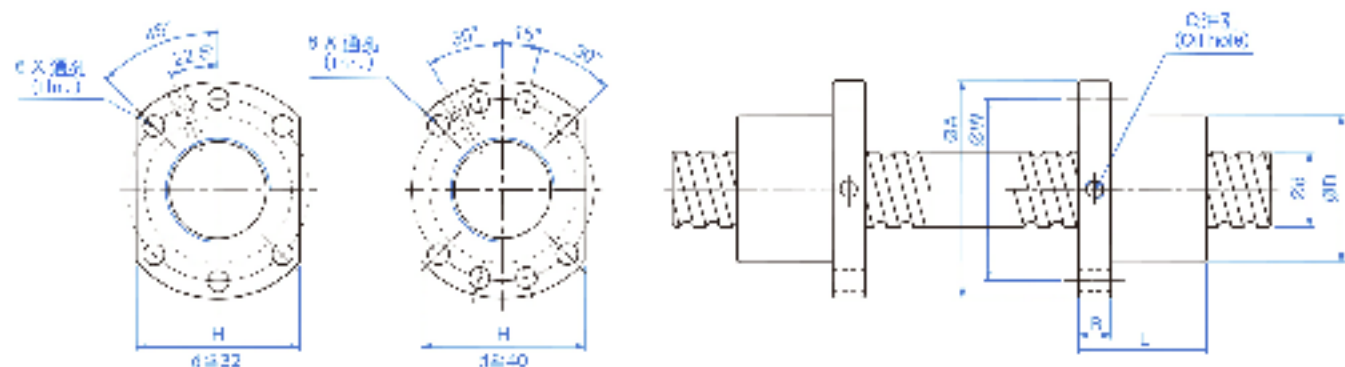
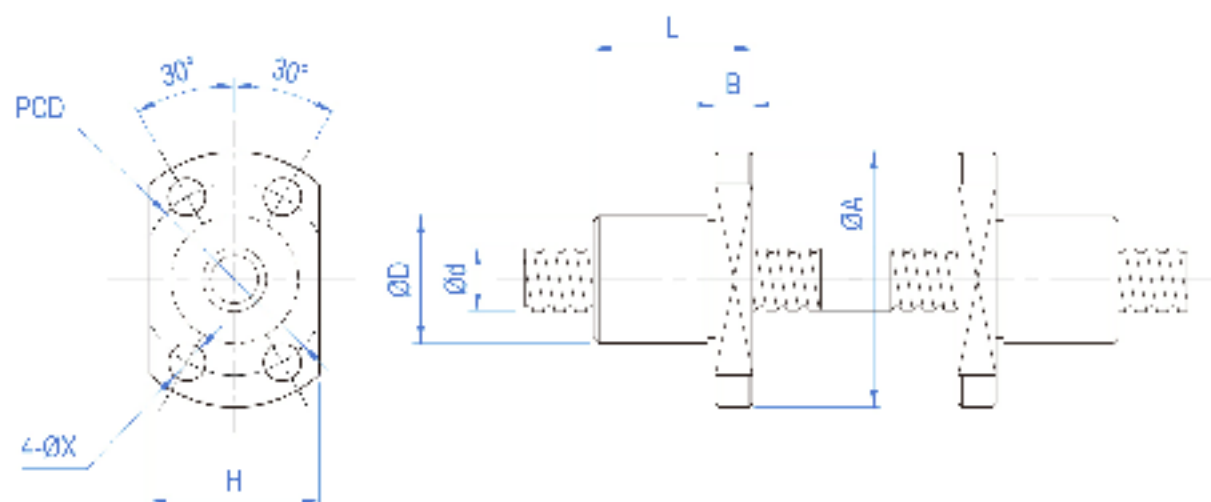


