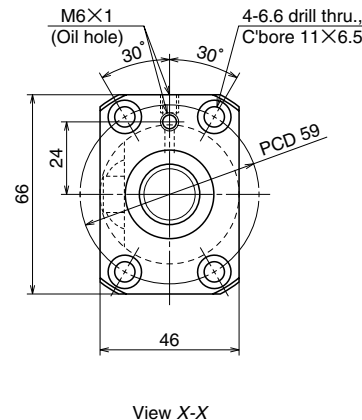


Unit: mm



Ball screw specifications		
Product classification	Preloaded	Precise clearance
Shaft dia. X Lead / Direction of turn	20 X 10/Right	
Preload / Ball recirculation	P preload / Return tube	
Ball dia. / Ball circle dia.	3.969/21	
Effective turns of balls	2.5 X 1	
Accuracy grade/ Preload / Axial play	C5/Z	C5/T
Basic load rating (N)	Dynamic $C_a$	6880
	Static $C_{0a}$	10900
Dynamic friction torque, (N · cm)	0	0.005 or less
	2.0~11.8	~2.9
Axial play	Yes	None
Dynamic friction torque, (N · cm)	2.0~11.8	~2.9
Spacer ball	Yes	None
Factory packed grease	NSK grease LR3	
Internal spatial volume of nut (cm <sup>3</sup> )	4.7	

Ball screw No.		Stroke	
		Nominal	Maximum ( $L_1$ -Nut length)
Preloaded (LPFT)	Precise clearance (LSFT)		
<b>W2002FA-1P-C5Z10</b>	<b>W2002FA-2-C5T10</b>	200	235
<b>W2003FA-1P-C5Z10</b>	<b>W2003FA-2-C5T10</b>	300	335
<b>W2004FA-1P-C5Z10</b>	<b>W2004FA-2-C5T10</b>	400	435
<b>W2005FA-1P-C5Z10</b>	<b>W2005FA-2-C5T10</b>	500	535
<b>W2006FA-1P-C5Z10</b>	<b>W2006FA-2-C5T10</b>	600	635
<b>W2007FA-1P-C5Z10</b>	<b>W2007FA-2-C5T10</b>	700	735
<b>W2008FA-1P-C5Z10</b>	<b>W2008FA-2-C5T10</b>	800	835
<b>W2009FA-1P-C5Z10</b>	<b>W2009FA-2-C5T10</b>	900	935
<b>W2010FA-1P-C5Z10</b>	<b>W2010FA-2-C5T10</b>	1000	1035
<b>W2011FA-1P-C5Z10</b>	<b>W2011FA-2-C5T10</b>	1100	1135
<b>W2012FA-1P-C5Z10</b>	<b>W2012FA-2-C5T10</b>	1200	1235

- Remarks
- We recommend NSK support unit WBK15-01A (square type, fixed side), WBK15S-01 (square type, simple support side), and WBK15-11 (round type, fixed side).
  - NSK grease LR3 is recommended. The amount for replenishing should be about 50% of nut internal space capacity.
  - 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 16.9 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	
289	314	399	0	0.023	0.018	0.035	1.4	3000	3000
389	414	499	0	0.025	0.020	0.040	1.6	3000	3000
489	514	599	0	0.027	0.020	0.050	1.9	3000	3000
589	614	699	0	0.030	0.023	0.065	2.1	3000	3000
689	714	799	0	0.035	0.025	0.065	2.3	3000	3000
789	814	899	0	0.035	0.025	0.085	2.5	3000	3000
889	914	999	0	0.040	0.027	0.085	2.8	3000	3000
989	1014	1099	0	0.040	0.027	0.110	3.0	2680	3000
1089	1114	1199	0	0.046	0.030	0.110	3.2	2210	3000
1189	1214	1299	0	0.046	0.030	0.150	3.4	1840	2570
1289	1314	1399	0	0.054	0.035	0.150	3.7	1570	2190

Unit: mm