20
0.4	2160	2210	6500	790	NAKD62	NAKD62V	CF24
0.4	2160	2210	6500	1040	NAKD72	NAKD72V	CF24-1
0.5	2830	3700	5000	1550	NAKD80	NAKD80V	CF30
0.5	2830	3700	5000	1740	NAKD85	NAKD85V	CF30-1
0.5	2830	3700	5000	1950	NAKD90	NAKD90V	CF30-2

●Note:*outersurface an be cylinder of spherical.**Limits of chamfer depend on the design.



Inlaid line rod ends with female thread series PHS...



PART NO	Dimensions													KN Load Ratings		Weight ≈kg		
	d H7	B	dk	C1 max	d2 max	G 6H	h1	L3 min	L4 max	L5	W	d4	d5	R1S	a [≈]		dyn. C	stat. C0
PHS5	5	8	11.11	6	16	M5×0.8	27	10	35	4	9	8.5	11	0.3	13	3.25	5.7	0.016
PHS6	6	9	12.7	6.675	18	M6×1.0	30	12	39	5	11	10	13	0.3	13	4.3	7.2	0.022
PHS8	8	12	15.875	9	22	M8×1.25	36	16	47	5	14	12.5	16	0.3	14	7.2	11.6	0.047
PHS10	10	14	19.05	10.5	26	M10×1.5	43	20	56	6.5	17	15	19	0.3	13	10	14.5	0.077
PHS10-1	10	14	19.05	10.5	26	M10×1.25	43	20	56	6.5	17	15	19	0.3	13	10	14.5	0.077
PHS12	12	16	22.225	12	30	M12×1.75	50	22	65	6.5	19	17.5	22	0.3	13	13.4	17	0.10
PHS12-1	12	16	22.225	12	30	M12×1.25	50	22	65	6.5	19	17.5	22	0.3	13	13	17	0.10
PHS14	14	19	25.4	13.5	34	M14×2.0	57	25	74	8	22	20	25	0.3	16	17	24	0.160
PHS14-1	14	19	25.4	13.5	34	M14×1.5	57	25	74	8	22	20	25	0.3	16	17	24	0.160
PHS16	16	21	28.575	15	40	M16×2.0	64	28	84	8	24	22	27	0.3	15	21.6	28.5	0.160
PHS16-1	16	21	28.575	15	40	M16×1.5	64	28	84	8	24	22	27	0.3	15	21.6	28.5	0.22
PHS18	18	23	31.75	16.5	44	M18×1.5	71	32	93	10	27	25	31	0.3	15	26	42.5	0.32
PHS20	20	25	34.925	18	50	M20×1.5	77	33	102	10	30	27.5	34	0.3	14	31.5	42.5	0.42
PHS22	22	28	38.1	20	54	M22×1.5	84	37	111	12	32	30	38	0.3	15	38	57	0.54
PHS25	25	31	42.85	22	60	M24×2	94	42	124	12	36	33.5	42	0.3	15	47.5	68	0.73
PHS28	28	35	47.60	24	66	M27×2	103	48	136	14	41	37	46	0.3	15	58	75	0.98
PHS30	30	37	50.8	25	70	M30×2	110	51	145	15	41	40	50	0.3	17	64	88	1.1
PHS30-1	30	37	50.8	25	70	M27×2	110	51	145	15	41	40	50	0.3	17	64	88	1.1

Dimensions in mm

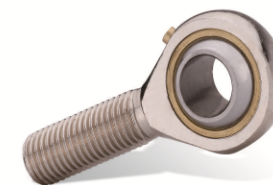
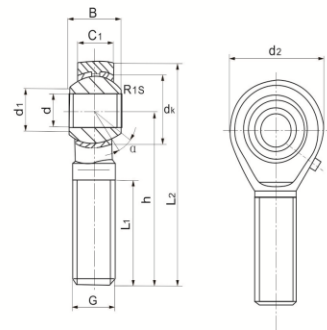
For left-hand thread, suffix "L" is added to bearing number and thread sign, e.g. PHS120 M20x1.5L—6H

Sliding contact surfaces: Steel / Bronze

Design and application features:

Rod end of steel and zinc coated, with male or female thread, spherical surface with bronze lining in bearing ring of carbon chromium steel, spherical surface with chromium plating; Can be lubricated via a nipple or a hole in the rod end. It has characteristics of large load capability, easy mounting and dismounting and mechanism simplification.