Bi-directional ball screw



Code	d	P	W	Nut Dimension									(kgf)		(kg/Lmin)
				D	A	B	L	W	H	X	Q	r	Ca	Coa	
SFL1604-4	12	4	2.5	24	40	10	40	32	30	4.5		1x4	907	1884	26
SFL1604-4	16	4	2.381	28	48	10	41	38	40	5.5	M6	1x4	973	2416	32
SFL1605-4		5	3.173	28	48	10	30	36	40	5.5	M6	1x4	1350	2052	22
SFU1610-5		10	3.173	28	48	10	37	36	40	5.5	M6	1x5	1102	2401	26
SFU2004-4	20	4	2.381	36	56	10	42	47	44	6.6	M6	1x4	1056	2987	38
SFU2005-4		5	3.173	36	56	10	51	47	44	6.6	M6	1x4	1551	3875	35
SFU2504-4	25	4	2.381	40	62	10	42	52	48	6.6	M6	1x4	1190	3795	40
SFU2505-4		5	3.173	40	62	10	51	52	48	6.6	M6	1x4	1724	4904	43
SFL2506-1		6	3.969	40	62	10	37	5	48	6.6	M6	1x4	2315	6057	47
SFL2508-4		8	4.762	40	62	10	63	57	48	6.6	M6	1x4	2953	8113	45
S-UD510-4	10	4.762	40	62	12	65	57	48	6.6	M6	1x4	2954	6995	50	
SFU3204-4	32	4	2.081	50	80	12	44	65	62	9	M6	1x4	1295	4835	51
SFU3205-4		5	2.173	50	80	12	52	65	62	9	M6	1x4	1922	6343	54
SFU3206-4		6	3.969	50	80	12	57	65	62	9	M6	1x4	2632	7979	57
S-UD506-4		8	4.762	50	80	12	65	65	62	9	M6	1x4	3387	9622	50
SFU3210-4		10	6.35	50	80	12	90	65	62	9	M6	1x4	4805	12208	61
SFU4005-4	40	5	2.173	63	93	14	55	78	70	9	M8	1x4	2110	7096	62
SFL4006-1		6	3.969	63	93	14	60	78	70	9	M6	1x4	2873	9915	66
SFL4008-4		8	4.762	63	93	14	67	78	70	9	M6	1x4	3712	1447	70
SFL4010-4		10	6.35	63	93	14	83	78	70	9	M8	1x4	5399	15801	63
SFU5010-4	50	10	6.35	75	110	16	93	93	85	11	M8	1x4	6004	19614	85

Bi-directional ball screw

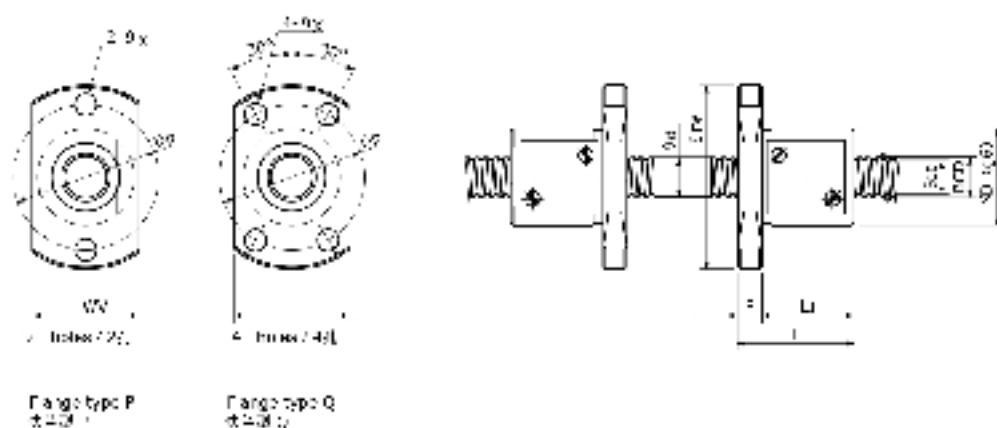


Code	d	P	D _h	n	C ₀	C _{0a}	K	Nut Dimension									
								U	A	B	L	ØD	H	X	Y	Z	Q
0801	8	1	0.8	4	161	400	14	12	27	4	18	21	18	3.4	/	/	/
0802	8	2	1.2	3	222	495	15	14	27	4	18	21	18	3.4	/	/	/
0800.5	8	2.5	1.7	3	221	457	13	16	28	4	20	23	20	3.4	/	/	/
1002	10	2	1.588	3	245	599	15	18	35	5	22	27	22	4.5	/	/	/
1003	10	3	2.0	3	245	560	15	20	35	5	20	27	27	4.5	/	/	/
1004	10	4	2.981	3	402	605	17	22	40	10	28	30	28	4.5	/	/	/
1201	12	1	0.8	3	173	317	15	20	31	5	28	29	27	4.5	/	/	/
1202	12	2	1.588	3	254	600	21	20	37	5	28	29	24	4.5	/	/	/
1200.5	12	2.5	1.7	3	355	587	22	20	37	5	28	29	27	4.5	/	/	/
1203	12	3	2.5	3	365	590	22	20	37	5	28	29	24	4.5	/	/	/

Note: the size and shape of the nut can be made as per customers requirement.

