

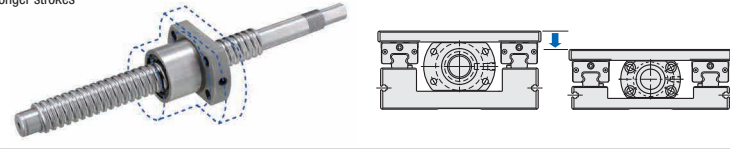
# Rolled Ball Screws Compact Nut - Shaft Dia. 20; Lead 5, 10

Accuracy Grade C10

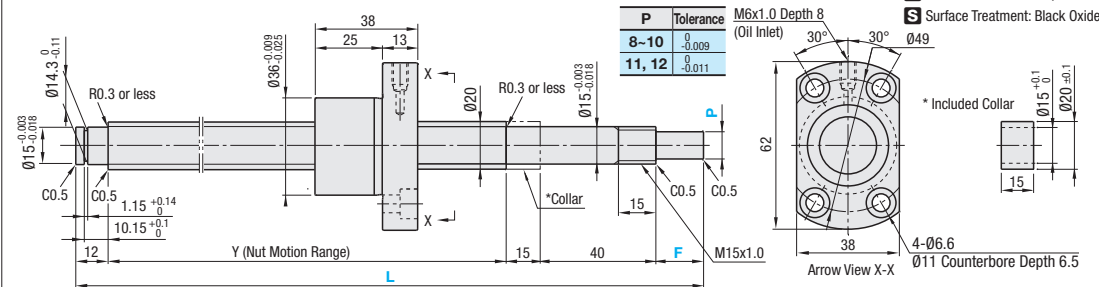
Points of comparison between similar products | Consider using this product if the usage environment is a high-load, and high-frequency drive application.

Nut Type	Type		Accuracy Grade	Shaft Dia.	Lead	Screw Shaft			Nut		
	Standard	F, P Configurable				Material	Hardness	Surface Treatment	Material	Hardness	Surface Treatment
Compact Nut	BSSC	BSSCK	C10	20	5, 10	EN 1.1203 Equiv.	Induction Hardened 56-62HRC	-	EN 1.7258 Equiv.	Carburized 58-62HRC	-

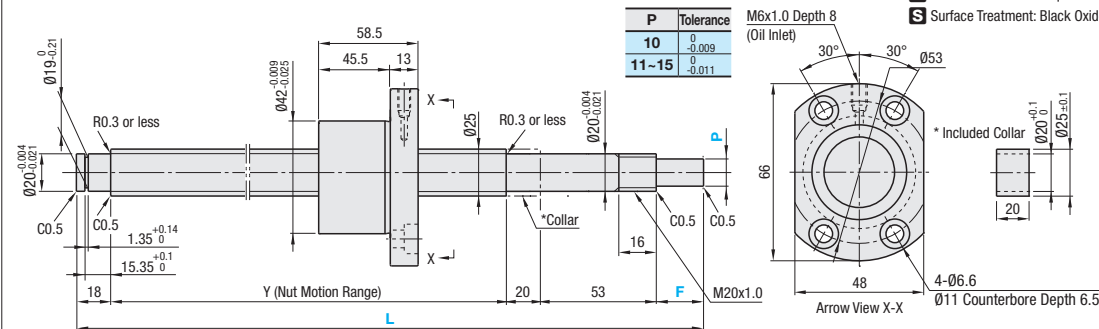
**Features of Compact Nut**  
 • Compact O.D.  
 • Lower profile sliders can be used.  
 • Longer strokes



## BSSC(K)2005, 2010



## BSSC(K)2505



Nut Type	Accuracy Grade	Part Number		1mm Increment			Y	Ball Dia.	Ball Center Dia.	Screw Root Dia.	Number of Circuits	Basic Load Rating		Axial Play	Twisting Direction		
		Type	Screw Shaft O.D.	L	*F	*P						C (Dynamic) kN	Co (Static) kN				
Compact Nut	C10	BSSC	20	05	200~2000	20	12	L-87	3.175	20.5	(17.25)	4 turns, 1 row	6.6	14.05	0.10 or Less		
					20~36	8~12	L-(67+F)										
		BSSCK	10	250~2000	20	12	L-87	6.53								13.93	0.15 or Less
				20~36	8~12	L-(67+F)											

