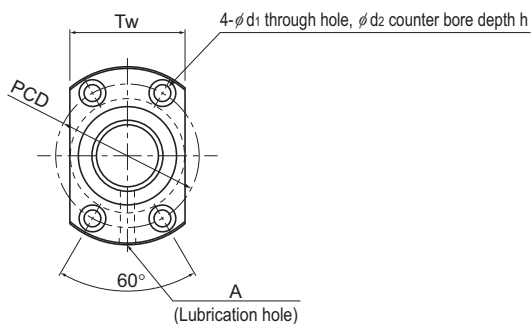


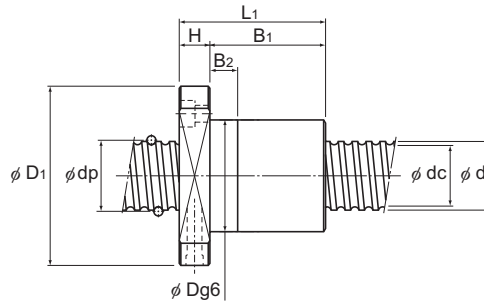
# DK No Preload

DN value	70,000
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Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows × turns	Basic load rating		Rigidity K N/μm
						Ca kN	C <sub>0a</sub> kN	
DK 1404-4	14	4	14.5	11.8	4 × 1	5.4	10.2	180
DK 1404-6	14	4	14.5	11.8	6 × 1	7.7	15.4	270
DK 1605-3	16	5	16.75	13.1	3 × 1	7.4	13	160
DK 1605-4	16	5	16.75	13.1	4 × 1	9.5	17.4	210
DK 2004-3	20	4	20.5	17.8	3 × 1	5.2	11.6	190
DK 2004-4	20	4	20.5	17.8	4 × 1	6.6	15.5	250
DK 2005-3	20	5	20.75	17.1	3 × 1	8.5	17.3	200
DK 2005-4	20	5	20.75	17.1	4 × 1	11	23.1	260
DK 2006-3	20	6	21	16.4	3 × 1	11.4	21.5	410
DK 2006-4	20	6	21	16.4	4 × 1	14.6	28.6	540
DK 2008-4	20	8	21	16.4	4 × 1	14.6	28.8	270

## Positioning Ball Screw



Unit: mm

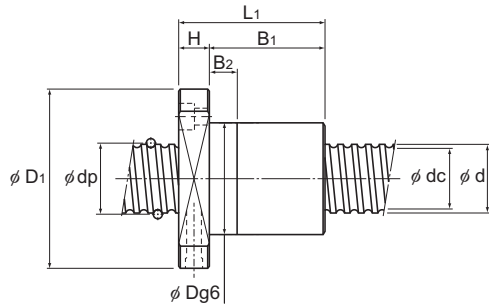
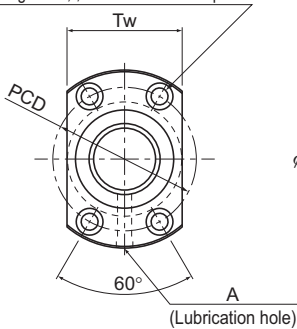
	Nut dimensions										Screw shaft inertial moment/mm <sup>3</sup>	Nut mass kg	Shaft mass kg/m	Permissible rotational speed min <sup>-1</sup>
	Outer diameter	Flange diameter	Overall length	H	B <sub>1</sub>	B <sub>2</sub>	PCD	d <sub>1</sub> × d <sub>2</sub> × h	Tw	Lubrication hole				
	D	D <sub>1</sub>	L <sub>1</sub>	H	B <sub>1</sub>	B <sub>2</sub>	PCD	d <sub>1</sub> × d <sub>2</sub> × h	Tw	A				
	26	45	48	10	38	10	35	4.5 × 8 × 4.5	29	M6	2.96 × 10 <sup>-8</sup>	0.2	1	4,820
	26	45	60	10	50	10	35	4.5 × 8 × 4.5	29	M6	2.96 × 10 <sup>-8</sup>	0.23	1	4,820
	30	49	45	10	35	10	39	4.5 × 8 × 4.5	31	M6	5.05 × 10 <sup>-8</sup>	0.24	1.25	4,170
	30	49	50	10	40	10	39	4.5 × 8 × 4.5	31	M6	5.05 × 10 <sup>-8</sup>	0.26	1.25	4,170
	32	56	42	11	31	10	44	5.5 × 9.5 × 5.5	35	M6	1.23 × 10 <sup>-7</sup>	0.26	2.18	3,410
	32	56	46	11	35	10	44	5.5 × 9.5 × 5.5	35	M6	1.23 × 10 <sup>-7</sup>	0.27	2.18	3,410
	34	58	46	11	35	10	46	5.5 × 9.5 × 5.5	36	M6	1.23 × 10 <sup>-7</sup>	0.31	2.06	3,370
	34	58	51	11	40	10	46	5.5 × 9.5 × 5.5	36	M6	1.23 × 10 <sup>-7</sup>	0.34	2.06	3,370
	35	58	52	11	41	10	46	5.5 × 9.5 × 5.5	36	M6	1.23 × 10 <sup>-7</sup>	0.36	1.93	3,330
	35	58	59	11	48	10	46	5.5 × 9.5 × 5.5	36	M6	1.23 × 10 <sup>-7</sup>	0.39	1.93	3,330
	35	58	69	11	58	15	46	5.5 × 9.5 × 5.5	36	M6	1.23 × 10 <sup>-7</sup>	0.45	2.06	3,330

