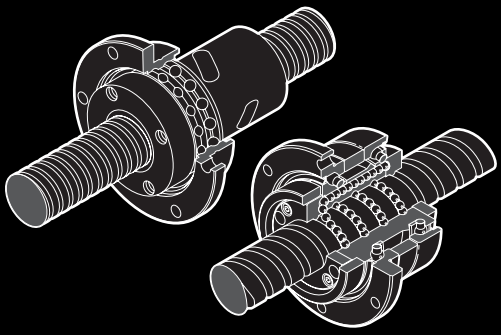


Precision Rotary Ball Screw
Model DIR and BLR

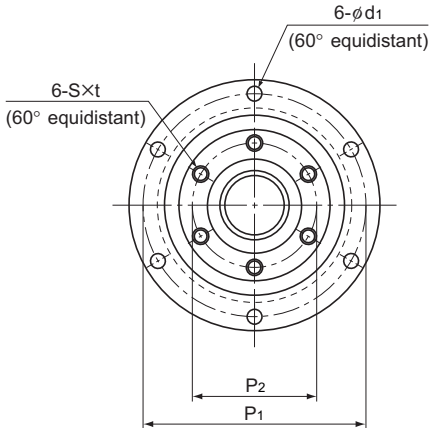
Ball Screw

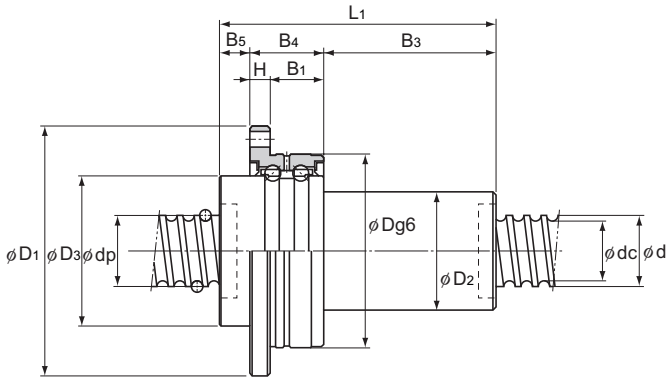
B Product Specifications

A Technical Descriptions of the Products (Separate)

* Please see the separate "A Technical Descriptions of the Products".

Model DIR Standard-Lead Rotary-Nut Ball Screw





Unit: mm

Model No.	Screw shaft outer diameter	Thread minor diameter	Lead	Ball center-to-center diameter	Basic load rating		Rigidity	Ball screw dimensions															Support bearing basic load rating		Nut inertial moment	Nut mass	Shaft mass
					Ca	C0a	K	Outer diameter	Flange diameter	Overall length	D3	D2	B5	B4	B3	P1	P2	H	B1	S	t	d1	Ca	C0a			
	d	dc	Ph	dp	kN	kN	N/µm	D	D1	L1	h7												kN	kN	kg·cm²	kg	kg/m
DIR 1605-6	16	13.2	5	16.75	7.4	13	310	48	64	79	36	30	8	21	50	56	30	6	15	M4	6	4.5	8.7	10.5	0.61	0.49	1.24
DIR 2005-6	20	17.2	5	20.75	8.5	17.3	310	56	72	80	43.5	34	9	21	50	64	36	6	15	M5	8	4.5	9.7	13.4	1.18	0.68	2.05
DIR 2505-6	25	22.2	5	25.75	9.7	22.6	490	66	86	88	52	40	13	25	50	75	43	7	18	M6	10	5.5	12.7	18.2	2.65	1.07	3.34
DIR 2510-4		21.6	10	26	9	18	330	66	86	106	52	40	11	25	70	75	43	7	18	M6	10	5.5	12.7	18.2	2.84	1.16	3.52
DIR 3205-6	32	29.2	5	32.75	11.1	30.2	620	78	103	86	63	46	11	25	50	89	53	8	17	M6	10	6.6	13.6	22.3	5.1	1.39	5.67
DIR 3206-6		28.4	6	33	14.9	37.1	630	78	103	97	63	48	11	25	61	89	53	8	17	M6	10	6.6	13.6	22.3	5.68	1.54	5.47
DIR 3210-6		26.4	10	33.75	25.7	52.2	600	78	103	131	63	54	11	25	95	89	53	8	17	M6	10	6.6	13.6	22.3	8.13	2.16	4.98
DIR 3610-6	36	30.5	10	37.75	28.8	63.8	710	92	122	151	72	58	14	33	104	105	61	10	23	M8	12	9	20.4	32.3	14.7	3.25	6.51
DIR 4010-6	40	34.7	10	41.75	29.8	69.3	750	100	130	142	79.5	62	14	33	95	113	67	10	23	M8	12	9	21.5	36.8	20.6	3.55	8.22
DIR 4012-6		34.4	12	41.75	30.6	72.3	790	100	130	167	79.5	62	14	33	120	113	67	10	23	M8	12	9	21.5	36.8	22.5	3.9	8.5

Model number coding

DIR2005-6 RR G0 +520L C1

- DIR2005-6: Model number
- RR: Seal symbol (*1)
- G0: Symbol for clearance in the axial direction (*2)
- +520L: Overall screw shaft length (in mm)
- C1: Accuracy symbol (*3)

(*1) See A-816. (*2) See A-685. (*3) See A-678.