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

Nut Type	Accuracy Grade	Part Number	Unit Price 1 ~ 4 pc(s).					
			L200-400	L401-600	L601-800	L801-1000	L1001-1200	L1201-1500
Compact Nut	C10	BSSC2005 BSSC2010						

Ordering Example: Part Number - L - F - P  
 BSSC2005 - 300  
 BSSCK2505 - 300 - F32 - P13

## Notes

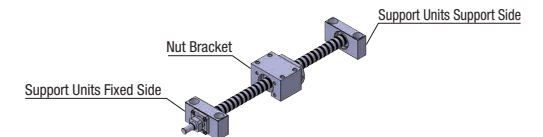
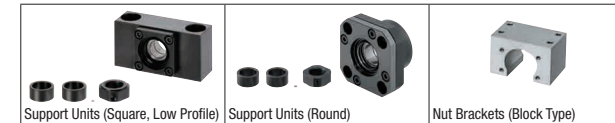
- Filled with lithium soap based grease (Alvania Grease S2 made by Showa Shell Sekiyu K.K).
- For accuracy of Ball Screws, see P.2223 and P.2224.
- For details of Support Units, see P.753 ~ P.778.
- Caution: Do not let the nuts overrun or remove the nuts from the screw shafts. It may cause the balls 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.)  
 BSSC2005 - 350 - - - KC10

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	No Retaining Ring Groove on 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 and 15. G=1mm Increment Ordering Code GC-Q10-G20 $5 \leq G \leq Qx3$ . Y dimension is shortened.
Change Support Side Shaft End Length	FC	Changes the length of the support side shaft end. FC=1mm Increment Ordering Code EN-JL 1030 Equiv. $13 \leq FC \leq 30$ Y dimension is shortened.
Tapped Hole on Support Side Shaft End	MC	Adds a tapped hole on the support side shaft end. MC=1mm Increment Ordering Code MC25 $15 \leq MC \leq 30$ Y dimension is shortened.

Alterations	Code	Spec.
Wrench Flats on Fixed Side Shaft End	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.
Keyway on Fixed Side Shaft End Detailed Keyway Dimensions	KC	Adds a keyway on the fixed side shaft end. KC=1mm Increment Ordering Code KC15 $4 \leq KC \leq Px3$ $KC \leq F-1$
Keyway on Fixed Side Shaft End	KLC	Adds a keyway at a customer specified area on the fixed side shaft end. (Keyway dim. is same as KC.) K, S=1mm Increment Ordering Code KLC-K7-S2 $5 \leq K+S \leq Px3$ $K+S \leq F-1$
Flat Machined on Fixed Side Shaft End	SC	Adds a flat on the fixed side shaft end. SC=1mm Increment Ordering Code SC7 $5 \leq SC \leq Px3$ $SC \leq F-1$
2 Flats Machined on Fixed Side Shaft End	SWC, SGC	Adds two flats on the fixed side shaft end. JIS-SWC: 90° Position SGC: 120° Position 1mm Increment Ordering Code SWC10 $5 \leq SWC, SGC \leq Px3$ $SWC, SGC \leq F-1$
Installing Special 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.

## Peripherals: Combination of the following parts is available.



## Combination with Support Units

Ball Screw Part Number	Recommended Support Unit				
	Type	Screw Shaft O.D.	Lead	Page	
BSSC	20	05	10	BSV 15	Page P.771
				BUV 15	Page P.772
				BRW 15	Page P.767
				BUR 15	Page P.768

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

## Combination with Nut Brackets

Ball Screw Part Number	Recommended Nut Bracket				
	Type	Screw Shaft O.D.	Lead	Page	
BSSC	20	05	BNFB, BNFM, BNFR, BNFA	2005C	Page P.780
			2010C	Page P.780	

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

## Example

Lower profile linear units can be designed by using in combination with Support Units Low Profile Type.