Note: The overall length of the nut will increase when equipping the QZ Lubricator. See **A15-366** for further details.

# DK No Preload

DN value	70,000
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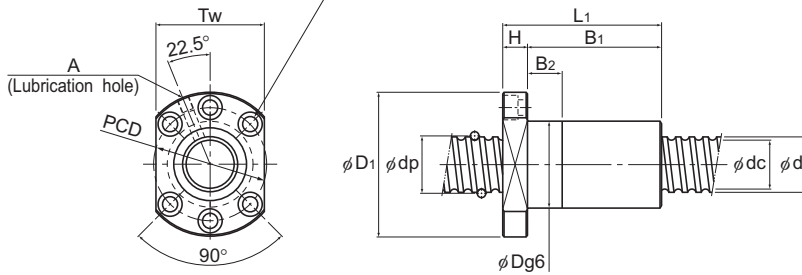
4- $\phi d_1$  through hole,  $\phi d_2$  counter bore depth h



DK2504 to 2510

Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows X turns	Basic load rating		Rigidity K N/ $\mu$ m
						Ca kN	C <sub>0a</sub> kN	
DK 2504-3	25	4	25.5	22.8	3 X 1	5.7	15	230
DK 2504-4	25	4	25.5	22.8	4 X 1	7.4	19.9	310
DK 2505-3	25	5	25.75	22.1	3 X 1	9.7	22.6	250
DK 2505-4	25	5	25.75	22.1	4 X 1	12.4	30.3	320
DK 2506-3	25	6	26	21.4	3 X 1	12.8	27	250
DK 2506-4	25	6	26	21.4	4 X 1	16.8	37.4	330
DK 2508-3	25	8	26	21.4	3 X 1	13.1	28.1	250
DK 2508-4	25	8	26	21.4	4 X 1	16.8	37.5	330
DK 2510-3	25	10	26	21.6	3 X 1	12.7	27	250
DK 2510-4	25	10	26	21.6	4 X 1	16.7	37.6	330
DK 2805-3	28	5	28.75	25.2	3 X 1	10.5	26.4	270
DK 2805-4	28	5	28.75	25.2	4 X 1	13.4	35.2	360
DK 2806-3	28	6	29	24.4	3 X 1	14	32	280
DK 2806-4	28	6	29	24.4	4 X 1	18	42.5	370
DK 2810-4	28	10	29.25	23.6	4 X 1	22.4	50	370

