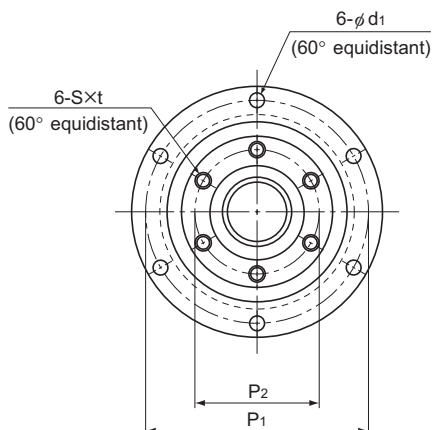


DIR With Preload

DN value	70000
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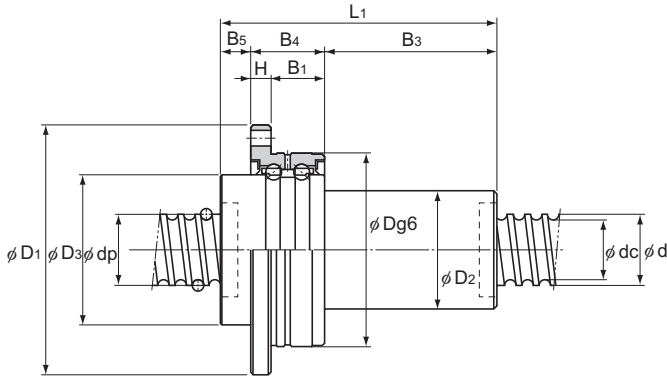
Model No.	Screw shaft outer diameter	Thread minor diameter	Lead	Ball center-to-center diameter	Basic load rating		Rigidity					
					Ca	C _{0a}		K	Outer diameter	Flange diameter	Overall length	D ₃
DIR 1605-6	16	13.2	5	16.75	7.4	13	310	48	64	79	36	
DIR 2005-6	20	17.2	5	20.75	8.5	17.3	310	56	72	80	43.5	
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

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

(*1) See [A15-334](#). (*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
D ₂	B ₅	B ₄	B ₃	P ₁	P ₂	H	B ₁	S	t	d ₁		Ca	C _{0a}	kg·m ²	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	4170
34	9	21	50	64	36	6	15	M5	8	4.5		9.7	13.4	1.18 × 10 ⁻⁴	0.68	2.05	3370
40	13	25	50	75	43	7	18	M6	10	5.5		12.7	18.2	2.65 × 10 ⁻⁴	1.07	3.34	2710
40	11	25	70	75	43	7	18	M6	10	5.5		12.7	18.2	2.84 × 10 ⁻⁴	1.16	3.52	2690
46	11	25	50	89	53	8	17	M6	10	6.6		13.6	22.3	5.10 × 10 ⁻⁴	1.39	5.67	2130
48	11	25	61	89	53	8	17	M6	10	6.6		13.6	22.3	5.68 × 10 ⁻⁴	1.54	5.47	2120
54	11	25	95	89	53	8	17	M6	10	6.6		13.6	22.3	8.13 × 10 ⁻⁴	2.16	4.98	2070
58	14	33	104	105	61	10	23	M8	12	9		20.4	32.3	1.47 × 10 ⁻³	3.25	6.51	1850
62	14	33	95	113	67	10	23	M8	12	9		21.5	36.8	2.06 × 10 ⁻³	3.55	8.22	1670
62	14	33	120	113	67	10	23	M8	12	9		21.5	36.8	2.25 × 10 ⁻³	3.9	8.5	1670

Note) 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 pre-load.

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_n) is obtained from the following equation.

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

K: Rigidity value in the dimensional table