

Personal Mobility Clutch

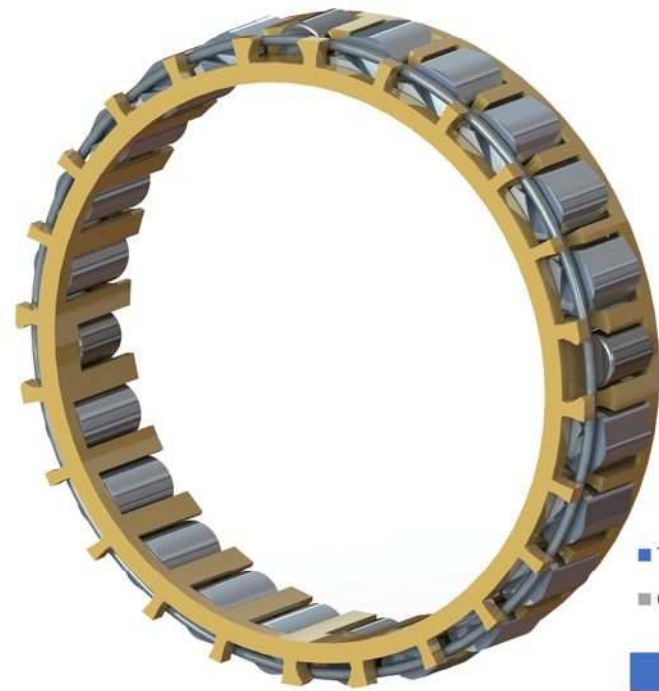


**Designed for
more freedom**

We offer optimum clutches for your requirements with a wide range of specifications, customized dimensions, torque, and service life.

Clutch Lineup for Tsubaki Personal Mobility

High Function Type (Cam & Roller)



Flagship model for various applications

2 in 1 model (Clutch + Bearing)

In mass production

Patented

■ Tsubaki cam & roller clutch ■ Competitor's roller clutch A
 ■ Competitor's roller clutch B ■ Competitor's roller clutch C

Transmission torque



Researched by Tsubaki

High-torque Model

No retaining mechanism

With retaining mechanism



Narrow width and high torque

In mass production



Achieves even higher torque

Component under development

Patent pending

Hub Unit Compatible Model



Ideal for hub drives (cost and torque optimization)

In mass production

Patented

Axial Load Model



Ideal for helical gears (axial load bearing when idle)

Development complete

Patent pending

Standard Type

Cam Cage Type



Easy to install (dimensions interchangeable with those of other manufacturers)

Development complete

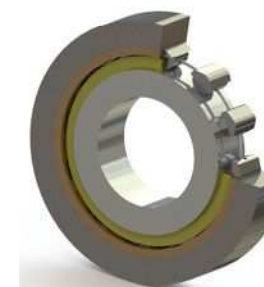
Integrated-bearing Type



Easy to install (dimensions interchangeable with those of other manufacturers)

In mass production

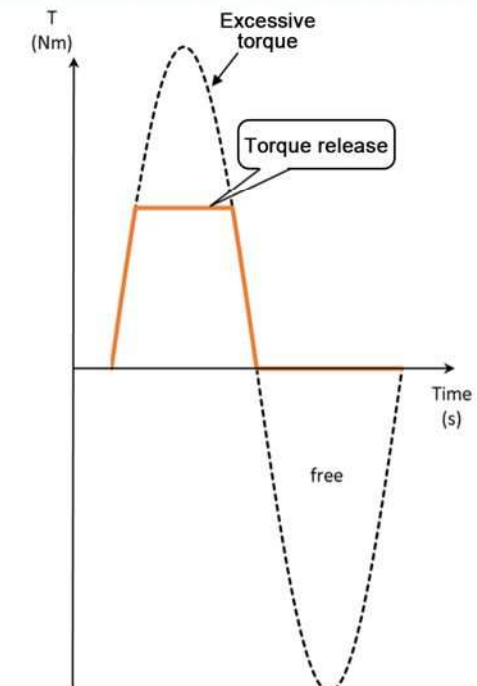
option Overload protection function



Ideal for pedal shafts (reduced excessive torque)

