

# Low Idling Rotational Torque Miniature One-Way Clutch



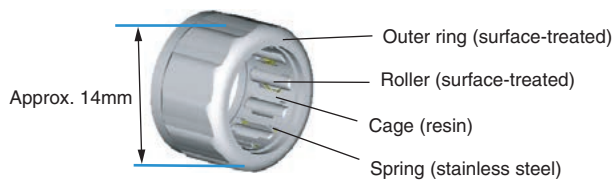
In general, one-way clutches are used in the backstopping mechanisms of devices and equipment in various fields.

JTEKT developed a low idling rotational torque miniature one-way clutch through significantly reducing the idling rotational torque to one-fifth compared with our conventional product.

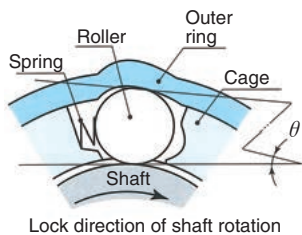
## Features

- ① Low idling rotational torque  
The idling rotational torque was reduced to approximately one-fifth compared with our conventional product while ensuring the locking function by adopting needle rollers in the rolling part and thoroughly optimizing the spring shape (plate thickness, width and length).
- ② Improved rust resistance  
Superior rust resistance was achieved by the use of stainless steel for the springs and surface treatment on the rollers and outer ring.
- ③ Weight reduction  
Weight reduction was achieved by reducing outer ring thickness to approximately by half compared with our conventional product through the introduction of press working on the outer ring, and by using resin for the cage.

## Structure

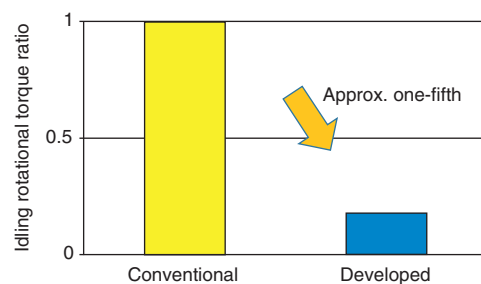


Appearance



Structure

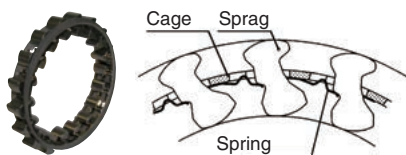
## Performance



Idling rotational torque reduction effect

### <Reference> Sprag type lightweight one-way clutch

JTEKT also produces sprag type clutches suitable for large-diameter shafts.



- Can be used with both the inner ring and outer ring being in the cylindrical raceway
  - Lightweight and stable idling rotational/locking function
  - One spring able to engage with all the sprags
- Inner ring O.D.:  $\phi 35$  to 70mm, width: 8 to 13mm  
Rated torque: 100 to 500 N·m

(Industrial Machinery Application Engineering Dept., Bearing Operations Headquarters)