## Positioning Ball Screw

6- $\phi d_1$  through hole,  $\phi d_2$  counter bore depth h

DK2805 to 2810

Unit: mm

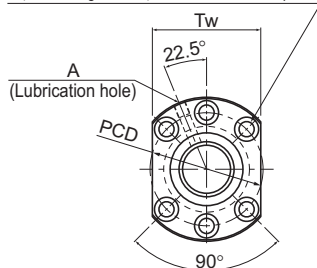
	Nut dimensions										Screw shaft inertial moment/mm <sup>3</sup>	Nut mass kg	Shaft mass kg/m	Permissible rotational speed min <sup>-1</sup>
	Outer diameter D	Flange diameter D <sub>1</sub>	Overall length L <sub>1</sub>	H	B <sub>1</sub>	B <sub>2</sub>	PCD	d <sub>1</sub> × d <sub>2</sub> × h	Tw	Lubrication hole A				
	38	63	43	11	32	10	51	5.5 × 9.5 × 5.5	39	M6	3.01 × 10 <sup>-7</sup>	0.33	3.5	2,740
	38	63	47	11	36	10	51	5.5 × 9.5 × 5.5	39	M6	3.01 × 10 <sup>-7</sup>	0.35	3.5	2,740
	40	63	46	11	35	10	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.38	3.35	2,710
	40	63	51	11	40	10	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.41	3.35	2,710
	40	63	52	11	41	10	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.41	3.19	2,690
	40	63	60	11	49	10	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.46	3.19	2,690
	40	63	62	12	50	10	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.48	3.35	2,690
	40	63	71	12	59	15	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.54	3.35	2,690
	40	63	80	15	65	15	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.62	3.45	2,690
	40	63	85	15	70	20	51	5.5 × 9.5 × 5.5	41	M6	3.01 × 10 <sup>-7</sup>	0.65	3.45	2,690
	43	71	49	12	37	10	57	6.6 × 11 × 6.5	55	M6	4.74 × 10 <sup>-7</sup>	0.48	4.27	2,430
	43	71	54	12	42	10	57	6.6 × 11 × 6.5	55	M6	4.74 × 10 <sup>-7</sup>	0.51	4.27	2,430
	43	71	53	12	41	10	57	6.6 × 11 × 6.5	55	M6	4.74 × 10 <sup>-7</sup>	0.5	4.36	2,410
	43	71	61	12	49	10	57	6.6 × 11 × 6.5	55	M6	4.74 × 10 <sup>-7</sup>	0.56	4.36	2,410
	45	71	84	15	69	20	57	6.6 × 11 × 6.5	55	M6	4.74 × 10 <sup>-7</sup>	0.82	4.18	2,390

Note: The overall length of the nut will increase when equipping the QZ Lubricator. See **A15-366** for further details.

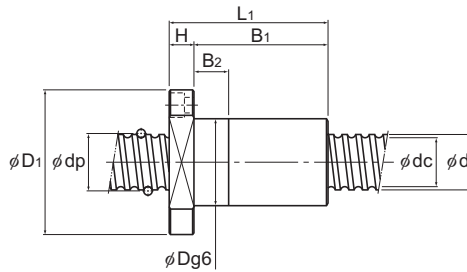
# DK No Preload

DN value	70,000
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6- $\phi$  d1 through hole,  $\phi$  d2 counter bore depth h



Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows X turns	Basic load rating		Rigidity K N/ $\mu$ m
						Ca kN	C <sub>0a</sub> kN	
DK 3204-3	32	4	32.5	30.1	3 X 1	6.4	19.6	290
DK 3204-4	32	4	32.5	30.1	4 X 1	8.2	26.1	380
DK 3205-3	32	5	32.75	29.2	3 X 1	11.1	30.2	300
DK 3205-4	32	5	32.75	29.2	4 X 1	14.2	40.3	400
DK 3205-6	32	5	32.75	29.2	6 X 1	20.1	60.4	600
DK 3206-3	32	6	33	28.4	3 X 1	14.9	37.1	310
DK 3206-4	32	6	33	28.4	4 X 1	19.1	49.5	410
DK 3210-3	32	10	33.75	26.4	3 X 1	25.7	52.2	300
DK 3210-4	32	10	33.75	26.4	4 X 1	33	69.7	390
DK 3212-4	32	12	33.75	26.4	4 X 1	34.2	73.9	420
DK 3610-3	36	10	37.75	30.5	3 X 1	28.8	63.8	350
DK 3610-4	36	10	37.75	30.5	4 X 1	36.8	85	470
DK 4010-3	40	10	41.75	34.4	3 X 1	29.8	69.3	380
DK 4010-4	40	10	41.75	34.4	4 X 1	38.1	92.4	500
DK 4012-3	40	12	41.75	34.4	3 X 1	30.6	72.3	390
DK 4012-4	40	12	41.75	34.4	4 X 1	39.2	96.4	520
DK 4016-4	40	16	41.75	34.4	4 X 1	39.1	96.8	520
DK 4020-3	40	20	41.75	34.7	3 X 1	29.4	69.3	750



