

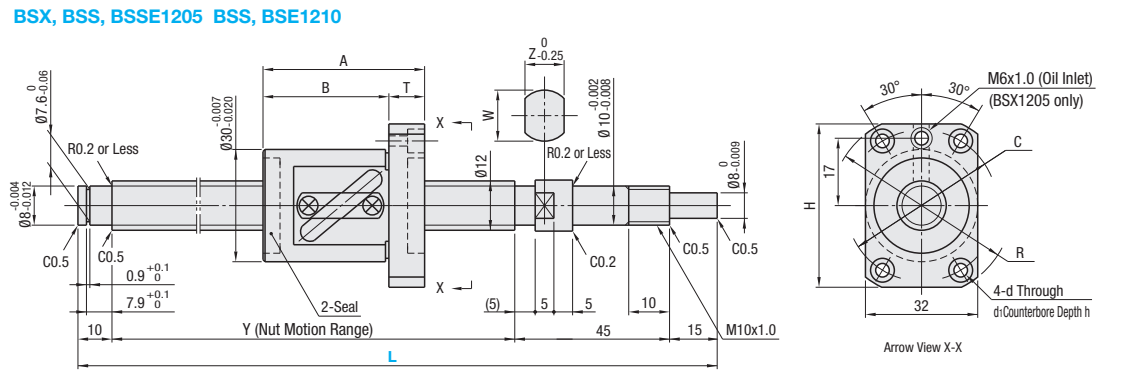
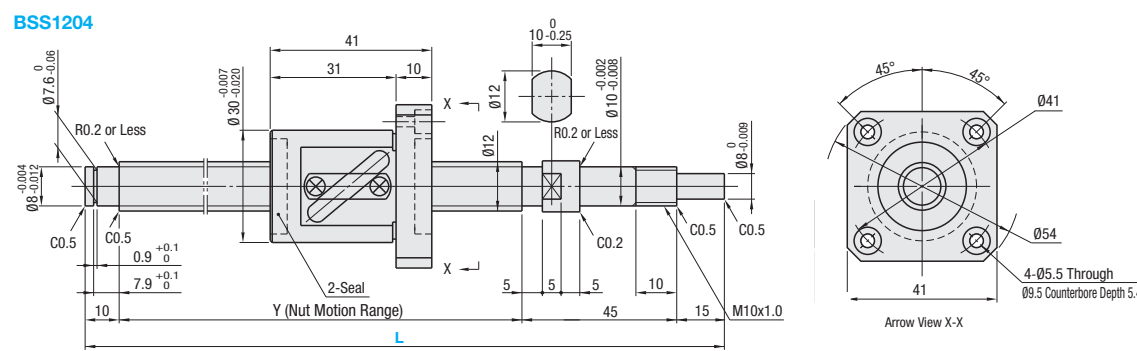
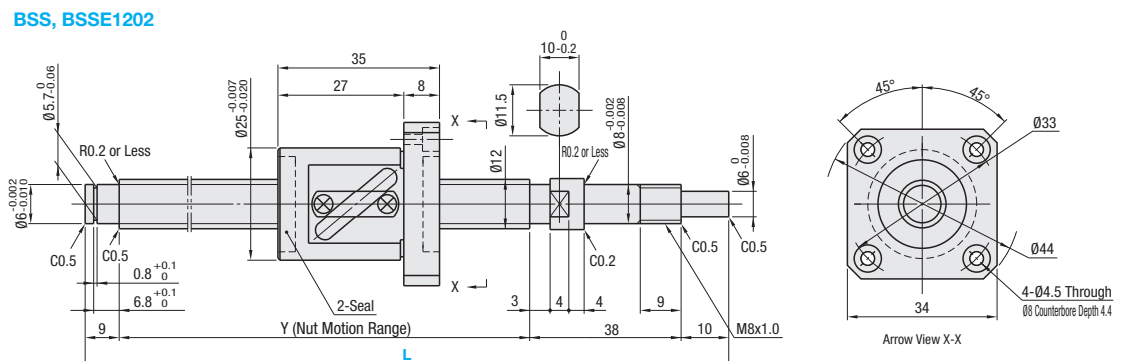
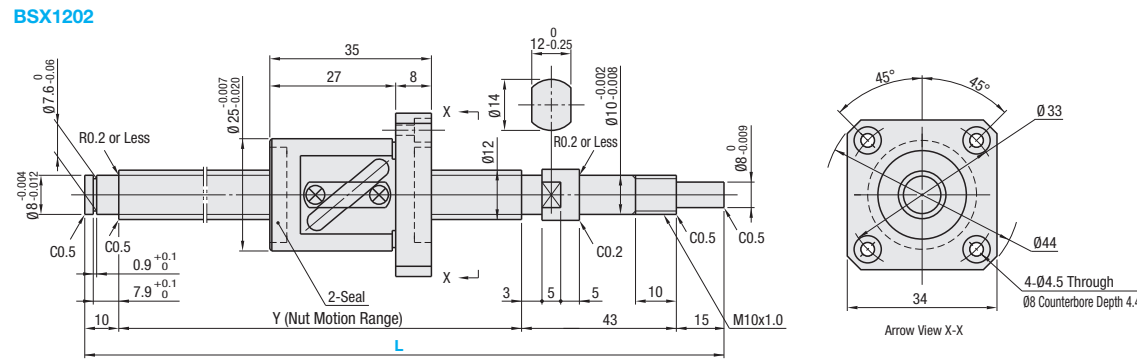
Precision Ball Screws Standard Nut - Shaft Dia. 12, Lead 2, 4, 5, 10

