

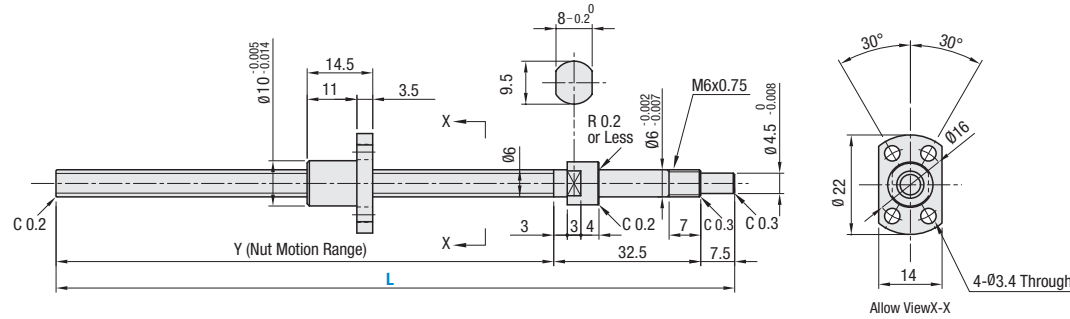
Precision Ball Screws (Shaft Diameter 6, 8, Lead 1, 2)

Accuracy Grade C3, C5, C7

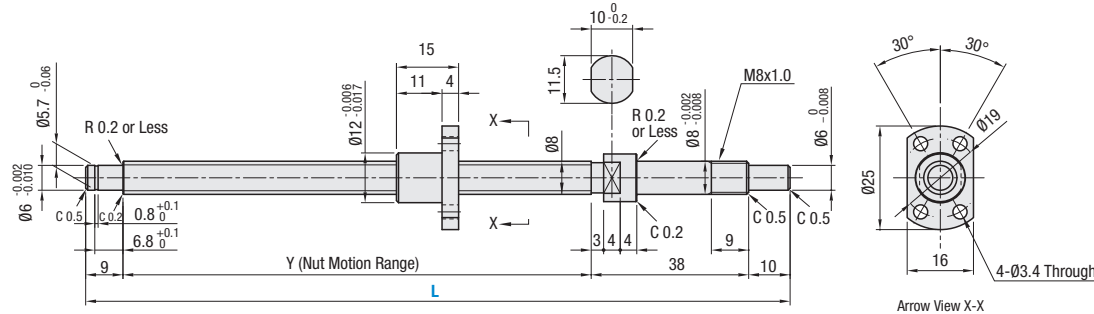


Nut Type	Type	Accuracy Grade	Shaft Diameter	Lead	Screw Shaft		Nut	
					Material	Hardness	Material	Hardness
Compact Nut	BSX	C3	6, 8	1, 2	JIS SCM415	Carburized 58-62 HRC min.	JIS SCM420	Carburized 58-62 HRC min.

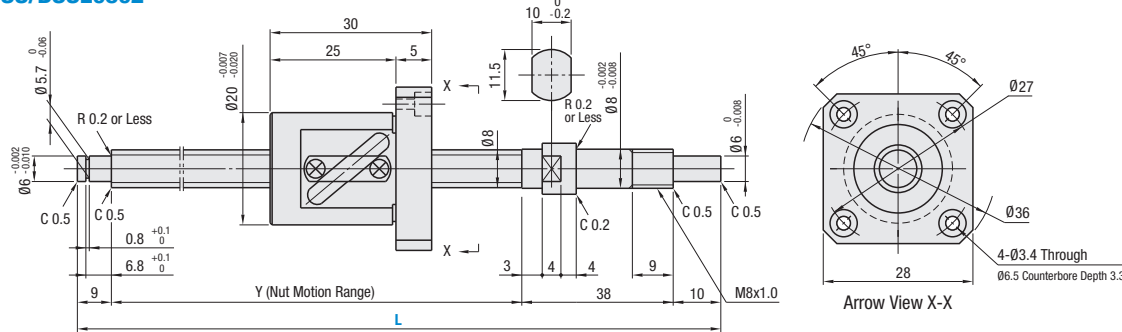
BSX0601



BSX0801



BSX/BSS/BSSE0802



BSX0802 comes with felt seals.