Unit: mm

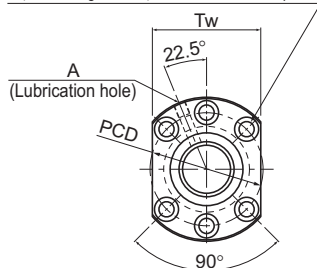
	Nut dimensions										Screw shaft inertial moment/mm <sup>3</sup>	Nut mass	Shaft mass	Permissible rotational speed
	Outer diameter	Flange diameter	Overall length	H	B <sub>1</sub>	B <sub>2</sub>	PCD	d <sub>1</sub> ×d <sub>2</sub> ×h	Tw	Lubrication hole				
	D	D <sub>1</sub>	L <sub>1</sub>	H	B <sub>1</sub>	B <sub>2</sub>	PCD	d <sub>1</sub> ×d <sub>2</sub> ×h	Tw	A				
	45	76	44	11	33	10	63	6.6×11×6.5	59	M6	8.08×10 <sup>-7</sup>	0.44	5.86	2,150
	45	76	48	11	37	10	63	6.6×11×6.5	59	M6	8.08×10 <sup>-7</sup>	0.47	5.86	2,150
	46	76	47	12	35	10	63	6.6×11×6.5	59	M6	8.08×10 <sup>-7</sup>	0.5	5.67	2,130
	46	76	52	12	40	10	63	6.6×11×6.5	59	M6	8.08×10 <sup>-7</sup>	0.53	5.67	2,130
	46	76	62	12	50	10	63	6.6×11×6.5	59	M6	8.08×10 <sup>-7</sup>	0.6	5.67	2,130
	48	76	53	12	41	10	63	6.6×11×6.5	59	M6	8.08×10 <sup>-7</sup>	0.58	6.31	2,120
	48	76	61	12	49	10	63	6.6×11×6.5	59	M6	8.08×10 <sup>-7</sup>	0.65	6.31	2,120
	54	87	80	15	65	15	69	9×14×8.5	66	M6	8.08×10 <sup>-7</sup>	1.22	4.98	2,070
	54	87	90	15	75	20	69	9×14×8.5	66	M6	8.08×10 <sup>-7</sup>	1.34	4.98	2,070
	54	87	98	15	83	25	69	9×14×8.5	66	M6	8.08×10 <sup>-7</sup>	1.43	5.2	2,070
	58	98	82	18	64	15	77	11×17.5×11	75	M6	1.29×10 <sup>-6</sup>	1.52	6.51	1,850
	58	98	93	18	75	20	77	11×17.5×11	75	M6	1.29×10 <sup>-6</sup>	1.66	6.51	1,850
	62	104	83	18	65	15	82	11×17.5×11	79	Rc1/8 (PT1/8)	1.97×10 <sup>-6</sup>	3.14	8.22	1,670
	62	104	93	18	75	20	82	11×17.5×11	79		1.97×10 <sup>-6</sup>	3.41	8.22	1,670
	62	104	90	18	72	20	82	11×17.5×11	79		1.97×10 <sup>-6</sup>	1.77	8.5	1,670
	62	104	103	18	85	25	82	11×17.5×11	79		1.97×10 <sup>-6</sup>	1.95	8.5	1,670
	62	104	120	18	102	30	82	11×17.5×11	79		1.97×10 <sup>-6</sup>	2.19	8.83	1,670
	62	104	123	18	105	30	82	11×17.5×11	79		1.97×10 <sup>-6</sup>	2.23	9.03	1,670

Note: The overall length of the nut will increase when equipping the QZ Lubricator. See **A15-366** for further details.

