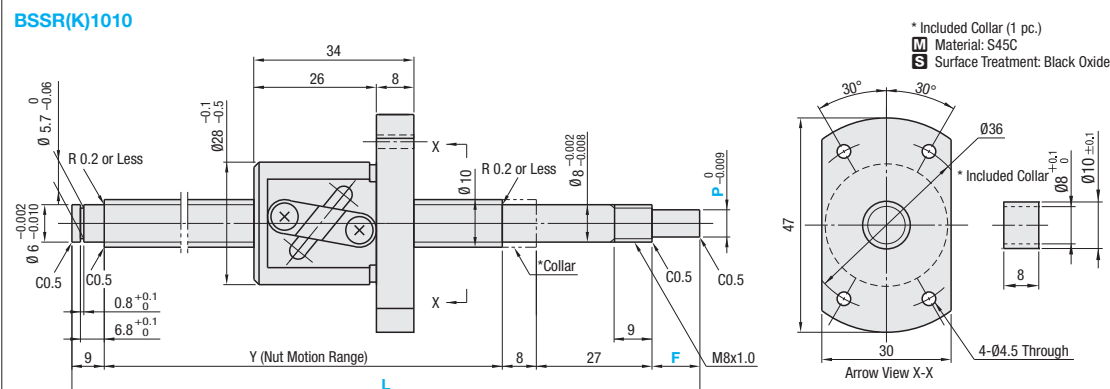
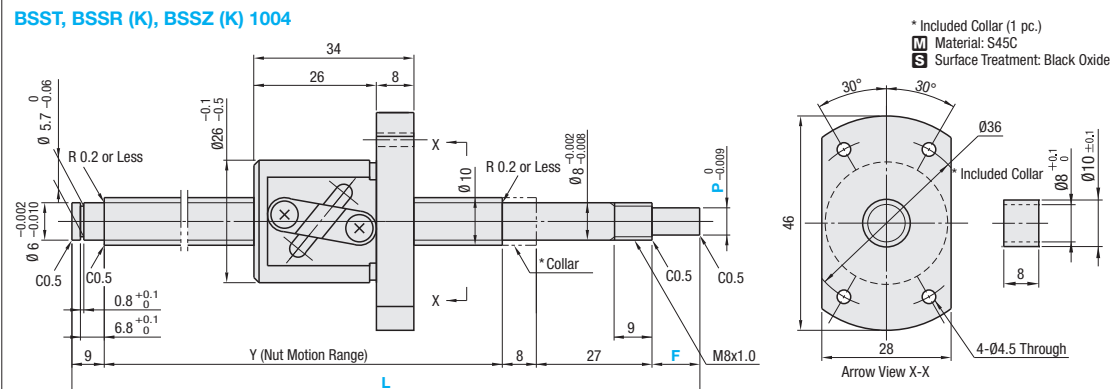
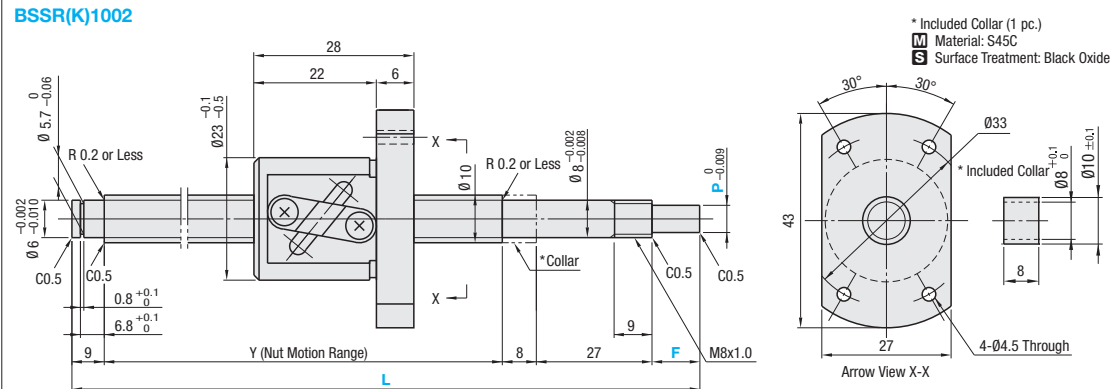


# Rolled Ball Screws Standard Nut - Shaft Dia. 10; Lead 2, 4, 10

## Accuracy Grade C7, C10

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			
	Standard	F, P Configurable				Material	Hardness	Surface Treatment	Material	Hardness	Surface Treatment	
Standard Nut	BSSZ	-	C7	10	4	S55C	Induction Hardened	-	SCM420	Carburized	58-62HRC	Phosphate Conversion Coating
	BSSR	BSSRK	C10	10	2, 4, 10	S55C	Induction Hardened	Phosphate Conversion Coating	SCM420	Carburized	58-62HRC	Phosphate Conversion Coating
	BSSZ	BSSZK	C10	10	4	S55C	Induction Hardened	-	SCM420	Carburized	58-62HRC	Phosphate Conversion Coating



