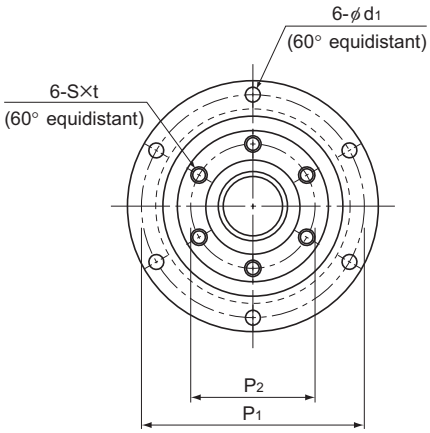
DIR
With Preload

DN value	70,000



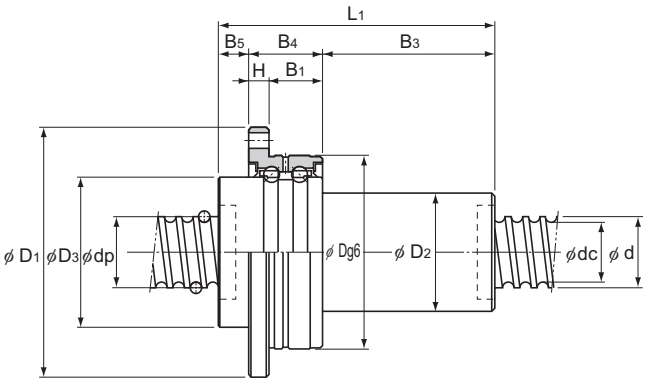
Model No.	Screw shaft outer diameter	Thread minor diameter	Lead	Ball center-to-center diameter	Basic load rating		Rigidity				
					Ca	C0a	K	Outer diameter	Flange diameter	Overall length	D3
	d	dc	Ph	dp	kN	kN	N/μm	D	D1	L1	h7
DIR 1605-6	16	13.2	5	16.75	7.4	13	310	48	64	79	36
DIR 2005-6	20	17.2	5	20.75	8.5	17.3	310	56	72	80	43.5
DIR 2505-6	25	22.2	5	25.75	9.7	22.6	490	66	86	88	52
DIR 2510-4	25	21.6	10	26	9	18	330	66	86	106	52
DIR 3205-6	32	29.2	5	32.75	11.1	30.2	620	78	103	86	63
DIR 3206-6	32	28.4	6	33	14.9	37.1	630	78	103	97	63
DIR 3210-6	32	26.4	10	33.75	25.7	52.2	600	78	103	131	63
DIR 3610-6	36	30.5	10	37.75	28.8	63.8	710	92	122	151	72
DIR 4010-6	40	34.7	10	41.75	29.8	69.3	750	100	130	142	79.5
DIR 4012-6	40	34.4	12	41.75	30.6	72.3	790	100	130	167	79.5

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 A15-356. [2] See A15-19. [3] See A15-12.



Unit: mm

Ball screw dimensions											Support bearing basic load rating		Nut inertial moment	Nut mass	Shaft mass	Permissible rotational speed
											Ca	C0a				
	D_2	B_5	B_4	B_3	P_1	P_2	H	B_1	S	t	d_1	kN	kN	kg·m²	kg	kg/m	min⁻¹
	30	8	21	50	56	30	6	15	M4	6	4.5	8.7	10.5	6.10×10^{-5}	0.49	1.24	4,170
	34	9	21	50	64	36	6	15	M5	8	4.5	9.7	13.4	1.18×10^{-4}	0.68	2.05	3,370
	40	13	25	50	75	43	7	18	M6	10	5.5	12.7	18.2	2.65×10^{-4}	1.07	3.34	2,710
	40	11	25	70	75	43	7	18	M6	10	5.5	12.7	18.2	2.84×10^{-4}	1.16	3.52	2,690
	46	11	25	50	89	53	8	17	M6	10	6.6	13.6	22.3	5.10×10^{-4}	1.39	5.67	2,130
	48	11	25	61	89	53	8	17	M6	10	6.6	13.6	22.3	5.68×10^{-4}	1.54	5.47	2,120
	54	11	25	95	89	53	8	17	M6	10	6.6	13.6	22.3	8.13×10^{-4}	2.16	4.98	2,070
	58	14	33	104	105	61	10	23	M8	12	9	20.4	32.3	1.47×10^{-3}	3.25	6.51	1,850
	62	14	33	95	113	67	10	23	M8	12	9	21.5	36.8	2.06×10^{-3}	3.55	8.22	1,670
	62	14	33	120	113	67	10	23	M8	12	9	21.5	36.8	2.25×10^{-3}	3.9	8.5	1,670

The rigidity values in the table represent spring constants, each obtained from the load and the elastic deformation when providing a preload equal to 10% of the basic axial 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 10% of 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

Options⇒A15-355