

TSK Standard Rolled Ball Screws



Features

- TSK Standard Rolled Ball Screws with the built-in nuts having either a brush wiper or seal cap at both ends as the customer requests, are standardized on C10 of the accuracy grade in accordance with JIS B1191.
- RBR series adopting preload with distance piece makes zero axial play possible.
- TSK standardizes Rolled Ball Screw up to the ultrahigh speed lead type.
By standardizing and mass-producing both shafts and nuts, TSK provides more competitive cost and the shortest delivery possible.
- Anti-corrosion treatment is available upon request.

Materials and Heat Treatment

	Materials (JIS)	Heat Treatment	Hardness
Screw Shaft	S55C S45C	Induction Hardening	HRC56~62
Nut	SCM415 SCM420	Carbonized Hardening	HRC58~62

(Note) No coating is done on the nut of RBE series.

Combination of Screw Shaft Dia. and Lead.

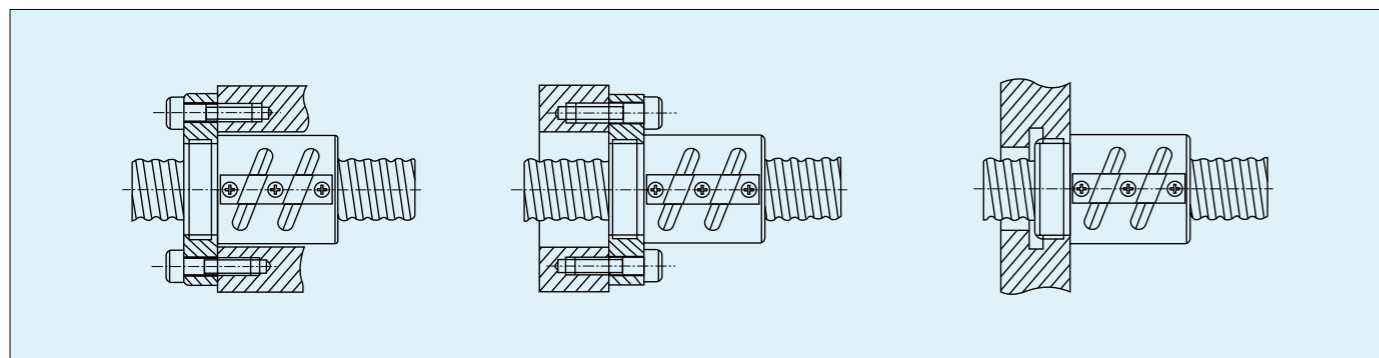
Screw Shaft Dia.	Nominal Lead															
	4	5	6	8	10	12	15	16	20	24	25	30	32	36	40	50
8				▲	▲	▲										
10			●		▲		△		▲							
12				●	▲	○						▲				
14	●△	●△														
15					○▲				▲			▲				
16		●△			●			○▲					▲			
18				●△												
20		●△	●△		●				○▲			▲			▲	
22				●△												
25		●		●△	●△						○▲					▲
28			●△													
32				●△	●								○			
36					△	●△			▲	▲				○		
40					●△										○	
45					●△	●△										
50					●			●△								△

● : RBS (Flange Type) ○ : RBH (High Speed Lead Type)
 ▲ : RBE (Super-High Speed Lead Type) △ : RBR (Constant Pressure-Preload Type)

Precautions for use

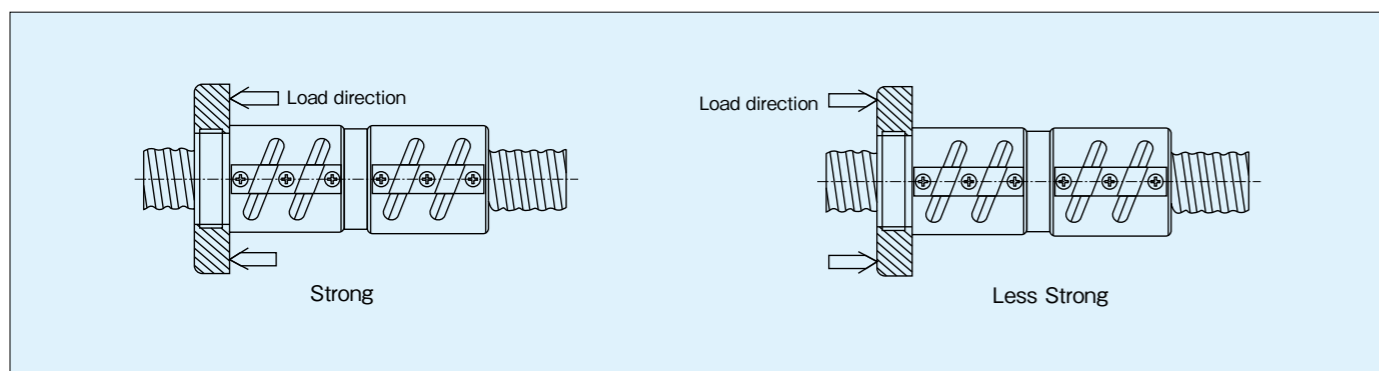
How to fix a nut

The following is a general fixing method of nut.



