

Rolled Ball Screws Standard Nut (Shaft Dia. 25: Lead 5, 10, 25)

Accuracy Grade C7, C10

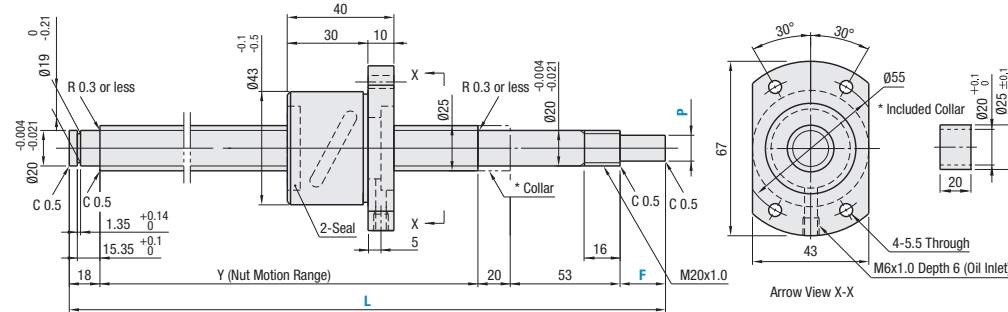
Rolled Ball Screws Standard Nut (Shaft Dia. 25: Lead 5, 10, 25) – Accuracy Grade C7, C10



RoHS10

Nut Type	Type		Accuracy Grade	Shaft Diameter	Lead	Screw Shaft			Nut		
	Standard	F, P Configurable				Material	Hardness	Surface Treatment	Material	Hardness	Surface Treatment
Standard Nut	BSST	—	C7	25	5, 10	1055 Carbon Steel	Induction Hardened 56–62 HRC min.	—	JIS SCM420	Carburized 58–62 HRC min.	Phosphate Conversion Coating
	BSSR	BSSRK	C10		Low Temp. Black Chrome						
	BSSZ	BSSZK									

