POETRY SPRINT COMPANY

The professional supplier of
Linear drive technology

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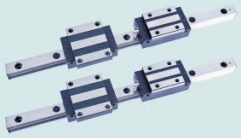
Linear guide series

linear guide is heavy load linear guide way designed by circular-arc groove and structure optimization are higher over 30% load capacity and rigidity than other similar ball type linear guideway.It features the same load in four directions (up/down/right/left) and self-aligning to absorb installation-error capability.

Ball screw rod series

Ball Screw is made of screw and ball nut. Its function is to turn the rotary motion into linear motion which is a future extension and development of ball screw. The significance of the development is to move into a rolling bearing from sliding action. With little frication, Ball Screw are widely used into various industrial equipment and precision instruments.

Ball join rod ends bearing series

rod end bearing, also known as a heim joint (N. America) or rose joint (U.K. and elsewhere), is a mechanical articulating joint. Such joints are used on the ends of control rods, steering links, tie rods, or anywhere a precision articulating joint is required. A ball swivel with an opening through which a bolt or other attaching hardware may pass is pressed into a circular casing with a threaded shaft attached. The threaded portion may be either male or female.

linear shaft series

Linear shaft is induction hardened, precision ground, and polished to the tolerances required by the demanding linear motion industry.

POETRY SPRINT COMPANY

Linear motion ball slide units series

Shaft Support Rails are designed to support the shafts on which open-type Linear Bushings run to prevent them from bending under load.Shaft Support Rails are delivered in ready-to-mount sections of high dimensional accuracy and are specially designed to give high rigidity.Their low overall height allows the construction of extra-compact linear motion assemblies.This is the sliding unit with the aluminum case, shafts and aluminum rail for preventing deflexion.

Linear bearing series

Linear bearings are bearing elements for translation type motion. As in the case of rotary bearings, a distinction is drawn as to whether the forces occurring are transmitted by means of rolling or sliding elements. Each linear design has particular characteristics that make it especially suitable for particular bearing arrangements.
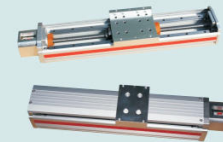
Rectangular coordinate robot

Rectangular coordinate robot are industrial applications, can achieve automatic control, repeatable programming, much work can, multivariant, into space right Angle relationship between the degrees of freedom of movement, multi-purpose manipulator. He was able to move transport objects, operating tools to complete all assignments.

Needle roller bearing

Cam Follower Bearings are also referred to as track follower. They are designed to follow a sliding or rotating piece (cam) and they use rollers or needles as the rolling elements. Cam Follower Bearings are therefore able to replicate a specific motion because they are highly versatile. They have thick-walled outer rings that run on a track. They are used to minimize distortion and bending stress while facilitating high load carrying capacity.Generally speaking, cam follower bearings are designed in different configurations and special structures can be designed according to the task requirements.

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Linear guide product model   ## Heavy duty ball linear slide rail

GRH 25 A 2 L1680 C0 P II

- GRH Series
- Size: 15,20,25,30,35,45,55,65
- A: Flange type
  R: Square
  LA: Lengthened flange
  LR: Square lengthening
- The number of sliders assembled by a single guide rail
- Length of guide rail (mm)
- Preloading: C0,C1,C2
- Precision: C,H,P
- Number of single guide rails[1]

DRH 25 A 2 L1680 C0 P II

- DRH Series
- Size: 15,20,25,30
- A: Flange type
  R: Square
- The number of sliders assembled by a single guide rail
- Length of guide rail (mm)
- Preloading: C0,C1,C2
- Precision: C,H,P
- Number of single guide rails[1]

XRW 12 R 2 R880 C0 P M II

- XRH, XRW Series
- Size: 7,9,12,15
- Load type
  R: standard
  LR: extend
- The number of sliders assembled by a single guide rail
- Length of guide rail (mm)
- Preloading: C0,C1,C2
- Precision: C,H,P
- Material of guide rail:
  M: stainless steel
  No mark: alloy steel
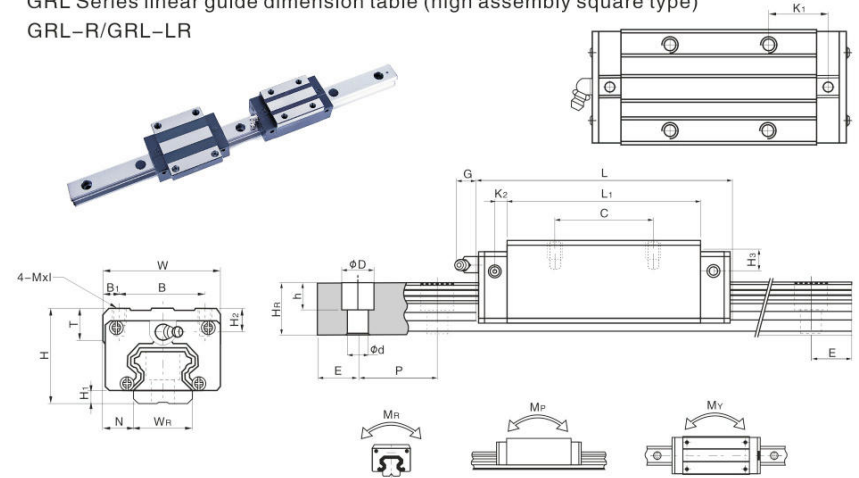- Number of single guide rails[1]

Note: 1. If only one guide rail is used, do not write down the number. Two guides are marked II, three guides are marked III, and so on.
2. No mark in the dust control equipment shall be equipped with oil scraper and dust control sheet for the dust control standard.
ZZ for the scraper and dust plate and metal scraper
KK for variable oil scraper plus dust flap plus metal scraper
DD is variable oil scraper and dust proof sheetU is XRH and XRW12. Dust flaps are optional for 15 specifications

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GRL Series linear guide rail

GRL Series linear guide dimension table (high assembly square type)
GRL–R/GRL–LR

Type	Component size (mm)						Slide size (mm)										Slippery course size (mm)							Size of retaining bolt for slide rail (mm)	Basic dynamic load rating C(KN)	Basic static load rating Co(KN)	Permissible static moment			Weight	
	H	H1	N	W	B	B1	C	L1	L	K1	K2	G	Mx1	T	H2	H3	WR	HR	D	h	d	P	E				MR (kN–m)	MP (kN–m)	MY (kN–m)	Slider kg	Slippery course kg/m
GRL15R	24	4.3	9.5	34	26	4	26	39.4	61.4	10	4.85	5.3	M4x4	6	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	0.14	1.45
GRL25R	36	5.5	12.5	48	35	6	35	58	84	16.8	6	12	M6x6	8	6	9	23	22	11	9	7	60	20	M6x20	26.48	36.49	0.42	0.33	0.33	0.42	3.21
GRL25LR							50	78.6	104.6	19.6															32.75	49.44	0.56	0.57	0.57	0.57	
GRL30R	42	6	16	60	40	10	40	70	97.4	20.25	6	12	M8x10	8.5	6.5	10.28	28	26	14	12	9	80	20	M8x25	38.74	52.19	0.66	0.53	0.53	0.78	4.47
GRL30LR							60	93	120.4	21.75															47.27	69.16	0.88	0.92	0.92	1.03	
GRL35R	48	7.5	18	70	50	10	50	80	112.4	20.6	7	12	M8x12	10.2	9	12.6	34	29	14	12	9	80	20	M8x25	49.52	69.16	1.16	0.81	0.81	1.14	6.30
GRL35LR							72	105.8	138.2	22.5															60.21	91.63	1.54	1.40	1.40	1.52	
GRL45R	60	9.5	20.5	86	60	13	60	97	139.4	23	10	12.9	M10x17	16	8.5	20.5	45	38	20	17	14	105	22.5	M12x35	77.57	102.71	1.98	1.55	1.55	2.08	10.41
GRL45LR							80	128.8	171.2	28.9															94.54	136.46	2.63	2.68	2.68	2.75	
GRL55R	70	13	23.5	100	75	12.5	75	117.7	166.7	27.35	11	12.9	M12x18	17.5	12	19	53	44	23	20	16	120	30	M14x45	114.44	148.33	3.69	2.64	2.64	3.25	15.08
GRL55LR							95	155.8	204.8	36.4															139.35	196.20	4.88	4.57	4.57	4.27	

注：1kgf=9.81 N

GRH Series linear guide rail

GRH Series linear guide dimension table (high assembly square type)
GRH-R/GRH-LR

注：1kgf=9.81 N

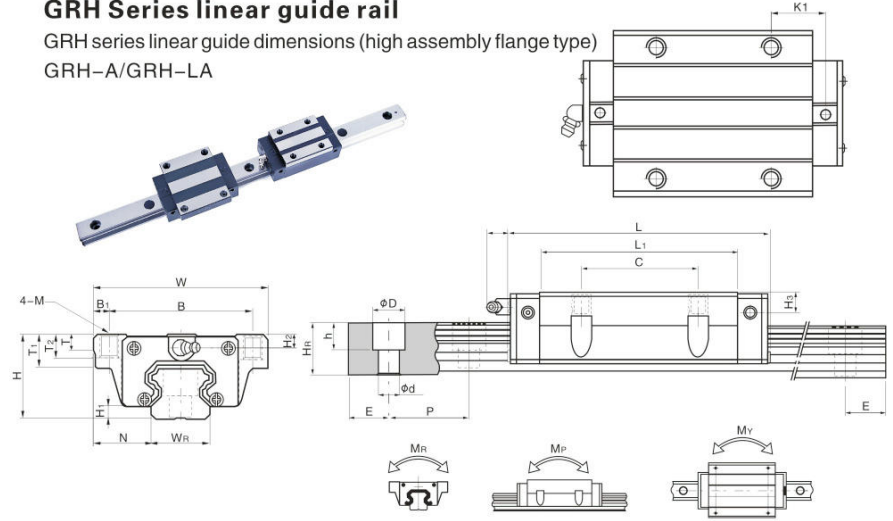| Type	Component size (mm)				Slide size (mm)											Slippery course size (mm)							Size of retaining bolt for slide rail (mm)	Basic dynamic load rating C(KN)	Basic static load rating Co(KN)	Permissible static moment			Weight	
	H	H1	N	W	B	B1	C	L1	L	K1	G	Mx1	T	H2	H3	Wr	Hr	D	h	d	P	E				MR kN·m	MP kN·m	MY kN·m	Slider kg	Slippery course kg/m
GRH15R	28	4.3	9.5	34	26		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	25.31	0.17	0.15	0.15	0.18 / 1.45
GRH20R	30	4.6	12	44	32	6		36	50.5	77.5	12.25														17.75	37.84	0.38	0.27	0.27	0.30
GRH20LR								50	65.2	92.2	12.6	12	M5x6	8	6	7	20	17.5	9.5	8.5	6	60	20	M5x16	21.18	48.84	0.48	0.47	0.47	0.39 / 2.21
GRH25R	40	5.5	12.5	48	35	6.5		35	58	84	16.8														26.48	56.19	0.64	0.51	0.51	0.51
GRH25LR								50	78.6	104.6	19.6	12	M6x8	8	10	13	23	22	11	9	7	60	20	M6x20	32.75	76.00	0.87	0.88	0.88	0.69 / 3.21
GRH30R	45	6	16	60	40	10		40	70	97.4	20.25														33.74	83.06	1.06	0.85	0.85	0.85
GRH30LR								60	93	120.4	21.75	12	M8x10	8.5	9.5	13.8	28	26	14	12	9	80	20	M8x25	47.27	110.13	1.40	1.47	1.47	1.15 / 4.47
GRH35R	55	7.5	18	70	50	10		50	80	112.4	20.6														49.52	102.87	1.73	1.20	1.20	1.45
GRH35LR								72	105.8	138.2	22.5	12	M8x12	10.2	11.6	19.6	34	29	14	12	8	80	20	M8x25	60.21	136.31	2.29	2.08	2.08	1.92 / 6.30
GRH45R	70	9.5	20.5	86	60	13		60	97	139.4	23														77.57	155.93	3.01	2.35	2.35	2.73
GRH45LR								80	128.8	171.2	28.9	12.9	M10x17	16	18.5	30.5	45	38	20	17	14	105	22.5	M12x35	94.54	207.12	4.00	4.07	4.07	3.61 / 10.41
GRH55R	80	13	23.5	100	75	12.5		75	117.7	166.7	27.35														114.44	227.81	5.66	4.06	4.06	4.17
GRH55LR								95	155.8	204.8	36.4	12.9	M12x18	17.5	22	53	44	23	20			120	30	M14x45	139.35	301.26	7.49	7.01	7.01	5.49 / 15.08
GRH65R	90	15	31.5	126	76			70	144.2	200.2	43.1														163.63	324.71	10.02	6.44	6.44	7.00
GRH65LR								120	203.6	259.6	47.8	12.9	M16x20	25	12	63	53	24	28			150	35	M16x50	208.36	457.15	14.15	11.12	11.12	9.82 / 21.18

GRH Series linear guide rail

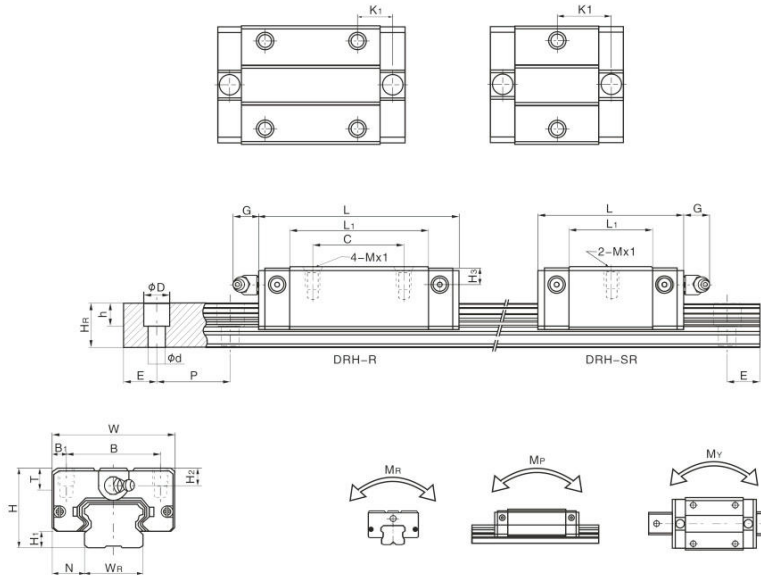## GRH series linear guide dimensions (high assembly flange type)
GRH-A/GRH-LA

注：1kgf=9.81 N

Type	Component size (mm)				Slide size (mm)															Slippery course size (mm)							Size of retaining bolt for slide rail (mm)	Basic dynamic load rating C(KN)	Basic static load rating Co(KN)	Permissible static moment			Weight	
	H	H1	N	W	B	B1	C	L1	L	K1	G	M	T	T1	T2	H2	H3	Wr	Hr	D	h	d	P	E				MR kN·m	MP kN·m	MY kN·m	Slider kg	Slippery course kg/m
GRH15A	24	4.3	16	47	38	4.5	30	39.4	61.4		5.3	M5	6		8.9	6.95	3.95	3.7	15	15	7.5	5.3	4.5	60	20	M4x16	11.38	25.31	0.17	0.15	0.15	0.17 / 1.45
GRH20A	30	4.6	21.5	63	53	5	40		50.5	77.5	10.25															17.75	37.84	0.38	0.27	0.27	0.40
GRH20LA									65.2	92.2	17.6	12	M6	8	10	9.5	6	7	20	17.5	9.5	8.5	6	60	20	M5x16	21.18	48.84	0.48	0.47	0.47	0.52 / 2.21
GRH25A	36	5.5	23.5	70	57	6.5	45		58	84	11.8															26.78	56.19	0.64	0.51	0.51	0.59
GRH25LA									78.6	104.6	22.1	12	M8	8	14	10	6	9	23	22	11	9	7	60	20	M6x20	32.75	76.00	0.87	0.88	0.88	0.80 / 3.21
GRH30A	42	6	31	90	72	9	52		70	97.4	14.25															38.74	83.06	1.06	0.85	0.85	1.09
GRH30LA									93	120.4	25.75	12	M10	8.5	16	10	6.5	10.8	28	26	14	12	9	80	20	M8x25	47.27	110.13	1.40	1.47	1.47	1.44 / 4.47
GRH35A	48	7.5	33	100	82	9	62		80	112.4	14.6															49.52	102.87	1.73	1.20	1.20	1.56
GRH35LA									105.8	138.2	27.5	12	M10	10.1	18	13	9	12.6	34	29	14	12	8	80	20	M8x25	60.21	136.31	2.29	2.08	2.08	2.06 / 6.30
GRH45A	60	9.5	37.5	120	100	10	80		97	139.4	13															77.57	155.93	3.01	2.35	2.35	2.79
GRH45LA									128.8	171.2	28.9	12.9	M12	15.1	22	15	8.5	20.5	45	38	20	17	14	105	22.5	M12x35	94.547	207.12	4.00	4.07	4.07	3.69 / 10.41
GRH55A	70	13	43.5	140	116	12	95		117.7	166.7	17.35															114.44	227.81	5.66	4.06	4.06	4.52
GRH55LA									158.8	204.8	36.4	12.9	M14	17.5	26.5	17	12	19	53	44	23	20		120	30	M14x45	139.35	301.26	7.49	7.01	7.01	5.96 / 15.08
GRH65A	90	15	53.5	170	142	14	110		144.2	200.2	23.1															163.63	324.71	10.02	6.44	6.44	9.17
GRH65LA									203.6	259.6	52.8	12.9	M16	25	37.5	23	15	15	63	53	24	28		150	35	M16x50	208.36	457.15	14.15	11.12	11.12	12.89 / 21.18

DRH Series linear guide rail

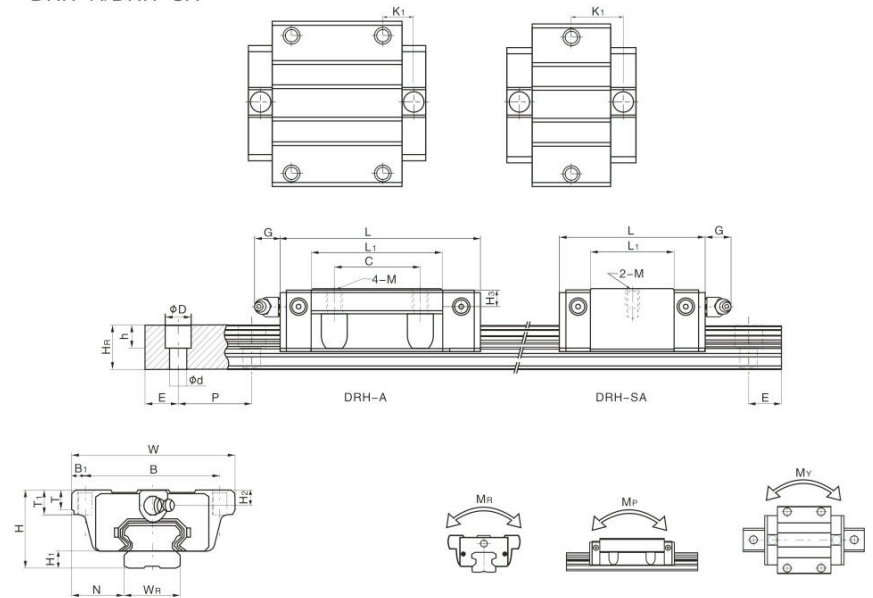DRH series linear guide dimensions (low assembly quad)
DRH−R/DRH−SR

