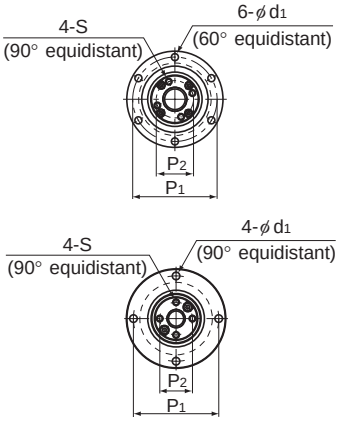
Model NS-A Compact Type: Straight Motion



Models NS 0812A and 1015A

Ball screw unit

Model No.	Screw shaft outer diameter d	Screw shaft inner diameter db	Lead Ph	Ball screw dimensions: Basic load rating Ca kN	Basic load rating C0a kN	Ball center-to-center diameter dp	Thread minor diameter dc	Outer diameter D g6	Flange diameter D1	Overall length L1	D3 h7	D4 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 C kN	Basic load rating C0 kN	Static permissible moment MA N-m	Basic torque rating CT N-m	Basic torque rating C0T N-m	Outer diameter D7	Flange diameter D5 $^{0}_{-0.2}$
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

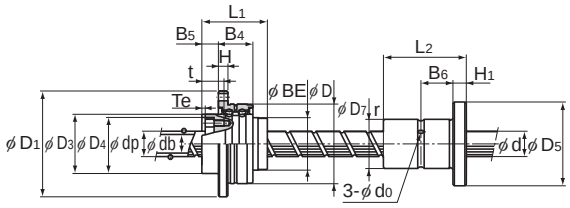
Note) For K hollow shaft, please refer to the db dimension for the inner bore diameter of the shaft. If requested solid shaft is also available. See "Ball Spline" A3-84 for details.

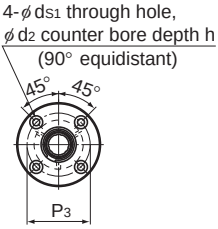
Model number coding

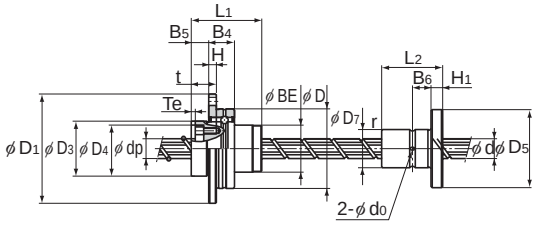
NS2020A +500L

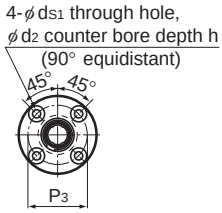
Model number — Overall shaft length (in mm)

To download a desired data, search for the corresponding model number in the Technical site. https://tech.thk.com









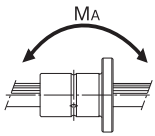
Models NS 0812A and 1015A

Unit: mm

										Support bearing basic load rating		Nut inertial moment	Screw shaft inertial moment/mm	Nut mass	Shaft mass
	BE	H	B_4	B_5	Te	P_1	P_2	S	t	d_1	Ca	C_0a				
											kN	kN	kg•cm²	J kg•cm²/mm	kg	kg/m
	19	3	10.5	7	1.5	38	14.5	M2.6	10	3.4	0.8	0.5	0.03	3.16×10^{-5}	0.08	0.35
	23	3	10.5	8	1.5	42	18	M3	11.5	3.4	0.9	0.7	0.08	7.71×10^{-5}	0.15	0.52
	32	6	21	10	2	56	25	M4	13.5	4.5	8.7	10.5	0.35	3.92×10^{-4}	0.31	0.8
	39	6	21	11	2.5	64	31	M5	16.5	4.5	9.7	13.4	0.85	9.37×10^{-4}	0.54	1.21
	47	7	25	13	3	75	38	M6	20	5.5	12.7	18.2	2.12	2.2×10^{-3}	0.88	1.79
	58	8	25	14	3	89	48	M6	21	6.6	13.6	22.3	5.42	5.92×10^{-3}	1.39	2.96
	73	10	33	16.5	3	113	61	M8	24.5	9	21.5	36.8	17.2	1.43×10^{-2}	3.16	4.51

Unit: mm

							Mounting hole			Nut mass
	Overall length L_2	H_1	B_6	r	Greasing hole d_0	P_3	d_{s1}	d_2	h	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



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