

# Model No.

# Ball Screw

## Model Number Coding

The model number configuration for ball screws differs depending on the type. Table 1 Refer to the corresponding configuration example shown in Table 3.

THK can also provide shaft end shapes matched to support units. These can also be denoted in the symbols, which should be used for this purpose.

### [Precision ball screw types and sample model number configurations]

Table 1

	Model No.		Shaft end shape	Model number coding
Precision	SBN-V, SBK, SDAN-V, SDA-V, HBN-V/HBN-K/HBN-KA/HBN, SBKH, BIF-V, BNFN-V/BNFN, MDK, MBF, BNF-V/BNF, DIK, DKN, BLW, DK, WHF, BLK, WGF, BNT		Fixed Side : H, J Supported Side : K	[1]
	Unfinished Shaft Ends A	MBF, MDK, BNF, BIF		[2]
	Unfinished Shaft Ends B	BNF, BIF		
	Finished Shaft Ends	BNK	Y	[3]
	Rotary Ball Screw	BLR, DIR	Fixed Side : H, J Supported Side : K	[4]
	Ball Screw/Spline	BNS-V, BNS-A, BNS, NS-V, NS-A, NS	—	[5]

### [Rolled ball screw types and sample model number configurations]

Table 2

	Model No.		Shaft end shape	Model number coding
Rolled	Ball screw nut and screw shaft combination products	JPF, BTK-V, MTF, BLK, WTF, CNF, BNT	Fixed Side : H, J Supported Side : K	[6]
	Rotary Ball Screw	BLR		[7]
	Standalone screw shafts	TS		[8]
	Standalone ball screw nuts	BTK-V, BLK, WTF, CNF, BNT, BLR	—	

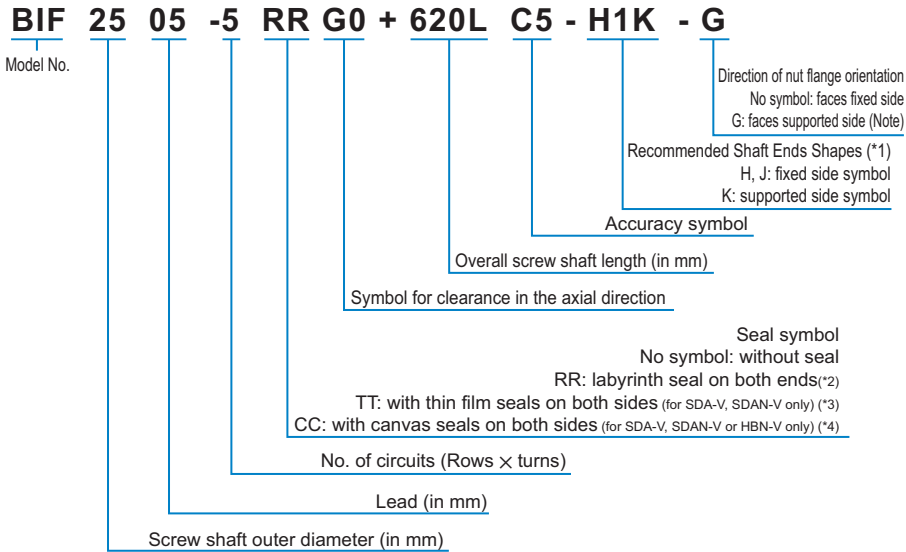
### [Support unit, nut bracket and lock nut types and sample model number configurations]

Table 3

Model No.		Shaft end shape	Model number coding
Support Unit	EK, BK, FK, EF, BF, FF	—	[9]
Nut brackets for BNK	MC	—	
Lock Nut	RN	—	

[1 Precision Ball Screw]

● Models SBN-V, SBK, SDAN-V, SDA-V, HBN-V/HBN-K/HBN-KA/HBN, SBKH, BIF-V, BNFN-V/BNFN, MDK, MBF, BNF-V/BNF, DIK, DKN, BLW, DK, WHF, BLK, WGF and BNT



(\*1) See **A15-322** to **A15-327**.  
(\*2) (\*3) (\*4) See **A15-334**, **A15-335**.

Note) The ball nut flange faces the fixed side unless otherwise specified.  
If desiring the flange to face the supported side, add symbol G in the end of the Ball Screw model number when placing an order.

[2 Precision Ball Screw Unfinished Shaft Ends]

● Models BIF, MDK, MBF and BNF

**BIF2505-5RRG0+720LC5A**

Unfinished shaft ends code (A or B)

## Model No.

## [3 Precision Ball Screw Finished Shaft Ends]

## ● Model BNK

**BNK2010-2.5RRG2+699LC7Y**

Finished shaft ends code

Refer to **A15-140** for the corresponding model number.

## [4 Rotary Ball Screw]

## ● Models BLR and DIR

**BLR2020-3.6 K UU G1 +1000L C5**

Model No.