Type	Component size (mm)				Slide size (mm)											Slippery course size (mm)							Size of retaining bolt for slide rail	Basic dynamic load rating	Basic static load rating	Permissible static moment			Weight	
	H	H1	N	W	B	B1	C	L1	L	K1	G	Mx1	T2	H2	H3	WR	HR	D	h	d	P	E	(mm)	C(KN)	Col(KN)	MR	MP	MY	Slider	Slippery course
																										kN-m	kN-m	kN-m	kg	kg/m
DRH15R	24	4.5	9.5	34	26	4	—	23.1	40.1	14.8	5.7	M4x6	6	5.5	6	15	12.5	6	4.5	4.5	60	20	M3x16	5.35	9.40	0.08	0.04	0.04	0.04	1.25
DRH15SR							26	39.8	56.8	10.15														7.83	16.19	0.13	0.10	0.10	0.15	
DRH20R	28	6	11	42	32	5	—	29	50	18.75	12	M5x7	7.5	6	6	20	15.5	9.5	8.5	6	60	20	M5x16	7.23	12.74	0.13	1.06	1.06	0.15	2.08
DRH20SR							32	48.1	69.1	12.3														10.31	21.13	0.22	0.16	0.16	0.24	
DRH25R	33	7	12.5	48	35	6.5	—	35.5	59.1	21.9	12	M6x9	8	8	8	23	18	11	9	7	60	20	M6x20	11.40	19.50	0.23	0.12	0.12	0.25	2.67
DRH25SR							35	59	82.6	16.15														16.27	32.40	0.38	0.32	0.32	0.41	
DRH30R	42	10	16	60	40	10	—	41.5	69.5	26.75	12	M8x12	9	8	9	28	23	11	9	7	80	20	M6x25	16.42	28.10	0.40	0.21	0.21	0.45	4.35
DRH30SR							40	70.1	98.1	21.05														23.70	47.46	0.68	0.55	0.55	0.76	

注：1kgf=9.81 N

DRH Series linear guide rail

DRH series linear guide dimensions (low assembly flange type)
DRH−A/DRH−SA

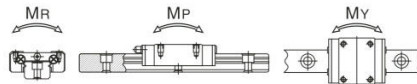| Type	Component size (mm)				Slide size (mm)											Slippery course size (mm)							Size of retaining bolt for slide rail	Basic dynamic load rating	Basic static load rating	Permissible static moment			Weight	
	H	H1	N	W	B	B1	C	L1	L	K1	G	Mx1	T2	H2	H3	WR	HR	D	h	d	P	E	(mm)	C(KN)	Col(KN)	MR	MP	MY	Slider	Slippery course
																										kN-m	kN-m	kN-m	kg	kg/m
DRH15A	24	4.5	18.5	52	41	5.5	—	23.1	40.1	14.8	5.7	M5	5	5.5	6	15	12.5	6	4.5	4.5	60	20	M3x16	5.35	9.40	0.08	0.04	0.04	0.12	1.25
DRH15SA							26	39.8	56.8	10.15														7.83	16.19	0.13	0.10	0.10	0.21	
DRH20A	28	6	19.5	59	49	5	—	29	50	18.75	12	M6	7	6	6	20	15.5	9.5	8.5	6	60	20	M5x16	7.23	12.74	0.13	1.06	1.06	0.19	2.08
DRH20SA							32	48.1	69.1	12.3														10.31	21.13	0.22	0.16	0.16	0.32	
DRH25A	33	7	25	73	60	6.5	—	35.5	59.1	21.9	12	M8	7.5	8	8	23	18	11	9	7	60	20	M6x20	11.40	19.50	0.23	0.12	0.12	0.35	2.67
DRH25SA							35	59	82.6	16.15														16.27	32.40	0.38	0.32	0.32	0.59	
DRH30A	42	10	31	90	72	9	—	41.5	69.5	26.75	12	M10	7	8	9	28	23	11	9	7	80	20	M6x25	16.42	28.10	0.40	0.21	0.21	0.62	4.35
DRH30SA							40	70.1	98.1	21.05														23.70	47.46	0.68	0.55	0.55	1.04	

注：1kgf=9.81 N

XRH Micro ball linear slide rail
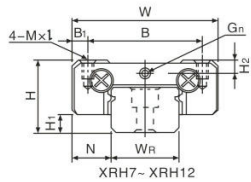
XRH7~ XRH12
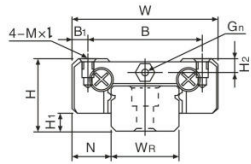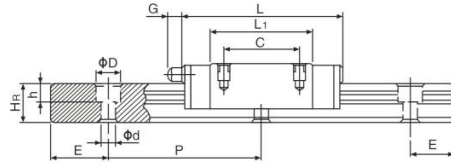
XRH7~ XRH15

Type	Component size (mm)				Slide size (mm)										Slippery course size (mm)							Size of retaining bolt for slide rail	Basic dynamic load rating	Basic static load rating	Permissible static moment			Weight	
	H	H_1	N	W	B	B_1	C	L_1	L	G	G_n	MXl	H_2		W_R	H_R	D	h	d	P	E	(mm)	C(KN)	Co(KN)	M_R N–m	M_P N–m	M_Y N–m	Slider kg	Slippery course kg/m
XRH5R	6	1.5	3.5	12	8	2	–	9.6	16	–	Φ0.8	M2X1.5	1		5	3.6	3.6	0.8	2.4	15	5	M2X6	0.54	0.84	2	1.3	1.3	0.008	0.15
XRH7R	8	1.5	5	17	11	2.5	8	13.5	22.5	–	Φ1.2	M2X2.5	1.5		7	4.8	4.8	2.3	2.4	15	5	M2X6	0.98	1.24	4.70	2.84	2.84	0.010	0.22
XRH7LR							13	21.8	30.8														1.37	1.96	7.64	4.80	4.80	0.015	
XRH9R	10	2	5.5	20	15	2.5	10	18.9	28.9	–	Φ1.4	M3X3	1.8		9	6.5	6	3.5	3.5	20	7.5	M3X8	1.86	2.55	11.76	7.35	7.35	0.016	0.38
XRH9LR							16	29.9	39.9														2.55	4.02	19.60	18.62	18.62	0.026	
XRH12R	13	3	7.5	27	20	3.5	15	21.7	34.7	–	Φ2	M3X3.5	2.5		12	8	6	4.5	3.5	25	10	M3X8	2.84	3.92	25.48	13.72	13.72	0.034	0.65
XRH12LR							20	32.4	45.4														3.72	5.88	38.22	36.26	36.26	0.054	
XRH15R	15	4	8.5	32	25	3.5	20	26.7	42.1	4.5	M3	M3X4	3		15	10	6	4.5	3.5	40	15	M3X10	4.61	5.59	45.08	21.56	21.56	0.059	1.06
XRH15LR							25	43.4	58.8														6.37	9.11	73.50	57.82	57.82	0.092	

XRW Micro ball linear slide rail
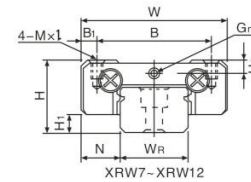
XRW7~ XRW12
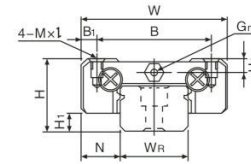
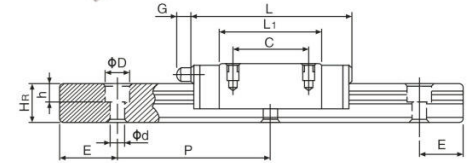XRW7~ XRW15

Type	Component size (mm)				Slide size (mm)										Slippery course size (mm)							Size of retaining bolt for slide rail	Basic dynamic load rating	Basic static load rating	Permissible static moment			Weight	
	H	H_1	N	W	B	B_1	C	L_1	L	G	G_n	MXl	H_2		W_R	H_R	D	h	d	P	E	(mm)	C(KN)	Co(KN)	M_R N–m	M_P N–m	M_Y N–m	Slider kg	Slippery course kg/m
XRW5R	6.5	1.5	3.5	17	13	2	–	14.1	20.5	–	Φ0.8	M2.5X1.5	1		10	–	5.5	1.6	3	20	5	M2.5X7	0.68	1.18	5.5	2.7	2.7	0.016	0.34
XRW5LR						8.5	6.5					M3-THRU																	
XRW7R	9	1.9	5.5	25	19	3	10	21	31.2	–	Φ1.2	M3X3	1.85		14	–	6	3.2	3.5	30	10	M3X6	1.37	2.06	15.70	7.14	7.14	0.020	0.51
XRW7LR							19	30.8	41														1.77	3.14	23.45	15.53	15.53	0.029	
XRW9R	12	2.9	6	30	21	4.5	12	27.5	39.3	–	Φ1.4	M3X3	2.4		18	–	6	4.5	3.5	30	10	M3X8	2.75	4.12	40.12	18.96	18.96	0.040	0.91
XRW9LR					23	3.5	24	38.5	50.7														3.43	5.89	54.54	34.00	34.00	0.057	
XRW12R	14	3.4	8	40	28	6	15	31.3	46.1	–	Φ2	M3X3.6	2.8		24	–	6	4.5	4.5	40	15	M4X8	3.92	5.59	70.34	27.80	27.80	0.071	1.49
XRW12LR							28	45.6	60.4														5.10	8.24	103.70	57.37	57.37	0.103	
XRW15R	16	3.4	9	60	45	7.5	30	38	54.8	5.2	M3	M4X4.2	3.2		42	23	8	4.5	4.5	40	15	M4X10	6.77	9.22	199.34	56.66	56.66	0.143	2.86
XRW15LR							35	57	73.8														8.93	13.38	299.01	122.60	122.60	0.215	

精密滚珠丝杆系列
Ball and steel rod series

SFT R 025 05 B2 D G C5 P0 1000

- Overall length of shaft (mm)
- Axial clearance and preload code
  P0、P1、P2、P3、P4
- Accuracy grade code
  C0、C1、C2、C3、C5、C7、C10
- Produce code
  G: Grinding   F: Rolled
- Flange type
  N: Not cutting S:Single cutting D:Double cutting
- No.of Turn (Circuits) or Turn x Row
  卷数: T: 1 (or 0.7) A: 1.5 (or 1.7) B: 2.5 C: 3.5 例：(B2=2.5 x 2)
  (Turn)   ex
- Lead (mm)
- Shaft dia. (mm)
- Direction of helix
  Right L：Left
- Nut type codes
  S: S: Single nut   D: Double nut
  F: F: With flange   C: Without flange
  T: T: T type nut   I: I type nut   D: D type nut   E: E type nut
  K: K type nut   U: DIN nut   S: Interrow
  (SFI、DFI、SFT、DFT、SFE、SFK)

Dimension Table of SFS (DIN 69051 Form B) Ball Screws
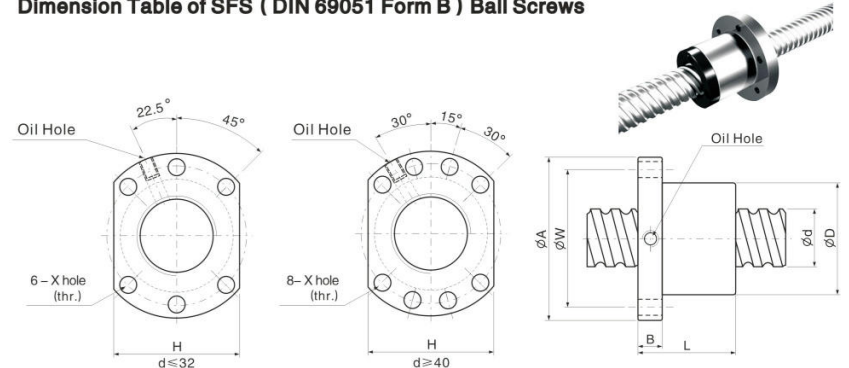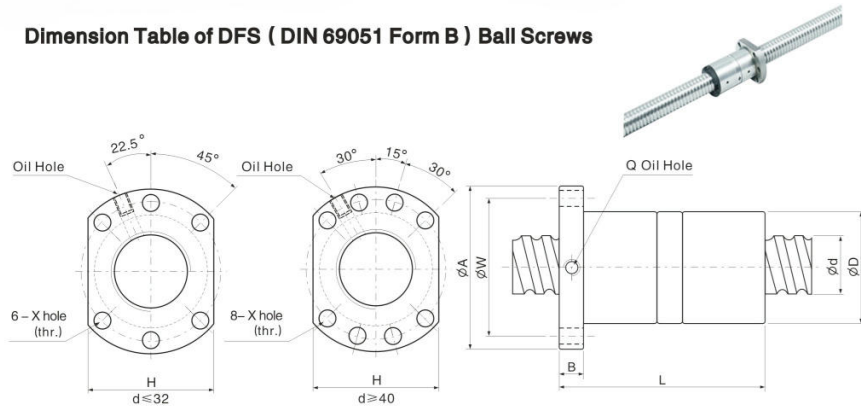

I: Lead   Da:Ball Dia.   n: Number of Circuits   K: Stiffness (Kgf/μm)
Ca: Basic Dynamic Rating Load(Kgf)   Coa: Basic Static Rating Load(Kgf)

单位(Unit):mm

Model No.	d	l	Da	D	A	B	L	W	H	X	Q	n	Ca	Coa	K
							Reference data of ball screw and nut								
SFS01205-2.8	12	5	2.5	24	40	10	31	32	30	4.5	M6*1P	2.8*1	536	794	12.5
SFS01605-3.8	15	5	2.778	28	48	10	38	38	40	5.5	M6*1P	3.8*1	771	1536	19.6
SFS01610-2.8		10	2.778	28	48	10	47	38	40	5.5	M6*1P	2.8*1	592.9	1131.8	14.4
SFS01616-1.8	15	16	2.778	28	48	10	45	38	40	5.5	M6*1P	1.8*1	405.5	727.6	9.2
SFS01616-2.8		16	2.778	28	48	10	61	38	40	5.5	M6*1P	2.8*1	592.9	1131.8	14.4
SFS01620-1.8		20	2.778	28	48	10	57	38	40	5.5	M6*1P	1.8*1	415.2	768	9.2
SFS02005-3.8	20	5	3.175	36	58	10	40	47	44	6.6	M6*1P	3.8*1	1027.1	2229.4	25.9
SFS02010-3.8		10	3.175	36	58	10	60	47	44	6.6	M6*1P	3.8*1	1049.1	2340.9	25.9
SFS02020-1.8	20	20	3.175	36	58	11	57	47	44	6.6	M6*1P	1.8*1	551.9	1108.8	12.2
SFS02020-2.8		20	3.175	36	58	11	77	47	44	6.6	M6*1P	2.8*1	8 7	1724.8	19.1
SFS02505-3.8	25	5	3.175	40	62	10	40	51	48	6.6	M6*1P	3.8*1	1133.1	2786.7	32
SFS02510-3.8		10	3.175	40	62	12	51	51	48	6.6	M6*1P	3.8*1	1133.1	2786.7	32
SFS02525-1.8	25	25	3.175	40	62	12	70	51	48	6.6	M6*1P	1.8*1	606.3	1372.8	15.1
SFS02525-2.8		25	3.175	40	62	12	95	51	48	6.6	M6*1P	2.8*1	886.5	2135.5	23.6
SFS03205-3.8	32	5	3.175	50	80	12	42	65	62	9	M6*1P	3.8*1	1263.1	3567	40.6
SFS03210-3.8		10	3.969	50	80	13	62	65	62	9	M6*1P	3.8*1	1693.4	4354.9	39.7
SFS03220-2.8	31	20	3.969	50	80	12	80	65	62	9	M6*1P	2.8*1	1324.9	3337.2	29.3
SFS03232-1.8		32	3.969	50	80	13	84	65	62	9	M6*1P	1.8*1	906	2145.5	18.8
SFS03232-2.8		32	3.969	50	80	13	116	65	62	9	M6*1P	2.8*1	1324.9	3337.2	29.3
SFS04005-3.8	40	5	3.175	63	93	15	45	78	70	9	M8*1P	3.8*1	1393.4	4458.8	50.5
SFS04010-3.8		10	6.35	63	93	14	63	78	70	9	M8*1P	3.8*1	3496.9	8471.8	49.3
SFS04020-2.8	38	20	6.35	63	93	14	82	78	70	9	M8*1P	2.8*1	2750.6	6570.9	36.3
SFS04040-1.8		40	6.35	63	93	14	105	78	70	9	M8*1P	1.8*1	1881	4224.1	23.3
SFS04040-2.8		40	6.35	63	93	14	145	78	70	9	M8*1P	2.8*1	2750.6	6570.9	36.3
SFS05005-3.8	50	5	3.175	75	110	15	45	93	85	11	M8*1P	3.8*1	1537.1	5573.5	62.8
SFS05010-3.8		10	6.35	75	110	18	68	93	85	11	M8*1P	3.8*1	3875.4	10701.2	61.6
SFS05020-3.8	48	20	6.35	75	110	18	108	93	85	11	M8*1P	3.8*1	3945.7	11147.1	61.6
SFS05050-1.8		50	6.35	75	110	18	125	93	85	11	M8*1P	1.8*1	2111.2	5491.4	29.2
SFS05050-2.8		50	6.35	75	110	18	175	93	85	11	M8*1P	2.8*1	3087.1	8542.2	45.4
SFS06310-3.8	61	10	6.35	90	125	18	70	108	95	11	M8*1P	3.8*1	4147.4	12484.8	77.6
SFS06320-3.8		20	7.144	95	135	20	116	115	100	13.5	M8*1P	3.8*1	4877.8	14109.1	77.9
SFS08010-3.8	77	10	6.35	105	145	20	70	125	110	13.5	M8*1P	3.8*1	4632.4	16051.9	97.3
SFS08020-3.8		20	9.525	125	165	25	120	130	130	13.5	M8*1P	3.8*1	7891.4	23074.6	98.6
SFS010020-3.8	96	20	12.7	150	202	30	124	176	155	17.5	M8*1P	3.8*1	12725.1	37454.4	123.3

Note:with sign ★ can produce left helix

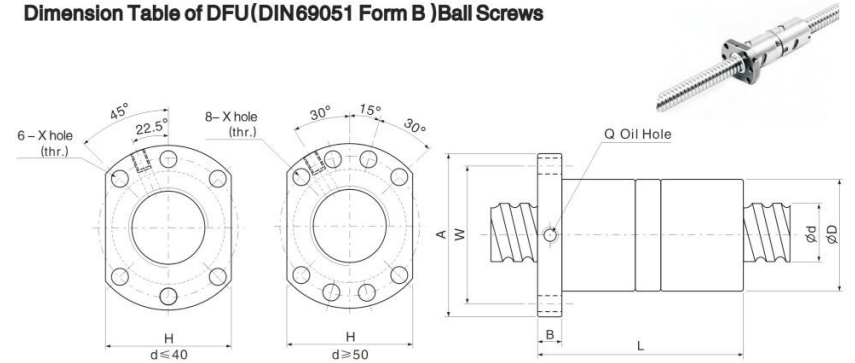## Dimension Table of DFS (DIN 69051 Form B) Ball Screws