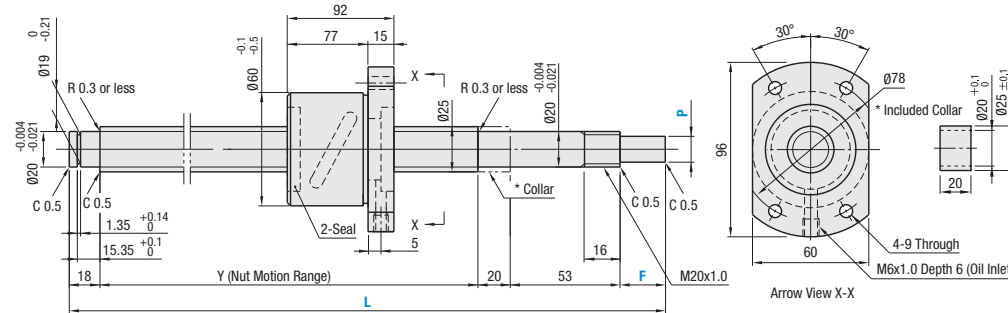
BSST2505, BSSR (K) 2505, BSSZ (K) 2505



*Included Collar
Material: 1045 Carbon Steel
Surface Treatment: Black Oxide

P	Tolerance
10	0 -0.009
11–15	0 -0.011

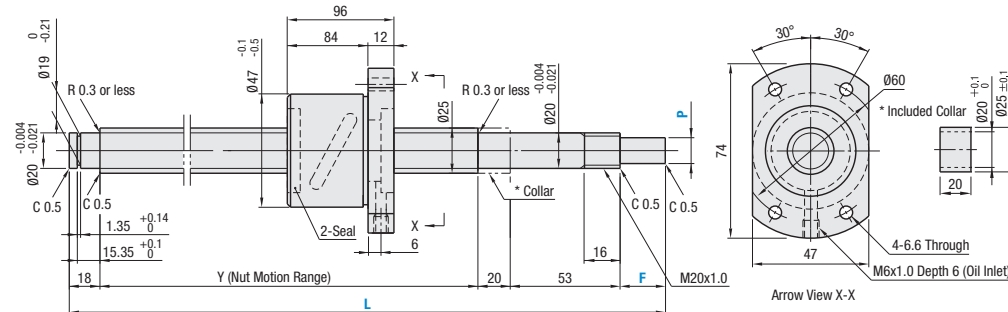
BSST2510, BSSR (K) 2510, BSSZ (K) 2510



*Included Collar
Material: 1045 Carbon Steel
Surface Treatment: Black Oxide

P	Tolerance
10	0 -0.009
11–15	0 -0.011

BSST2525, BSSR (K) 2525, BSSZ (K) 2525



*Included Collar
Material: 1045 Carbon Steel
Surface Treatment: Black Oxide

P	Tolerance
10	0 -0.009
11–15	0 -0.011

Nut Type	Accuracy Grade	Part Number	1 mm Increment			Y	Ball Dia.	Ball Center Dia.	Screw Root Dia.	Number of Circuits	Basic Load Rating		Axial Play	Twisting Direction
			L	*F	*P						C (Dynamic) kN	Co (Static) kN		
Standard Nut	C7	BSST	25	05	200–2000	27	15	L-118	2.5 Turns 1 Row	6.6	18.7	0.03 or Less	Right	
						27–45	10–15	L-(91+F)				0.10 or Less		
	27	15				L-118	0.07 or Less							
	C10	BSST		10	300–2000	27	15	L-118	2.5 Turns 2 Rows	27.5	76.3	0.20 or Less		
						27–45	10–15	L-(91+F)						
	C7	BSST		25	300–2000	27	15	L-118	2.5 Turns 1 Row	9.3	22.7	0.12 or Less		
27–45			10–15			L-(91+F)								

*F and P are configurable for BSSRK and BSSZK only. $F \leq Px3$. $kgf=Nx0.101972$

Rolled Ball Screws Standard Nut (Shaft Dia. 25: Lead 5, 10, 25)

Accuracy Grade C7, C10, continued

Part Number Example

Part Number	-	L	
BSSR2525L	-	370	L Type Greased
BSSR2505G	-	370	G Type Greased

- Note:**
- Mounting surface of BSST ball nut flange is not surface-treated.
 - Filled with lithium soap based grease (Alvania Grease S2 made by Showa Shell Sekiyu K.K.).
 - Various grease options are available. For specifications, P.752.
 - For accuracy of Ball Screws, see P.752–754.
 - For details of Support Units, see P.792–802.
 - Caution: Do not remove any nuts from their screw shafts or allow nuts to overrun the stroke. It may cause the balls to fall out or damage the ball recirculation parts.
 - Included Collar is packaged together with main body of Ball Screws. Store this Included Collar with care. It is required when mating with Support Units.
 - Do not tilt the ball screw assembly. Due to its weight, the nut may rotate off of the shaft.

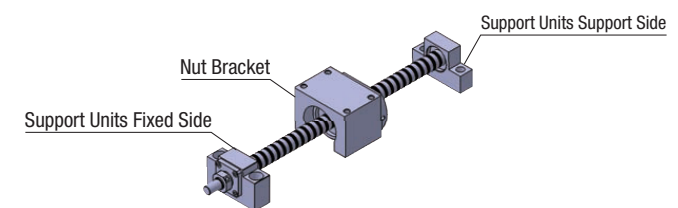
Part Number Alterations

Part Number	-	L	-	F	-	P	-	(FC, MC, etc.)
BSSR2505	-	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	RLC	Changes the nut direction. Ordering Code: RLC
No Retaining Ring Groove on Support Side Shaft End	RNC	Retaining ring groove is 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 $5 \leq G \leq Q \times 3$ 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 $19 \leq FC \leq 60$ Y dimension is shortened.
Tapped Hole on Support Side Shaft End	MC	Adds a tapped hole on the support side shaft end. MC = 1 mm Increment Ordering Code: MC20

Alterations	Code	Spec.
Wrench Flats on Fixed Side	SZC	Adds wrench flats on the fixed side shaft end. Ordering Code: SZC Ball bearings will fall out if the ball nut crosses the wrench flats.
Incomplete Hardened Area	KC	Adds a keyway on the fixed side shaft end. KC = 1 mm Increment Ordering Code: KC10 $5 \leq KC \leq Px3$ $KC \leq F-1$
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 $6K+S \leq Px3$ $K+S \leq F-1$
Flat Machined on Fixed Side Shaft End	SC	Adds a flat on the fixed side shaft end. SC = 1 mm Increment Ordering Code: SC20 $5 \leq SC \leq Px3$ $SC \leq F-1$
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: SWC10 $5 \leq SWC, SGC \leq Px3$ $SWC, SGC \leq F-1$
Installing Special Temporary Shaft	TAS	Special Temporary Shaft used for installing Ball Screw Nut. Always use Special Temporary Shaft when removing or installing Ball Screw Nut.

Peripherals: Combination of the following parts are available.



Combination with Support Units

Ball Screw Part Number			Recommended Support Units						
Type	Screw Shaft Outer Diameter	Lead	Part Number		Shape	Fixed Side	Support Side	Page	
			Type	No.					
BSST BSSR BSSZ	25	05 10 20	BRW	20	Round	—	—	800	
								BUR	20
			BSW	20		Square Type	—	—	794
							BUN	20	—

- Aside from the part numbers shown above, there are a variety of other Support Units available. (P.792–802).
- Combination of BSST2510, BSSR2510 and BSSZ2510 Ball Screws with BSW20 Support Unit may cause the nut to come in contact with the bottom surfaces.

Combination with Nut Brackets

Ball Screw Part Number			Recommended Nut Brackets		
Type	Screw Shaft O.D.	Lead	Part Number		Page
			Type	No.	
BSST BSSR BSSZ	25	05 10 25	BNFB	2505R	810
			BNFM	2510R	810
			BNFR	2525R	810