



Unit: mm

Ball screw specifications		
Product classification	Preloaded	Precise clearance
Shaft dia. X Lead / Direction of turn		14 x 8 / Right
Preload / Ball recirculation		P preload / Return tube
Ball dia. / Ball circle dia.		3.175 / 14.5
Effective turns of balls		2.5 x 1
Accuracy grade / Preload / Axial play		C5/Z C5/T
Basic load rating (N)	Dynamic $C_a$	4280
	Static $C_{0a}$	5840
Axial play		0 0.005 or less
Dynamic friction torque, (N · cm)		1.5~7.8 ~2.4
Spacer ball		Yes None
Factory packed grease		NSK grease LR3
Internal spatial volume of nut (cm <sup>3</sup> )		2.1

Ball screw No.		Stroke	
		Nominal	Maximum (L <sub>1</sub> -Nut length)
Preloaded (LPFT)	Precise clearance (LSFT)		
<b>W1401FA-3P-C5Z8</b>	<b>W1401FA-4-C5T8</b>	100	143
<b>W1402FA-3P-C5Z8</b>	<b>W1402FA-4-C5T8</b>	150	193
<b>W1402FA-5P-C5Z8</b>	<b>W1402FA-6-C5T8</b>	200	243
<b>W1403FA-3P-C5Z8</b>	<b>W1403FA-4-C5T8</b>	250	293
<b>W1403FA-5P-C5Z8</b>	<b>W1403FA-6-C5T8</b>	300	343
<b>W1404FA-3P-C5Z8</b>	<b>W1404FA-4-C5T8</b>	350	393
<b>W1404FA-5P-C5Z8</b>	<b>W1404FA-6-C5T8</b>	400	443
<b>W1405FA-3P-C5Z8</b>	<b>W1405FA-4-C5T8</b>	450	493
<b>W1405FA-5P-C5Z8</b>	<b>W1405FA-6-C5T8</b>	500	543
<b>W1406FA-3P-C5Z8</b>	<b>W1406FA-4-C5T8</b>	550	593
<b>W1406FA-5P-C5Z8</b>	<b>W1406FA-6-C5T8</b>	600	643
<b>W1407FA-1P-C5Z8</b>	<b>W1407FA-2-C5T8</b>	700	743

Remarks 1. We recommend NSK support unit WBK12-01A (square type, fixed side), WBK12S-01 (square type, simple support side), and WBK12-11 (round type, fixed side).  
 2. NSK grease LR3 is recommended. The amount for replenishing should be about 50% of nut internal space capacity.  
 3. Permissible rotational speed is determined by a  $d \cdot n$  value and a critical speed. See page B509.  
 Root diameter of screw shaft (dr) is 11.2 mm.

Unit: mm

Screw shaft length			Lead accuracy			Shaft run-out **	Mass (Kg)	Permissible rotational speed N (min <sup>-1</sup> )	
								Supporting condition	
$L_1$	$L_2$	$L_3$	$T$	$e_p$	$v_u$		Fixed - Simple support	Fixed - Fixed	
189	204	271	0	0.020	0.018	0.025	0.56	3000	3000
239	254	321	0	0.023	0.018	0.035	0.61	3000	3000
289	304	371	0	0.023	0.018	0.035	0.67	3000	3000
339	354	421	0	0.025	0.020	0.040	0.72	3000	3000
389	404	471	0	0.025	0.020	0.040	0.78	3000	3000
439	454	521	0	0.027	0.020	0.050	0.83	3000	3000
489	504	571	0	0.027	0.020	0.050	0.88	3000	3000
539	554	621	0	0.030	0.023	0.050	0.94	3000	3000
589	604	671	0	0.030	0.023	0.065	0.99	3000	3000
639	654	721	0	0.035	0.025	0.065	1.0	3000	3000
689	704	771	0	0.035	0.025	0.065	1.1	3000	3000
789	804	871	0	0.035	0.025	0.085	1.2	2800	3000