I: Lead   Da：Ball Dia.   n: Number of Circuits   K：Stiffness (Kgf/μm)
Ca：Basic Dynamic Rating Load(Kgf)   Coa: Basic Static Rating Load(Kgf)

(Unit):mm

Model No.	Reference data of ball screw and nut														
	d	l	Da	D	A	B	L	W	H	X	Q	n	Ca	Coa	K
DFS01605-3.8	15	5	2.778	28	48	10	73	38	40	5.5	M6*1P	3.8*1	771	1536	39.21
DFS01610-2.8		10	2.778	28	48	10	97	38	40	5.5	M6*1P	2.8*1	592.9	1131.8	28.89
DFS02005-3.8	20	5	3.175	36	58	10	75	47	44	6.6	M6*1P	3.8*1	1027.1	2229.4	51.84
DFS02010-3.8		10	3.175	36	58	10	120	47	44	6.6	M6*1P	3.8*1	1049.4	2340.9	51.84
DFS02505-3.8	25	5	3.175	40	62	10	75	51	44	6.6	M6*1P	3.8*1	1133.1	2786.7	64.14
DFS02510-3.8		10	3.175	40	62	12	122	51	48	6.6	M6*1P	3.8*1	1133.1	2786.7	64.14
DFS03205-3.8	32	5	3.175	50	80	12	82	65	62	9	M6*1P	3.8*1	1263.1	3567	81.35
DFS03210-3.8	31	10	3.969	50	80	13	122	65	62	9	M6*1P	3.8*1	1693.4	4354.9	79.56
DFS03220-2.8		20	3.969	50	80	12	160	65	62	9	M6*1P	2.8*1	1324.9	3337.2	58.62
DFS04005-3.8	40	5	3.175	63	93	15	85	78	70	9	M8*1P	3.8*1	1393.4	4458.8	101.02
DFS04010-3.8	38	10	6.35	63	93	14	123	78	70	9	M8*1P	3.8*1	3496.9	8471.8	98.76
DFS04020-2.8		20	6.35	63	93	14	162	78	70	9	M8*1P	2.8*1	2750.6	6570.9	72.77
DFS05005-3.8	50	5	3.175	75	110	15	85	93	85	11	M8*1P	3.8*1	1537.1	5573.5	125.62
DFS05010-3.8	48	10	6.35	75	110	18	138	93	85	11	M8*1P	3.8*1	3875.4	10701.2	123.35
DFS05020-3.8		20	6.35	75	110	18	218	93	85	11	M8*1P	3.8*1	3945.7	11147.1	123.35
DFS06310-3.8	61	10	6.35	90	125	18	140	108	95	11	M8*1P	3.8*1	4147.4	12484.8	155.32
DFS06320-3.8		20	7.144	95	135	20	226	115	100	13.5	M8*1P	3.8*1	4877.8	14109.1	155.98
DFS08010-3.8	77	10	6.35	105	145	20	140	125	110	13.5	M8*1P	3.8*1	4632.4	16051.9	194.67
DFS08020-3.8		20	9.525	125	165	25	230	145	130	13.5	M8*1P	3.8*1	7891.4	23074.6	197.33
DFS010020-3.8	96	20	12.7	150	202	30	244	176	155	17.5	M8*1P	3.8*1	12725.1	37454.4	246.7

Note:with sign ★ can produce left helix

Dimension Table of DFU(DIN69051 Form B)Ball Screws
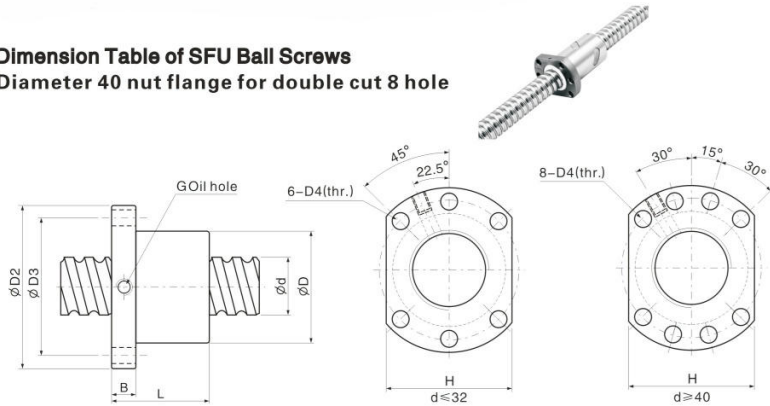

I: Lead   Da：Ball Dia.   n: Number of Circuits   K：Stiffness (Kgf/μm)
Ca：Basic Dynamic Rating Load(Kgf)   Coa: Basic Static Rating Load(Kgf)

(Unit):mm

	Model No.	Reference data of ball screw and nut													
		d	l	Da	D	A	B	L	W	H	X	Q	n	Ca	Coa	K
★	DFU 1604-4	16	4	2.381	28	48	10	80	38	40	5.5	M6	4	629	1270	35
★	DFU 1605-4		5	3.175	28	48	10	100	38	40	5.5	M6	4	780	1790	20
★	DFU 1610-3		10	3.175	28	48	10	118	38	40	5.5	M6	3	721	1249	15
	DFU 2004-4	20	4	2.381	36	58	10	80	47	44	6.6	M6	4	699	1617	41
★	DFU 2005-4		5	3.175	36	58	10	101	47	44	6.6	M6	4	1130	2380	25
	DFU 2504-4	25	4	2.381	40	62	10	80	51	48	6.6	M6	4	777	2032	48
★	DFU 2505-4		5	3.175	40	62	10	101	51	48	6.6	M6	4	1280	3110	35
	DFU 2506-4		6	3.969	40	62	10	105	51	48	6.6	M6	4	1528	3284	40
	DFU 2508-4		8	4.762	40	62	10	120	51	48	6.6	M6	4	1941	3863	38
★	DFU 2510-4		10	4.762	40	62	12	145	51	48	6.6	M6	4	1944	3877	33
	DFU 3204-4	32	4	2.381	50	80	12	80	65	62	9	M6	4	871	2661	56
★	DFU 3205-4		5	3.175	50	80	12	102	65	62	9	M6	4	1450	4150	40
	DFU 3206-4		6	3.969	50	80	12	105	65	62	9	M6	4	1720	4298	47
	DFU 3208-4		8	4.762	50	80	12	122	65	62	9	M6	4	2189	5079	44
★	DFU 3210-4		10	6.350	50	80	12	162	65	62	9	M6	4	3390	7170	79
	DFU 4005-4	40	5	3.175	63	93	14	105	78	70	9	M6	4	1610	5330	49
	DFU 4006-4		6	3.969	63	93	14	108	78	70	9	M6	4	1911	5458	55
	DFU 4008-4		8	4.762	63	93	14	132	78	70	9	M6	4	2435	6469	52
★	DFU 4010-4		10	6.350	63	93	14	165	78	70	9	M8	4	3910	9520	50
	DFU 5010-4	50	10	6.350	75	110	16	171	93	85	11	M8	4	4450	12500	65
★	DFU 5020-4		20	7.144	75	110	16	280	93	85	11	M8	4	4644	14327	59.5
★	DFU 6310-4	63	10	6.350	95	125	18	182	108	95	11	M8	4	5070	16600	80
	DFU 6320-4		20	9.525	95	135	20	290	115	100	13.5	M8	4	7573	23860	84.1
★	DFU 8010-4	80	10	6.350	105	145	20	182	125	110	13.5	M8	4	5620	21300	90
	DFU 8020-4		20	9.525	125	165	25	295	145	130	13.5	M8	4	8485	30895	84.1
	DFU10020-4	100	20	9.525	150	202	30	340	170	155	17.5	M8	4	9420	39183	300

Note:with sign ★ can produce left helix

Dimension Table of SFU Ball Screws
Diameter 40 nut flange for double cut 8 hole

I: Lead   Da：Ball Dia.   n: Number of Circuits   K：Stiffness (Kgf/μm)
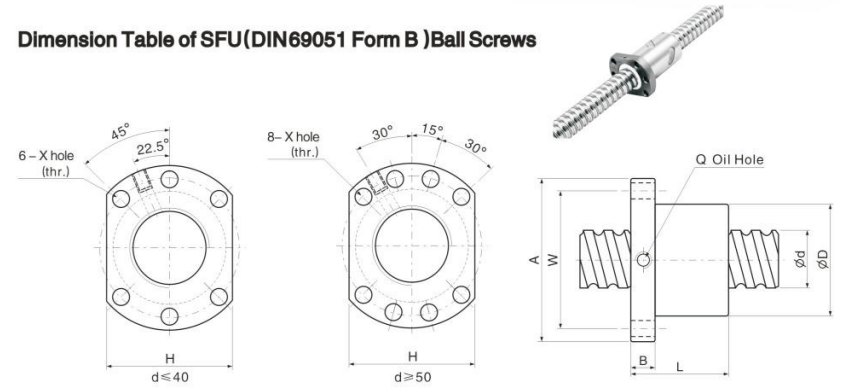Ca：Basic Dynamic Rating Load(Kgf)   Coa: Basic Static Rating Load(Kgf)   (Unit)：mm

| Model No. | Nominal diameter | Nominal lead | Steel ball diameter | The cycle number | \multicolumn{7}{c}{Ball screw nut mounting dimensions} | | | | | | | Rated load | |
					D1 (g6)	D2	D3	D4	L	B	G	H	Dynamic load Ca	Static load Coa
SFU1204–3	12	4	2.381	3	22/24	42	32	4.8	35	8	M6	30	592	1129
SFU1604–3	16	4	2.381	3	28	48	38	5.5	36	10	M6	40	629	1270
★ SFU1605–3	16	5	3.175	3	28	48	38	5.5	42	10	M6	40	780	1790
★ SFU1605–4	16	5	3.175	4	28	48	38	5.5	50	10	M6	40	780	1790
SFS1610–2/4	15	10	2.778	2	28	48	38	5.5	42	10	M6	40	736	1275
SFU2004–3	20	4	2.381	3	36	58	47	6.7	42	10	M6	44	860	1710
★ SFU2005–3	20	5	3.175	3	36	58	47	6.7	42	10	M6	44	860	1710
★ SFU2005–4	20	5	3.175	4	36	58	47	6.7	51	10	M6	44	1130	2380
SFS2010–2/4	20	10	3.175	3	36	58	47	6.7	42	10	M5	44	996	2296
★ SFU2505–3	25	5	3.175	3	40	63	51	6.7	42	10	M6	48	980	2300
★ SFU2505–4	25	5	3.175	4	40	63	51	6.7	51	10	M6	48	1280	3110
SFU2510–3	25	10	4.763	3	40	62	51	6.8	85	15	M6	48	870	2050
★ SFU3205–3	32	5	3.175	3	50	80	65	9	52	12	M6	62	1690	5100
★ SFU3205–4	32	5	3.175	4	50	80	65	9	52	12	M6	62	1450	4150
SFU3210–3	32	10	6.35	3	50	80	65	9	74	12	M6	62	2610	5310
SFU3210–4	32	10	6.35	4	50	80	65	9	90	14	M6	62	3390	7170
★ SFU4005–4	40	5	3.175	4	63	93	78	9	55	15	M6	70	1610	5330
★ SFU4005–5	40	5	3.175	5	63	93	78	9	55	14	M6	70	1900	6620
SFU4010–3	40	10	6.35	3	63	93	78	9	71	14	M6 M8	70	3010	7100
SFU4010–4	40	10	6.35	4	63	93	78	9	93	15	M6 M8	70	3910	9520
SFU5005–4	50	5	3.175	4	75	110	93	11	55	15	M6 M8	85	1880	6690
SFU5010–4	50	10	6.35	4	75	110	93	11	95	16	M6 M8	85	5310	15500
SFU6310–4	63	10	6.35	4	90	125	108	11	97	18	M8	95	5070	16600
SFU6310–5	63	10	6.35	5	90	125	108	11	97	18	M8	95	6070	20600
SFU8010–5	80	10	6.35	5	105	145	125	13.5	108	20	M8	110	6660	26500
SFU8010–6	80	10	6.35	6	105	145	125	13.5	110	22	M8	110	7810	31800
Ca Coa：loading unit：kgf 1kgf=9.8N														

Note:with sign ★ can produce left helix

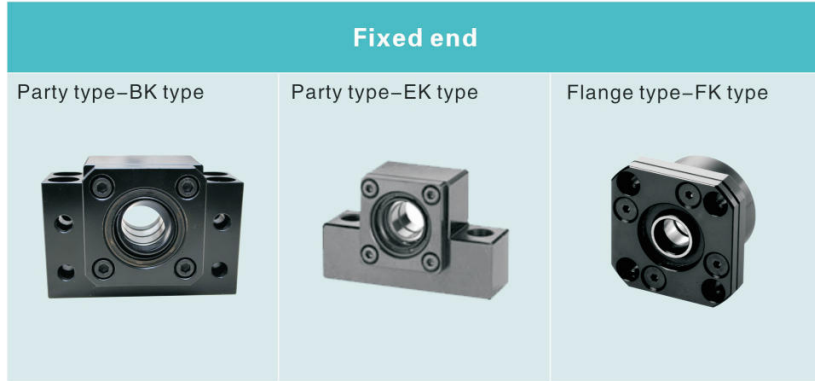## Dimension Table of SFU(DIN69051 Form B)Ball Screws

I: Lead   Da：Ball Dia.   n: Number of Circuits   K：Stiffness (Kgf/μm)
Ca：Basic Dynamic Rating Load(Kgf)   Coa: Basic Static Rating Load(Kgf)   (Unit)：mm

| Model No. | Reference data of ball screw and nut | | | | | | | | | | | | |
	d	l	Da	D	A	B	L	W	H	X	Q	n	Ca	Coa	K
SFU 1204–4	12	4	2.381	24	40	10	40	32	30	4.5		4	593	1129	12.5
★ SFU 1604–4	16	4	2.381	28	48	10	40	38	40	5.5	M6	4	629	1270	35
★ SFU 1605–4		5	3.175	28	48	10	50	38	40	5.5	M6	4	780	1790	20
★ SFU 1610–3		10	3.175	28	48	10	57	38	40	5.5	M6	3	721	1249	15
SFU 2004–4	20	4	2.381	36	58	10	42	47	44	6.6	M6	4	699	1617	41
★ SFU 2005–4		5	3.175	36	58	10	51	47	44	6.6	M6	4	1130	2380	25
SFU 2504–4	25	4	2.381	40	62	10	42	51	48	6.6	M6	4	777	2052	48
★ SFU 2505–4		5	3.175	40	62	10	51	51	48	6.6	M6	4	1280	3110	35
SFU 2506–4		6	3.969	40	62	10	54	51	48	6.6	M6	4	1528	3284	40
SFU 2508–4		8	4.762	40	62	10	63	51	48	6.6	M6	4	1941	3863	38
★ SFU 2510–4		10	4.762	40	62	12	85	51	48	6.6	M6	4	1944	3877	33
SFU 3204–4	32	4	2.381	50	80	12	44	65	62	9	M6	4	871	2661	56
★ SFU 3205–4		5	3.175	50	80	12	52	65	62	9	M6	4	1450	4150	40
SFU 3206–4		6	3.969	50	80	12	57	65	62	9	M6	4	1720	4298	47
SFU 3208–4		8	4.762	50	80	12	65	65	62	9	M6	4	2189	5079	44
★ SFU 3210–4		10	6.350	50	80	12	90	65	62	9	M6	4	3390	7170	79
★ SFU 4005–4	40	5	3.175	63	93	14	55	74	70	9	M8	4	1610	5330	49
SFU 4006–4		6	3.969	63	93	14	60	78	70	9	M8	4	1911	5458	55
SFU 4008–4		8	4.762	63	93	14	67	78	70	9	M8	4	2435	6469	52
★ SFU 4010–4		10	6.350	63	93	14	93	78	70	9	M8	4	3910	9520	50
SFU 5010–4	50	10	6.350	75	110	16	93	93	85	11	M8	4	4450	12500	65
★ SFU 5020–4		20	7.144	75	110	16	138	93	85	11	M8	4	4644	14327	59.5
★ SFU 6310–4	63	10	6.350	95	125	18	98	108	95	11	M8	4	5070	16600	80
SFU 6320–4		20	9.525	95	125	20	149	115	100	13.5	M8	4	7573	23860	84.1
★ SFU 8010–4	80	10	6.350	105	145	20	98	125	110	13.5	M8	4	5620	21300	90
SFU 8020–4		20	9.525	125	165	25	154	145	130	13.5	M8	4	8485	30895	84.1
SFU10020–4	100	20	9.525	150	202	30	180	170	155	17.5	M8	4	9420	39183	110.1

Note:with sign ★ can produce left helix

Screw brackets

BK/EK/FK/BF/EF/FF

Fixed end		
Party type–BK type	Party type–EK type	Flange type–FK type

Surface treatment: dye black

Fixed end		
Party type–BF type	Party type–EF type	Flange type–FF type
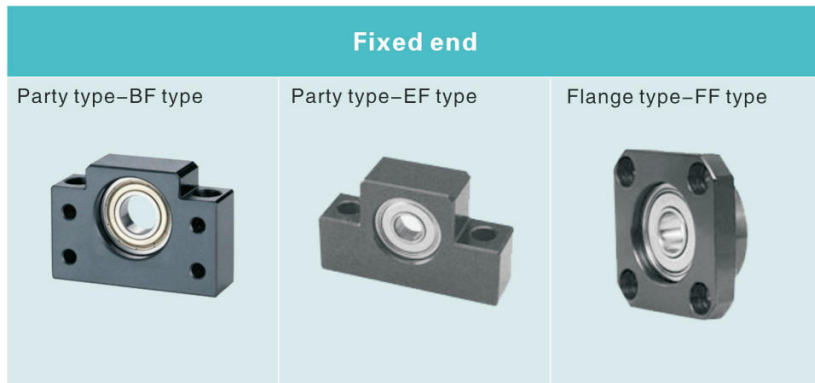
Surface treatment: dye black

Table 1.1.1 types of screw supports and applicable ball screws

Fixed end/applicable model		Support end/applicable model		Applicable ball screw shaft outer diameter
Flange type	Party type	Flange type	Party type	
–	EK–6	–	FF–6	EF–6	–	Ø4、Ø6
FK–8	EK–8	–	FF–8	EF–8	–	Ø8、Ø10、Ø12
FK–10	EK–10	EK–10	FF–10	EF–10	EF–10	Ø10、Ø12、Ø14、Ø15
FK–12	EK–12	EK–12	FF–12	EF–12	EF–12	Ø14、Ø15、Ø16
FK–15	EK–15	EK–15	FF–15	EF–15	EF–15	Ø18、Ø20
–	–	EK–17	–	–	EF–17	Ø20、Ø25
FK–20	EK–20	EK–20	FF–20	EF–20	EF–20	Ø25、Ø28
FK–25	EK–25	EK–25	FF–25	EF–25	EF–25	Ø32、Ø36
FK–30	–	EK–30	FF–30	–	EF–30	Ø36、Ø40
–	–	EK–35	–	–	EF–35	Ø40、Ø45、Ø50
–	–	EK–40	–	–	EF–40	Ø50、Ø55

Table 1.1.2 characteristics table

Fixed end/applicable model		Axial		Support end/deep groove ball bearing		Radial	
Model of screw support seat	Bearing type	Basic dynamic load rating	Rigid	Model of screw support seat	Bearing type	Basic dynamic load rating	Basic static load rating
EK–6	706ATYDF	273	2.9	EF–6、FF–6	606ZZ	231	88
EK–8、FK–8	708ATYDF	450	5.4	EF–8、FF–8	606ZZ	231	88
BK–10、EK–10、FK–10	7000ATYDF	620	9.6	BF–10、EF–10、FF–10	608ZZ	335	142
BK–12、EK–12、FK–12	7001ATYDF	679	10.6	BF–12、EF–12、FF–12	6000ZZ	465	200
BK–15、EK–15、FK–15	7002ATYDF	775	11.5	BF–15、EF–15、FF–15	6002ZZ	570	289
BK–17	7203ATYDF	1397	12.7	BF–17	6203ZZ	979	469
BK–20	7004ATYDF	1295	14.2	BF–20	6004ZZ	958	515
EK–20、FK–20	7204ATYDF	1820	15.8	EF–20、FF–20	6204ZZ	1300	702
BK–25、EK–25、FK–25	7205ATYDF	2060	19.4	BF–25、EF–25、FF–25	6205ZZ	1430	800
BK–30、FK–30	7206ATYDF	2856	19.8	BF–30、FF–30	6206ZZ	1989	1152
BK–35	7207ATYDF	3794	26.0	BF–35	6207ZZ	2621	1560
BK–40	7208ATYDF	4498	27.5	BF–40	6208ZZ	2968	1815

※ When ball screw shaft diameter is Ø6 and EK06 or EF06 is used for assembly, it must be grinding grade.

