

## TCJ for transmitting rotational force only in one direction



TCJ is a one-way clutch that realizes high torque in spite of its small size and can be used in high temperature environments. TCJ can solve various problems.

### BENEFIT

- Can be used by press-fitting into various shaped housings such as gears, pulleys, levers and cams.
- No need to prepare bearings. (Built-in sintered bearings)
- Expects the cost reduction since the wide tolerance shaft can be used.
- Compact, high torque, and can be used in high temperature environment up to 140°C / 284°F.

Code	Part No.	Allowable Torque 【N·m】(lbf·in)	Idling Torque 【mN·m】(lbf·in)	Backlash 【°】	Lock Direction 【Shaft Fixed】	Shaft Diameter 【mm】
489999	TCJ-614-RB-H	0.78 (6.9)	2.94 or less (0.03)	2.5 or less	CW · CCW	$\phi 6 \begin{smallmatrix} 0 \\ -0.03 \end{smallmatrix}$

\* The lock direction can be switched by changing the mounting direction to the housing.

### OPERATION TEMPERATURE

Operation Temperature [°C] (°F)
0 - 140°C (32 - 284°F)

### HOUSING DIMENSIONS

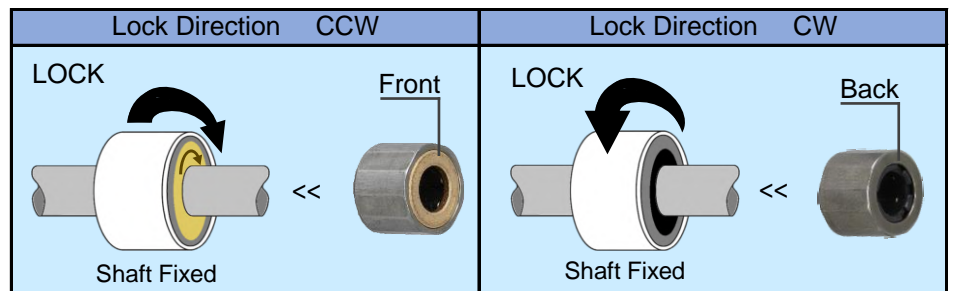
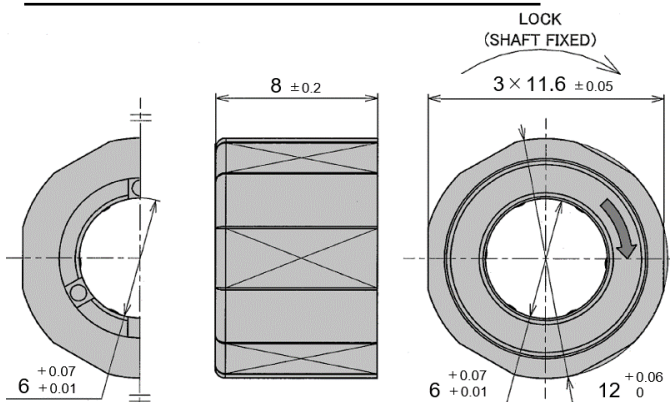
Minimum Housing Dimensions [mm]		
Outside	Width	Inside *
$\phi 14 \leq$	$8 \leq$	$\phi 6 \begin{smallmatrix} +0.07 \\ +0.01 \end{smallmatrix}$

\*No need to prepare bearings inside.

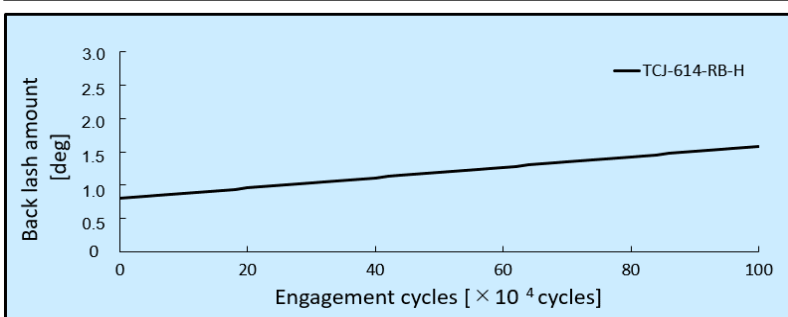
### MAIN MATERIALS

Part name	Material
Outer sleeve	Steels
Retainer	Plastics
Needle	Bearing steel
Spring	Stainless
Cover	Stainless
Grease	Silicone

### CLUTCH ELEMENT DIMENSIONS



### DURABILITY

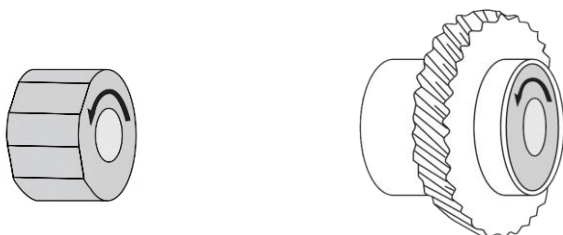


### TEST CONDITION

- Swinging cycle: 240 times / min
- Swinging angle: 30°
- Radial load: 9.8N (1kgf)
- Durability : 1,000,000 cycles
- Shaft tolerance range :  $\phi 5.97\text{mm}$
- Surface hardness : 670 Hv

### ASSEMBLY

It is possible to provide clutches assembled in the housing.



Single Item

Assembling With Customized Housing

### RECOMMENDED SHAFT

Material	Stainless Bearing steel Carbon tool steel
Processing	Heat treatment 700Hv0.1 *Please refrain from plating use
Shaft Diameter	$\phi 6 \begin{smallmatrix} 0 \\ -0.03 \end{smallmatrix}$