Accuracy Grade C3, C5, C7

Points of comparison between similar products | Consider using this product if the usage environment is a high-load, and high-frequency drive application.

Nut Type	Type	Accuracy Grade	Shaft Dia.	Lead	Screw Shaft		Nut	
					Material	Hardness	Material	Hardness
Standard Nut	BSX	C3	12	2, 5	*AISI4150	*Induction Hardened 58-62HRC	SCM420	Carburized 58-62HRC
	BSS	C5		2, 4, 5, 10				
	BSSE	C7		2, 5, 10				

*For 1202, screw shaft material SCM415 is carburized.



Nut Type	Accuracy Grade	Part Number Type	Screw Shaft O.D.	Lead	1mm Increment L	Y	A	B	T	Z	W	H	R	C	d	d ₁	h	Ball Dia.	Ball Center Dia.	Screw Root Dia.	Number of Circuits	Basic Load Rating		Axial Play	Preload Torque N, cm	Twisting Direction		
																						C (Dynamic) kN	Co (Static) kN					
Standard Nut	C3	BSX	12	02	150~390	L-68													1.5875	12.3	(10.6)	2.5 turns	1.54	2.05	0 (Preloaded)	0.4~3.2	Right	
		BSS			150~445																		L-57	2.45	4.1	0.005 or Less		1.0 or Less
		BSSE			150~400																		L-70	3.6	6.75	0.005 or Less		1.0 or Less
	C5	BSX	12	05	150~440	L-70	44	34	10	12	14	45	50	40	4.5	8	4.4			2.3812	12.6	(10.1)	1 row	3.74	4.9	0 (Preloaded)	1.5~5.0	Right
		BSS			150~450																			5.95	9.8	0.005 or Less	1.0 or Less	
		BSSE			200~600																			L-70	49	37	12	
	C7	BSX	12	10	200~600	L-70	49	37	12	12	14	48	54	41	5.5	9.5	5.4			3.175	12.8	(9.5)	1.5 turns	3.85	5.9	0.030 or Less	-	Right
		BSS			200~600																			5.9	9.8	0.030 or Less	-	
		BSSE			200~600																			5.9	9.8	0.030 or Less	-	

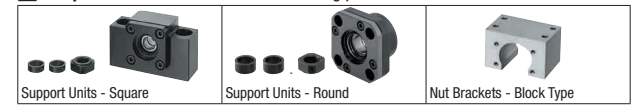
Ordering Example: Part Number - L

BSX1202 - 300
 BSS1210L - 420 (L Type Greased)
 BSSE1210G - 420 (G Type Greased)