Inlaid line rod ends with male thread series POS...



PART NO	Dimensions													KN Load Ratings		Weight ≈kg
	d H7	B	dk	C1 max	d2 max	G 6H	h	L1 min	L2 max	min	a [≈]	dyn. C	stat. C0			
POS5	5	8	11.11	6	16	M5×0.8	33	20	41	0.3	13	3.25	5.7	0.013		
POS6	6	9	12.7	6.75	18	M6×1.0	36	22	45	0.3	13	4.3	7.2	0.020		
POS8	8	12	15.875	9	22	M8×1.25	42	25	53	0.3	14	7.2	11.6	0.030		
POS10	10	14	19.05	10.5	26	M10×1.5	48	29	61	0.3	13	10	14.5	0.055		
POS12	12	16	22.225	12	30	M12×1.75	54	33	69	0.3	13	13.4	17	0.085		
POS14	14	19	25.4	13.5	34	M14×2.0	60	36	77	0.3	16	17	24	0.14		
POS16	16	21	28.575	15	40	M16×2.0	66	40	86	0.3	15	21.6	28.5	0.21		
POS18	18	23	31.75	16.5	44	M18×1.5	72	44	94	0.3	15	26	42.5	0.28		
POS20	20	25	34.925	18	50	M20×1.5	78	47	103	0.3	14	31.5	52.5	0.38		
POS22	22	28	38.1	20	54	M22×1.5	84	51	111	0.3	15	38	57	0.48		
POS25	25	31	42.85	22	60	M24×2	94	57	124	0.3	15	47.5	68	0.64		
POS28	28	35	47.6	24	66	M27×2	103	62	136	0.3	15	58	75.5	0.96		
POS30	30	37	50.8	25	70	M30×2	110	66	145	0.3	17	64	88	1.1		

Dimensions in mm

For left-hand thread, suffix "L" is added to bearing number and thread sign, e.g. POS120

Sliding contact surfaces: steel / Bronze

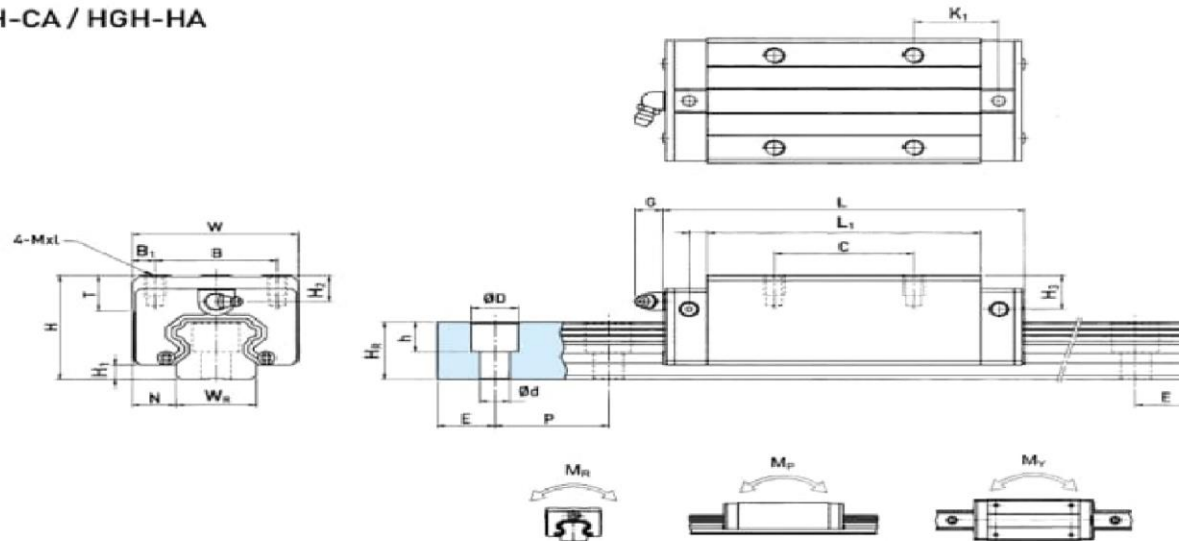
Design and application features:

