

Precision Ball Screws (Shaft Diameter 25, Lead 5, 10, 20)

Accuracy Grade C5, C7

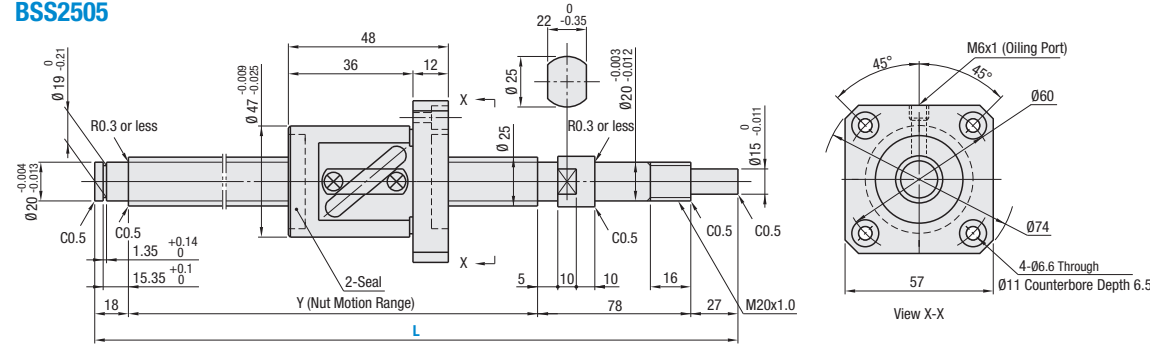
Precision Ball Screws
(Shaft Diameter 25, Lead 5, 10, 20) –
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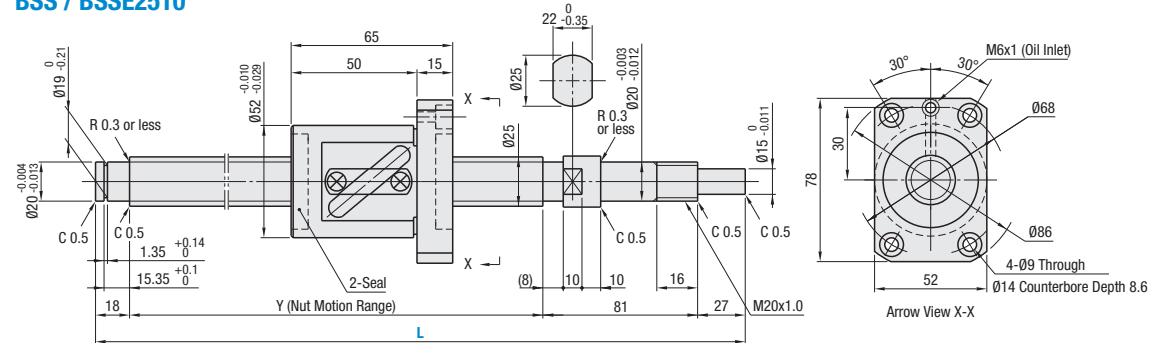
Ball Nut Type	Type	Precision Class	Shaft Diameter	Lead	Screw Shaft		Ball Nut	
					Material	Hardness	Material	Hardness
Standard Nut	BSS	C5	25	5, 10, 20	4150 Alloy Steel	Induction Hardened 58–62 HRC min.	JIS-SCM420	Carburized 58–62 HRC min.
	BSSE	C7		10, 20				

ⓘ Ball bearings will fall out if the ball nut crosses the wrench flats.

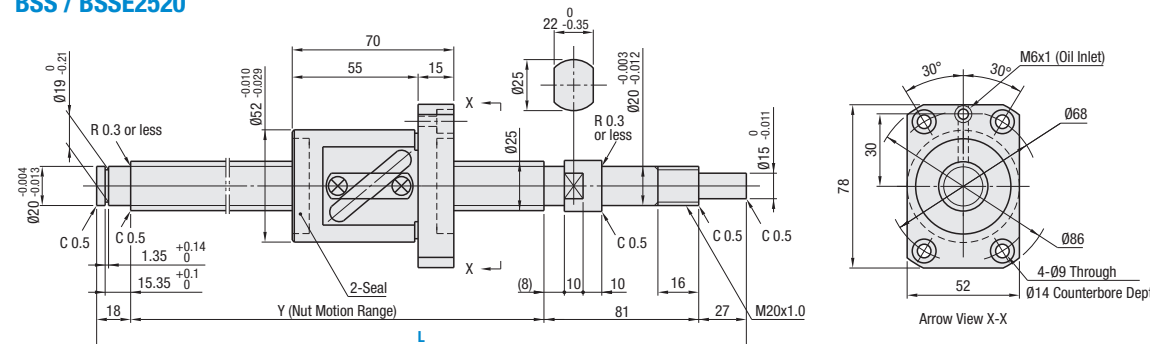
BSS2505



BSS / BSSE2510



BSS / BSSE2520



Ball Nut Type	Precision Class	Type	Part Number		Y	Ball Dia.	Ball Center Dia.	Screw Root Dia.	Number of Circuits ¹	Basic Load Rating		Axial Play	Preload Torque N-cm	Twisting Direction
			Screw Shaft Diameter	Lead						C (Dynamic) kN	Co (Static) kN			
Standard Nut	C5	BSS	25	05	300–995	L-123	3.175	25.8	(22.5)	9.4	22.2	0.005 or Less	6.0 or Less	Right
	C5	BSS		10	300–1500	L-126	4.7625	26	(21)	16.1	33.4	0.005 or Less	6.0 or Less	
	C7	BSSE	10	300–1500	L-126	4.7625	26	(21)	16.1	33.4	0.030 or Less	—		
	C5	BSS	20	300–1500	L-126	4.7625	26	(21)	1.5 Turns, 1 Row	10.4	20.1	0.005 or Less	6.0 or Less	
C7	BSSE	20	300–1500	L-126	4.7625	26	(21)	1.5 Turns, 1 Row	10.4	20.1	0.030 or Less	—		

