

**NSK Precision Europe GmbH**  
Harkortstr. 15  
40880 Ratingen  
Germany  
Phone: +49 (0) 2102-481-0  
Fax: +49 (0) 2102-481-2680  
Info-de@nsk.com

**NSK Italia S.P.A.**  
Via Garibaldi, 215  
20024 Garbagnate Milanese  
Milano  
Italy  
Phone: +39 02 995 19227  
Fax: +39 02 995 19275  
Info-seiki@nsk.com

**NSK France S.A.**  
Quartier de l'Europe  
2, Rue Georges Guynemer  
78283 Guyancourt, Cedex  
France  
Phone: +33 130 577 534  
Fax: +33 130 577 570  
Info-fr@nsk.com

**NSK Europe Ltd.**  
Northern Road  
Newark HG24 2JF  
Nottinghamshire  
United Kingdom  
Phone: +44 (0) 1636 643 282  
Fax: +44 (0) 1636 643 075  
gage-l@nsk.com

**NSK Spain S.A.**  
C/Tarragona, Cuerpo Bajo  
2a planta  
08014 Barcelona  
Spain  
Phone: +34 93 289 27 64  
Fax: +34 93 289 27 61  
info-es@nsk.com

European Website:  
[www.nskeurope.com](http://www.nskeurope.com)

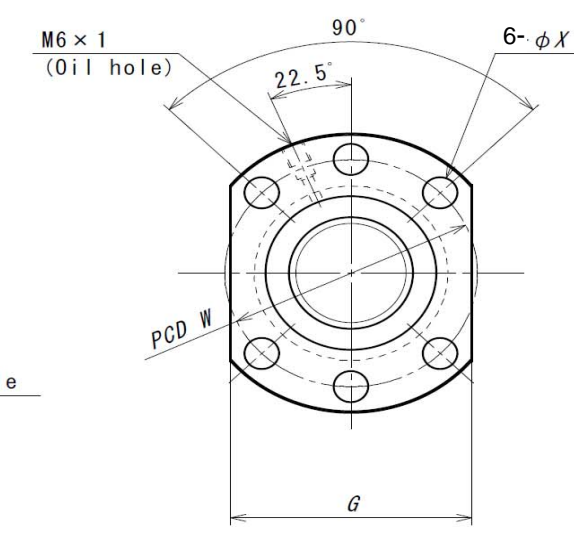
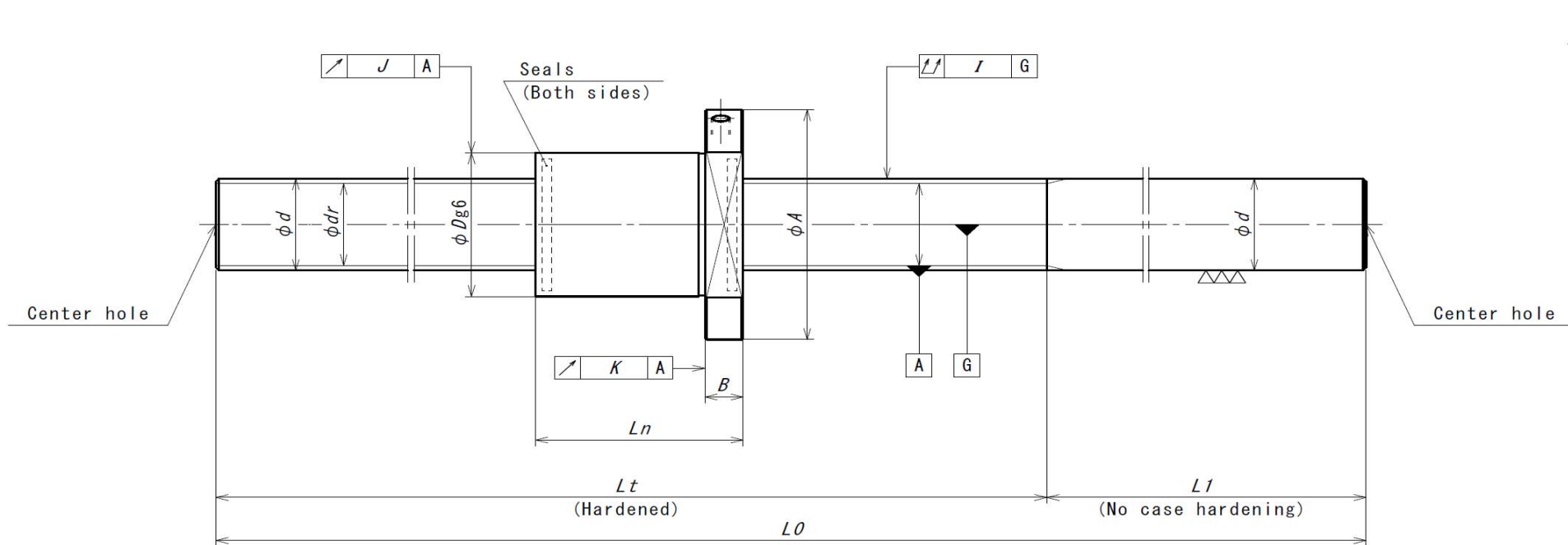
Technical e-source Center :  
[www.tec.nsk.com](http://www.tec.nsk.com)

