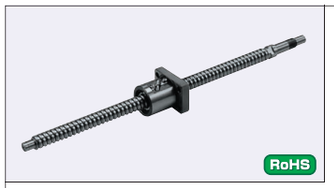
Precision Ball Screws Standard Nut - Shaft Diameter 20: Lead 5, 10, 20

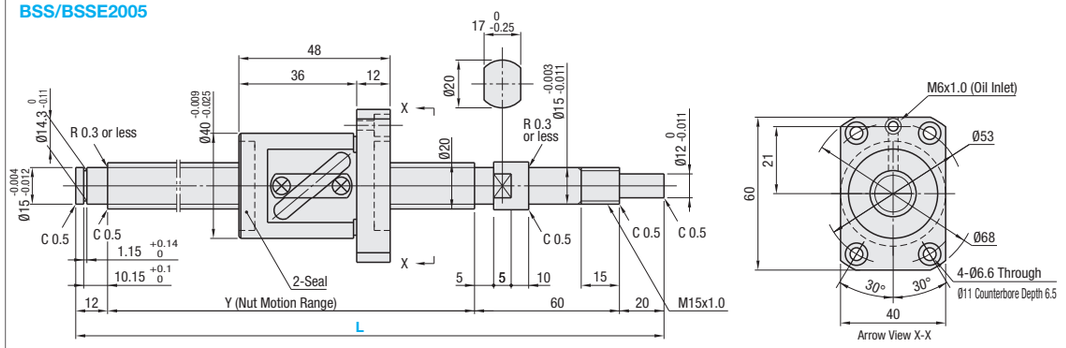
Accuracy Grade C5, C7



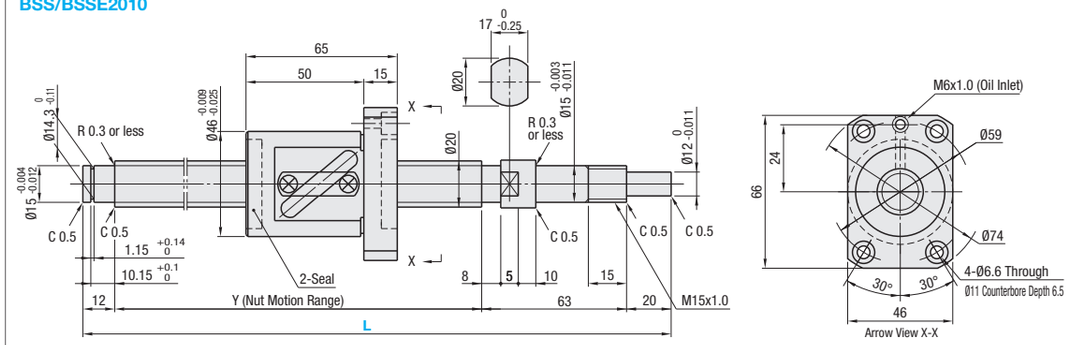
Nut Type	Type	Accuracy Grade	Shaft Dia.	Lead	Screw Shaft		Nut	
					M Material	H Hardness	M Material	H Hardness
Standard Nut	BSS	C5	20	5, 10, 20	4150 Alloy Steel	Induction Hardened 58~62HRC	JIS SCM420	Carburized 58~62HRC
	BSSE	C7						

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

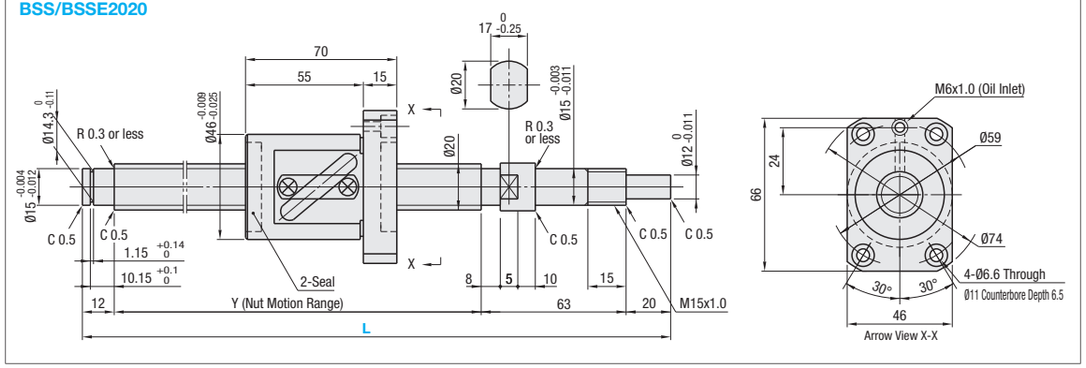
BSS/BSSE2005



BSS/BSSE2010



BSS/BSSE2020



Nut Type	Accuracy Grade	Part Number Type	Part Number Screw Shaft O.D.	Part Number Lead	1mm Increment L	Y	Ball Dia.	Ball Center Dia.	Screw Root Dia.	Number of Circuits	Basic Load Rating C (Dynamic) kN	Basic Load Rating Co (Static) kN	Axial Play	Preload Torque N-cm	Twisting Direction
Standard Nut	C5	BSS	20	05	200~1000	L-92	3.175	20.8	(17.5)	2.5 turns, 1 row	8.35	17.5	0.005 or Less	3.0 or Less	Right
	C7	BSSE											0.030 or Less	-	
	C5	BSS		10	250~1500	L-95	4.7625	21	(16)		13.5	25.1	0.005 or Less	4.0 or Less	
	C7	BSSE											0.030 or Less	-	
	C5	BSS		20	250~1500	L-95			(15.9)	1.5 turns, 1 row	9.2	16.2	0.005 or Less	4.0 or Less	
	C7	BSSE											0.030 or Less	-	

