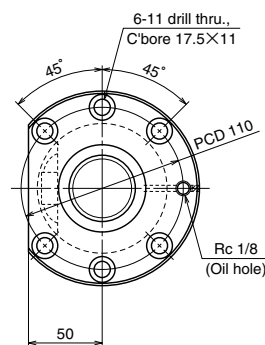


Unit: mm



View X-X

Ball screw specifications		
Shaft dia. x Lead / Direction of turn	45 x 10 / Right	
Preload / Ball recirculation	Z preload / Return tube	
Ball dia. / Ball circle dia.	6.35 / 46	
Effective turns of balls	2.5 x 1	
Accuracy grade / Preload	C5 / Z	
Basic load rating (N)	Dynamic C _a	29900
	Static C _{0a}	77300
Preload (N)	2260	
Dynamic friction torque, median, (N·cm)	69.0	
Spacer ball	None	
Factory packed grease	Refer to Remarks 2.	
Internal spatial volume of nut (cm ³)	33	

Ball screw No.	Stroke		Screw shaft length		
	Nominal	Maximum (L ₁ -Nut length)	L ₁	L ₂	L ₃
W4506SA-1Z-C5Z10	550	577	680	700	947
W4509SA-1Z-C5Z10	850	877	980	1000	1247
W4513SA-1Z-C5Z10	1250	1277	1380	1400	1647
W4517SA-1Z-C5Z10	1650	1677	1780	1800	2047
W4524SA-1Z-C5Z10	2350	2377	2480	2500	2747

Lead accuracy			Shaft run-out **	Mass (Kg)	Permissible rotational speed N (min ⁻¹)	
T	e _p	v _u			Supporting condition	
					Fixed - Simple support	Fixed - Fixed
-0.016	0.035	0.025	0.050	13.4	1550	1550
-0.024	0.040	0.027	0.065	16.7	1550	1550
-0.033	0.054	0.035	0.100	21.2	1550	1550
-0.043	0.065	0.040	0.130	25.6	1550	1550
-0.060	0.077	0.046	0.170	33.4	980	1400

- Remarks
1. We recommend NSK support unit round type WBK35DF-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 · n value and a critical speed. See page B509.
Root diameter of screw shaft (dr) is 39.4 mm.