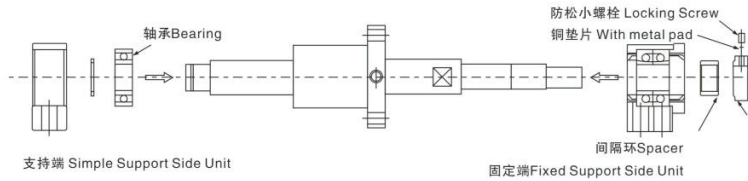## Support for ball screw

Mounting Procedures

Mount the fixed−end support unit on the ball screw shaft.
Do not disassemble the support unit.
When inserting the screw shaft into the support unit, makes the Condition that the oil seal lip is not deformed.
After inserting the shaft into the fixed−end support unit tighten the support Unit with look unt, In addition hold it tighter. Using the set piece and Hexagon socdet screw.
Side the supported−end bearing into the screw shaft. Put the bearing into The housing using stopper ring to hold the bearing.

MC Type buckle Locating snap ring

轴承Bearing　　　　　　　　　　　防松小螺栓 Locking Screw
铜垫片 With metal pad

间隔环Spacer
支持端 Simple Support Side Unit　　　固定端Fixed Support Side Unit

Mouting the table on the ball screw nut and mounting the support unit on the base

Mount the ball screw nut on the table. If a bracket is used, place the ball screw nut into the bracket. Temporarily mounts the fixed−end support unit on the base. Move the table toward the support uhit side, and center the ball screw so the table is balanced. To adiust, one of the following methods can be chosen. Execute the adjustment with reference to the square or round support unit. Mark sure there is a clearance between the table bore and the outer circumference of the nut.
Use shim plates to center the square support unit with the center of the table. Or, create a clearance between the outer Circumference of the round support unit and the table bore.

滑台 Table　　连接块 Bracket
支持端　　　　　　　　　　　　　固定端Fixed Support Side Unit
Simple Support Side Unit
平　　台
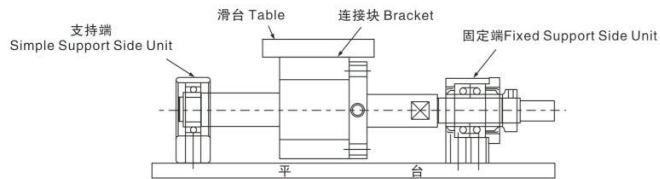
Support for ball screw

Mouting the support side housing and base and checking accuracy

Move the table toward suppored−end housing side.Center the ball screw.Move the table to both directions to make sure it be balanced,then temporarily tighten the housing on the base.
Use tow dial indicators;one to check the run−out error at end of the ball screw shaft and the otherto check theaxial cleance.Finally tighten the nut,fixed−end support unit.and supported−end housing firmly.
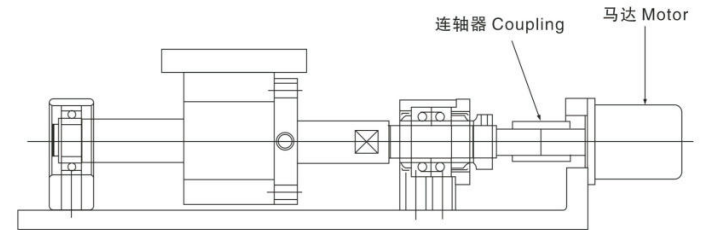
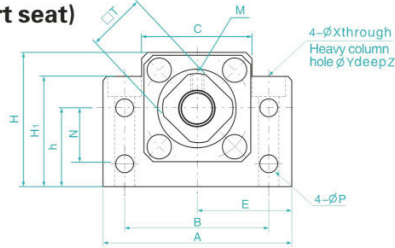测定轴方向背隙 Measure axial clearance　　　　　测定轴端之振幅 Measure runout
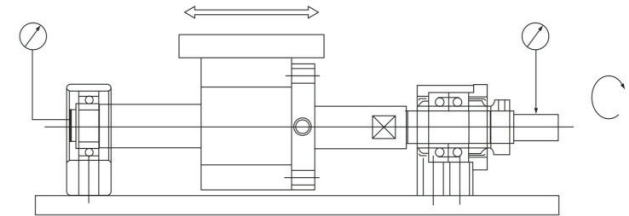
Connecting to the motor

Fix the motor to the machine.
Use the coupling to connect the motor with the ball screw.
Execute

连轴器 Coupling　　马达 Motor

BK series (fixed end of screw support seat)

4–ØX through
Heavy column
hole Ø Y deep Z

4–ØP

Nominal model	Trunnion D1	A	B	C	C1	C2	E ± 0.02	H1	h ± 0.02	H
BK–10	10	60	46	34	13	6	30	32.5	22	39
BK–12	12	60	46	35	13	6	30	32.5	25	43
BK–15	15	70	54	40	15	6	35	38	28	48
BK–17	17	86	68	50	19	8	43	55	39	64
BK–20	20	88	70	52	19	8	44	50	34	60
BK–25	25	106	85	64	22	10	53	70	48	80
BK–30	30	128	102	76	23	11	64	78	51	89
BK–35	35	140	114	88	26	12	70	79	52	96
BK–40	40	160	130	100	33	14	80	90	60	110

Dimension of shaft end machining

View A–A
R1 M ØD1 h7 R2(MAX)
ØBh7
C1 C2 S C3
F E G H A
ØD
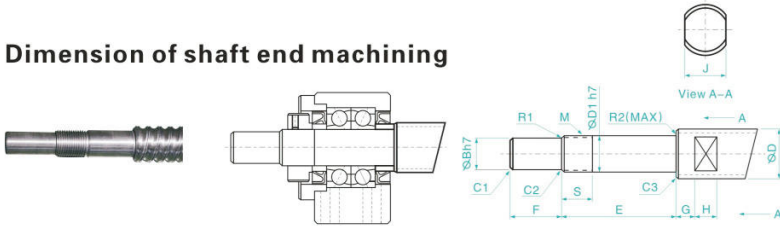
Choose model	Apply shaft shaft outer diameter D	D1	B	E	F	M
BK–10	Ø12、Ø14、Ø15	10	8	39	15	M10x1
BK–12	Ø14、Ø15、Ø16、Ø18	12	10	39	15	M12x1
BK–15	Ø18、Ø20	15	12	40	20	M15x1
BK–17	Ø20、Ø25	17	15	53	23	M17x1
BK–20	Ø25、Ø28	20	17	53	25	M20x1
BK–25	Ø32、Ø36	25	20	65	30	M25x1.5
BK–30	Ø36、Ø40	30	25	72	38	M30x1.5
BK–35	Ø40、Ø45、Ø50	35	30	83	45	M35x1.5
BK–40	Ø50、Ø55	40	35	98	50	M40x1.5
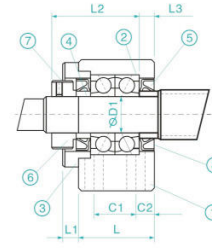
Serial number	Name	Number
①	Bearing seat	1 PCS
②	Bearing	1 SET
③	Gland	1 PCS
④	Spacer ring	2 PCS
⑤	Oil seal	2 PCS
⑥	Fixed nut	1 PCS
⑦	Locking screw (with copper gasket)	1 PCS

Unit:mm

L	L1	L2	L3	T	P	N	M	X	Y	Z	Bearing type
25	5	29	5	16	5.5	15	M3	6.6	11	5	7000ATYDFC8P5
25	5	29	5	19	5.5	18	M3	6.6	11	1.5	7001ATYDFC8P5
27	6	32	6	22	5.5	18	M3	6.6	11	6.5	7002ATYDFC8P5
35	9	44	7	24	6.6	28	M4	9	14	8.5	7203ATYDFC8P5
35	8	43	8	30	6.6	22	M4	9	14	8.5	7004ATYDFC8P5
42	12	54	9	35	9	33	M5	11	17.5	11	7205ATYDFC8P5
45	14	61	9	40	11	33	M6	14	20	13	7206ATYDFC8P5
50	14	67	12	50	11	35	M8	14	20	13	7207ATYDFC8P5
61	18	76	15	50	14	37	M8	18	26	17.5	7208ATYDFC8P5

Tolerance of axle diameter and dimension

H1Type H2Type

Distinguish the size(mm) h		h unit 0.001
Above	Above	h
6	10	−2 −15
10	18	−3 −18
18	24	−3 −21
18	30	−3 −21
30	50	−4 −25
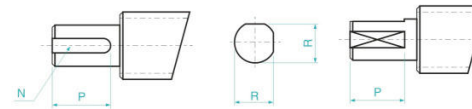
S	J	G	H	Chamfering			Radius		H1 Keyway (width*depth* length)	H2		BK Type
				C1	C2	C3	R1	R2	N	P	R	P	
16	10	5	7	0.5	0.5	0.5	0.3	0.6	2x1.2	11	7.5	11	BK–10
14	13	6	8	0.5	0.5	0.5	0.3	0.6	3x1.8	12	9.5	12	BK–12
12	16	6	9	0.5	0.5	0.5	0.3	0.6	4x2.5	16	11.3	16	BK–15
17	18	7	10	0.5	0.5	0.5	0.5	0.6	5x3.0	21	14.3	21	BK–17
15	21	8	11	0.5	0.5	0.5	0.5	0.6	5x3.0	21	16	21	BK–20
18	27	10	13	0.5	0.7	1.0	0.5	0.6	6x3.5	25	19	25	BK–25
25	32	10	15	0.5	0.7	1.0	0.5	1.0	8x4.0	32	23.5	32	BK–30
28	36	12	15	0.5	1.0	1.0	0.5	1.0	8x4.0	40	28.5	40	BK–35
35	41	14	19	0.5	1.0	1.0	0.5	1.0	10x5.0	45	33	45	BK–40

POETRY SPRINT COMPANY

BF series (screw support end)
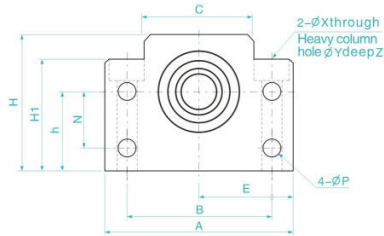
Nominal model	Trunnion D1	A	B	C	E ± 0.02	H1	h ± 0.02	H
BF−10	8	60	46	34	30	32.5	22	39
BF−12	10	60	46	35	30	32.5	25	43
BF−15	15	70	54	40	35	38	28	48
BF−17	17	86	68	50	43	55	39	64
BF−20	20	88	70	52	44	50	34	60
BF−25	25	106	85	64	53	70	48	80
BF−30	30	128	102	76	64	78	51	89
BF−35	35	140	114	88	70	79	52	96
BF−40	40	160	130	100	80	90	60	110

Dimension of shaft end machining

Choose model	Apply shaft shaft outer diameter D	D1	E
BF−10	Ø12、Ø14、Ø15	8	10
BF−12	Ø14、Ø15、Ø16	10	11
BF−15	Ø18、Ø20	15	13
BF−17	Ø20、Ø25	17	16
BF−20	Ø25、Ø28	20	16
BF−25	Ø32、Ø36	25	20
BF−30	Ø36、Ø40	30	21
BF−35	Ø40、Ø45、Ø50	35	22
BF−40	Ø50、Ø55	40	23

POETRY SPRINT COMPANY

Serial number	Name	Number
①	Bearing seat	1 PCS
②	Bearing	1 SET
③	C type buckle	1 PCS

Unit:mm

L	N	P	X	Y	Z	C type buckle	Bearing type
20	15	5.5	6.6	11	5	C8	608ZZ
20	18	5.5	6.6	11	1.5	C10	6000ZZ
20	18	5.5	6.6	11	6.5	C15	6002ZZ
23	28	6.6	9	14	8.5	C17	6203ZZ
26	22	6.6	9	14	8.5	C20	6004ZZ
30	33	9	11	17.5	11	C25	6205ZZ
32	33	11	14	20	13	C30	6206ZZ
32	35	11	14	20	13	C35	6207ZZ
37	37	14	18	26	17.5	C40	6208ZZ
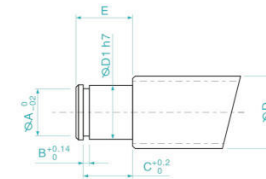
Tolerance of axle diameter and dimension

Distinguish the size(mm)		h unit 0.001
Above	Above	h
6	10	−2 −15
10	18	−3 −18
18	30	−3 −21
30	50	−4 −25

C type buckle			BF Type
A	B	C	
7.6	0.9	7.9	BF−10
9.6	1.15	9.15	BF−12
14.3	1.15	10.15	BF−15
16.2	1.15	13.15	BF−17
19.0	1.35	13.35	BF−20
23.9	1.35	16.35	BF−25
28.6	1.75	17.75	BF−30
33.0	1.75	18.75	BF−35
38.0	1.95	19.95	BF−40

EK series (fixed end of screw support seat)
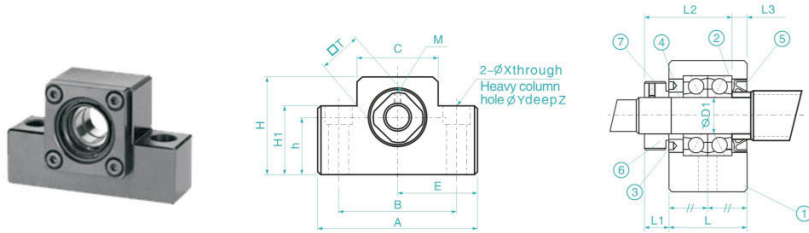
Nominal model	Trunnion D1	A	B	C	E ±0.02	H1	h ±0.02
EK-6	6	42	30	18	21	20	13
EK-8	8	52	38	25	26	26	17
EK-10	10	70	52	36	35	24	25
EK-12	12	70	52	36	35	24	25
EK-15	15	80	60	41	40	25	30
EK-20	20	95	75	56	47.5	25	30
EK-25	25	105	85	66	52.5	25	35

Dimension of shaft end machining
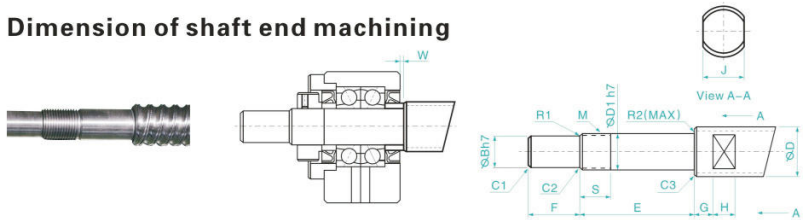
Choose model	Apply shaft shaft outer diameter D	D1	B	E	F	M
EK-6	Ø6、Ø8	6	4	30	8	M6x0.75
EK-8	Ø10、Ø12	8	6	35	9	M8x1
EK-10	Ø12、Ø14、Ø15	10	8	36	15	M10x1
EK-12	Ø14、Ø15、Ø16	12	10	36	15	M12x1
EK-15	Ø18、Ø20	15	12	49	20	M15x1
EK-20	Ø25、Ø28、Ø32	20	17	64	25	M20x1
EK-25	Ø32、Ø36	25	20	65	30	M25x1.5

※ When ball screw shaft diameter is Ø6 and EK06 or EF06 is used for assembly, it must be grinding grade.

