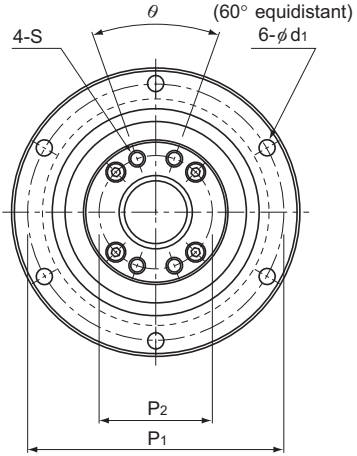
BLR (Precision Ball Screw) No Preload

DN value	70,000



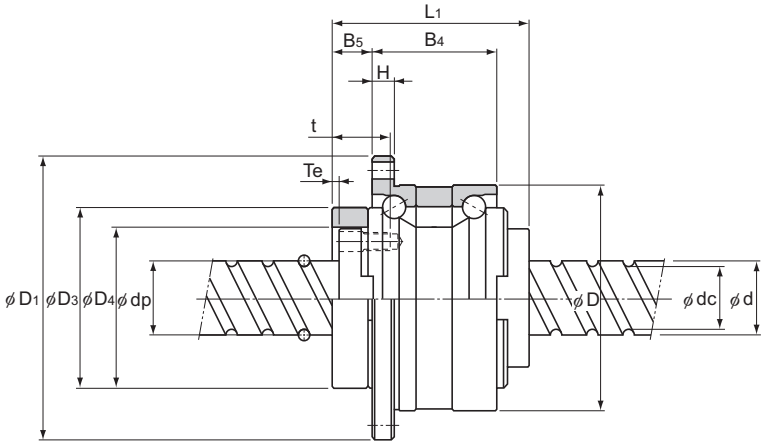
Model No.	Screw shaft outer diameter d	Thread minor diameter dc	Lead Ph	Ball center-to-center diameter dp	Basic load rating Ca kN	Basic load rating C0a kN	Outer diameter D	Flange diameter D1	Overall length L1	D3
BLR 1616-3.6	16	13.7	16	16.65	7.1	14.3	52 $^{0}_{-0.007}$	68	43.5	40 $^{0}_{-0.025}$
BLR 2020-3.6	20	17.5	20	20.75	11.1	24.7	62 $^{0}_{-0.007}$	78	54	50 $^{0}_{-0.025}$
BLR 2525-3.6	25	21.9	25	26	16.6	38.7	72 $^{0}_{-0.007}$	92	65	58 $^{0}_{-0.03}$
BLR 3232-3.6	32	28.3	32	33.25	23.7	59.5	80 $^{0}_{-0.007}$	105	80	66 $^{0}_{-0.03}$
BLR 3636-3.6	36	31.7	36	37.4	30.8	78	100 $^{0}_{-0.008}$	130	93	80 $^{0}_{-0.03}$
BLR 4040-3.6	40	35.2	40	41.75	38.7	99.2	110 $^{0}_{-0.008}$	140	98	90 $^{0}_{-0.035}$
BLR 5050-3.6	50	44.1	50	52.2	57.8	155	120 $^{0}_{-0.008}$	156	126	100 $^{0}_{-0.035}$

Model number coding

BLR2020-3.6 K UU G1 +1000L C5

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

[1] UU: Seal attached on both ends No symbol: Without seal. [2] See A15-19. [3] See A15-12.



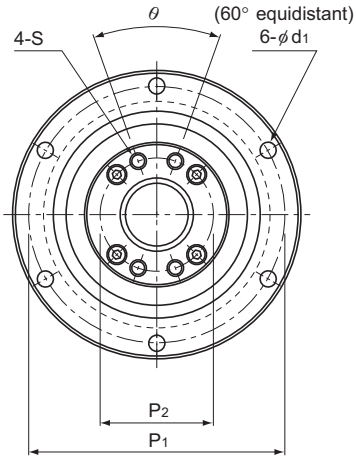
Unit: mm

Ball screw dimensions												Support bearing basic load rating		Nut inertial moment	Nut mass	Shaft mass	Permissible rotational speed
	D_4	H	B_4	B_5	Te	P_1	P_2	S	t	d_1	θ°	Ca kN	C_0a kN	$kg \cdot m^2$	kg	kg/m	min^{-1}
	$32^{+0.025}_{0}$	5	27.5	9	2	60	25	M4	12	4.5	40	19.4	19.2	4.80×10^{-5}	0.38	1.41	4,200
	$39^{+0.025}_{0}$	6	34	11	2	70	31	M5	16	4.5	40	26.8	29.3	1.44×10^{-4}	0.68	2.25	3,370
	$47^{+0.025}_{0}$	8	43	12.5	3	81	38	M6	19	5.5	40	28.2	33.3	3.23×10^{-4}	1.1	3.52	2,690
	$58^{+0.03}_{0}$	9	55	14	3	91	48	M6	19	6.6	40	30	39	6.74×10^{-4}	1.74	5.83	2,100
	$66^{+0.03}_{0}$	11	62	17	3	113	54	M8	22	9	40	56.4	65.2	1.68×10^{-3}	3.2	7.34	1,870
	$73^{+0.03}$	11	68	16.5	3	123	61	M8	22	9	50	59.3	74.1	2.79×10^{-3}	3.95	9.01	1,670
	$90^{+0.035}_{0}$	12	80	25	4	136	75	M10	28	11	50	62.2	83	5.82×10^{-3}	6.22	14.08	1,340