Rod end of steel and zinc coated, with male or female thread, spherical surface with bronze lining; inner race of carbon chromium steel, spherical surface with chromium plating; Can be lubricated via a nipple or a hole in the rod end. It has characteristics of large load capability, easy mounting and dismounting and mechanism simplification.



Dimensions for HG Series Linear Guideways

HGH-CA / HGH-HA



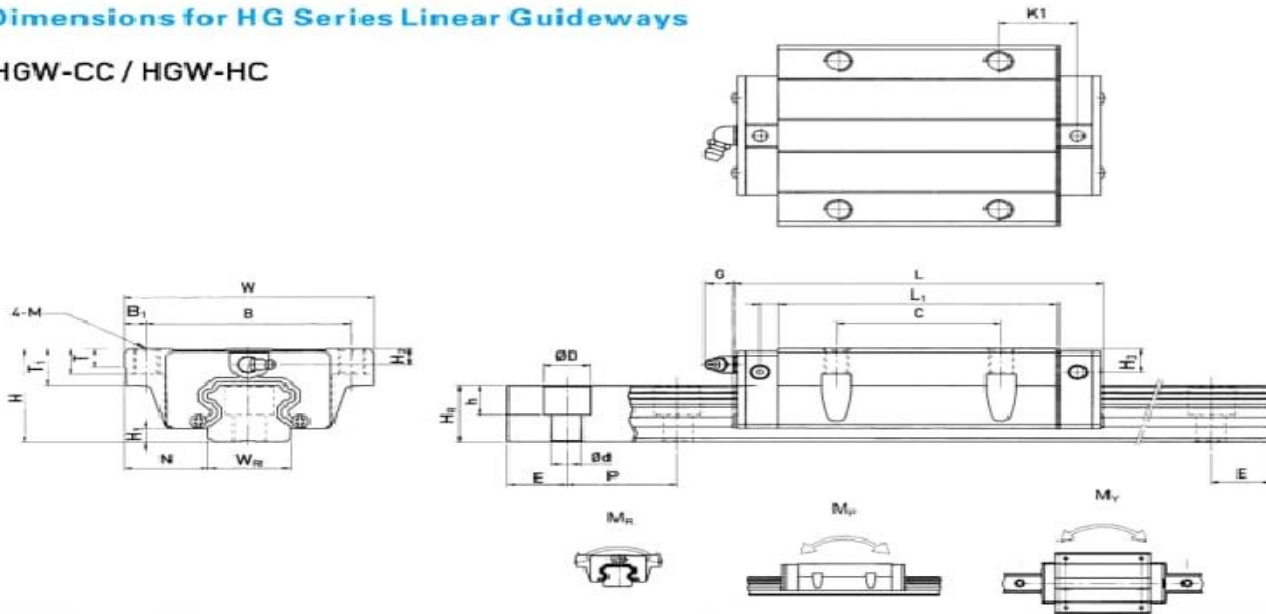
Model No.	Dimensions of Assembly (mm)			Dimensions of Block (mm)										Dimensions of Rail (mm)					Mounting Bolt for Rail	Basic Dynamic Load Rating	Basic Static Load Rating	Static Rated Moment (kgf.m)			Weight					
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	G	Mxl	T	H ₂	H ₃	W _R	H _R	D				h	d	P	E	[mm]	C ₁ (kN)	C ₂ (kN)	M _x kN-m	M _y kN-m
HGH 15CA	28	4.3	9.5	34	24	4	26	39.4	61.4	10	5.3	M4x5	6	7.95	7.7	15	15	7.5	5.3	4.5	60	20	M4x16	11.38	16.97	0.12	0.10	0.10	0.18	1.45
HGH 20CA	30	4.6	12	44	32	6	34	50.5	77.5	12.25	12	M5x6	8	6	6	20	17.5	9.5	8.5	6	60	20	M5x16	17.75	27.76	0.27	0.20	0.20	0.30	2.21
HGH 20HA							50	65.2	92.2	12.6														21.18	35.9	0.35	0.35	0.35	0.39	
HGH 25CA	40	5.5	12.5	48	35	6.5	35	58	84	15.7	12	M6x8	8	10	9	23	22	11	9	7	60	20	M6x20	26.68	36.49	0.42	0.33	0.33	0.51	3.21
