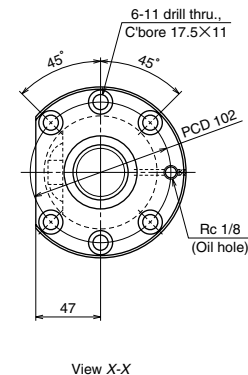


Unit: mm



Ball screw specifications		
Shaft dia. X Lead / Direction of turn	40 × 10/Right	
Preload / Ball recirculation	Z preload / Return tube	
Ball dia. / Ball circle dia.	6.35/41	
Effective turns of balls	2.5 × 1	
Accuracy grade / Preload	C5/Z	
Basic load rating (N)	Dynamic $C_a$	28600
	Static $C_{0a}$	68600
Preload (N)	2160	
Dynamic friction torque, median, (N · cm)	64.0	
Spacer ball	None	
Factory packed grease	<b>Refer to Remarks 2.</b>	
Internal spatial volume of nut (cm <sup>3</sup> )	30	

Ball screw No.	Stroke		Screw shaft length		
	Nominal	Maximum ( $L_1$ -Nut length)	$L_1$	$L_2$	$L_3$
<b>W4004SA-1Z-C5Z10</b>	350	377	480	500	672
<b>W4005SA-3Z-C5Z10</b>	450	477	580	600	772
<b>W4006SA-1Z-C5Z10</b>	550	577	680	700	872
<b>W4007SA-3Z-C5Z10</b>	650	677	780	800	1039
<b>W4009SA-3Z-C5Z10</b>	850	877	980	1000	1239
<b>W4011SA-3Z-C5Z10</b>	1050	1077	1180	1200	1439
<b>W4013SA-1Z-C5Z10</b>	1250	1277	1380	1400	1639
<b>W4015SA-3Z-C5Z10</b>	1450	1477	1580	1600	1839
<b>W4017SA-1Z-C5Z10</b>	1650	1677	1780	1800	2039
<b>W4023SA-1Z-C5Z10</b>	2250	2277	2380	2400	2639

Left side shaft end	Lead accuracy			Shaft run-out **	Mass (Kg)	Permissible rotational speed N (min <sup>-1</sup> )	
	$T$	$e_p$	$v_u$			Supporting condition	
	Fixed - Simple support		Fixed - Fixed				
<b>II</b>	-0.012	0.027	0.020	0.040	8.7	1750	—
<b>II</b>	-0.014	0.030	0.023	0.040	9.6	1750	—
<b>II</b>	-0.016	0.035	0.025	0.050	10.4	1750	—
<b>I</b>	-0.019	0.035	0.025	0.065	11.7	1750	1750
<b>I</b>	-0.024	0.040	0.027	0.065	13.4	1750	1750
<b>I</b>	-0.028	0.046	0.030	0.080	15.1	1750	1750
<b>I</b>	-0.033	0.054	0.035	0.100	16.9	1750	1750
<b>I</b>	-0.038	0.054	0.035	0.100	18.6	1750	1750
<b>I</b>	-0.043	0.065	0.040	0.130	20.3	1670	1750
<b>I</b>	-0.057	0.077	0.046	0.170	25.5	930	1320

- Remarks 1. We recommend NSK support unit round type WBK30DF-31.  
 2. Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.  
 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 34.4 mm.