Ball Nut Type	Precision Class	Type	Part Number		1 mm Increment	Y	Ball Dia.	Ball Center Dia.	Screw Root Dia.	Number of Circuits ¹	Basic Load Rating		Allowable Axial Play	Preload Torque N·cm	Twisting Direction
			Screw Shaft Diameter	Lead							C (Dynamic) kN	Co (Static) kN			
Compact Nut	C3	BSX	06	01	80-205	L-40	0.800	6.24	(5.3)	1 Turn, 3 Rows	0.55	1.15	0 (Preloaded)	1.3 or Less	Right
			08	01	80-255						0.65	1.6			
Standard Nut	C5	BSS	08	02	100-240	L-57	1.5875	8.3	(6.6)	2.5 Turns, 1 Row	1.22	1.3	0.005 or Less	0.5 or Less	Right
					100-210						1.95	2.6			

¹See P.750 for details.

kgf=Nx0.101972

Precision Ball Screws (Shaft Diameter 6, 8, Lead 1, 2)

Accuracy Grade C3, C5, C7, continued

Nut Type	Accuracy Grade	Part Number	Available Types					
			L80-99	L100-160	L161-205	L206-210	L211-240	L241-255
Compact Nut	C3	BSX0601	•	•	•	—	—	—
		BSX0801	•	•	•	•	•	•
		BSX0802	—	•	•	•	•	—
Standard Nut	C5	BSS0802	—	•	•	•	—	—
		C7	BSSE0802	—	•	•	•	—

Part Number Example

Part Number	-	L
BSX0601	-	185
BSS0802	-	200
BSS0802L	-	210 L Type Greased
BSS0802G	-	210 G Type Greased

- Note**
- ① Filled with lithium soap based grease (Alvania Grease S2 made by Showa Shell Sekiyu K.K.) (BSX is filled with Multemp Grease PS2 made by Kyodo Yushi Co., Ltd.)
 - ② 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.
 - ③ Various grease options are available. For specifications P.752. ❌ Not applicable to BSX.
 - ④ For accuracy of Ball Screws, see P.752-754.
 - ⑤ For details of Support Units, see P.792-802.

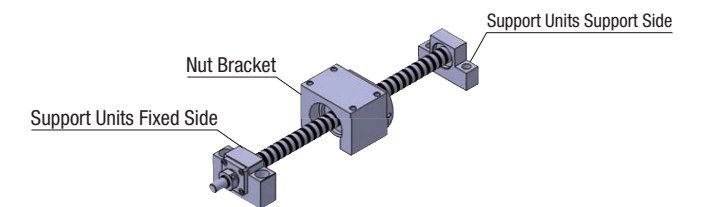
Part Number Alterations

Part Number	-	L	-	(FC, KC, etc.)
BSS0802	-	190	-	KC3

Alterations	Code	Spec.
No Machining on Support Side Shaft End	NC	No machining added on the support side shaft end. Ordering Code: NC ❌ BSX0601 is not applicable.
Ball Nut Orientation Reversed (Support Side, Fixed Side)	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. ❌ BSX0601 is not applicable.
Change Support Side Shaft End Length	FC	Changes the length of the support side shaft end. FC = 1 mm Increment Ordering Code: FC20 ① 10 ≤ FC ≤ 20 ② Y dimension is shortened. ❌ BSX0601 and 0801 are not applicable.

Alterations	Code	Spec.
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: KC6 ① 3 ≤ KC ≤ 9 ❌ BSX0601 is not applicable.
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.) Ordering Code: KLC-K5-S1 ① 4 ≤ K+S ≤ 9 ❌ BSX0601 is not applicable.
Flat Machined on Fixed Side Shaft End	SC	Adds a flat on the fixed side shaft end. SC = 1 mm Increment Ordering Code: SC7 ① 5 ≤ SC ≤ 6 (BSX0601) ② 5 ≤ SC ≤ 9 (BS_0801, 0802)
2 Flats 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: SWC6 ① 5 ≤ SWC, SGC ≤ 6 (BSX0601) ② 5 ≤ SWC, SGC ≤ 9 (BS_0801, 0802)

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
BSX BSS BSSE	06	01	BRW	6	Round	○	—	800
			BSW	6	Square	○	—	794
	08	01 02	BRW	8	Round	○	—	800
			BUR	8	—	—	○	802
			BSW	8	Square	○	—	794
			BUN	8	—	—	○	798

① Aside from the part numbers shown above, there are a variety of other Support Units available with various configurations 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
BSX BSS BSSE	06	01	—	—	—
			BNFB BNFM BNFR BNFA	801X	810
	08	01 02	—	—	—
			BNFB BNFM BNFR BNFA	802S	810

① A variety of materials and surface treatments for Nut Brackets are available. (P.810).