3D CAD Datadownload :  
[www.nsk.solidcomponents.com](http://www.nsk.solidcomponents.com)

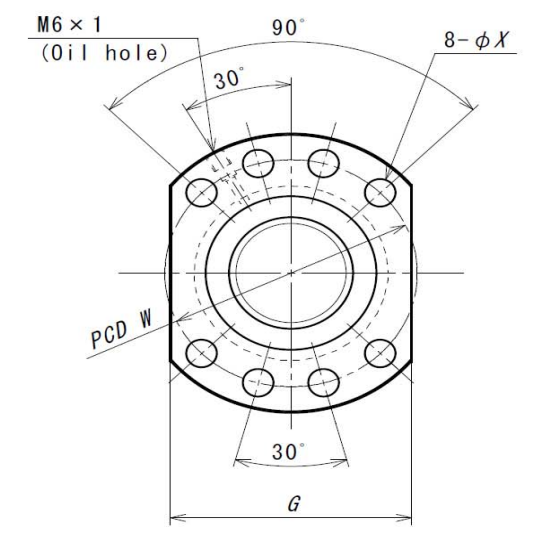
## DS Series Ball Screws

with no shaft end machining  
Nuts matching DIN 69051-5





Type 1  
Shaft diameter:  
φ 32



Type 2  
Shaft diameter:  
φ 40, φ 50 and φ 63

Unit: mm

NSK Reference Number	Shaft dia. <i>d</i>	Lead <i>l</i>	Nut Model No.	Basic load rating (N)		Preload (N) <i>Fa0</i>	Dynamic preload torque <i>Tp</i> (N-cm)	Nut dimensions					Screw shaft dimensions				Lead accuracy			Run-out			Mass (kg)			
				Dynamic <i>Ca</i>	Static <i>Coa</i>			O.D. <i>D</i>	Flange <i>A</i>	<i>G</i>	<i>B</i>	Length <i>Ln</i>	Bolt hole <i>W</i>	<i>X</i>	Thread <i>Lt</i>	Overall <i>L0</i>	<i>d</i>	<i>L1</i>	<i>T</i>	<i>±ep</i>	<i>vu</i>	Shaft <i>I</i>		Nut O.D. <i>J</i>	Nut flange <i>K</i>	
W3207DS-2PSS-C5Z5	32	5	BSS3205-5E	21 900	52 900	530	2.5 - 17.6	50	80	62	12	46	65	9	700	900	032	200	-0.015	0.035	0.025	0.065	0.015	0.011	6.0	
2.5 - 17.6							1 000								1 250	032	250	-0.022	0.040	0.027	0.080					8.1
2.0 - 21.5							1 500								1 800	032	300	-0.034	0.054	0.035	0.130					11.4
W3204DS-2PSS-C5Z10	32	10	PR3210-4	23 800	51 500	570	7.4 - 23.5	50	80	62	12	59	65	9	400	600	032	200	-0.009	0.025	0.020	0.045	0.015	0.011	4.4	
5.4 - 25.5							700								900	032	200	-0.015	0.035	0.025	0.065					6.2
5.4 - 25.5							1 000								1 250	032	250	-0.022	0.040	0.027	0.080					8.3
3.9 - 27.5							1 500								1 800	032	300	-0.034	0.054	0.035	0.130					11.6
3.9 - 27.5							2 000								2 300	032	300	-0.046	0.065	0.040	0.170					14.6
W3210DS-4PSS-C5Z20	32	20	PR3220-4	23 800	51 500	570	10.8 - 32.5	50	80	62	12	98	65	9	1 000	1 250	032	250	-0.022	0.040	0.027	0.080	0.015	0.011	8.7	
8.8 - 36.5							1 500								1 800	032	300	-0.034	0.054	0.035	0.130					12.1
8.8 - 36.5							2 000								2 300	032	300	-0.046	0.065	0.040	0.170					15.2
W4007DS-2PY-C5Z5	40	5	PFD4005-6	28 000	78 400	680	6.4 - 20.5	63	93	70	14	64	78	9	700	1 000	040	300	-0.015	0.035	0.025	0.050	0.019	0.013	10.7	