27

EK10~15
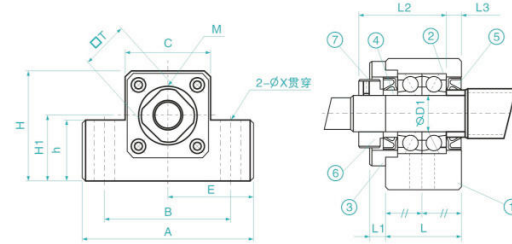
Serial number	Name	Number
①	Bearing seat	1 PCS
②	Bearing	1 SET
③	Gland	1 PCS
④	Spacer ring	2 PCS
⑤	Oil seal	2 PCS
⑥	Fixed nut	1 PCS
⑦	Locking screw (with copper gasket)	1 PCS

Unit:mm

C2	C1	H	L	L1	L2	L3	M	X	Y	Z	T	Bearing type
–	–	25	20	5.5	22	3.5	M3	5.5	9.5	11	12	706ATYDFC7P5
–	–	32	23	7	26	4	M3	6.6	11	12	14	708ATYDFC8P5
–	–	43	24	6	29.5	6	M3	9	–		16	7000ATYDFC8P5
–	–	43	24	6	29.5	6	M3	9	–		19	7001ATYDFC8P5
–	–	49	25	6	36	5	M3	11	–		22	7002ATYDFC8P5
–	–	58	42	10	50	10	M4	11	–		30	7204ATYDFC8P5
9	30	68	48	13	60	14	M5	11	–		35	7205ATYDFC8P5

Tolerance of axle diameter and dimension

H1Type H2Type
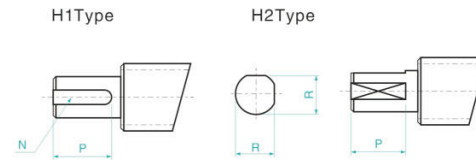
Distinguish the size(mm)		h unit 0.001
Above	Above	h
6	10	-2 / -15
10	18	-3 / -18
18	24	-3 / -21

S	J	G	H	Chamfering			Radius		H1 Keyway (width*depth* length)		H2		W	EK Type
				C1	C2	C3	R1	R2	N	P	R	P		
10	5	4	4	0.3	0.3	0.3	0.3	0.6	–	–	3.7	6	1.5	EK-6
10	8	5	5	0.3	0.3	0.3	0.3	0.6	–	–	5.6	7	1.5	EK-8
11	10	5	7	0.5	0.5	0.5	0.3	0.6	2x1.2	11	7.5	11	-0.5	EK-10
11	13	6	8	0.5	0.5	0.5	0.3	0.6	3x1.8	12	9.5	12	-0.5	EK-12
13	16	6	9	0.5	0.5	0.5	0.3	0.6	4x2.5	16	11.3	16	5.0	EK-15
17	21	8	11	0.5	0.5	0.5	0.5	0.6	5x3.0	21	16	21	1.0	EK-20
18	27	10	13	0.5	0.7	1.0	0.5	0.6	6x3.5	25	19	25	1.0	EK-25

28

EF series (screw support end)

EF10~15; E F20~25

2–ØXthrough
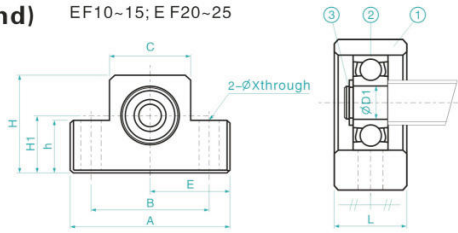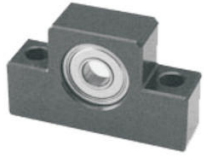
Nominal model	Trunnion D1	A	B	C	E ±0.02	H1	h ±0.02
EF–6	6	42	30	18	21	20	13
EF–8	6	52	38	25	26	26	17
EF–10	8	70	52	36	35	24	25
EF–12	10	70	52	36	35	24	25
EF–15	15	80	60	41	40	25	30
EF–20	20	95	75	56	47.5	25	30
EF–25	25	105	85	66	52.5	25	35

Dimension of shaft end machining
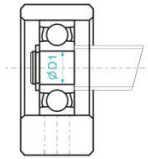
Choose model	Apply shaft shaft outer diameter D	D1	E
EF–6	Ø6、Ø28	6	9
EF–8	Ø10、Ø12	6	9
EF–10	Ø12、Ø14、Ø15	8	10
EF–12	Ø14、Ø15、Ø16	10	11
EF–15	Ø18、Ø20	15	13
EF–20	Ø25、Ø28	20	19
EF–25	Ø32、Ø36	25	20

※ When ball screw shaft diameter is Ø6 and EK06 or EF06 is used for assembly, it must be grinding grade.

EF6~8

2–ØX贯穿
沉柱孔ØY深Z
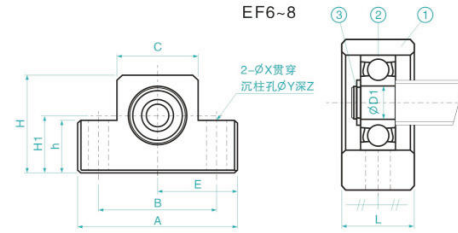
Serial number	Name	Number
①	Bearing seat	1 PCS
②	Bearing	1 SET
③	C type buckle	1 PCS

Unit:mm

H	L	X	Y	Z	C type buckle	Bearing type
25	12	5.5	9.5	11	C6	606ZZ
32	14	6.6	11	12	C6	606ZZ
43	20	9	–	–	C8	608ZZ
43	20	9	–	–	C10	6000ZZ
49	20	9	–	–	C15	6002ZZ
58	26	11	–	–	C20	6204ZZ
68	30	–	11	–	C25	6205ZZ
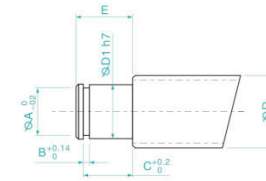
Tolerance of axle diameter and dimension

Distinguish the size(mm)		h unit 0.001
Above	Above	h
6	10	−2 −15
10	18	−3 −18
18	30	−3 −21

C type buckle			EF Type
A	B	C	
5.7	0.8	6.8	EF–6
5.7	0.8	6.8	EF–8
7.6	0.9	7.9	EF–10
9.6	1.15	9.15	EF–12
14.3	1.15	10.15	EF–15
19	1.35	15.35	EF–20
23.9	1.35	16.35	EF–25

POETRY SPRINT COMPANY

FK series
(fixed end of screw support seat)

方法A

2-ØXthrough
Heavy column
hole ØYdeepZ
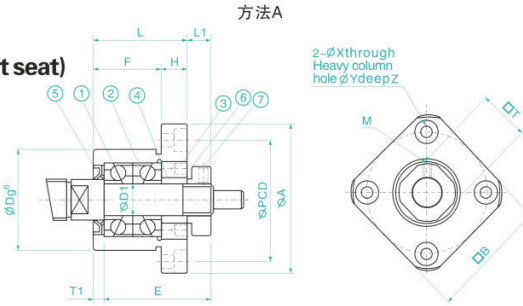
Nominal model	Trunnion D1	A	F	L	E	Dg6	H	PCD
FK–8	8	43	14	23	26	28	9	35
FK–10	10	52	17	27	29.5	34	10	42
FK–12	12	54	17	27	29.5	36	10	44
FK–15	15	63	17	32	36	40	15	50
FK–20	20	85	30	52	50	57	22	70
FK–25	25	98	30	57	60	63	27	80
FK–30	30	117	32	62	61	75	30	95

Dimension of shaft end machining
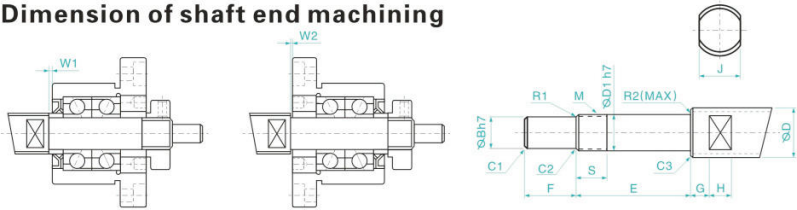
Choose model	Apply shaft shaft outer diameter D	D1	B	E	F	M
FK–8	Ø10、Ø12	8	6	35	9	M8x1
FK–10	Ø12、Ø14、Ø15	10	8	36	15	M10x1
FK–12	Ø14、Ø15、Ø16	12	10	36	15	M12x1
FK–15	Ø18、Ø20	15	12	49	20	M15x1
FK–20	Ø25、Ø28	20	17	64	25	M20x1
FK–25	Ø32、Ø36	25	20	76	30	M25x1.5
FK–30	Ø40、Ø50	30	25	72	38	M30x1.5

方法B

D	g6	Serial number	Name	Number
28	−0.007 −0.020	①	Bearing seat	1 PCS
34	−0.009 −0.025	②	Bearing	1 SET
36	−0.009 −0.025	③	Gland	1 PCS
40	−0.009 −0.025	④	Spacer ring	2 PCS
57	−0.010 −0.029	⑤	Oil seal	2 PCS
63	−0.010 −0.029	⑥	Fixed nut	1 PCS
75	−0.010 −0.029	⑦	Locking screw (with copper gasket)	1 PCS

Unit:mm

M	B	L1	T1	L2	T2	X	Y	Z	T	Bearing type
M3	35	7	4	8	5	3.4	6.5	4	14	708ATYDFC8P5
M3	42	7.5	5	8.5	6	4.5	8	4	16	7000ATYDFC8P5
M3	44	7.5	5	8.5	6	4.5	8	4	19	7001ATYDFC8P5
M3	52	10	6	12	8	5.5	9.5	6	22	7002ATYDFC8P5
M4	68	8	10	12	14	6.6	11	10	30	7204ATYDFC8P5
M5	79	13	10	20	17	9	15	13	35	7205ATYDFC8P5
M6	93	14	12	17	18	11	17.5	15	40	7206ATYDFC8P5
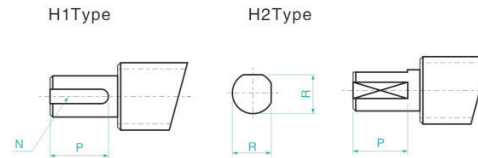
Tolerance of axle diameter and dimension

H1Type H2Type

Distinguish the size(mm)		h unit 0.001
Above	Above	h
6	10	−2 −15
6	10	−2 −15
10	18	−3 −18
18	30	−3 −21

S	J	G	H	Chamfering			Radius		H1		H2		W1	W2	FK Type
				C1	C2	C3	R1	R2	N	P	R	P			
15	–	–	–	0.5	0.5	0.5	0.3	0.6	–	–	5.6	7	1.5	0.5	FK–8
11	10	5	7	0.5	0.5	0.5	0.3	0.6	2x1.2	11	7.5	11	0.5	0.5	FK–10
11	13	6	8	0.5	0.5	0.5	0.3	0.6	3x1.8	12	9.5	12	0.5	0.5	FK–12
13	16	6	9	0.5	0.5	0.5	0.3	0.6	4x2.5	16	11.6	16	4	2	FK–15
17	21	8	11	0.5	0.5	0.5	0.3	0.6	5x3.0	21	16	21	1	−3	FK–20
20	27	10	13	0.5	0.5	0.5	0.3	0.6	6x3.5	25	19	25	5	−2	FK–25
25	32	10	15	0.5	0.5	0.5	0.3	0.6	8x4	32	23.5	32	−3	−6	FK–30

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FF series (screw support end)

4-ØXthrough
Heavy column
hole ØYdeepZ
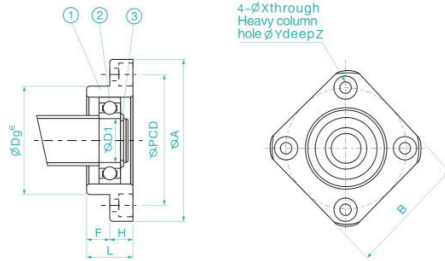
Nominal model	Trunnion D1	L	H	F	Dg6	A
FF-6	6	10	6	4	22	36
FF-10	8	12	7	5	28	43
FF-12	10	15	7	8	34	52
FF-15	15	17	9	8	40	63
FF-20	20	20	11	9	57	85
FF-25	25	24	14	10	63	98
FF-30	30	27	18	9	75	117

Dimension of shaft end machining

Choose model	Apply shaft shaft outer diameter D	D1	E
FF-6	Ø10、Ø12	6	9
FF-10	Ø12、Ø14、Ø15	8	10
FF-12	Ø14、Ø15、Ø16	10	11
FF-15	Ø18、Ø20	15	13
FF-20	Ø25、Ø28	20	19
FF-25	Ø32、Ø36	25	20
FF-30	Ø40、Ø50	30	21

POETRY SPRINT COMPANY

D	g6
22	−0.007 −0.020
28	−0.007 −0.020
34	−0.009 −0.025
40	−0.09 −0.025
57	−0.010 −0.029
63	−0.010 −0.029
75	−0.010 −0.029

Serial number	Name	Number
①	Bearing seat	1 PCS
②	Bearing	1 SET
③	C type buckle	1 PCS

Unit:mm

PCD	B	X	Y	Z	C type buckle	Bearing type
28	28	3.4	6.5	4	C6	606ZZ
35	35	3.4	6.5	4	C8	608ZZ
42	42	4.5	8	4	C10	6000ZZ
50	52	5.5	9.5	5.5	C15	6002ZZ
70	68	6.6	11	6.5	C20	6204ZZ
80	79	9	14	8.5	C25	6205ZZ
95	93	11	17.5	11	C30	6206ZZ
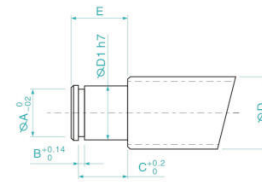
Tolerance of axle diameter and dimension

Distinguish the size(mm)		h unit 0.001
Above	Above	h
6	10	−2 −15
10	18	−3 −18
18	24	−3 −21

C type buckle			FF Type
A	B	C	
5.7	0.8	6.8	FF-6
7.6	0.9	7.9	FF-10
9.6	1.15	9.15	FF-12
14.3	1.15	10.15	FF-15
19	1.35	15.35	FF-20
23.9	1.35	16.35	FF-25
28.6	1.75	17.75	FF-30

Nut a connector
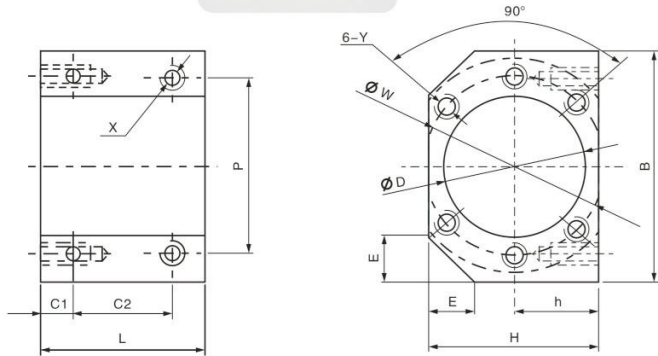
PARCA NO	SOMUN	D	B	H	h	E	L	C1	C2	P	X	W	Y
16H	1605	28	52	40	20	12	40	8	24	40	M5	38	M5
	1610												
1616	1616	32	54	38	19	8	40	8	24	44	M5	42	M4
20H	2005	36	62	44	22	12	40	8	24	48	M6	47	M6
	2010												
2020	2020	39	64	46	23	11	40	8	24	52	M6	50	M5
25H	2505	40	66	48	24	13	40	8	24	50	M6	51	M6
	2510												
2525	2525	47	68	56	28	9	40	8	24	50	M6	60	M6
32H	3205	50	86	62	31	17	40	8	24	66	M8	65	M8
	3210												
40H	4005	63	100	70	35	19	40	8	24	80	M8	78	M8
	4010												
50H	5010	75	116	85	42.5	22	46	10	26	92	M8	93	M8

SFE main lead screw nut
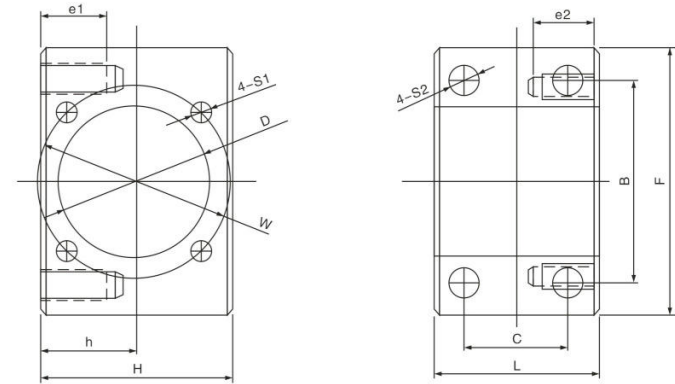
SFE large lead nut seat size table

型号	h	D	L	C	B	F	e1	e2	S1	S2	H	W
SFE1616	20.2	32.1	36	24	48	58	14	14	M4	M4	39	42
SFE2020	22.7	39.1	36	24	58	69	14	16	M6	M6	44	50
SFE2525	29	47.1	48	30	67	80	16	18	M8	M8	58	60
SFE3232	34.5	58.1	60	40	90	114	16	18	M8	M8	68	74

Ball screw shaft coupling
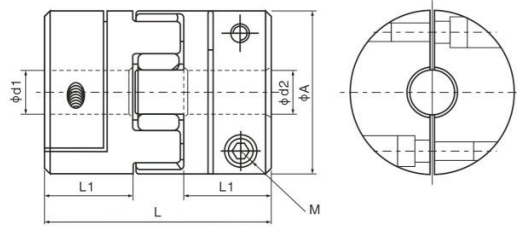
Size

Unit:mm

Type	A	L	L1	Largest aperture dmax	Standard aperture（H8）d1Xd2		M
					d1	d2	
SRJ-20C	20	30	10	10	4、5、6、6.35、7、8、10		M3
SRJ-30C	30	35	11	16	5、6、6.35、8、9、9.5、10、11、12、14、15		M4
SRJ-40C	40	66	25	22	8、9.5、10、11、12、14、15、16、18、19、20		M5
SRJ-55C	55	78	30	28	12、15、16、18、19、20、22、24、25		M6
SRJ-65C	65	90	35	38	20、22、24、25、28、30、32、35、38		M8

■ Specification code: SRJ-AC-d1xd2 ex:SRJ-30C-6X8   Material: aluminum alloy

Performance

Slow moving material: engineering plastics

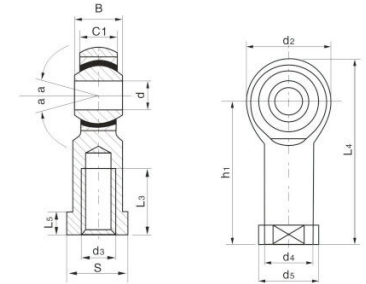| Type	General torsion （N.m）	Maximum torque （N.m）	Maximum number of turns （min）	Static torsional rigidity （N.m/rad）	Dynamic torsional rigidity （N.m/rad）
SRJ-20C	5	10	15200	51.0	151
SRJ-30C	12.5	25	10200	170.9	505
SRJ-40C	17	34	7600	857.5	2571
SRJ-55C	60	120	5600	2060	6163
SRJ-65C	160	320	4700	3430	10291

Type	Weight （kg）		Maximum instantaneous moment of inertia J(kgm²)		Allow the eccentric （mm）	Allow the Angle （°）	Allowable axial difference （mm）
	A single	Elastic ring	A single	Elastic ring			
SRJ-20C	8.5 X10³	1.7 X10³	0.46 X10³	0.073 X10³	0.10	1.0	0.8
SRJ-30C	18 X10³	4.2 X10³	2.5 X10³	0.45 X10³	0.15	1.0	1
SRJ-40C	64 X10³	6.5 X10³	20.1 X10³	1.44 X10³	0.15	1.0	1.2
SRJ-55C	130 X10³	17.4 X10³	50.5 X10³	7.3 X10³	0.2	1.0	1.4
SRJ-65C	250 X10³	28.6 X10³	200.1 X10³	16.3 X10³	0.2	1.0	1.5

Self-lubricating rod end bearings female thread steel on ptee-metallic fabric maintenance free series
## PHSA