Kgf=Nx0.101972

Price **Configure Online**

Accuracy Grade	Part Number	Unit Price 1~4 pc(s). L200~249	L250~299	L300~400	L401~600	L601~700	L701~800	L801~995	L996~1000	L1001~1200	L1201~1300	L1301~1495	L1496~1500
C5	BSS2005									-	-	-	-
C7	BSSE2005									-	-	-	-
C5	BSS2010	-											
C7	BSSE2010	-											
C5	BSS2020	-											
C7	BSSE2020	-											

For orders larger than indicated quantity, please request a quotation.

Ordering Example

Part Number	-	L
BSS2005	-	820
BSSE2010L	-	1000 (L Type Greased)
BSSE2010G	-	1000 (G Type Greased)

Days to Ship **Configure Online**

Notes

- Filled with lithium soap based grease (Alvania Grease S2 made by Showa Shell Sekiyu K.K).
- Cautions: Do not let nuts overrun its stroke or remove nuts from screw shafts. It may cause balls to fall out or damage ball recirculation parts.
- Various grease options are available. For specifications, **P.612**.
- For accuracy of Ball Screws, see **P.612**, **P.614**.
- For details of Support Units, see **P.653~P.668**.

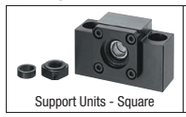
Alterations

Part Number	-	L	-	(FC, KC, etc.)
BSS2020	-	350	-	KC10

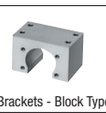
Alterations	Code	Spec.	Price Adder
No Machining on Support Side Shaft End	NC	No machining added on the support side shaft end. Ordering Code NC	
Ball Nut Orientation Reversed (Support Side) (Fixed Side) Standard / Change	RLC	Changes the nut direction. Ordering Code RLC	
No Retaining Ring Groove on Support 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 Length (10.15, FC)	FC	Changes the length of the support side shaft end. FC=1mm Increment Ordering Code FC20. 13≤FC≤30. Y dimension is shortened.	
Change Support Side Shaft End Machining (Qh7, G)	GC	Changes the machining on the support side. Q is selectable from 10, 12, 15. G=1mm Increment. Y dimension is shortened. Ordering Code GC-Q10-G20. 5≤G≤Qx3	

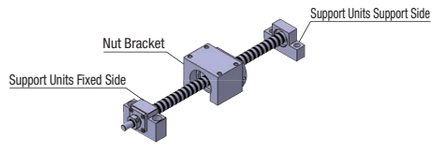
Alterations	Code	Spec.	Price Adder
Tapped Hole on Support Side Shaft End (M, ℓ, 10.15, MC)	MC	Adds a tapped hole on the support side shaft end. MC=1mm Increment. Ordering Code MC25. M: M6x1.0; ℓ: 15. Y dimension is shortened. 21≤MC≤30	
Keyway on Fixed Side Shaft End. Detailed Keyway Dimensions **P.614** (KC)	KC	Adds a keyway on the fixed side shaft end. KC=1mm Increment. Ordering Code KC15. 4≤KC≤19	
Keyway on Fixed Side Shaft End (K, S)	KLC	Adds a keyway at a customer specified area on the fixed side shaft end. (Keyway dim. is same as KC.) K, S=1mm Increment. Ordering Code KLC-K7-S2. 5≤K+S≤19	
Flat Machined on Fixed Side Shaft End (SC, 0.5)	SC	Adds a flat on the fixed side shaft end. SC=1mm Increment. Ordering Code SC7. 5≤SC≤19	
2 Flats Machined on Fixed Side Shaft End (SWC, SGC, SWC/SGC, 0.5, 0.5)	SWC SGC	Adds two flats on the fixed side shaft end. SWC: 90° Position SGC: 120° Position 1mm Increment. Ordering Code SWC20. 5≤SWC, SGC≤19	

Peripherals: combination of the following parts are available.


Support Units - Square

Support Units - Round


Nut Brackets - Block Type



Combination with Support Units

Ball Screw Part Number Type	Screw Shaft O.D.	Lead	Recommended Support Unit Part Number Type	Part Number No.	Shape	Fixed Side	Support Side	Page
BSS BSSE	20	05 10 20	BRW	15	Round	○		P.665
			BUR	15			○	P.667
			BSW	15	Square	○		P.659
			BUN	15			○	P.663

Other than the part numbers shown above, a variety of Support Units are also available. (**P.653~P.668**)

Combination with Nut Brackets

Ball Screw Part Number Type	Screw Shaft O.D.	Lead	Recommended Nut Bracket Part Number Type	Part Number No.	Page
BSS BSSE	20	05	BNFB	2005S	P.670
		10	BNFM	2010S	P.670
		20	BNFA	2020S	P.670

Other than the part numbers shown above, a variety of Nut Brackets are also available. (**P.670**)