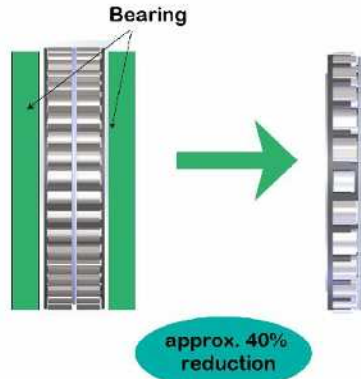
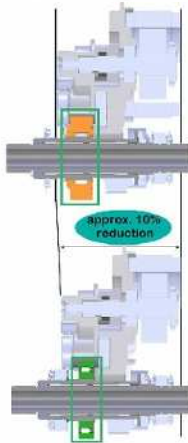
Component under development

Patent pending



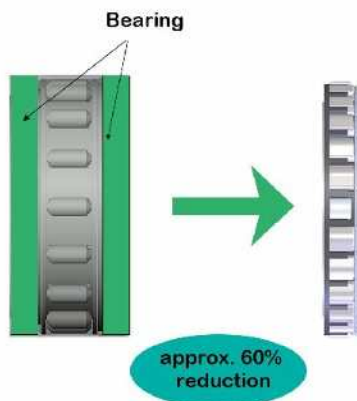
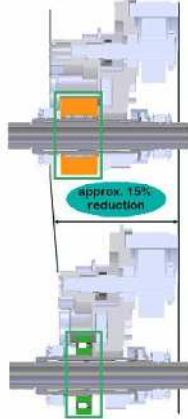
•Features

Cam/roller clutch cage in comparison to sprag cage made by other companies.



- Clutch dimensions: approx.40% reduction
- Unit dimensions: approx.10% reduction
- Drag torque: approx.10% reduction

Cam/roller cage in comparison to sprag / roller cage made by other companies.



- Clutch dimensions: approx.60% reduction
- Unit dimensions: approx.15% reduction
- Drag torque: approx.80% reduction

•Transmission Capacity/Dimensions

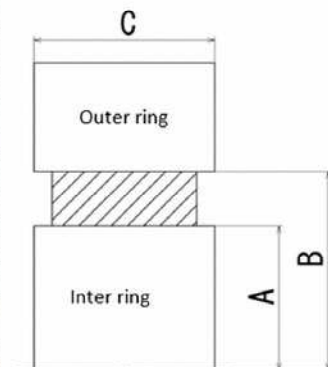


Can and roller type
Radial load resistance



Cam
Cage
Type

Model	Allowable torque Nm	Inner ring raceway diameter(A)	Outer ring raceway diameter(B)	Mounting width(C)
CC104R4-15-8.5	7	15	23.294	9
CC104R4-15-10.5	9	15	23.294	11
CC104R4-15-14.5	14	15	23.294	15
CC110R5-25-8.5	29	25	33.294	9
CC110R5-25-10.5	39	25	33.294	11
CC110R5-25-14.5	59	25	33.294	15
CC116R4-35-8.5	105	35	43.294	9
CC116R4-35-10.5	147	35	43.294	11
CC116R4-35-14.5	232	35	43.294	15
CC120R4-45-8.5	207	45	53.294	9
CC120R4-45-10.5	276	45	53.294	11
CC120R4-45-14.5	427	45	53.294	15
CC1**R5-100-8.5	63~1100	100	108.294	9
CC1**R5-100-10.5	84~1400	100	108.294	11
CC1**R5-100-14.5	128~1900	100	108.294	15
BB101815	44	15	23	12
BB102625	133	25	33	12
BB103635	285	35	43	12
BB104445	482	45	53	12



The above values are for reference only.
(Optimum design will be provided according to customers' requirements and applications.)

Tsubaki Cam Clutches contribute to improved energy-saving performance for the electrification of personal mobility with supreme reliability, service life, and compact size.

Tsubakimoto Europe B.V.

Aventurijn 1200, 3316 LB Dordrecht, Netherlands
Telephone +31 78 620 4000 Fax +31 78 620 4001
mail : info@tsubaki.eu

[Explanatory video](#)