(Note) A clearance between housing bore and nut is required.

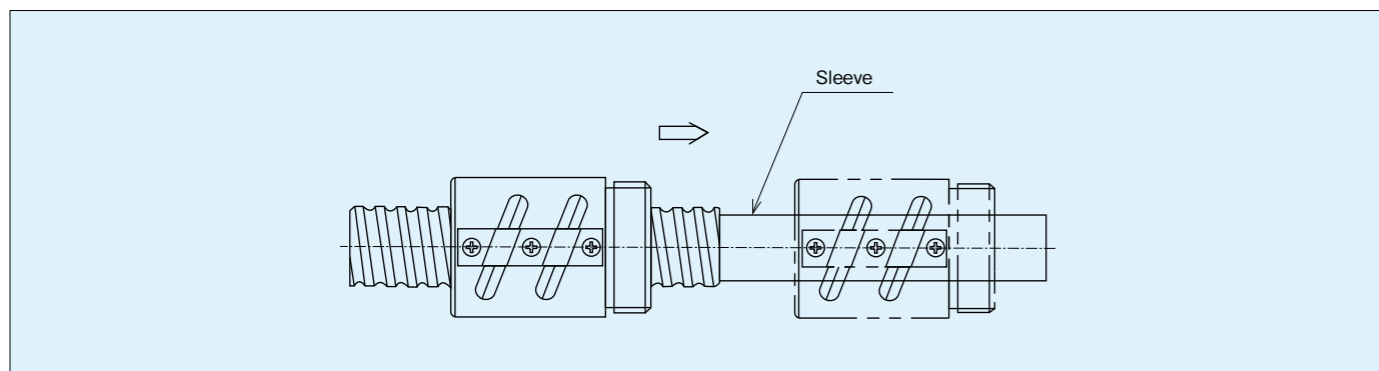
In case of RBR type, please consider the fixing direction on confirming the following load direction.



How to fix a nut on, and how to remove it out

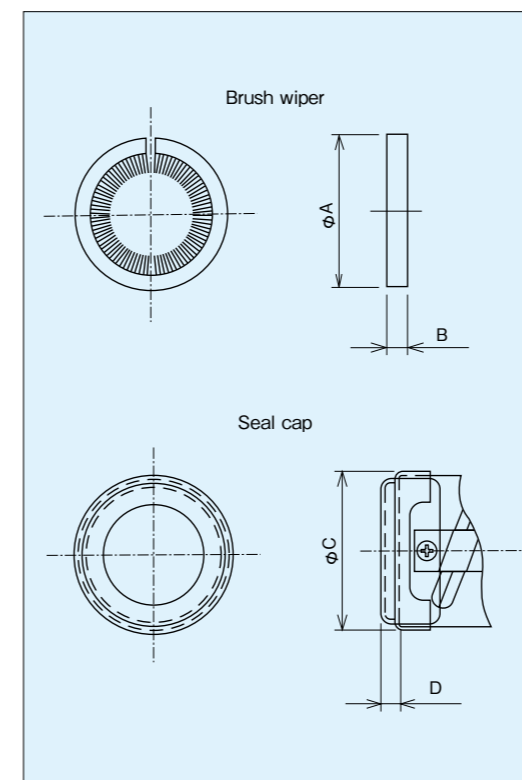
When you move a nut out from a screw shaft, you must push exactly the end of sleeve to the tail of screw shaft, and rotate the nut on the screw out to the sleeve.

When you move a nut in, you must do the adverse operation.



(Note) The diameter of sleeve should be a little smaller than the root diameter of shaft.

Brush wiper & seal cap dimensions, and installation method



Unit : mm

Nut Model	Brush wiper		Seal cap			
	Type	A	B	Type	C	D
RBS1208	W01201	22	2.8	S01201	28.6	3.5
RBS1404	W01401			S01401		
RBS1405				S01401		
RBS1605	W01601	25	2.8	S01601	31.6	3.5
RBS1610				S01601		
RBS1808	W01801	30	2.8	S01801	35.6	3.5
RBS2005	W02001			S02001		
RBS2006				S02001		
RBS2010	W02002	33	2.8	S02002	39.6	3.5
RBS2208	W02201			S02201		
RBS2505	W02500	36	2.8	S02500	41.6	3.5
RBS2508	W02501			S02501		
RBS2510		S02502	46	4.5		
RBS2806	W02801	43			3.6	S02801
RBS3208	W03201		49	3.6		S03201
RBS3210		S03201				
RBS3610	W03601	52	3.6	S03601	62	4.5
RBS3612				S03601		
RBS4010	W04001	57	3.6	S04001	67	4.5
RBS4510	W04501			62		
RBS4512		S04501				
RBS5010	W05000	64.5	3.6	Flange wipers are set at both ends of the nut.		
RBS5016	W05001					

- (Note) 1. Customized brush wiper is also available.
 2. RBS : The brush wiper is installed on the inside of the flange side of the nut.
 3. RBR : Same standards as those of the RBS series.

Flange wiper installation