Accuracy Grade	Part Number	Unit Price 1 - 4 pc(s)																											
		L150	L200	L201	L251	L291	L296	L301	L391	L401	L441	L446	L451																
C3	BSX1202	199																											
C5	BSS1202																												
C7	BSSE1202																												
C5	BSX1204																												
C3	BSX1205																												
C5	BSS1205																												
C7	BSSE1205																												
C5	BSS1210																												
C7	BSSE1210																												

Alterations	Code	Spec.	Alterations	Code	Spec.
No Machining on Support Side Shaft End	NC	No machining added on the support side shaft end. Ordering Code: NC	Keyway on Fixed Side Shaft End Detailed Keyway Dimensions \square P684	KC	Adds a keyway on the fixed side shaft end. KC=1mm Increment Ordering Code: KC10 ④3≤KC≤14(9)
Ball Nut Orientation Reversed (Support Side) (Fixed Side)	RLC	Changes the nut direction. Ordering Code: RLC	Keyway on Fixed Side Shaft End	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-K5-S1 ④4≤K+S≤14(9)
No Retaining Ring Groove on Support Side Shaft End	RNC	No Retaining Ring Groove on Support Side Shaft End. Ordering Code: RNC ④Combination with FC is not available.	Flat Machined on Fixed Side Shaft End	SC	Adds a flat on the fixed side shaft end. SC=1mm Increment Ordering Code: SC7 ④5≤SC≤14(9)
Change Support Side Shaft End Machining	GC	Changes the machining on the support side. Q is selectable from 6 or 8. ④Y dimension is shortened. G=1mm Increment Ordering Code: GC-Q8-G20 ④5≤G≤Qx3 ④Not applicable to 1202 of C5 and C7.	2 Flats Machined on Fixed Side Shaft End	SWC, SGC, SGC	Adds two flats on the fixed side shaft end. SWC: 90° Position SGC: 120° Position 1mm Increment Ordering Code: SWC10 ④5≤SWC, SGC≤14(9)
Change Support Side Shaft End Length	FC	Changes the length of the support side shaft end. FC=1mm Increment Ordering Code: FC20			

Peripherals: Combination of the following parts is available.



Ball Screw Part Number	Recommended Support Unit			
	Type	Screw Shaft O.D.	Lead	Page
BSX	12	02	BRW 10	P767
			BUR 10	P768
			BSW 10	P761
			BUN 10	P762
			BUN 10	P762
	05	10	BRW 10	P767
			BUR 10	P768
			BSW 10	P761
			BUN 10	P762
			BUN 10	P762
02	8	BRW 8	P767	
		BUR 8	P768	
		BSW 8	P761	
		BUN 8	P762	
		BUN 8	P762	
BSSE	10	BRW 10S	P767	
		BUR 10	P768	
		BSW 10S	P761	
		BUN 10	P762	
		BUN 10	P762	

Ball Screw Part Number	Recommended Nut Bracket		
	Type	Part Number	Page
BSX, BSS, BSSE	12	02	BNFB 1202S P780
		04	BNFM 1204S P780
		05	BNFR 1205S P780
		10	BNFA 1210S P780

Notes:
 ④ Filled with lithium soap based grease (Alvania Grease S2 made by Showa Shell Sekiyu K.K.)
 ④ Cautions: Do not let the nuts overrun or remove the nuts from the screw shafts. It may cause the balls to fall out or damage the ball recirculation parts.
 ④ Various grease options are available. For Days to Ship, Price and specifications, \square P686 ④BSX is not applicable.
 ④ For accuracy of Ball Screws, see P2223 and P2224.
 ④ For details of Support Units, see P753 - P778.
 ④ Use one of the support unit accessory collars on the fastening nut side.

④ Other than the part numbers shown above, Support Units with various configurations and surface treatments are also available. (P761-P778)