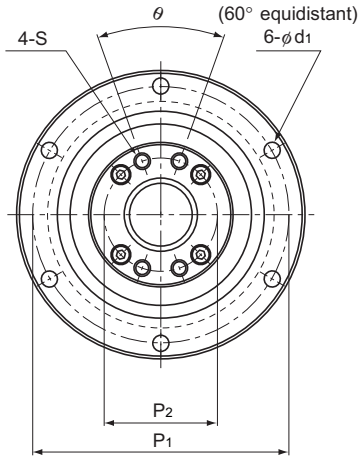
Note) The rigidity values in the table represent spring constants each obtained from the load and the elastic deformation when providing a preload 10% of the basic dynamic load rating (Ca) and applying an axial load three times greater than the preload.
These values do not include the rigidity of the components related to mounting the ball screw nut. Therefore, it is normally appropriate to regard roughly 80% of the value in the table as the actual value.
If the applied preload (Fa_0) is not 0.1 Ca, the rigidity value (K_N) is obtained from the following equation.

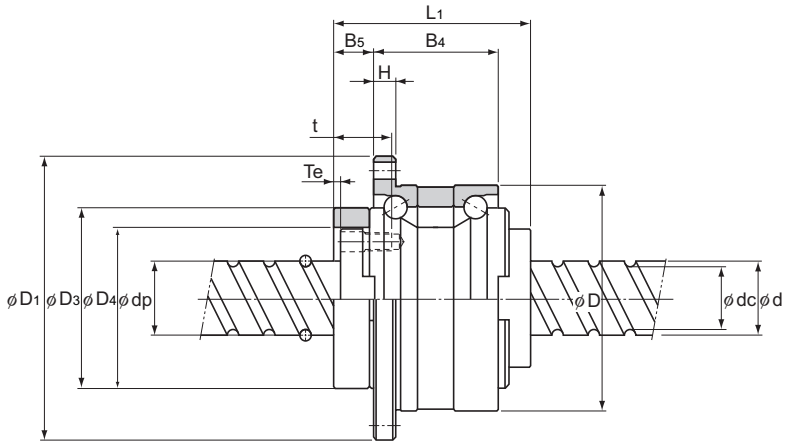
$$K_N = K\left(\frac{Fa_0}{0.1Ca}\right)^{\frac{1}{3}}$$

K: Rigidity value in the dimensional table.

Description of Each Option⇒A-815 Dimensions⇒B-777

Model BLR Large Lead Rotary-Nut Precision Ball Screw





Unit: mm

Model No.	Screw shaft outer diameter	Thread minor diameter	Lead	Ball center-to-center diameter	Basic load rating		Ball screw dimensions																Support bearing basic load rating		Nut inertial moment	Nut mass	Shaft mass
					Ca	C0a	Outer diameter	Flange diameter	Overall length			H	B4	B5	Te	P1	P2	S	t	d1	θ°	Ca	C0a			
	d	dc	Ph	dp	kN	kN	D	D1	L1	D3	D4											kN	kN	kg·cm²	kg	kg/m
BLR 1616-3.6	16	13.7	16	16.65	7.1	14.3	52 0 -0.007	68	43.5	40 0 -0.025	32 +0.025 0	5	27.5	9	2	60	25	M4	12	4.5	40	19.4	19.2	0.48	0.38	1.41
BLR 2020-3.6	20	17.5	20	20.75	11.1	24.7	62 0 -0.007	78	54	50 0 -0.025	39 +0.025 0	6	34	11	2	70	31	M5	16	4.5	40	26.8	29.3	1.44	0.68	2.25
BLR 2525-3.6	25	22	25	26	16.6	38.7	72 0 -0.007	92	65	58 0 -0.03	47 +0.025 0	8	43	12.5	3	81	38	M6	19	5.5	40	28.2	33.3	3.23	1.1	3.52
BLR 3232-3.6	32	28.3	32	33.25	23.7	59.5	80 0 -0.007	105	80	66 0 -0.03	58 +0.03 0	9	55	14	3	91	48	M6	19	6.6	40	30	39	6.74	1.74	5.83
BLR 3636-3.6	36	31.7	36	37.4	30.8	78	100 0 -0.008	130	93	80 0 -0.03	66 +0.03 0	11	62	17	3	113	54	M8	22	9	40	56.4	65.2	16.8	3.2	7.34
BLR 4040-3.6	40	35.2	40	41.75	38.7	99.2	110 0 -0.008	140	98	90 0 -0.035	73 +0.03	11	68	16.5	3	123	61	M8	22	9	50	59.3	74.1	27.9	3.95	9.01
BLR 5050-3.6	50	44.1	50	52.2	57.8	155	120 0 -0.008	156	126	100 0 -0.035	90 +0.035 0	12	80	25	4	136	75	M10	28	11	50	62.2	83	58.2	6.22	14.08

Model number coding

BLR2020-3.6 K UU G1 +1000L C5

- BLR2020-3.6: Model number
- K: Flange orientation symbol (*1)
- UU: Symbol for support bearing seal (*2)
- G1: Symbol for clearance in the axial direction (*3)
- +1000L: Overall screw shaft length (in mm)
- C5: Accuracy symbol (*4)

(*1) See A-778 (*2) UU: Seal attached on both ends No symbol: Without seal (*3) See A-685 (*4) See A-678

Description of Each Option⇒A-815 Dimensions⇒B-777