HGH 25HA							50	78.6	104.6	18.5														32.75	49.44	0.56	0.57	0.57	0.69	
HGH 30CA	45	6	16	60	40	10	40	70	97.4	20.25	12	M8x10	8.5	9.5	13.8	28	26	14	12	9	80	20	M8x25	38.74	52.19	0.66	0.53	0.53	0.88	4.47
HGH 30HA							60	93	120.4	21.75														47.27	69.16	0.88	0.92	0.92	1.16	
HGH 35CA	55	7.5	18	70	50	10	50	80	112.4	20.6	12	M8x12	10.2	16	19.6	34	29	14	12	9	80	20	M8x25	49.52	69.16	1.16	0.81	0.81	1.45	6.30
HGH 35HA							72	105.8	138.2	22.5														60.21	91.63	1.56	1.40	1.40	1.92	
HGH 45CA	70	9.5	20.5	86	60	13	60	97	139.4	23	12.9	M10x17	14	18.5	30.5	45	38	20	17	14	105	22.5	M12x35	77.57	102.71	1.98	1.56	1.55	2.73	10.41
HGH 45HA							80	128.8	171.2	28.9														94.54	136.46	2.63	2.68	2.68	3.61	
HGH 55CA	80	13	23.5	100	75	12.5	75	117.7	166.7	27.35	12.9	M12x18	17.5	22	29	53	44	23	28	16	120	30	M14x45	114.44	148.33	3.69	2.64	2.64	4.17	15.08
HGH 55HA							95	155.8	204.8	36.4														139.35	196.2	4.88	4.57	4.57	5.49	
HGH 65CA	90	15	31.5	126	76	25	70	144.2	200.2	43.1	12.9	M16x20	25	15	15	63	53	26	22	18	150	35	M16x50	163.63	215.33	6.45	4.27	4.27	7.00	21.18
HGH 65HA							120	203.6	259.6	47.8														208.36	303.13	9.38	7.38	7.38	9.82	