Options⇒A15-355

BLR (Rolled Ball Screw) No Preload

DN value	70,000



Model No.	Screw shaft outer diameter d	Thread minor diameter dc	Lead Ph	Ball center-to-center diameter dp	Basic load rating Ca kN	Basic load rating C0a kN	Outer diameter D	Flange diameter D1	Overall length L1	D3
BLR 1616-3.6	16	13.7	16	16.65	5.8	12.9	52 $^{0}_{-0.007}$	68	43.5	40 $^{0}_{-0.025}$
BLR 2020-3.6	20	17.5	20	20.75	7.7	22.3	62 $^{0}_{-0.007}$	78	54	50 $^{0}_{-0.025}$
BLR 2525-3.6	25	21.9	25	26	12.1	35	72 $^{0}_{-0.007}$	92	65	58 $^{0}_{-0.03}$
BLR 3232-3.6	32	28.3	32	33.25	17.3	53.9	80 $^{0}_{-0.007}$	105	80	66 $^{0}_{-0.03}$
BLR 3636-3.6	36	31.7	36	37.4	22.4	70.5	100 $^{0}_{-0.008}$	130	93	80 $^{0}_{-0.03}$
BLR 4040-3.6	40	35.2	40	41.75	28.1	89.8	110 $^{0}_{-0.008}$	140	98	90 $^{0}_{-0.035}$
BLR 5050-3.6	50	44.1	50	52.2	42.1	140.4	120 $^{0}_{-0.008}$	156	126	100 $^{0}_{-0.035}$

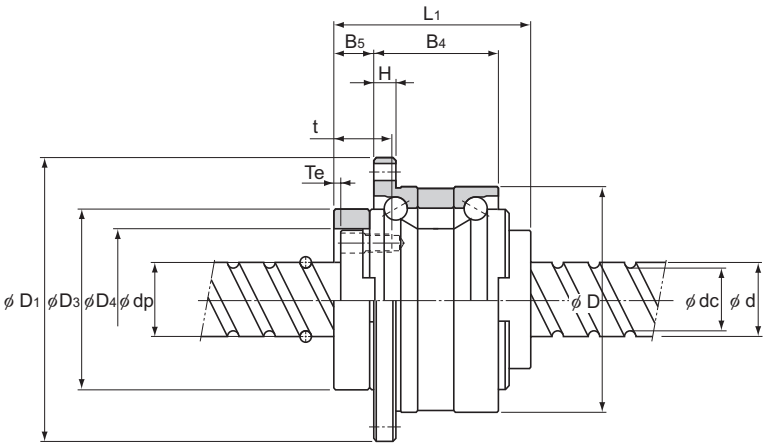
Model number coding

BLR2020-3.6 K UU +1000L C7 T

- BLR2020-3.6: Model number
- K: Flange orientation symbol
- UU: Symbol for support bearing seal[1]
- +1000L: Overall screw shaft length (in mm)
- C7: Accuracy symbol[2]
- T: Symbol for rolled Ball Screw

[1] UU: seal attached on both ends; No symbol: without seal. [2] See A15-12.

Note: For clearance in the axial direction, see A15-19.



