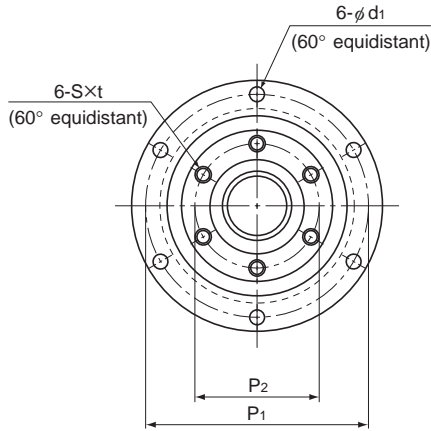


Model DIR Standard-Lead Rotary-Nut Ball Screw



Model No.	Screw shaft outer diameter d	Thread minor diameter dc	Lead Ph	Ball center-to-center diameter dp	Basic load rating		Rigidity K N/μm				
					Ca kN	C _{0a} kN		Outer diameter D	Flange diameter D ₁	Overall length L ₁	D ₃ 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		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		28.4	6	33	14.9	37.1	630	78	103	97	63
DIR 3210-6		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		34.4	12	41.75	30.6	72.3	790	100	130	167	79.5

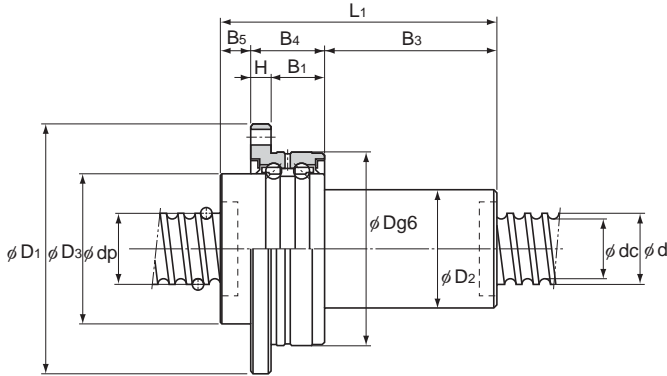
Model number coding

DIR2005-6 RR G0 +520L C1

Model number Seal symbol (*1) Overall screw shaft length (in mm)
 Symbol for clearance in the axial direction (*2) Accuracy symbol (*3)

(*1) See [A15-350](#). (*2) See [A15-19](#). (*3) See [A15-12](#).

Precision Rotary Ball Screw



Unit: mm

Ball screw dimensions												Support bearing basic load rating	Nut inertial moment	Nut mass	Shaft mass
D ₂	B ₅	B ₄	B ₃	P ₁	P ₂	H	B ₁	S	t	d ₁	Ca				
30	8	21	50	56	30	6	15	M4	6	4.5	8.7	10.5	0.61	0.49	1.24
34	9	21	50	64	36	6	15	M5	8	4.5	9.7	13.4	1.18	0.68	2.05
40	13	25	50	75	43	7	18	M6	10	5.5	12.7	18.2	2.65	1.07	3.34
40	11	25	70	75	43	7	18	M6	10	5.5	12.7	18.2	2.84	1.16	3.52
46	11	25	50	89	53	8	17	M6	10	6.6	13.6	22.3	5.1	1.39	5.67
48	11	25	61	89	53	8	17	M6	10	6.6	13.6	22.3	5.68	1.54	5.47
54	11	25	95	89	53	8	17	M6	10	6.6	13.6	22.3	8.13	2.16	4.98
58	14	33	104	105	61	10	23	M8	12	9	20.4	32.3	14.7	3.25	6.51
62	14	33	95	113	67	10	23	M8	12	9	21.5	36.8	20.6	3.55	8.22
62	14	33	120	113	67	10	23	M8	12	9	21.5	36.8	22.5	3.9	8.5

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 (Fa₀) is not 0.1 Ca, the rigidity value (K_w) is obtained from the following equation.

$$K_w = K \left(\frac{F_{a0}}{0.1 C_a} \right)^3$$

K: Rigidity value in the dimensional table.