Designation	Dimensions（mm）												a°	Max stat load capacity	Weight (kg)	Old designation
	d	D3	d2	d5	S	B	L5	C1	h1	L3	d4	L4				
PHSA5	5	M5x0.8	18	12.5	10	8	4	6	27	10	9	36	13			SI5T/K
PHSA6	6	M6x1	20	13	11	9	5	6.75	30	12	10	45	13	7.20	0.027	SI6T/K
PHSA8	8	M8x1.25	24	16	14	12	5	9	36	16	12.5	48	13	11.60	0.046	SI8T/K
PHSA10	10	M10x1.5	28	19	17	14	6.5	10.5	43	20	15	57	13	14.50	0.076	SI10T/K
PHSA12	12	M12x1.75	32	22	19	16	6.5	12	50	22	17.5	66	13	17.00	0.115	SI12T/K
PHSA14	14	M14x2	36	25	22	19	8	13.5	57	25	20	75	13	24.00	0.170	SI14T/K
PHSA16	16	M16x2	40	27	22	21	8	15	64	28	22	84	13	28.50	0.230	SI16T/K
PHSA18	18	M18x1.5	46	31	27	23	10	16.5	71	32	25	94	13	35.00	0.320	SI18T/K
PHSA20	20	M20x1.5	50	34	30	25	10	18	77	33	27.5	102	13	40.00	0.42	SI20T/K
PHSA22	22	M22x1.5	54	37	32	28	12	20	84	37	30	111	13	52.00	0.54	SI22T/K
PHSA25	25	M25x2	60	42	30	31	12	22	94	42	33.5	124	13	60.00	0.75	SI25T/K
PHSA28	28	M27x2	66	46	41	35	14	26	103	41	37	136	13			SI28T/K
PHSA30	30	M30x2	70	50	41	37	15	25	110	51	40	145	13	81.00	1.30	SI30T/K

1.For Left-hand thread suffix "L" is added to bearings number and thread PHSAL8K M8x1.25L-6H
2.A=TO line SF1 materiad on the surface of spherical plain

POETRY SPRINT COMPANY

Inlaid line rod ends with female thread series
PHS
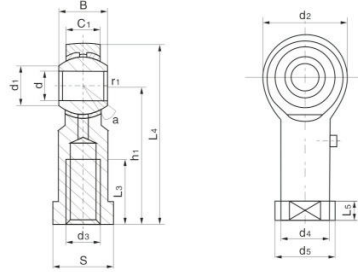
Bearings number	Dimensions (mm)										Load ratings		a°	weight (kg)
	C_1	d	B	d_2 max	d_3	h_1	L_3 min	L_4 max	L_5 max	d_5 max	S	Dynamic	Static		
PHS 5	6	5	8	16	M5X0.8	27	14	35	4	11	9	3.3	4.1	13	0.016
PHS 6	6.75	6	9	18	M6X1	30	14	39	5	13	11	4.3	5.3	13	0.026
PHS 8	9	8	12	22	M8X1.25	36	17	47	5	16	14	6.8	8.5	14	0.044
PHS 10	10.5	10	14	26	M10X1.5	43	21	56	6.5	19	17	10	11	14	0.072
PHS 12	12	12	16	30	M12X1.75	50	24	65	6.5	22	19	13	14	13	0.108
PHS 14	13.5	14	19	34	M14X2	57	27	74	8	25	22	17	20	16	0.161
PHS 16	15	16	21	38	M16X2	64	33	83	8	27	22	21	25	15	0.225
PHS 18	16.5	18	23	42	M18X1.5	71	36	92	10	31	27	26	30	15	0.295
PHS 20	18	20	25	46	M20X1.5	77	40	100	10	34	30	31	35	15	0.382
PHS 22	20	22	28	50	M22X1.5	84	43	109	12	37	32	38	43	15	0.488
PHS 25	22	25	31	60	M24X2	94	48	124	12	42	36	47	65	15	0.749
PHS 28	25	28	35	66	M27X2	103	53	136	12	46	41	59	77	15	0.949
PHS 30	25	30	37	70	M30X2	110	56	145	15	50	41	63	86	17	1.13

1.For Left-hand thread suffix"L"is added to bearings number and thread sign,e.g.PHS8 M8L-6H
2.The surface of spherical plain with a bronze line
3.To plate zine on the surface of rod body,the housing with a lubrication hole or a grease nipple

POETRY SPRINT COMPANY

Inlaid line rod ends with male thread series
POS
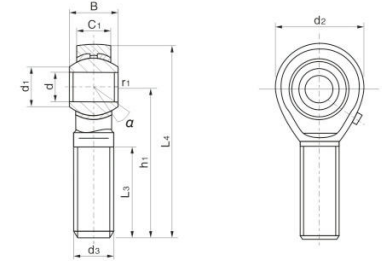
Bearings number	Dimensions (mm)										Load ratings		a°	weight (kg)
	d	B	r_1	C_1	d_1	d_2	d_3	h	L_1	L_2	Dynamic	Static		
POS 5	5	8	0.3	6	7.7	16	M5X0.8	33	20	41	3.3	3.9	13	0.016
POS 6	6	9	0.3	6.75	9	18	M6X1	36	22	45	4.3	5.3	13	0.026
POS 8	8	12	0.3	9	10.4	22	M8X1.25	42	25	53	6.8	8.5	14	0.044
POS 10	10	14	0.6	10.5	12.9	26	M10X1.5	48	29	61	10	11	14	0.072
POS 12	12	16	0.6	12	15.4	30	M12X1.75	54	33	69	13	14	13	0.108
POS 14	14	19	0.6	13.5	16.9	34	M14X2	60	36	77	17	20	16	0.161
POS 16	16	21	0.6	15	19.4	38	M16X2	66	40	85	21	25	15	0.225
POS 18	18	23	0.6	16.5	21.9	42	M18X1.5	72	44	93	26	30	15	0.295
POS 20	20	25	0.6	18	24.4	46	M20X1.5	78	47	101	31	35	15	0.382
POS 22	22	28	0.6	20	25.8	50	M22X1.5	84	51	109	38	43	15	0.488
POS 25	25	31	0.6	22	29.6	60	M24X2	94	57	124	47	65	15	0.749
POS 28	28	35	0.6	25	32.3	66	M27X2	103	62	136	59	77	15	0.949
POS 30	30	37	0.6	25	34.8	70	M30X2	110	66	145	63	86	17	1.13

1.For Left-hand thread suffix"L"is added to bearings number and thread sign,e.g.POS8 M8L-6H
2.The surface of spherical plain with a bronze line
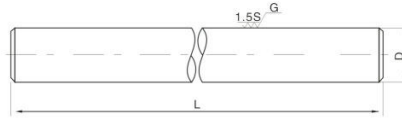3.To plate zine on the surface of rod body,the housing with a lubrication hole or a grease nipple

POETRY SPRINT COMPANY

Cylinder linear rail series

Main application:

linear shaft is widely used in automatic transmission device, such as industrial robot, automatic recorder, computer, precision printer, special cylinder rod, automatic wood molding machine and other industrial automatic machines. At the same time because of its hardness, but also to extend the transmission life of ordinary precision instruments.

Material: Gcr15
Hardness: HRC62±2
Accuracy: g6–g5
Roughness: Ra0.4–0.8
Hard band depth: 0.8mm~3mm
Waiting length: 1000mm~7000mm
Straightness: 100mm不超过5μm
Roundness: 不超过0.003mm
Standard S: chrome plated As: stainless steel

Dia-meter (mm)	Type WC (WCAS)	Type WCS	Precision (µm) g6	Length of the standard(mm)	Effective condition hard band	Weight (kgf/m)
3	WC3	WCS3	−2~−8		No more than 1.0	0.06
4	WC4	WCS4				0.10
5	WC5	WCS5	−4~−12			0.15
6	WC6	WCS6				0.23
8	WC8	WCS8	−5~−14		No less than 1.0	0.40
10	WC10	WCS10				0.62
12	WC12	WCS12				0.89
13	WC13	WCS13	−6~−17			1.04
16	WC16	WCS16			No less than 1.5	1.58
20	WC20	WCS20				2.47
25	WC25	WCS25	−7~−20			3.85
30	WC30	WCS30			No less than2.0	5.55
35	WC35	WCS35				7.55
40	WC40	WCS40	−9~−25		No less than2.5	9.87
50	WC50	WCS50				15.4
60	WC60	WCS60	−10~−29		No less than 3.0	22.2
80	WC80	WCS80				39.5
100	WC100	WCS100	−12~−34			61.7
120	WC120	WCS120				88.8
150	WC150	WCS150	−14~−39			139.0

Note: 1. The manufacturer with color ▢ can provide the length of each specification.
2. The manufacturer can provide 45# carbon steel, 20CrMO, 40CrMO and other materials.

POETRY SPRINT COMPANY

>>> Spectal Machining for Shaft

We can offer linear shaft with diameter ⌀5 mm~⌀150mm,maximum length up to 6000mm.
1.When you are special requirements on length,we can meet your machining requirements with different length; when you request above 6000mm,we can anti–connect for you.(shown in Fig a)

Dowet joint   Dowet joint   Butted joint   Threaded and ground joint
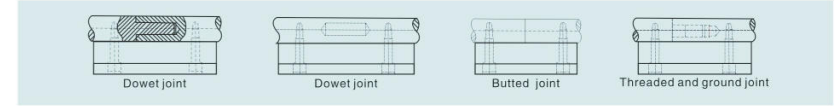
2.When you are special requirements on machining,such as threading,coaxial holes drilled and tapped,radial holes drilled and tapped,reduced shaft diameter etc,we can machine for you,and these special machines are finished after heat treatment and hard chromic so that ensure the precision of product.send us your detailed sketch or blue print for propmt quotatine and action. your should be satisfied with our service.
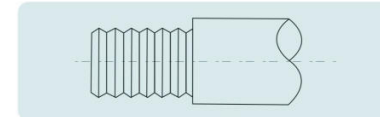
THREADING
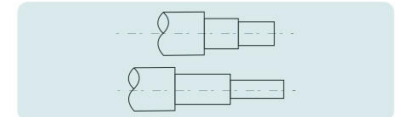
REDUCED SHAFT DIAMETER
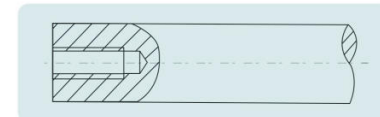
COAXIAL HOLES DRILLED AND TAPPED

FLATS–SINGLE OR MULTIPLE

KEY WAY

SNAP RING GROOVES

RADIAL HOLES DRILLED AND TAPPED

CHAMFERING

POETRY SPRINT COMPANY
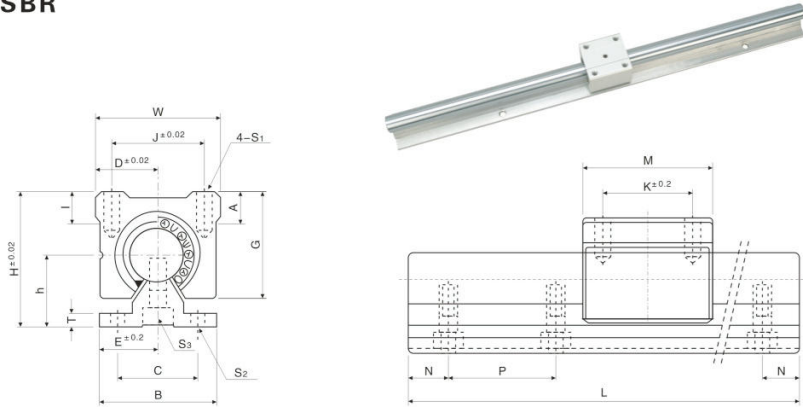
Linear motion ball slide units series
SBR

Type			Load ratings		Weight		Dimensions（mm）			
Unit	Slider★ ★	Trunnion	Dynamic C(N)	Static Co(N)	Slide（kgf）	Qrbital (kgf/m)	D	h	H	E
SBR12S	SBR12UU	Φ12	600	1020	0.1	1.60	20.5	22.5	40	15
SBR16S	SBR16UU	Φ16	770	1170	0.15	2.55	22.5	25	45	20
SBR20S	SBR20UU	Φ20	860	1370	0.20	3.50	24	27	50	22.5
SBR25S	SBR25UU	Φ25	980	1560	0.45	5.30	30	38	60	27.5
SBR30S	SBR30UU	Φ30	1560	2740	0.63	7.40	35	37	70	30
SBR35S	SBR35UU	Φ35	1660	3130	0.95	10.05	40	43	80	32.5
SBR40S	SBR40UU	Φ40	2150	4010	1.33	13.10	45	48	90	37.5
SBR50S	SBR50UU	Φ50	3820	7930	3.00	20.65	60	62	115	47.5

Type	Dimensions（mm）											
	W	G	A	B	T	M	S₃	J	K	S₂	C	S₁	P
SBR12S	41	28	9	30	4	39	M4X16	28	26	Φ4.0	22	M5	100
SBR16S	45	33	9	40	5	45	M6X20	32	30	Φ5.5	30	M5	150
SBR20S	48	39	11	45	5	50	M6X20	35	35	Φ5.5	30	M6	150
SBR25S	50	47	14	55	6	65	M6X25	40	40	Φ6.6	35	M6	200
SBR30S	70	56	15	60	7	70	M8X30	50	50	Φ6.6	40	M8	200
SBR35S	80	63	18	65	8	80	M8X35	55	55	Φ9	45	M8	200
SBR40S	90	72	20	75	9	90	M8X40	65	65	Φ9	55	M10	200
SBR50S	120	90	25	95	11	110	M10X50	94	80	Φ11	70	M10	200

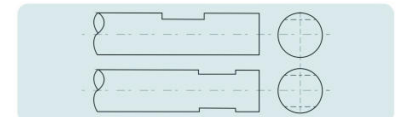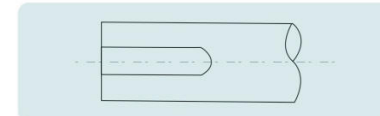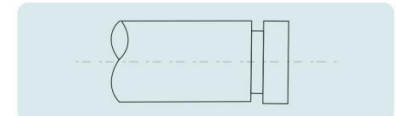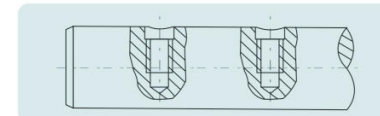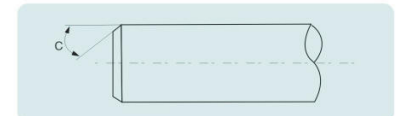# POETRY SPRINT COMPANY

Linear motion ball slide units series
SBR…UU   SBR…LUU
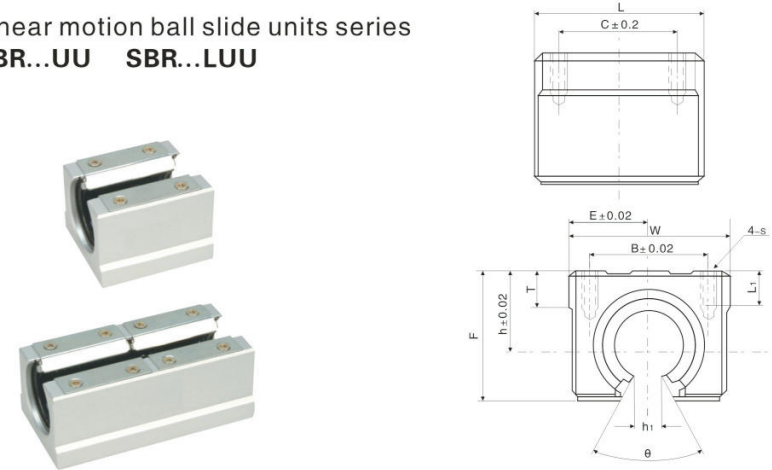
Unit Designation	Dimensions（mm）												Slide bush			Weight kg
	h	E	W	L	F	h₁	θ	B	C	S	L₁	T	Designation	Dynamic C（kgf）	Static Co（kgf）	
SBR 10UU	15	18	36	32	24	6	80°	25	20	M5	10	7	LM10UU–OP	372	549	0.65
SBR 12UU	17.5	20.5	41	39	28	7.5	80°	28	26	M5	10	9	LM12UU–OP	420	610	0.10
SBR 13UU	17	20	40	39	27.6	8.5	80°	28	28	M5	10	8	LM13UU–OP	510	784	0.10
SBR 16UU	20	22.5	45	45	33	10	80°	32	30	M5	12	9	LM16UU–OP	774	1180	0.15
SBR 20UU	23	24	48	50	39	10	60°	35	35	M6	12	11	LM20UU–OP	882	1370	0.20
SBR 25UU	27	30	60	65	47	11.5	50°	40	40	M6	12	14	LM25UU–OP	980	1570	0.45
SBR 30UU	33	35	70	70	56	14	50°	50	50	M8	18	15	LM30UU–OP	1570	2740	0.63
SBR 35UU	37	40	80	80	63	16	50°	55	55	M8	18	18	LM35UU–OP	1670	3140	0.925
SBR 40UU	42	45	90	90	72	19	50°	65	65	M10	20	20	LM40UU–OP	2160	4020	0.133
SBR 50UU	53	60	120	110	92	23	50°	94	80	M10	20	25	LM50UU–OP	3820	7940	0.30
SBR 12LUU	17.5	20.5	41	78	27	7.5	80°	28	60	M5	10	9	LM12UU–OP	1200	2000	0.18
SBR 16LUU	20	22.5	45	85	33	10	80°	32	60	M5	12	9	LM16LUU–OP	1548	2360	0.30
SBR 20LUU	23	24	48	96	39	10	60°	35	70	M6	12	11	LM20LUU–OP	1764	2740	0.40
SBR 25LUU	27	30	60	130	47	11.5	50°	40	100	M6	12	14	LM25LUU–OP	1960	3140	0.90
SBR 30LUU	33	35	70	140	56	14	50°	50	110	M8	18	15	LM30LUU–OP	3140	5480	0.126
SBR 40LUU	42	45	90	175	72	19	50°	65	140	M10	20	20	LM40LUU–OP	4320	8040	0.266
SBR 50LUU	53	60	120	215	92	23	50°	94	160	M10	20	20	LM50LUU–OP	7640	15880	0.60

POETRY SPRINT COMPANY

Linear motion ball slide units series
TBR
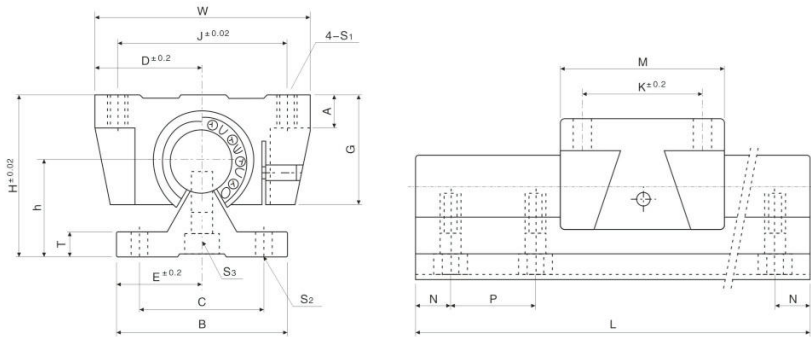
Type		Trunnion	Load ratings		Weight		Dimensions (mm)			
Unit	Slider★ ★		Dynamic C(N)	Static Co(N)	Slide (kgf)	Qrbital (kgf/m)	D	h	H	E
TBR16S	TBR16UU	Φ16	392	490	0.18	2.58	31	22.14	40	25
TBR20S	TBR20UU	Φ20	784	1176	0.30	4.27	34	29.01	50	27.5
TBR25S	TBR25UU	Φ25	1568	2352	0.60	5.9	41	31.97	60	32.5
TBR30S	TBR30UU	Φ30	1764	2940	0.90	8.35	45.5	36.52	70	37.5

