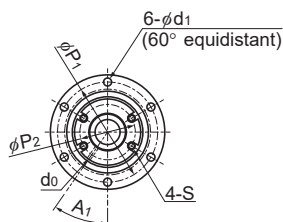


BNS-V Low-Inertia Type: Linear-Rotary Motion No Preload

DN value	100,000
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Ball screw unit

Ball screw unit

Model No.	Screw shaft outer diameter	Screw shaft inner diameter	Lead	Ball screw dimensions										
				Basic load rating		Ball center-to- center diameter	Thread minor diameter	Outer diameter	Flange diameter	Overall length	D ₃	AE	BE	H
				Ca	C ₀ a									
	d	db	Ph	kN	kN	dp	dc	D	D ₁	L ₁	h7	AE	BE	H
BNS 1616V	16	11	16	4.6	6.8	16.65	13.7	42	54	38	32.5	31	31	4
BNS 2020V	20	14	20	7.3	11.7	20.75	17.5	48	64	45	39.5	37	36	6
BNS 2525V	25	18	25	8	14.4	25.35	22.1	56	72	55	43.5	42	41.6	6

Ball spline

Model No.	Ball spline dimensions											
	Basic load rating		Static permissible moment M _A N·m	Basic torque rating		Outer diameter D ₇ g6	Flange diameter D ₅	Overall length L ₂	D ₆ h7	AE ₁	BE ₁	H ₁
	C	C ₀		C _T	C _{0T}							
	kN	kN		N·m	N·m							
BNS 1616V	8.4	13.4	77.4	42.9	68.6	42	54	46.4	32.5	27.5	28	4
BNS 2020V	10.5	18.6	144	66.4	117.2	48	64	59	36	31.5	32	6
BNS 2525V	15.9	26.2	230	125.3	207	56	72	67	43.5	39.5	40	6

Notes: For K hollow shaft, please refer to the db dimension for the inner bore diameter of the shaft.

A solid shaft is also available upon request. See "Ball Spline" **A3-120** for details.

Model number coding

BNS2020V +500L C5

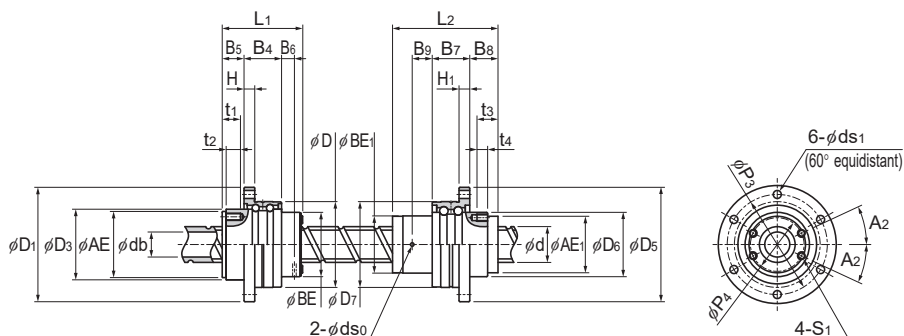
Model number

Overall shaft
length (in mm)

Accuracy symbol¹

¹ See **A15-12**.

Rotary Nut Ball Screw



Ball spline

Unit: mm

													Support bearing basic load rating		Nut inertial moment	Screw shaft inertial moment	Nut mass	Shaft mass	Permissible rotational speed
	B ₄	B ₅	P ₁	P ₂	S	t ₁	t ₂	d ₁	B ₆	d ₀	A ₁		Ca kN	C _{0a} kN	kg·m ²	kg·m ² /mm	kg	kg/m	min ⁻¹
	18	9.7	48	25.5	M3	8.2	6	3.4	5.8	2	35°		6.7	8.6	2.00×10 ⁻⁵	3.21×10 ⁻⁸	0.21	0.8	5,000
	21	12.2	56	31	M4	10.2	8	4.5	7.2	2	35°		7.3	10.6	6.50×10 ⁻⁵	8.04×10 ⁻⁸	0.39	1.21	4,810
	21	13.2	64	36	M5	10.2	8	4.5	15.3	3	35°		9.7	13.4	1.02×10 ⁻⁴	1.91×10 ⁻⁷	0.51	1.79	3,940

Unit: mm

													Support bearing basic load rating		Nut inertial moment	Nut mass
	B ₇	B ₈	P ₃	P ₄	S ₁	t ₃	t ₄	ds ₁	A ₂	B ₉	ds ₀		Ca kN	C ₀ kN	kg·m ²	kg
	18	13	48	25	M3	11.5	6	3.4	20°	5	2		5.2	5.1	1.80×10 ⁻⁵	0.19
	21	15.8	56	30	M4	11.8	6	4.5	25°	5.4	2		6.7	6.4	4.20×10 ⁻⁵	0.33
	21	19.2	64	36	M5	15.2	8	4.5	25°	7.6	3		7.4	7.8	9.80×10 ⁻⁵	0.49