Flange orientation  
symbolSymbol for clearance  
in the axial directionSymbol for  
support bearing sealOverall screw shaft  
length (in mm)

Accuracy symbol

## [5 Ball Screw/Spline]

## ● Models BNS-V, BNS-A, BNS, NS-V, NS-A, and NS

**BNS2525 +600L C5**

Model No.

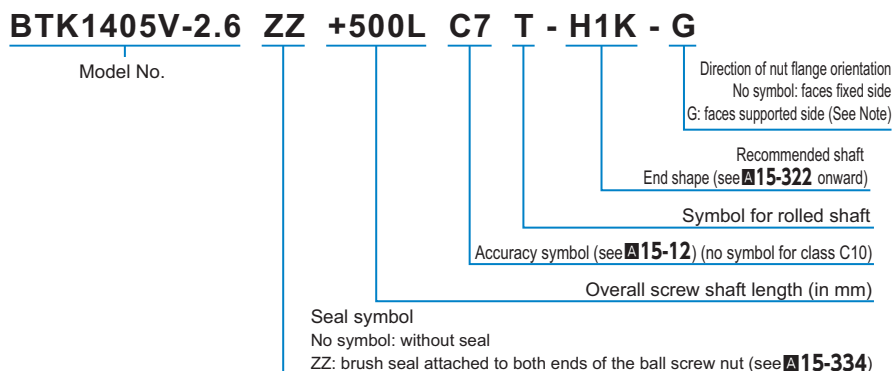
Overall shaft length  
(in mm)

Accuracy symbol

## [6 Rolled Ball Screw]

### ● Models BTK-V, MTF, BLK, WTF, CNF and BNT (Rolled)

- Combination of the Ball Screw Nut and the Screw Shaft



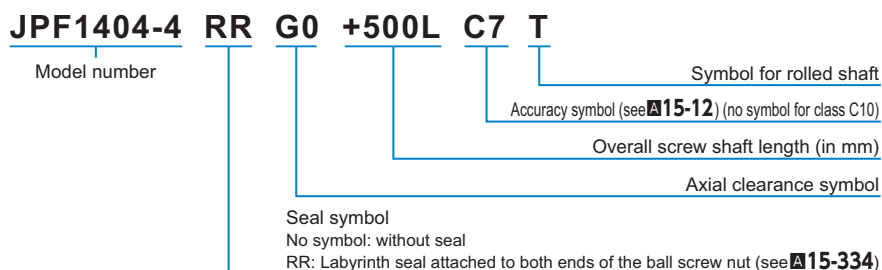
Note) The ball nut flange faces the fixed side unless otherwise specified.

If desiring the flange to face the supported side, add symbol G at the end of the ball screw model number when placing an order.

## [6 Rolled Ball Screw]

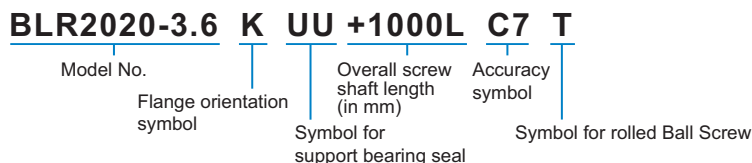
### ● Model JPF

- Rolled Ball Screw model JPF



## [7 Rolled Rotary Ball Screw]

### ● Model BLR (Rolled)



Note) For clearance in the axial direction, see **A15-19**.

## Model No.

## [8 Standalone rolled shafts/nuts]

- Models BTK-V, BLK/WTF, CNF, BNT(Rolled), BLR(Rolled) and TS

Rolled shaft only

**TS 14 05 +500L C7**

Screw shaft outer  
diameter (in mm)

Lead  
(in mm)

Accuracy symbol  
(see page **A15-12**)  
(no symbol for class C10)

Overall screw shaft length  
(in mm)

Nut only

**BTK1405V-2.6 ZZ**

Model No.

Seal symbol  
no symbol: without seal  
ZZ: brush seal attached to  
both ends of the ball screw nut  
(see **A15-334**)

Symbol for rolled ball screw shaft

## [9 Support units, nut brackets and lock nuts]

- Models EK, BK, FK, EF, BF, FF, MC and RN

**EK12**

Model No.

## [10 Ball screw options, W wiper rings and QZ lubricators]

**BIF2505V-5 QZ WW G0 +1000L C5**

With QZ  
Lubricator

With wiper ring W

(\*) See **A15-344**.

Ball Screw

## Notes on Ordering

## [Options]

The details of the product options differ according to the model number. Check before ordering.  
See **A15-333**.

## [Other notes on specifications]

Contact THK separately for information on the specifications below.

- Shaft end shape (for recommended shaft end shapes, indicate the symbol).
- Surface Treatment (see **B0-20**)
- Grease used
- Nipple mounting