Type	Dimensions (mm)											
	W	G	A	B	T	M	S₁	J	K	S₂	C	S₃	P
TBR16S	62	26	8	50	6	42	M5	50	30	Φ5.5	37	M6	150
TBR20S	68	31	10	55	8	51	M6	54	37	Φ5.5	40	M6	150
TBR25S	82	41	12	65	10	65	M8	65	50	Φ6.6	45	M6	200
TBR30S	91	48	12	75	12	75	M8	75	60	Φ6.6	55	M6	200

POETRY SPRINT COMPANY

Linear motion ball slide units series
TBR…UU   TBR…LUU
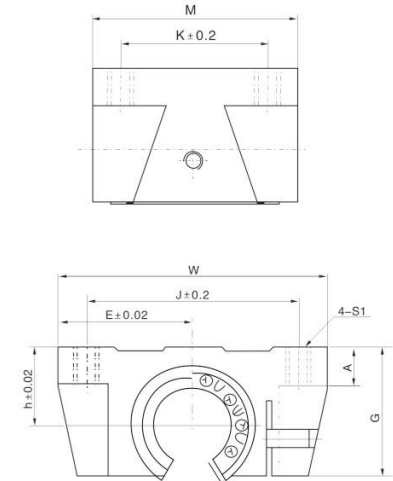
Support Designation	Shaft Dimensions	Basic load rating		Dimensions (mm)										Slide bush	
		Dynamic C(N)	Static Co(N)	W	G	A	M	S₁	J	K	E	h	Designation	Basic load rating Dynamic CN	Static CoN
TBR16UU	Φ16	392	490	62	26	8	42	M5	50	30	31	18	LM16UU–OP	392	490
TBR20UU	Φ20	784	1176	68	31	10	51	M6	54	37	34	21	LM20UU–OP	784	1176
TBR25UU	Φ25	1568	2352	82	41	12	65	M8	65	50	41	28	LM25UU–OP	1568	2352
TBR30UU	Φ30	1764	2940	91	48	12	75	M8	75	60	45.5	33.5	LM30UU–OP	1764	2940
TBR16LUU	Φ16	780	980	62	26	8	85	M5	50	60	31	18	LM16LUU–OP	392	490
TBR20LUU	Φ20	1568	2352	68	31	10	96	M6	54	70	34	21	LM20LUU–OP	784	1176
TBR25LUU	Φ25	3136	4704	82	41	12	130	M8	65	100	41	28	LM25LUU–OP	1568	2352
TBR30LUU	Φ30	3528	5880	91	48	12	140	M8	75	110	45.5	33.5	LM30LUU–OP	1764	2940

POETRY SPRINT COMPANY

Linear motion ball slide units series
SCS...UU   SCS...LUU
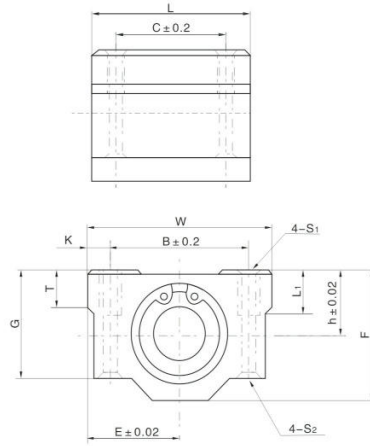
Unit Designation	Dimensions (mm)													Slide bush			Weight (kg/m)
	T	h	E	W	L	F	G	B	C	K	S₁	S₂	L₁	Designation	Dynamic CN	Static C₀N	
SCS 6UU	6	9	15	30	25	18	15	20	15	5	M4	3.4	8	LM 6UU	206	265	34
SCS 8UU	6	11	17	34	30	22	18	24	18	5	M4	3.4	8	LM 8UU	274	392	52
SCS 10UU	8	13	20	40	35	26	21	28	21	6	M5	4.3	12	LM 10UU	372	549	92
SCS 12UU	8	15	21	42	36	28	24	30.5	26	5.75	M5	4.3	12	LM 12UU	510	784	102
SCS 13UU	8	15	22	44	39	30	24.5	33	26	5.5	M5	4.3	12	LM13UU	510	784	120
SCS 16UU	9	19	25	50	44	38.5	32.5	36	34	7	M5	4.3	12	LM 16UU	774	1180	200
SCS 20UU	11	21	27	54	50	41	35	40	40	7	M6	5.2	12	LM 20UU	882	1370	255
SCS 25UU	12	26	38	76	67	51.5	42	54	50	11	M8	7	18	LM 25UU	980	1570	600
SCS 30UU	15	30	39	78	72	59.5	49	58	58	10	M8	7	18	LM 30UU	1570	2740	735
SCS 35UU	18	34	45	90	80	68	54	70	60	10	M8	7	18	LM 35UU	1670	3140	1100
SCS 40UU	20	40	51	102	90	78	62	80	60	11	M10	8.7	25	LM 40UU	2160	4020	1590
SCS 50UU	25	52	61	122	110	102	80	100	80	11	M10	8.7	25	LM 50UU	3820	7940	3340
SCS 60UU	30	58	66	132	122	114	94	108	90	12	M10	10.7	25	LM 60UU	4700	10000	4270
SCS 8LUU	6	11	17	34	58	22	18	24	42	5	M4	3.4	8	LM 8LUU	274	392	0.1
SCS 10LUU	8	13	20	40	68	26	21	28	456	6	M5	4.3	12	LM 10LUU	372	549	0.18
SCS 12LUU	8	15	21	42	70	28	24	30.5	50	5.75	M5	4.3	12	LM 12LUU	510	784	0.20
SCS 13LUU	8	15	22	44	75	30	24.5	33	50	5.5	M5	4.3	12	Lm13LUU	510	784	0.23
SCS 16LUU	9	19	25	50	85	38.5	32.5	36	60	7	M5	4.3	12	LM 16LUU	774	1180	0.39
SCS 20LUU	11	21	27	54	96	41	35	40	70	7	M6	5.2	12	LM 20LUU	882	1370	0.49
SCS 25LUU	12	26	38	76	130	51.5	42	54	100	11	M8	7	18	LM 25LUU	980	1570	1.165
SCS 30LUU	15	30	39	78	140	59.5	49	58	110	10	M8	7	18	LM 30LUU	1570	2740	1.43
SCS 35LUU	18	34	45	90	155	68	54	70	120	10	M8	7	18	LM 35LUU	1670	3140	2.13
SCS 40LUU	20	40	51	102	175	78	62	80	140	11	M10	8.7	25	LM 40LUU	2160	4020	3.09
SCS 50LUU	25	52	61	122	215	102	80	100	160	11	M10	8.7	25	LM 50LUU	3820	7940	6.53
SCS 60LUU	30	58	66	132	240	114	94	108	180	12	M12	10.7	25	LM 60LUU	4700	10000	9.29

POETRY SPRINT COMPANY

Box style linear sliding
SC...VUU
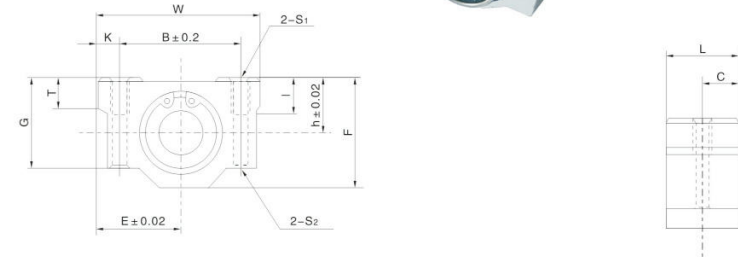
Model NO.	Shaft Diameter	Dimensions (mm)							Mounting dimensions						Weight (kg/m)
		h	E	W	L	F	G	T	B	C	K	S₁	S₂	I	
SC8VUU	8	11	17	34	15.5	22	18	6	24	7.75	5	M4	3.4	8	0.027
SC10VUU	10	13	20	40	20	26	21	8	28	10	6	M5	4.3	12	0.053
SC12VUU	12	15	21	42	21	28	24	8	30.5	10.5	5.75	M5	4.3	12	0.06
SC13VUU	13	15	22	44	20.6	30	24.5	8	33	10.3	5.5	M5	4.3	12	0.064
SC16VUU	16	19	25	50	24.1	38.5	32.5	9	36	12.05	6	M5	4.3	12	0.11
SC20VUU	20	21	27	54	28.1	41	35	11	40	14.05	7	M6	5.2	12	0.144
SC25VUU	25	26	38	76	38	51.5	42	12	54	19	11	M8	7	18	0.34
SC30VUU	30	30	39	78	39	59.5	49	15	58	20.75	10	M8	7	18	0.424
SC35VUU	35	34	45	90	45	68	54	18	70	22.75	10	M8	7	18	0.626
SC40VUU	40	40	51	102	51	78	62	20	80	28.25	11	M10	8.7	25	1.0
SC50VUU	50	52	61	122	69	102	80	25	100	34.5	11	M10	8.7	25	2.1

POETRY SPRINT COMPANY

Linear motion ball slide units series
SH…A
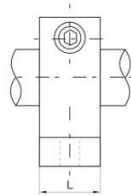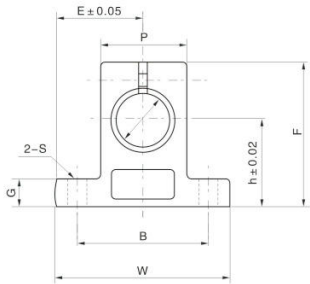
Support Designation	Shaft Demensions	Dimensions (mm)									Locking Bolt	Clamping Bolt	Weight (kg/m)
		h	E	W	L	F	G	P	B	S			
SH 8A	8	20	21	42	14	32.8	6	18	32	5.5	M4	M5	24
SH 10A	10	20	21	42	14	32.8	6	18	32	5.5	M4	M5	24
SH 12A	12	23	21	42	14	37.5	6	20	32	5.5	M4	M5	30
SH 13A	13	23	21	42	14	37.5	6	20	32	5.5	M4	M5	30
SH 16A	16	27	24	48	16	44	8	25	38	5.5	M4	M5	40
SH 20A	20	31	30	60	20	51	10	30	45	6.6	M5	M6	70
SH 25A	25	35	35	70	24	60	12	38	56	6.6	M6	M6	130
SH 30A	30	42	42	84	28	70	12	44	64	9	M6	M8	180
SH 35A	35	50	49	98	32	82	15	50	74	11	M8	M10	270
SH 40A	40	60	57	114	36	96	15	60	90	11	M8	M10	420
SH 50A	50	70	63	126	40	120	18	74	100	14	M12	M12	750
SH 60A	60	80	74	148	45	136	18	90	120	14	M12	M12	1100

POETRY SPRINT COMPANY

Winding shape ball joint rod ends series
SHF…A
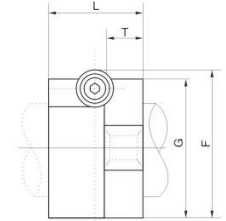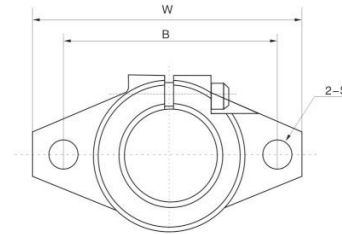
Model No.	Shaft Diameter	Dimensions (mm)							Locking Bolt	Clamping Bolt	Weight (kg/m)
		W	L	T	F	G	B	S			
SHF 3A	3	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 4A	4	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 5A	5	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 6A	6	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 8A	8	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 10A	10	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 12A	12	47	13	7	28	25	36	5.5	M4	M5	0.020
SHF 13A	13	47	13	7	28	25	36	5.5	M4	M5	0.020
SHF 16A	16	50	16	8	31	28	40	5.5	M4	M5	0.027
SHF 20A	20	60	20	8	37	34	48	7	M5	M6	0.040
SHF 25A	25	70	25	10	42	40	56	7	M5	M6	0.060
SHF 30A	30	80	30	12	50	46	64	9	M6	M8	0.110
SHF 35A	35	92	35	14	58	50	72	12	M8	M10	0.380
SHF 40A	40	102	40	16	67	56	80	12	M10	M10	0.510
SHF 50A	50	122	50	19	83	70	96	14	M12	M12	0.890
SHF 60A	60	140	60	23	95	82	112	14	M12	M12	1.500

POETRY SPRINT COMPANY

Linear bearing series
LM...UU

Designation					Major dimensions and tolerance		
LM...UU Standard	Ball circuit	Weight(g)	LM...AJ Clearance adjustment	LM...OP Open	dr (mm)	Tolerance(mm)	
						Precision J (Precision level)	Precision P (Regular grade)
LM 4UU	4	1.9	–	–	4	0 -0.005	0 -0.008
LM 5UU	4	4	–	–	5		
LM 6UU	4	8	LM6–AJ	–	6		
LM 8SUU	4	11	LM8–AJ	–	8		
LM 8UU	4	16	LM8–AJ	–	8		
LM 10UU	4	30	LM10–AJ	LM10–OP	10	0 -0.006	0 -0.009
LM 12UU	5	31.5	LM12–AJ	LM12–OP	12		
LM 13UU	5	43	LM13–AJ	LM13–OP	13		
LM 16UU	5	69	LM16–AJ	LM16–OP	16		
LM 20UU	6	87	LM20–AJ	LM20–OP	20	0 -0.007	0 -0.0010
LM 25UU	6	220	LM25–AJ	LM25–OP	25		
LM 30UU	6	250	LM30–AJ	LM30–OP	30		
LM 35UU	6	390	LM35–AJ	LM35–OP	35		
LM 40UU	6	585	LM40–AJ	LM40–OP	40	0 -0.008	0 -0.0012
LM 50UU	6	1580	LM50–AJ	LM50–OP	50		
LM 60UU	6	2000	LM60–AJ	LM60–OP	60	0 -0.009	0 -0.0015
LM 80UU	6	4420	LM80–AJ	LM80–OP	80		
LM 100UU	6	8600	LM100–AJ	LM100–OP	100	0 -0.010	0 -0.020

LM 25 A UU AJ

- LM: Linear bearing code(metric size, widely used in Asia)
- 25 Trunnion sizes
- A The high temperature with mark (metal retainer)
- UU No seal type / U Single seal / UU Double sealed
- AJ Standard adjustment / OP Open

LM   LM...AJ   LM...OP

D (mm)	Tolerance (mm)	L (mm)	Tolerance (mm)	B (mm)	Tolerance (mm)	W (mm)	D₁ (mm)	f (mm)	E (mm)	θ	Dynamic CN	Statoc CoN	Model No.
8	0 -0.009	12	0 -0.12	–	–	–	–	–	–	–	88	127	LM 4UU
10		15		10.2		1.1	9.6	–	–	–	167	206	LM 5UU
12		19		13.5		1.1	11.5	1	–	–	206	265	LM 6UU
15	0 -0.011	17		11.5		1.1	14.3	1	–	–	176	216	LM 8SUU
15		24		17.5		1.1	14.3	1	–	–	274	392	LM 8UU
19		29	0 -0.2	22	0 -0.2	1.3	18	1	6.8	80°	372	549	LM 10UU
21	0 -0.013	30		23		1.3	20	1.5	8	80°	510	784	LM 12UU
23		32		23		1.3	22	1.5	9	80°	510	784	LM 13UU
28		37		26.5		1.6	27	1.5	11	80°	774	1180	LM 16UU
32		42		30.5		1.6	30.5	1.5	11	60°	882	1370	LM 20UU
40	0 -0.016	59		41		1.85	38	2	12	50°	980	1570	LM 25UU
45		64		44.5		1.85	43	2.5	15	50°	1570	2740	LM 30UU
52		70	0 -0.3	49.5	0 -0.3	2.1	49	2.5	17	50°	1670	3140	LM 35UU
60	0 -0.019	80		60.5		2.1	57	3	20	50°	2160	4020	LM 40UU
80		100		74		2.6	76.5	3	25	50°	3820	7940	LM 50UU
90	0 -0.022	110		85		3.15	86.5	3	30	50°	4700	10000	LM 60UU
120		140	0 -0.4	105.5	0 -0.4	4.15	116	3	40	50°	7350	16000	LM 80UU
150	0 -0.025	175		125.5		4.15	145	3	50	50°	14120	34800	LM 100UU

Linear bearing series
LME...UU

Designation						Major dimensions and tolerance		
LME...UU	Ball circuit	Weight(g)	LME...AJ Clearance adjustment	LME...OP Open	Dr(mm)		Tolerance(mm)	
							Precision J	Precision P
LME 4UU	4	1.9	–	–	4			+0.008 0
LME 5UU	4	11	LME 5–AJ	–	5			
LME 8UU	4	20	LME 8–AJ	–	8			
LME 10UU	4	29.5	LME10–AJ	LME10–OP	10			
LME 12UU	5	41	LME12–AJ	LME12–OP	12			
LME 16UU	5	57	LME16–AJ	LME16–OP	16			+0.009 –0.001
LME 20UU	6	91	LME20–AJ	LME20–OP	20			
LME 25UU	6	215	LME25–AJ	LME25–OP	25			+0.011 –0.001
LME 30UU	6	325	LME30–AJ	LME30–OP	30			
LME 40UU	6	705	LME40–AJ	LME40–OP	40			
LME 50UU	6	1130	LME50–AJ	LME50–OP	50			+0.013 –0.002
LME 60UU	6	2050	LME60–AJ	LME60–OP	60			
LME 80UU	6	5140	LME60–AJ	LME60–OP	80			

LME 25 A UU AJ

AJ Standard adjustment
OP Open

LME: Metric sizes are widely used in Europe

Trunnion sizes

The high temperature with mark (metal retainer)

U Single seal
UU Double sealed

No seal type

LME   LME...AJ   LME...OP
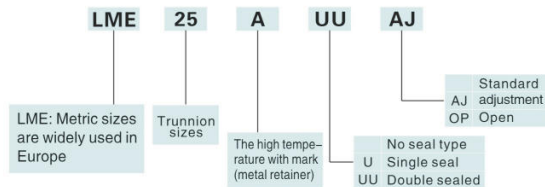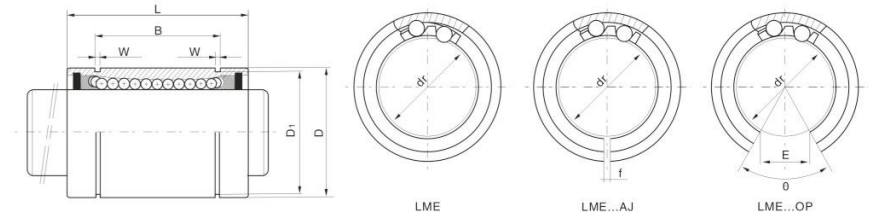
Major dimensions and tolerance											Ratings load		Model No.
D (mm)	Tolerance (mm)	L (mm)	Tolerance (mm)	B (mm)	Tolerance (mm)	W (mm)	D1 (mm)	f (mm)	E (mm)	θ	Dynamic CN	Statoc CoN	
8	0 –0.12	12		–		–	–	–	–	–	88	127	LME 4UU
12	0 –0.008	22		14.5		1.1	11.5	1	–	–	206	265	LME 5UU
16		25		16.5		1.1	15.2	1	–	–	265	402	LME 8UU
19		26	0 –0.2	22	0 –0.2	1.3	18	1	6.8	80°	372	549	LME 10UU
22	0 –0.009	32		22.9		1.3	21	1.5	7.5	78°	510	784	LME 12UU
26		36		24.9		1.3	24.9	1.5	10	78°	578	892	LME 16UU
32		45		31.5		1.6	30.3	2	10	60°	862	1370	LME 20UU
40	0 –0.011	58		44.1		1.85	37.5	2	12.5	60°	980	1570	LME 25UU
47		68		52.1		1.85	44.5	2	12.5	50°	1570	2740	LME 30UU
62	0 –0.013	80	0 –0.3	60.6	0 –0.3	2.15	59	3	16.8	50°	2160	4020	LME 40UU
75		100		77.6		2.65	72	3	21	50°	3820	7940	LME 50UU
90	0 –0.015	125	0 –0.4	101.7	0 –0.4	3.15	86.5	3	27.2	54°	4700	9800	LME 60UU
120		165		133.7		4.15	116	3	36.3	54°	7350	16000	LME 80UU

