



Unit: mm

Ball screw specification		
Shaft dia. x Lead / Direction of turn	15 x 10 / Right	
Ball recirculation	Return tube	
Ball dia. / Ball circle dia.	3.175 / 15.5	
Root dia.	12.2	
Effective turns of balls	2.5 x 1	
Accuracy grade / Axial play code	Ct7/S	
Basic load rating (N)	Dynamic C_d	7070
	Static C_{0a}	12800
Axial play	0.010 or less	
Dynamic friction torque (N · cm)	~2.5	
Spacer ball	None	
Factory pre-packed grease	NSK grease LR3	
Internal spatial volume of nut (cm ³)	2.3	

Unit: mm

Ball screw No.	Stroke		Screw shaft length		
	Nominal	Maximum (L ₁ - Nut length)	L ₁	L ₂	L ₃
VFA1510C7S-500	300	348	400	455	500
VFA1510C7S-700	500	548	600	655	700
VFA1510C7S-1000	800	848	900	955	1000

Lead accuracy			Shaft run-out**	Mass (Kg)	Permissible rotational speed N (min ⁻¹)	
T	e _p	v ₃₀₀			Supporting condition	
					Fixed - Simple support	Fixed - Free
0	0.120	0.052	0.075	0.89	3000	2600
0	0.195	0.052	0.110	1.1	3000	1150
0	0.310	0.052	0.180	1.5	2340	510

- Remarks
- We recommend NSK support units WBK12-01A (square type, fixed support side), WBK15SF-01 (simple support side), and WBK12-11 (round type, fixed support side). WBK12SF-01 (on the simple support side) is a unit that supports the shaft outside surface by the bearing.
 - NSK grease LR3 is recommended.
 - 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 12.2 mm.