# DK No Preload

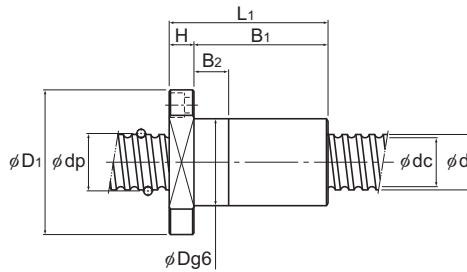
DN value	70,000
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6- $\phi$  d1 through hole,  $\phi$  d2 counter bore depth h



Model No.	Screw shaft outer diameter d	Lead Ph	Ball center-to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows X turns	Basic load rating		Rigidity K N/ $\mu$ m
						Ca kN	C <sub>0a</sub> kN	
DK 5010-3	50	10	51.75	44.4	3 × 1	33.9	90.7	470
DK 5010-4	50	10	51.75	44.4	4 × 1	43.4	120.5	610
DK 5010-6	50	10	51.75	44.4	6 × 1	62.7	186.8	930
DK 5012-3	50	12	52.25	43.3	3 × 1	45.8	113	490
DK 5012-4	50	12	52.25	43.3	4 × 1	58.6	150.6	640
DK 5016-3	50	16	52.25	43.3	3 × 1	45.7	113.3	490
DK 5016-4	50	16	52.25	43.3	4 × 1	58.5	151	640
DK 5020-3	50	20	52.25	43.6	3 × 1	44.2	108.8	470
DK 6310-4	63	10	64.75	57.7	4 × 1	49.5	160.7	780
DK 6310-6	63	10	64.75	57.7	6 × 1	70.3	242.1	1,140
DK 6312-3	63	12	65.25	56.3	3 × 1	51.9	147.4	600
DK 6312-4	63	12	65.25	56.3	4 × 1	66.4	196.6	785
DK 6320-3	63	20	65.7	55.9	3 × 1	83.5	229.3	1,470

## Positioning Ball Screw



Unit: mm

	Nut dimensions										Screw shaft inertial moment/mm <sup>2</sup>	Nut mass	Shaft mass	Permissible rotational speed
	Outer diameter	Flange diameter	Overall length							Lubrication hole				
	D	D <sub>1</sub>	L <sub>1</sub>	H	B <sub>1</sub>	B <sub>2</sub>	PCD	d <sub>1</sub> ×d <sub>2</sub> ×h	Tw	A				
	72	123	83	18	65	15	101	11×17.5×11	92	Rc1/8 (PT1/8)	4.82×10 <sup>-6</sup>	2.14	13.38	1,350
	72	123	93	18	75	20	101	11×17.5×11	92		4.82×10 <sup>-6</sup>	2.3	13.38	1,350
	72	123	114	18	96	30	101	11×17.5×11	92		4.82×10 <sup>-6</sup>	2.65	13.38	1,350
	75	129	97	22	75	20	105	14×20×13	98		4.82×10 <sup>-6</sup>	2.91	12.74	1,330
	75	129	110	22	88	25	105	14×20×13	98		4.82×10 <sup>-6</sup>	3.16	12.74	1,330
	75	129	111	22	89	25	105	14×20×13	98		4.82×10 <sup>-6</sup>	3.18	13.41	1,330
	75	129	129	22	107	30	105	14×20×13	98		4.82×10 <sup>-6</sup>	3.52	13.41	1,330
	75	129	136	28	108	30	105	14×20×13	98		4.82×10 <sup>-6</sup>	3.94	13.8	1,330
	85	146	97	22	75	20	122	14×20×13	110		1.21×10 <sup>-5</sup>	3.28	21.93	1,080
	85	146	118	22	96	30	122	14×20×13	110		1.21×10 <sup>-5</sup>	3.7	21.93	1,080
	90	146	98	22	76	20	122	14×20×13	110		1.21×10 <sup>-5</sup>	3.71	21.14	1,070
	90	146	111	22	89	25	122	14×20×13	110		1.21×10 <sup>-5</sup>	4.04	21.14	1,070
	95	159	136	28	108	30	129	18×26×17.5	121		1.21×10 <sup>-5</sup>	6.17	21.57	1,060

Note: The overall length of the nut will increase when equipping the QZ Lubricator. See **A15-366** for further details.