POETRY SPRINT COMPANY

Linear bearing series
## LM…LUU   LME…LUU

SI UNIT:1N＝0.102kgf   Unit:mm

Model No.	Ball circuit	Weight(gf)	Inscribed clecle diameter		Outer diameter	
			dr	Tolerance	D	Tolerance
LM6LUU	4	16	6		12	0 −0.013
LM8LUU	4	31	8		15	
LM10LUU	4	62	10	0 −0.010	19	
LM12LUU	5	80	12		21	0 −0.016
LM13LUU	5	90	13		23	
LM16LUU	5	145	16		28	
LM20LUU	6	180	20		32	
LM25LUU	6	440	25	0 −0.012	40	0 −0.019
LM30LUU	6	580	30		45	
LM35LUU	6	795	35		52	
LM40LUU	6	1170	40	0 −0.012	60	0 −0.022
LM50LUU	6	2100	50		80	
LM60LUU	6	3500	60	0 −0.020	90	0 −0.025

Model No.	Ball circuit	Weight(gf)	Inscribed clecle diameter		Outer diameter	
			dr	Tolerance	D	Tolerance
LME8LUU	4	31	8	+0.009 −0.001	16	0 −0.009
LME12LUU	5	80	12		22	0 −0.011
LME16LUU	5	145	16	+0.011 −0.001	26	
LME20LUU	6	180	20		32	
LME25LUU	6	440	25	+0.013 −0.002	40	0 −0.013
LME30LUU	6	580	30		47	
LME40LUU	6	1170	40		62	
LME50LUU	6	3100	50	+0.016 −0.004	75	0 −0.015
LME60LUU	6	3500	60		90	0 −0.020
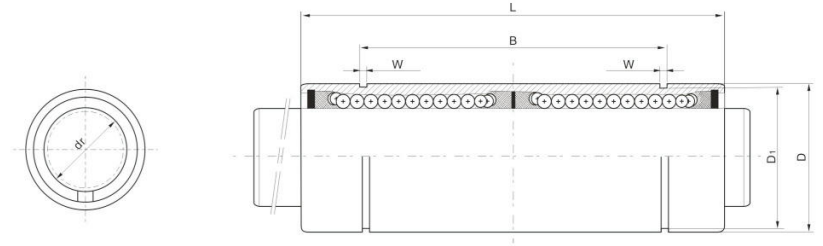
SI UNIT:1N＝0.102kgf   Unit:mm

Length		B		W	D₁	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
L	Tolerance		Tolerance					CN	CoN	
35		27		1.1	11.5	15	15	324	529	LM6LUU
45		35		1.1	14.3	15	15	413	784	LM8LUU
55		44		1.3	18	15	15	588	1100	LM10LUU
57	0 −0.3	46	0 −0.3	1.3	20	15	15	657	1200	LM12LUU
61		46		1.3	22	15	15	814	1570	LM13LUU
70		53		1.6	27	15	15	1230	2350	LM16LUU
80		61		1.6	30.5	20	20	1400	2750	LM20LUU
112		82		1.85	38	20	20	1560	3140	LM25LUU
123		89		1.85	43	20	20	2490	5490	LM30LUU
135		99		2.1	49	25	25	2650	6470	LM35LUU
154	0 −0.4	121	0 −0.4	2.1	57	25	25	3430	8040	LM40LUU
192		148		2.6	76.5	25	25	6080	15900	LM50LUU
211		170		3.15	86.5	25	25	7650	20000	LM60LUU

Length		B		W	D₁	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
L	Tolerance		Tolerance					CN	CoN	
45		33		1.1	15.2			431	784	LME8LUU
57	0 −0.3	45.8	0 −0.3	1.3	21	15	15	657	1200	LME12LUU
70		49.8		1.3	24.9			1230	2350	LME16LUU
80		61		1.6	30.5			1400	2750	LME20LUU
112		82		1.85	38	17	20	1560	3140	LME25LUU
123		104.2		1.85	44.5			2490	5490	LME30LUU
154	0 −0.4	121.2	0 −0.4	2.15	59			3430	8040	LME40LUU
192		155.2		2.65	72	20	25	6080	15900	LME50LUU
211		170		3.15	86.5	25		7650	20000	LME60LUU

POETRY SPRINT COMPANY

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

Designation			Inscribed ciecle diameter		Outer diameter		Length		Flange diameter	
LMF...UU	Ball circuit	Weight(g)	dr	Tolerance	D	Tolerance	L	Tolerance	D₁	Tolerance
LMF6UU	4	26.5	6		12		19		28	
LMF8SUU	4	34	8		15	0 / −0.011	17		32	
LMF8UU	4	40	8		15		24		32	
LMF10UU	4	78	10	0 / −0.009	19		29	0 / −0.2	40	
LMF12UU	4	76	12		21	0 / −0.013	30		42	
LMF13UU	4	94	13		23		32		43	0 / −0.2
LMF16UU	5	134	16		28		37		48	
LMF20UU	5	180	20		32		42		54	
LMF25UU	6	340	25	0 / −0.010	40	0 / −0.016	59		62	
LMF30UU	6	460	30		45		64		74	
LMF35UU	6	795	35		52		70	0 / −0.3	82	
LMF40UU	6	1054	40	0 / −0.012	60	0 / −0.019	80		96	
LMF50UU	6	2200	50		80		100		116	0 / −0.3
LMF60UU	6	2960	60	0 / −0.015	90	0 / −0.022	110		134	

Designation			Inscribed ciecle diameter		Outer diameter		Length		Flange diameter	
LMK...UU	Ball circuit	Weight(g)	dr	Tolerance	D	Tolerance	L	Tolerance	D₁	Tolerance
LMK6UU	4	18.5	6		12		19		28	
LMK8SUU	4	23	8		15	0 / −0.011	17		32	
LMK8UU	4	29	8		15		24		32	
LMK10UU	4	61	10	0 / −0.009	19		29	0 / −0.2	40	
LMK12UU	4	56	12		21	0 / −0.013	30		42	
LMK13UU	4	75	13		23		32		43	0 / −0.2
LMK16UU	5	104	16		28		37		48	
LMK20UU	5	145	20		32		42		54	
LMK25UU	6	300	25	0 / −0.010	40	0 / −0.016	59		62	
LMK30UU	6	375	30		45		64		74	
LMK35UU	6	692	35		52		70	0 / −0.3	82	
LMK40UU	6	864	40	0 / −0.012	60	0 / −0.019	80		96	
LMK50UU	6	2020	50		80		100		116	0 / −0.3
LMK60UU	6	2520	60	0 / −0.015	90	0 / −0.022	110		134	

SI UNIT:1N＝0.102kgf   Unit:mm

H	P.C.D	Hole for attachment d₁Xd₂Xh	Amgular Radial tolerance of flange μm	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
						CN	CoN	
5	20	3.4X6.5X3.3	12	12	−5	21	27	LMF6UU
5	24	3.4X6.5X3.3	12	12	−5	18	23	LMF8SUU
5	24	3.4X6.5X3.3	12	12	−5	27	41	LMF8UU
6	29	4.5X8X4.4	12	12	−5	38	56	LMF10UU
6	32	4.5X8X4.4	12	12	−5	42	61	LMF12UU
6	33	4.5X8X4.4	12	12	−7	52	79	LMF13UU
6	38	4.5X8X4.4	12	12	−7	79	120	LMF16UU
8	43	5.5X9.5X5.4	15	15	−9	88	140	LMF20UU
8	51	5.5X9.5X5.4	15	15	−9	100	160	LMF25UU
10	60	6.6X11X6.5	15	15	−9	160	280	LMF30UU
10	67	6.6X11X6.5	20	20	−13	170	320	LMF35UU
13	78	9X14X8.6	20	20	−13	220	410	LMF40UU
13	98	9X14X8.6	20	20	−13	390	810	LMF50UU
18	112	11X17.5X10.8	25	25	−13	480	1020	LMF60UU

K	H	P.C.D	Hole for attachment d₁Xd₂Xh	Amgular Radial tolerance of flange μm	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
							CN	CoN	
22	5	20	3.4X6.5X3.3	12	12	−5	21	27	LMK6UU
25	5	24	3.4X6.5X3.3	12	12	−5	18	23	LMK8SUU
25	5	24	3.4X6.5X3.3	12	12	−5	27	41	LMK8UU
30	6	29	4.5X8X4.4	12	12	−5	38	56	LMK10UU
32	6	32	4.5X8X4.4	12	12	−5	42	61	LMK12UU
34	6	33	4.5X8X4.4	12	12	−7	52	79	LMK13UU
37	6	38	4.5X8X4.4	12	12	−7	79	120	LMK16UU
42	8	43	5.5X9.5X5.4	15	15	−9	88	140	LMK20UU
50	8	51	5.5X9.5X5.4	15	15	−9	100	160	LMK25UU
58	10	60	6.6X11X6.5	15	15	−9	160	280	LMK30UU
64	10	67	6.6X11X6.5	20	20	−13	170	320	LMK35UU
75	13	78	9X14X8.6	20	20	−13	220	410	LMK40UU
92	13	98	9X14X8.6	20	20	−13	390	810	LMK50UU
106	18	112	11X17.5X10.8	25	25	−13	480	1020	LMK60UU

POETRY SPRINT COMPANY

Flange linear bearing series
LMF...LUU   LMK...LUU

Designation			Inscribed ciecle diameter		Outer diameter		Length		Flange diameter	
LMF...LUU	Ball circuit	Weight(g)	dr	Tolerance	D	Tolerance	L	Tolerance	D1	Tolerance
LMF6LUU	4	32	6		12	0 −0.013	35		28	
LMF8LUU	4	53	8		15		45		32	
LMF10LUU	4	105	10	0 −0.010	19		55	0 −0.3	40	
LMF12LUU	4	100	12		21	0 −0.016	57		42	
LMF13LUU	4	130	13		23		61		43	0 −0.2
LMF16LUU	5	187	16		28		70		48	
LMF20LUU	5	260	20		32		80		54	
LMF25LUU	6	515	25	0 −0.012	40	0 −0.019	112		62	
LMF30LUU	6	655	30		45		123		74	
LMF35LUU	6	970	35	0 −0.015	52	0 −0.022	135	0 −0.4	82	
LMF40LUU	6	1560	40		60		154		96	
LMF50LUU	6	3500	50		80		192		116	0 −0.3
LMF60LUU	6	4500	60	0 −0.020	90	0 −0.025	211		134	

Designation			Inscribed ciecle diameter		Outer diameter		Length		Flange diameter	
LMK...LUU	Ball circuit	Weight(g)	dr	Tolerance	D	Tolerance	L	Tolerance	D1	Tolerance
LMK6LUU	4	26	6		12	0 −0.013	35		28	
LMK8LUU	4	46	8		15		45		32	
LMK10LUU	4	88	10	0 −0.010	19		55	0 −0.3	40	
LMK12LUU	4	82	12		21	0 −0.016	57		42	
LMK13LUU	4	108	13		23		61		43	0 −0.2
LMK16LUU	5	160	16		28		70		48	
LMK20LUU	5	230	20		32		80		54	
LMK25LUU	6	475	25	0 −0.012	40	0 −0.019	112		62	
LMK30LUU	6	575	30		45		123		74	
LMK35LUU	6	870	35	0 −0.015	52	0 −0.022	135	0 −0.4	82	
LMK40LUU	6	1380	40		60		154		96	
LMK50LUU	6	3300	50		80		192		116	0 −0.3
LMK60LUU	6	4060	60	0 −0.020	90	0 −0.025	211		134	

SI UNIT:1N＝0.102kgf   Unit:mm

H	P.C.D	Hole for attachment d1Xd2Xh	Amgular Radial tolerance of flange μm	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
						CN	CoN	
5	20	3.4X6.5X3.3	15	15	−5	324	529	LMF6LUU
5	24	3.4X6.5X3.3	15	15	−5	431	784	LMF8LUU
6	29	4.5X8X4.4	15	15	−5	588	1100	LMF10LUU
6	32	4.5X8X4.4	15	15	−5	657	1200	LMF12LUU
6	33	4.5X8X4.4	15	15	−7	814	1570	LMF13LUU
6	38	4.5X8X4.4	15	15	−7	1230	2350	LMF16LUU
8	43	5.5X9.5X5.4	20	20	−9	1400	2750	LMF20LUU
8	51	5.5X9.5X5.4	20	20	−9	1560	3140	LMF25LUU
10	60	6.6X11X6.5	20	20	−9	2490	5490	LMF30LUU
10	67	6.6X11X6.5	25	25	−13	2650	6270	LMF35LUU
13	78	9X14X8.6	25	25	−13	3430	8040	LMF40LUU
13	98	9X14X8.6	25	25	−13	6080	15900	LMF50LUU
18	112	11X17.5X10.8	25	25	−13	7650	20000	LMF60LUU

K	H	P.C.D	Hole for attachment d1Xd2Xh	Amgular Radial tolerance of flange μm	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
							CN	CoN	
22	5	20	3.4X6.5X3.3	15	15	−5	324	529	LMK6LUU
25	5	24	3.4X6.5X3.3	15	15	−5	431	784	LMK8LUU
30	6	29	4.5X8X4.4	15	15	−5	588	1100	LMK10LUU
32	6	32	4.5X8X4.4	15	15	−5	657	1200	LMK12LUU
34	6	33	4.5X8X4.4	15	15	−7	814	1570	LMK13LUU
37	6	38	4.5X8X4.4	15	15	−7	1230	2350	LMK16LUU
42	8	43	5.5X9.5X5.4	20	20	−9	1400	2750	LMK20LUU
50	8	51	5.5X9.5X5.4	20	20	−9	1560	3140	LMK25LUU
58	10	60	6.6X11X6.5	20	20	−9	2490	5490	LMK30LUU
64	10	67	6.6X11X6.5	25	25	−13	2650	6270	LMK35LUU
75	13	78	9X14X8.6	25	25	−13	3430	8040	LMK40LUU
92	13	98	9X14X8.6	25	25	−13	6080	15900	LMK50LUU
106	18	112	11X17.5X10.8	25	25	−13	7650	20000	LMK60LUU

Flange linear bearing series
LMH…UU

Designation			Inscribed circle diameter		Outer diameter		Length		Flange diameter	
LMH…UU	Ball circuit	Weight(g)	dr	Tolerance	D	Tolerance	L	Tolerance	D₁	Tolerance
LMH6UU	4	21	6	0 / −0.009	12	0 / −0.011	19	0 / −0.2	28	0 / −0.2
LMH8UU	4	33	8		15		24		32	
LMH10UU	4	64	10		19	0 / −0.013	29		40	
LMH12UU	4	68	12		21		30		42	
LMH13UU	4	81	13		23		32		43	
LMH16UU	5	112	16	0 / −0.010	28		37		48	
LMH20UU	5	167	20		32	0 / −0.016	42		54	
LMH25UU	6	325	25		40		59	0 / −0.3	62	
LMH30UU	6	388	30		45		64		74	

LMH…LUU

Designation			Inscribed circle diameter		Outer diameter		Length		Flange diameter	
LMH…LUU	Ball circuit	Weight(g)	dr	Tolerance	D	Tolerance	L	公差 Tolerance	D₁	Tolerance
LMH6LUU	4	27	6	0 / −0.010	12	0 / −0.013	35	0 / −0.3	28	0 / −0.2
LMH8LUU	4	46	8		15		45		32	
LMH10LUU	4	91	10		19	0 / −0.016	55		40	
LMH12LUU	4	92	12		21		57		42	
LMH13LUU	4	117	13		23		61		43	
LMH16LUU	5	165	16	0 / −0.012	28		70		48	
LMH20LUU	5	247	20		32	0 / −0.019	80		54	
LMH25LUU	6	500	25		40		112	0 / −0.4	62	
LMH30LUU	6	583	30		45		123		74	

LMH13 or smaller — LMH16 or smaller

SI UNIT:1N=0.102kgf Unit:mm

W	H	A	F	Hole for attachment d₁Xd₂Xh	Angular Radial tolerance of flange μm	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
								CN	CoN	
18	5	20	–	3.4X6.5X3.3	12	12	−5	21	27	LMH6UU
21	5	24	–	3.4X6.5X3.3	12	12	−5	27	41	LMH8UU
25	6	29	–	4.5X8X4.4	12	12	−5	38	56	LMH10UU
27	6	32	–	4.5X8X4.4	12	12	−5	42	61	LMH12UU
29	6	33	–	4.5X8X4.4	12	12	−7	52	79	LMH13UU
34	6	31	22	4.5X8X4.4	12	12	−7	79	120	LMH16UU
38	8	36	24	5.5X9.5X5.4	15	15	−9	88	140	LMH20UU
46	8	40	32	5.5X9.5X5.4	15	15	−9	100	160	LMH25UU
51	10	49	35	6.6X11X6.5	15	15	−9	160	280	LMH30UU

LMH13 or smaller — LMH16 or smaller

SI UNIT:1N=0.102kgf Unit:mm

W	H	A	F	Hole for attachment d₁Xd₂Xh	Angular Radial tolerance of flange μm	Eccentricity (max) μm	Radial clearance tolerance	Basic load rating		Model No.
								CN	CoN	
18	5	20	–	3.4X6.5X3.3	15	15	−5	33	54	LMH6LUU
21	5	24	–	3.4X6.5X3.3	15	15	−5	44	80	LMH8LUU
25	6	29	–	4.5X8X4.4	15	15	−5	60	112	LMH10LUU
27	6	32	–	4.5X8X4.4	15	15	−5	67	122	LMH12LUU
29	6	33	–	4.5X8X4.4	15	15	−7	83	160	LMH13LUU
34	6	31	22	4.5X8X4.4	15	15	−7	125	240	LMH16LUU
38	8	36	24	5.5X9.5X5.4	20	20	−9	143	280	LMH20LUU
46	8	40	32	5.5X9.5X5.4	20	20	−9	159	320	LMH25LUU
51	10	49	35	6.6X11X6.5	20	20	−9	254	560	LMH30LUU