P: lead; B: ball diameter; n: number of balls per revolution; K: stiffness (kg/mm);
C₀: basic dynamic rating load (kg); C_{0a}: basic static rating load (kg).

Bi-directional ball screw



Ball Screw Model	Start Nut Lead (mm)	Lead (mm)	Ball Size (mm)	Ball ID (mm)	Ball OD (mm)	Ball Pitch (mm)	Number of Balls	Ball Lead Range		Max. Speed (m/min)
								Upper (mm)	Lower (mm)	
040	4	1	2.8	4.15	4.75	5.4	145	300/300	430/430	35/31
050	5	1	3.2	4.5	5.15	5.8	145	300/300	500/500	35/31
060	6	1	3.6	4.9	5.55	6.2	145	300/300	550/550	35/31
080	8	1	4.0	5.35	5.95	6.6	145	600/600	1000/1000	60/109
080S		1.0	4.0	5.35	5.95	6.6	145	800/800	1500/1500	73/113
090	9	1	4.4	5.75	6.35	7.0	145	1200/1200	2000/2000	60/109
100		1.0	4.4	5.75	6.35	7.0	145	1500/1500	2500/2500	84/131
100S	10	1	4.8	6.15	6.75	7.4	145	900/900	2000/2000	60/109
100		1.0	4.8	6.15	6.75	7.4	145	1400/1400	3000/3000	80/144
100S	10	1.0	4.8	6.15	6.75	7.4	145	2000/2000	3000/3000	80/144
100		1.0	4.8	6.15	6.75	7.4	145	3000/3000	4000/4000	140/218
100S	10	1.0	4.8	6.15	6.75	7.4	145	3000/3000	4000/4000	140/218
100		1.0	4.8	6.15	6.75	7.4	145	4000/4000	5000/5000	160/236
120	12	1	5.2	6.55	7.15	7.8	145	1000/1000	2000/2000	60/109
120		1.0	5.2	6.55	7.15	7.8	145	1600/1600	3000/3000	100/180
120S	12	1.0	5.2	6.55	7.15	7.8	145	2000/2000	4000/4000	100/180
120		1.0	5.2	6.55	7.15	7.8	145	3000/3000	5000/5000	150/257
120S	12	1.0	5.2	6.55	7.15	7.8	145	4000/4000	6000/6000	150/257
120		1.0	5.2	6.55	7.15	7.8	145	5000/5000	7000/7000	210/351
140	14	1	5.6	6.95	7.55	8.2	145	1000/1000	2000/2000	60/109
140		1.0	5.6	6.95	7.55	8.2	145	1600/1600	3000/3000	100/180
140S	14	1.0	5.6	6.95	7.55	8.2	145	2000/2000	4000/4000	100/180
140		1.0	5.6	6.95	7.55	8.2	145	3000/3000	5000/5000	150/257
140S	14	1.0	5.6	6.95	7.55	8.2	145	4000/4000	6000/6000	150/257
140		1.0	5.6	6.95	7.55	8.2	145	5000/5000	7000/7000	210/351
160	16	1	6.0	7.35	7.95	8.6	145	1000/1000	2000/2000	60/109
160		1.0	6.0	7.35	7.95	8.6	145	1600/1600	3000/3000	100/180
160S	16	1.0	6.0	7.35	7.95	8.6	145	2000/2000	4000/4000	100/180
160		1.0	6.0	7.35	7.95	8.6	145	3000/3000	5000/5000	150/257
160S	16	1.0	6.0	7.35	7.95	8.6	145	4000/4000	6000/6000	150/257
160		1.0	6.0	7.35	7.95	8.6	145	5000/5000	7000/7000	210/351

Note 1) The diameter of the Screw Shaft both ends must be less than the Screw Shaft Base diameter.
 a) Increase Ball Nut diameter of ball nut.