¹See P.750 for details.

kgf=Nx0.101972

Precision Ball Screws (Shaft Diameter 25, Lead 5, 10, 20)

Accuracy Grade C5, C7, continued

Accuracy Grade	Part Number	Available Types							
		L200–249	L250–299	L300–400	L401–600	L601–700	L701–800	L801–995	L1496–1500
C5	BSS2505	•	•	•	•	•	—	—	—
C5	BSS2510	•	•	•	•	•	•	•	•
C7	BSSE2510	•	•	•	•	•	•	•	•
C5	BSS2520	•	•	•	•	•	•	•	•
C7	BSSE2520	•	•	•	•	•	•	•	•

Part Number Example

Part Number - L
 BSS2510 - 700
 BSSE2510L - 420 L Type Greased
 BSSE2510G - 420 G Type Greased

Note:

- ⓘ Filled with lithium soap based grease (Alvania Grease S2 made by Showa Shell Sekiyu K.K.).
- ⓘ Caution: Do not remove nuts from screw shafts or allow nuts to overrun the stroke. It may cause balls to fall out or damage ball recirculation parts.
- ⓘ Various grease options are available. For lead time, prices and specifications, P.752.
- ⓘ For accuracy of Ball Screws, see P.752–754.
- ⓘ For details of Support Units, see P.792–802.

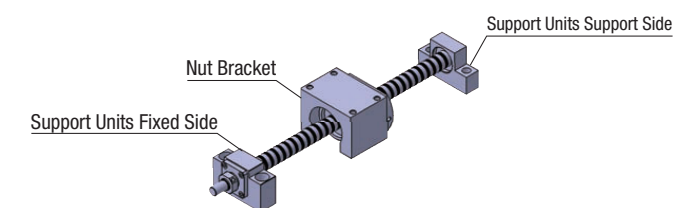
Part Number Alterations

Part Number - L - (FC, MC, etc.)
 BSS2505 - 700 - RLC

Alterations	Code	Spec.
No Machining on Support Side Shaft End	NC	No machining added on the support side shaft end. Ordering Code: NC
Ball Nut Orientation Reversed (Support Side) (Fixed Side) Changed	RLC	Changes the nut direction. Ordering Code: RLC
No Retaining Ring Groove on Support Side Shaft End	RNC	Retaining ring groove in not machined on the support side shaft end. Ordering Code: RNC ⓘ Combination with FC is not available.
Change Support Side Shaft End Machining	GC	Changes the machining on the support side. Q is selectable from 10, 12, 15, 20 G = 1 mm Increment Ordering Code: GC-Q10-G20 ⓘ 5 ≤ G ≤ Qx3 ⓘ Y dimension is shortened.
Change Support Side Shaft End Length	FC	Changes the length of the support side shaft end. FC = 1 mm Increment Ordering Code: FC20 ⓘ 19 ≤ FC ≤ 60 ⓘ Y dimension is shortened.

Alterations	Code	Spec.
Tapped Hole on Support Side Shaft End	MC	Adds a tapped hole on the support side shaft end. MC = 1 mm Increment Ordering Code: MC40 M 8 x 1.25 t ⓘ 28 ≤ MC ≤ 60 ⓘ Y dimension is shortened.
Keyway on Fixed Side Shaft End Detailed Keyway Dimensions P.752.	KC	Adds a keyway on the fixed side shaft end. KC = 1 mm Increment Ordering Code: KC20 ⓘ 5 ≤ KC ≤ 26
Keyway on Fixed Side Shaft End	KLC	Adds a keyway at a customer specified area on the fixed side shaft end. (Key groove dim. is the same as KC.) K, S = 1 mm Increment Ordering Code: KLC-K20-S3 ⓘ 6 ≤ K + S ≤ 26
Flat Machined on Fixed Side Shaft End	SC	Adds a flat on the fixed side shaft end. SC = 1 mm Increment Ordering Code: SC20 ⓘ 5 ≤ SC ≤ 26
2 Flat Machined on Fixed Side Shaft End	SWC SGC	Adds two flats on the fixed side shaft end. SWC: 90° Position SGC: 120° Position 1 mm Increment Ordering Code: SWC20 ⓘ 5 ≤ SWC, SGC ≤ 26

Peripherals: Combination of the following parts are available.



Combination with Support Units

Ball Screw Part Number	Recommended Support Units							
	Type	Screw Shaft Outer Dia.	Lead	Part Number	Shape	Fixed Side	Support Side	Page
BSS BSSE	25	05 10 20	20	BRW	Round	○	—	800
						BUR	—	○
				BSW	Square	○	—	794
						BUN	—	○

ⓘ Aside from the part numbers shown above, there are a variety of other Support Units available in various shapes and surface treatments. (P.792–802).

Combination with Nut Brackets

Ball Screw Part Number	Recommended Nut Brackets					
	Type	Screw Shaft Outer Diameter	Lead	Part Number	Page	
BSS BSSE	25	05 10 20	20	BNFB	2505S	810
				BNFM	2510S	810
				BNFR	2510S	810
				BNFA	2520S	810

ⓘ Aside from the part numbers shown above, there are a variety of other Nut Brackets available. (P.810).