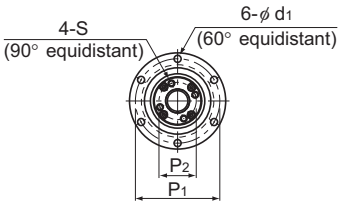
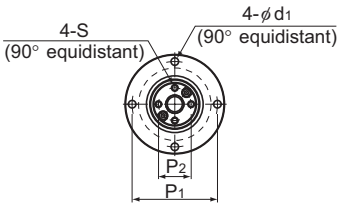
NS-A Compact Type: Linear Motion
No Preload

DN value	70,000



Ball screw unit (Models NS 1616A to 4040A)



Ball screw unit (Models NS 0812A and 1015A)

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	D_4
				Ca	C_0a			D				
	d	db	Ph	kN	kN	dp	dc	g6	D_1	L_1	h7	H7
NS 0812A	8	—	12	1.1	1.8	8.4	6.6	32	44	28.5	22	19
NS 1015A	10	—	15	1.7	2.7	10.5	8.3	36	48	34.5	26	23
NS 1616A	16	11	16	3.9	7.2	16.65	13.7	48	64	40	36	32
NS 2020A	20	14	20	6.1	12.3	20.75	17.5	56	72	48	43.5	39
NS 2525A	25	18	25	9.1	19.3	26	21.9	66	86	58	52	47
NS 3232A	32	23	32	13	29.8	33.25	28.3	78	103	72	63	58
NS 4040A	40	29	40	21.4	49.7	41.75	35.2	100	130	88	79.5	73

Ball spline

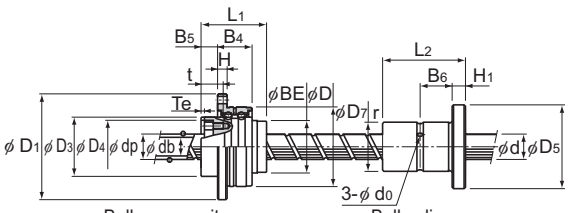
Model No.	Ball spline dimensions						
	Basic load rating		Static permissible moment	Basic torque rating		Outer diameter	Flange diameter
	C	C_0	M_A	C_T	C_{0T}	D_7	D_5 $^{0}_{-0.2}$
	kN	kN	N·m	N·m	N·m		
NS 0812A	1.5	2.6	5.9	2	2.9	16 $^{0}_{-0.011}$	32
NS 1015A	2.8	4.9	15.7	3.9	7.8	21 $^{0}_{-0.013}$	42
NS 1616A	7.1	12.6	67.6	31.4	34.3	31 $^{0}_{-0.013}$	51
NS 2020A	10.2	17.8	118	56.8	55.8	35 $^{0}_{-0.016}$	58
NS 2525A	15.2	25.8	210	105	103	42 $^{0}_{-0.016}$	65
NS 3232A	20.5	34	290	180	157	49 $^{0}_{-0.016}$	77
NS 4040A	37.8	60.5	687	418	377	64 $^{0}_{-0.019}$	100

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

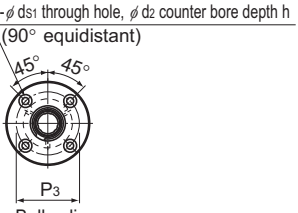
Model number coding

NS2020A +500L C5

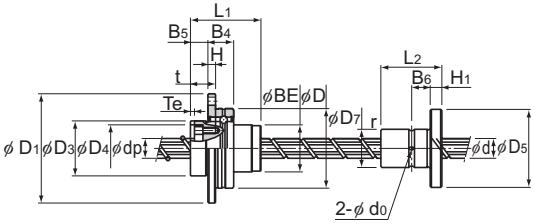
- NS2020A: Model number
- +500L: Overall shaft length (in mm)
- C5: Accuracy symbol[1]



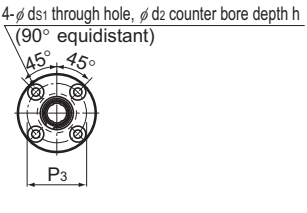
Ball screw unit
(Models NS 1616A to 4040A)



Ball spline
(Models NS 1616A to 4040A)



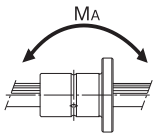
Ball screw unit
(Models NS 0812A and 1015A)



Ball spline
(Models NS 0812A and 1015A)

Unit: mm

BE	H	B_4	B_5	Te	P_1	P_2	S	t	d_1	Support bearing basic load rating Ca kN	Support bearing basic load rating C_0a kN	Nut inertial moment kg·m²	Screw shaft inertial moment kg·m²/mm	Nut mass kg	Shaft mass kg/m	Permissible rotational speed min⁻¹
19	3	10.5	7	1.5	38	14.5	M2.6	10	3.4	0.8	0.5	3.00×10^{-6}	3.16×10^{-9}	0.08	0.35	3,500
23	3	10.5	8	1.5	42	18	M3	11.5	3.4	0.9	0.7	8.00×10^{-6}	7.71×10^{-9}	0.15	0.52	3,500
32	6	21	10	2	56	25	M4	13.5	4.5	8.7	10.5	3.50×10^{-5}	3.92×10^{-8}	0.31	0.8	4,200
39	6	21	11	2.5	64	31	M5	16.5	4.5	9.7	13.4	8.50×10^{-5}	9.37×10^{-8}	0.54	1.21	3,370
47	7	25	13	3	75	38	M6	20	5.5	12.7	18.2	2.12×10^{-4}	2.20×10^{-7}	0.88	1.79	2,690
58	8	25	14	3	89	48	M6	21	6.6	13.6	22.3	5.42×10^{-4}	5.92×10^{-7}	1.39	2.96	2,100
73	10	33	16.5	3	113	61	M8	24.5	9	21.5	36.8	1.72×10^{-3}	1.43×10^{-6}	3.16	4.51	1,670

Unit: mm

Overall length L_2	H_1	B_6	r	Lubrication hole d_0	P_3	Mounting hole ds_1	Mounting hole d_2	Mounting hole h	Nut mass kg
25	5	7.5	0.5	1.5	24	3.4	6.5	3.3	0.04
33	6	10.5	0.5	1.5	32	4.5	8	4.4	0.09
$50\ ^{0}_{-0.2}$	7	18	0.5	2	40	4.5	8	4.4	0.23
$63\ ^{0}_{-0.2}$	9	22.5	0.5	2	45	5.5	9.5	5.4	0.33
$71\ ^{0}_{-0.3}$	9	26.5	0.5	3	52	5.5	9.5	5.4	0.45
$80\ ^{0}_{-0.3}$	10	30	0.5	3	62	6.6	11	6.5	0.58
$100\ ^{0}_{-0.3}$	14	36	0.5	4	82	9	14	8.6	1.46