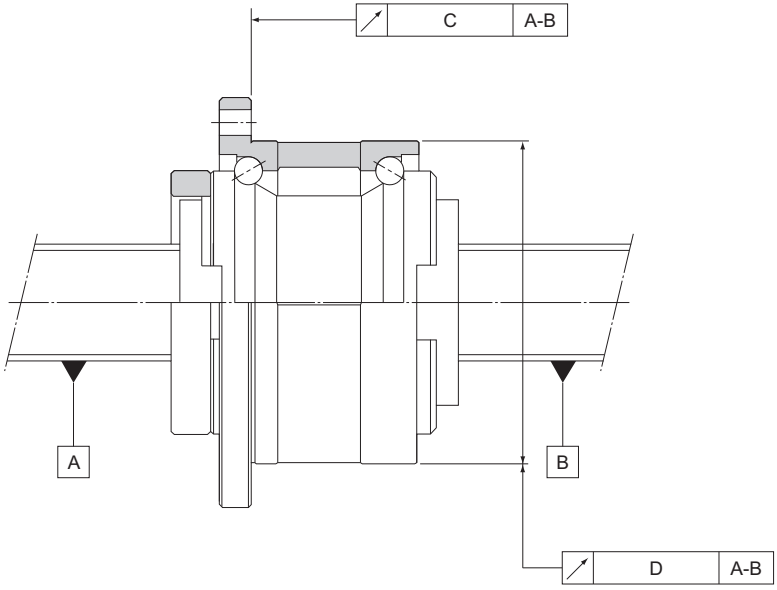
Unit: mm

Ball screw dimensions												Support bearing basic load rating		Nut inertial moment	Nut mass	Shaft mass	Permissible rotational speed
	D_4	H	B_4	B_5	Te	P_1	P_2	S	t	d_1	θ°	Ca kN	C_{0a} kN	kg·m²	kg	kg/m	min⁻¹
	32 +0.025 0	5	27.5	9	2	60	25	M4	12	4.5	40	19.4	19.2	4.80×10^{-5}	0.38	1.35	4,200
	39 +0.025 0	6	34	11	2	70	31	M5	16	4.5	40	26.8	29.3	1.44×10^{-4}	0.68	2.17	3,370
	47 +0.025 0	8	43	12.5	3	81	38	M6	19	5.5	40	28.2	33.3	3.23×10^{-4}	1.1	3.41	2,690
	58 +0.03 0	9	55	14	3	91	48	M6	19	6.6	40	30	39	6.74×10^{-4}	1.74	5.69	2,100
	66 +0.03 0	11	62	17	3	113	54	M8	22	9	40	56.4	65.2	1.68×10^{-3}	3.2	7.12	1,870
	73 +0.03	11	68	16.5	3	123	61	M8	22	9	50	59.3	74.1	2.79×10^{-3}	3.95	8.76	1,670
	90 +0.035 0	12	80	25	4	136	75	M10	28	11	50	62.2	83	5.82×10^{-3}	6.22	13.79	1,340

Options⇒A15-355

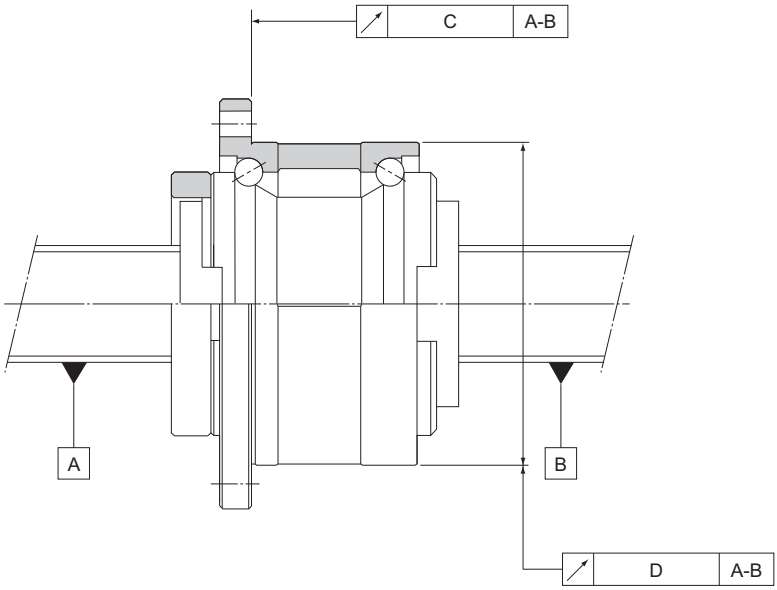
Model BLR

The accuracy of Model BLR is compliant with the JIS standard JIS B 1192 (ISO 3408) except for the radial runout of the circumference of the ball screw nut from the screw axis (D) and the perpendicularity of the flange-mounting surface against the screw axis (C).



Unit: mm

Lead angle accuracy	C3		C5		C7	
Accuracy grades	C3		C5		C7	
Model No.	C	D	C	D	C	D
BLR 1616	0.013	0.017	0.016	0.020	0.023	0.035
BLR 2020	0.013	0.017	0.016	0.020	0.023	0.035
BLR 2525	0.015	0.020	0.018	0.024	0.023	0.035
BLR 3232	0.015	0.020	0.018	0.024	0.023	0.035
BLR 3636	0.016	0.021	0.019	0.025	0.024	0.036
BLR 4040	0.018	0.026	0.021	0.033	0.026	0.046
BLR 5050	0.018	0.026	0.021	0.033	0.026	0.046



Unit: mm

Lead angle accuracy	C7, C8, C10	
Accuracy grades	C10	
Model No.	C	D
BLR 1616	0.035	0.065
BLR 2020	0.035	0.065
BLR 2525	0.035	0.065
BLR 3232	0.035	0.065
BLR 3636	0.036	0.066
BLR 4040	0.046	0.086
BLR 5050	0.046	0.086