Note 2) Ball Nut diameter is not allowed to be less than the ball diameter.

If the lead screw requires Ball Nut dimensions on shaft, please ask ALM representative.

Note 3) The Rigidity values shown in the table are theoretical values of Ball Nut Rigidity.

Calculated from the moment of Inertia Dimension, under the following conditions.

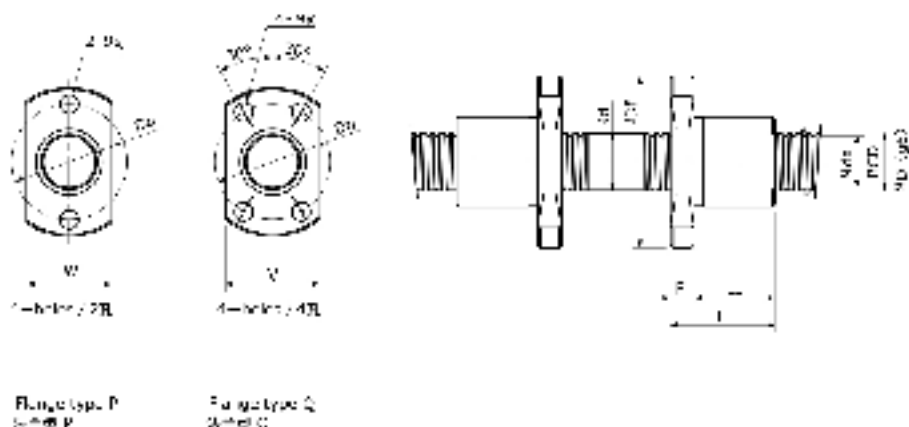
Backlash type/Apply the Axial load on ball nut to 30% of the Basic Dynamic Rating Ca.

Preload type/Apply the Preload on ball nut to 5% of the Basic Dynamic Load Rating Ca.

For Axial load or Preload condition other than the above, see the formula in 4-4-35, you can calculate Rigidity using this formula.

Note 4) Ball Lead, Rating and Rigidity for Backlash type and Preload type are described in the same order.

Bi-directional ball screw



Ball size	Ball size										Ball code number
	D	El	L	l	r	W	V	Z	N ₁ (mm)	Flange Type	
2	6	13	8	10	3	11	13	14	20	F0	100
2	10	20	12	16	3	22	14	16	28	F0	150
2	17	33	16.5	17	3.5	23	15	17	34	F0	160
2	19	39	17	21	4	24	17	20	34	F0	190
2	15	33	20	16	4	27	16	22	34	F0	150L
2	15	33	18	14	4	27	18	20	34	F0	190
2	15	33	22	17	4	27	16	22	34	F0	160
2	17	37	21	16	4	27	20	26	40	F0	190
2	17	39	20	14	5	27	21	26	40	F0	160
2	18	38	21	16	5	27	22	26	40	F0	190
1	24	44	27	24	6	35	27	30	50	F0	100
1	24	44	28	25	6	35	27	30	50	F0	100
1	24	44	34	26	6	35	27	30	50	F0	100
2	16	34	19	17	5	26	17	20	30	F0	130
2	19	35	20	14	5	27	20	28	40	F0	120
2	20	37	21	16	5	27	21	28	40	F0	120
2	22	41	22	20	6	28	20	32	50	F0	120
1	28	46	29	27	6	35	28	30	50	F0	100
1	30	49	29	27	6	35	28	30	50	F0	100
2	24	43	25	14	6	35	28	30	50	F0	100
2	24	43	30	26	6	35	27	30	50	F0	100
2	26	45	29	21	6	35	29	30	50	F0	100
1	30	51	30	28	6	35	30	30	50	F0	100
1	30	51	32	28	6	35	30	30	50	F0	100
2	24	43	30	14	6	35	27	30	50	F0	160
2	26	45	30	16	6	35	29	30	50	F0	160
1	38	47	35	28	6	35	30	38	50	F0	160
1	38	47	40	28	6	35	30	38	50	F0	160