Nut Type	Accuracy Grade	Part Number		1mm Increment			Ball Dia.	Ball Center Dia.	Screw Root Dia.	Number of Circuits	Basic Load Rating C (Dynamic) kN	Co (Static) kN	Axial Play	Twisting Direction	
		Type	Screw Shaft O.D.	L	*F	*P									Y
Standard Nut	C10	BSSR	10	02	150-585	10	6	L-54	1.5875	10.3	(8.4)	1.7	3	0.05 or Less	
		BSSR				10-18	5, 6	L-(44+F)							
	C7	BSSR	10	04	150-600	10	6	L-54	2.3812	10.6	(7.8)	2.3	4.8	0.03 or Less	
		BSSR				10-18	5, 6	L-(44+F)							
	C10	BSSRK	10	02	150-585	10	6	L-54	2.3812	10.6	(7.8)	1.5	1.85	3.2	0.05 or Less
		BSSRK				10-18	5, 6	L-(44+F)							
C10	BSSZ	10	04	150-600	10	6	L-54	2.3812	10.6	(7.8)	1.5	1.85	3.2	0.05 or Less	
	BSSZ				10-18	5, 6	L-(44+F)								

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

Nut Type	Accuracy Grade	Part Number	Unit Price 1 ~ 4 pc (s).		
			L150~200	L201~400	L401~600
Standard Nut	C10	BSSR1002			
	C7	BSST1004			
	C10	BSSR1004			
		BSSR1010			

**Ordering Example**

Part Number - L - F - P

BSSZ1004 - 200

BSSZK1004 - 370 - F15 - P6

BSSR1004L - 370 (L Type Greased)

BSSR1004G - 370 (G Type Greased)

- Notes**
- 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 price and specifications, see P.686
  - For accuracy of Ball Screws, see P.2223 and P.2224.
  - For details of Support Units, see P.753 ~ P.778.
  - 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.
  - Use the "\*\* collar" position in the diagram for the accessory collar. Use one of the support unit accessory collars on the fastening nut side.
  - Do not tilt the ball screw assembly since the nut may spin off from the shaft due to its own weight.

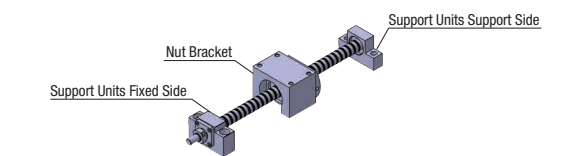
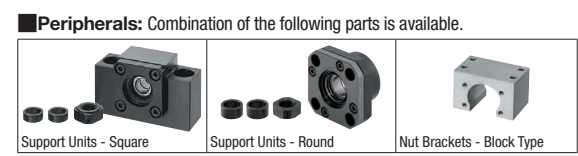
**Alterations**

Part Number - L - F - P - (FC, KC-etc.)

BSSR1004 - 270 - SC7

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)	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 Length	FC	Changes the length of the support side shaft end. FC=1mm Increment Ordering Code FC20 11 ≤ FC ≤ 20 Y dimension is shortened.
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.

Alterations	Code	Spec.
Keyway on Fixed Side Shaft End	KC	Adds a keyway on the fixed side shaft end. P=5 is not applicable. KC=1mm Increment Ordering Code KC5 2 ≤ KC ≤ Px3 KC ≤ F-1
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.) P=5 is not applicable. K, S=1mm Increment Ordering Code KLC-K5-S2 3 ≤ K+S ≤ Px3 K+S ≤ F-1
Flat Machined on Fixed Side Shaft End	SC	Adds a flat on the fixed side shaft end. SC=1mm Increment Ordering Code SC7 5 ≤ SC ≤ Px3 SC ≤ F-1
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 1mm Increment Ordering Code SWC7 5 ≤ SWC, SGC ≤ Px3 SWC, SGC ≤ F-1
Installing Special Temporary Shaft Temporary Shaft	TAS	Special Temporary Shafts suitable with Ball Screws are installed. When removing Nut from Screw Shaft, always use Special Temporary Shaft. For installation method, see P.685.



**Combination with Support Units**

Ball Screw Part Number	Recommended Support Unit					
	Type	Screw Shaft O.D.	Lead	Part Number Type	Shape	Page
BSST BSSR BSSZ	10	02	04	BRW	8S	P.767
				BUR	6	P.768
				BSW	8S	P.761
				BUN	8	P.762

**Combination with Nut Brackets**

Ball Screw Part Number	Recommended Nut Bracket					
	Type	Screw Shaft O.D.	Lead	Part Number Type	Page	
BSST BSSR BSSZ	10	02	04	BNFB	1002R	P.780
				BNFM	1004R	P.780
				BNFR	1004R	P.780
				BNFA	1010R	P.780

Other than the part numbers shown above, a rich variety of Support Units are also available. (P.761~P.778)

Other than the part numbers shown above, a wide variety of Nut Brackets are also available. (P.780)