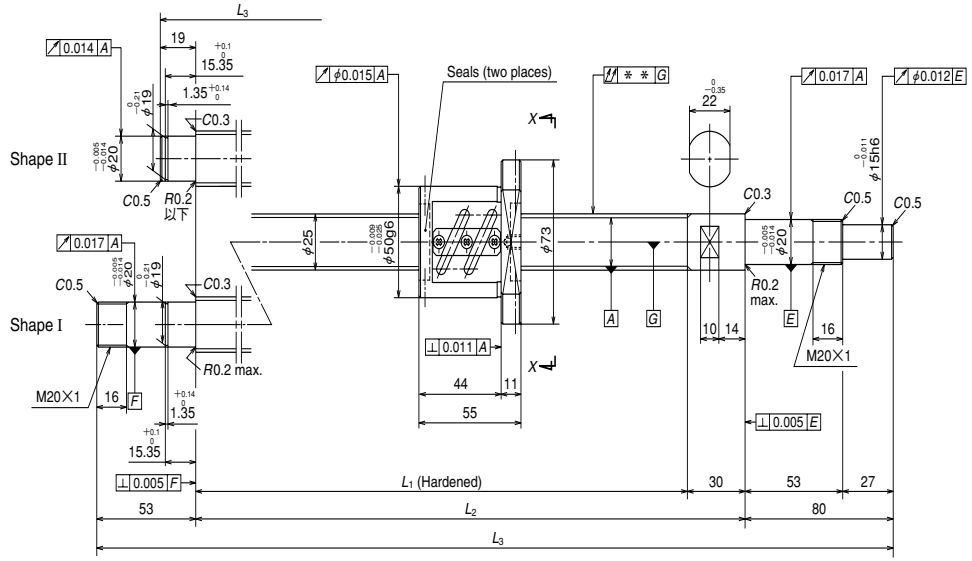
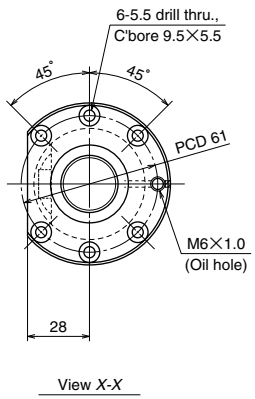


NSK

φ25×5

Standard stock

Unit: mm



Ball screw specifications		
Shaft dia. × Lead / Direction of turn		25×5/Right
Preload / Ball recirculation		P preload / Return tube
Ball dia. / Ball circle dia.		3.175/25.5
Effective turns of balls		2.5×2
Accuracy grade / Preload		C5/Z
Basic load rating (N)	Dynamic C_a	10400
	Static C_{0a}	21900
Preload (N)		540
Dynamic friction torque, median, (N·cm)		8.8
Spacer ball		Yes
Factory packed grease		**Refer to Remarks 2.**
Internal spatial volume of nut (cm³)		5.0

Unit: mm

Ball screw No.	Stroke		Screw shaft length		
	Nominal	Maximum (L_1–Nut length)	L_1	L_2	L_3
W2502SA-3P-C5Z5	150	165	220	250	349
W2502SA-4P-C5Z5	200	215	270	300	399
W2503SA-2P-C5Z5	300	315	370	400	499
W2504SA-2P-C5Z5	400	415	470	500	599
W2505SA-2P-C5Z5	500	515	570	600	733
W2506SA-1P-C5Z5	600	615	670	700	833
W2507SA-2P-C5Z5	700	715	770	800	933
W2509SA-1P-C5Z5	900	915	970	1000	1133
W2511SA-1P-C5Z5	1000	1115	1170	1200	1333

Left side shaft end	Lead accuracy			Shaft run-out **	Mass (Kg)	Permissible rotational speed N (min⁻¹) Supporting condition	
	T	e_p	υ_u			Fixed - Simple support	Fixed - Fixed
Ⅱ	–0.005	0.023	0.018	0.035	1.8	2800	—
Ⅱ	–0.006	0.023	0.018	0.035	2.0	2800	—
Ⅱ	–0.009	0.025	0.020	0.040	2.3	2800	—
Ⅱ	–0.011	0.027	0.020	0.050	2.7	2800	—
Ⅰ	–0.014	0.030	0.023	0.060	3.1	2800	2800
Ⅰ	–0.016	0.035	0.025	0.075	3.4	2800	2800
Ⅰ	–0.018	0.035	0.025	0.075	3.8	2800	2800
Ⅰ	–0.023	0.040	0.027	0.090	4.5	2800	2800
Ⅰ	–0.028	0.046	0.030	0.120	5.2	2480	2800

Remarks 1. We recommend NSK support unit WBK20-01A (square type, fixed side), WBK20S-01 (square type, simple support side), and WBK20-11 (round type, fixed side).
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 22.2 mm.