4.7 - 22.5							1 000								1 300	040	300	-0.022	0.040	0.027	0.070					13.5
4.7 - 22.5							1 500								1 800	040	300	-0.034	0.054	0.035	0.090					18.2
15.6 - 42.0							1 000								1 300	040	300	-0.022	0.040	0.027	0.070					13.0
W4015DS-2PSS-C5Z10	40	10	PR4010-4	42 200	89 900	1 020	15.6 - 42.0	63	93	70	14	60	78	9	1 500	1 800	040	300	-0.034	0.054	0.035	0.090	0.019	0.013	17.5	
11.8 - 47.0							2 000								2 300	040	300	-0.046	0.065	0.040	0.110					22.0
28.5 - 66.0							1 500								1 800	040	300	-0.034	0.054	0.035	0.090					19.2
W4020DS-2PY-C5Z20	40	20	PFD4020-4	48 000	93 300	1 150	25.5 - 69.0	63	93	70	18	138	78	9	2 000	2 300	040	300	-0.046	0.065	0.040	0.110	0.019	0.013	23.9	
25.5 - 69.0							2 500								2 800	040	300	-0.058	0.077	0.046	0.140					28.6
25.5 - 69.0							3 000								3 350	040	350	-0.065	0.093	0.054	0.180					33.7
23.5 - 51.0							1 000								1 300	050	300	-0.022	0.040	0.027	0.070					21.4
21.5 - 53.0							1 500								1 800	050	300	-0.034	0.054	0.035	0.090					28.5
W5020DS-2PY-C5Z10	50	10	PFD5010-6	77 300	183 000	1 850	21.5 - 53.0	75	110	85	18	114	93	11	2 000	2 300	050	300	-0.046	0.065	0.040	0.110	0.019	0.013	35.6	
41.0 - 86.0							1 500								1 800	050	300	-0.034	0.054	0.035	0.090					29.2
41.0 - 86.0							2 000								2 300	050	300	-0.046	0.065	0.040	0.110					36.4
W5025DS-1PY-C5Z20	50	20	PFD5020-3	56 000	109 000	1 340	37.5 - 91.0	75	110	85	18	133	93	11	2 500	2 900	050	400	-0.058	0.077	0.046	0.140	0.019	0.013	45.2	
37.5 - 91.0							3 000								3 400	050	400	-0.065	0.093	0.054	0.180					52.5
51.0 - 106							1 500								1 900	063	400	-0.034	0.054	0.035	0.060					47.5
W6320DS-1PY-C5Z10	63	10	PFD6310-6	88 100	244 000	2 120	51.0 - 106	90	125	95	22	118	108	11	2 000	2 400	063	400	-0.046	0.065	0.040	0.075	0.025	0.015	59.0	
51.0 - 106							2 500								2 900	063	400	-0.058	0.077	0.046	0.095					70.5
51.0 - 106							2 500								2 900	063	400	-0.058	0.077	0.046	0.095					70.5