注 : 1kgf=9.81N



Dimensions for HG Series Linear Guideways

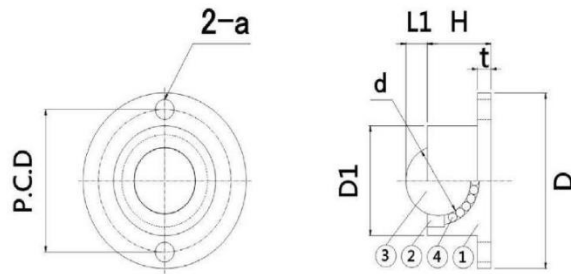
HGW-CC / HGW-HC



Model No.	Dimensions of Assembly (mm)		Dimensions of Block (mm)													Dimensions of Rail (mm)				Mounting Bolt for Rail (mm)	Basic Dynamic Load Rating C1 (kN)	Basic Static Load Rating C0 (kN)	Static Rated Moment (kgf.m)			Weight					
	H	H1	N	W	B	B1	C	L1	L	K1	G	M	T	T1	H2	H3	W4	H4	D				h	d	P	E	Mx	My	Mz	Block kg	Rail kg/m
HGW 15CC	24	4.3	16	47	38	4.5	30	39.4	61.4	8	5.3	M5	6	8.9	3.95	3.7	15	15	7.5	5.3	4.5	60	20	M4x16	11.38	16.97	0.12	0.10	0.10	0.17	1.45
HGW 20CC	30	4.6	21.5	63	53	5	40	50.5	77.5	10.25	12	M6	8	10	6	6	20	17.5	9.5	8.5	6	60	20	M5x16	17.75	27.76	0.27	0.20	0.20	0.40	2.21
HGW 20HC								65.2	92.2	17.6															21.18	35.9	0.35	0.35	0.35	0.52	
HGW 25CC	36	5.5	23.5	70	57	6.5	45	58	84	10.7	12	M8	8	14	6	5	23	22	11	9	7	60	20	M6x20	26.48	36.49	0.42	0.33	0.33	0.59	3.21
HGW 25HC								76.6	104.6	21															32.75	49.44	0.56	0.57	0.57	0.80	
HGW 30CC	42	6	31	90	72	9	52	70	97.4	14.25	12	M10	8.5	16	6.5	10.8	28	26	14	12	9	80	20	M8x25	38.74	52.19	0.66	0.53	0.53	1.09	4.47
HGW 30HC								93	120.4	25.75															47.27	69.16	0.88	0.92	0.92	1.44	
HGW 35CC	48	7.5	33	100	82	9	62	80	112.4	14.6	12	M10	10.1	18	9	12.6	34	29	14	12	9	80	20	M8x25	49.52	69.16	1.16	0.81	0.81	1.56	6.30
HGW 35HC								105.8	138.2	27.5															60.21	91.63	1.54	1.40	1.40	2.06	
HGW 45CC	60	9.5	37.5	120	100	10	80	97	139.4	13	12.9	M12	15.1	22	8.5	20.5	4.5	38	20	17	14	105	22.5	M12x35	77.57	102.71	1.98	1.55	1.55	2.79	10.41
HGW 45HC								128.8	171.2	28.9															94.54	136.46	2.63	2.68	2.68	3.69	
HGW 55CC	70	13	43.5	140	116	12	95	117.7	166.7	17.35	12.9	M14	17.5	26.5	12	19	53	44	23	20	16	120	30	M14x45	114.44	148.33	3.69	2.64	2.64	4.52	15.08
HGW 55HC								155.8	204.8	36.4															139.35	194.2	4.88	4.57	4.57	5.96	
HGW 65CC	90	15	53.5	170	142	14	110	144.2	200.2	23.1	12.9	M16	25	37.5	15	15	63	53	26	22	18	150	35	M16x50	163.63	215.33	6.65	4.27	4.27	9.17	21.18
HGW 65HC								203.6	259.6	52.8															208.36	303.13	9.38	7.38	7.38	12.89	



SMT-BCHF



(Materials)				
Type	[M]			
	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
SMT-BCHF	SUS304		SUS440C(HRC55~)	
SMT-BCHFJ	SUS304		POM	SUS304

(Specifications)									
Type	D	D1	L1	H	t	P.C.D	a	d	N(kgf)
SMT-BCHF SMT-BCHFJ	27	15	2.5	9.5	2	21	3.5	8.73	55(5.6)
	30	18	3.5	11.5	2	24	3.5	10.32	62(6.3)
	39	24	5.3	14.7	3	31.5	4.5	15.87	343(35)
	48	30	6.3	18.7	4	39	5.5	19.05	412(42)

QUALITY WITH ECONOMY