Drawn Cup Roller Clutches

Koyo®

Ball, Needle & Roller Bearings

Koyo offers clutch design expertise based on advanced knowledge and experience. We create value-added systems centered on drawn cup roller clutches. We offer a large selection of standard sizes, develop custom sizes for individual applications, and provide unparalleled technical support,

Drawn cup roller clutches transmit torque between the shaft and housing in one direction while allowing free overrun in the opposite direction. This optimizes motion control.

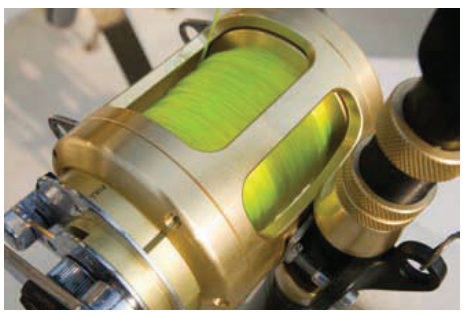
The units are compact, lightweight, and operate directly on a hardened shaft. Proper mounting is easy with a simple press fit in the housing. They use the same small radial section as drawn cup needle roller bearings and are offered both in metric and inch nominal series, with sizes ranges from 4 mm to 35 mm (1/8 in. to 1 in.) bore.

When transmitting torque, either the shaft or the housing can be used as the input member. Rollers wedge against precisely formed interior ramps to positively transmit torque. Transition from overrun to lock normally occurs with minimal lost motion.

Drawn cup roller clutches are offered as a clutch-only unit or as a clutch and bearing assembly. Clutch-only units should be used with external radial support to hold the shaft and housing concentrically and carry radial loads.

Applications

- *Indexing tables*
- *Conveyor belt systems*
- *Exercise equipment (exercise bikes, rowing machines)*
- *Office Equipment (Copiers, fax machines)*
- *Roll feed mechanisms (towel and tape dispensers)*
- *Chainsaw starters*
- *Two-speed gearboxes*
- *Washing machine transmissions*
- *Fishing reels*
- *Medical equipment*



Applications

Corrosion-resistant coatings/materials.

Can feature axial grooves in cup surface for use in plastic housings to prevent clutch from slipping relative to housing.

Two types of clutch retainers:

1.) Molded plastic cage with integral springs (operating temperatures up to 93° C [200° F], maximum engagement rates up to 200 cycles per minute).

2.) Reinforced nylon with separate steel springs (operating temperatures up to 121° C [250° F] continuous and 149° C [300° F] intermittent, maximum engagement rates up to 6000 cycles per minute).

QS9000/ISO9000/TS16949 certification ensures the highest precision and quality.

Benefits

High torque capacity to overrun drag ratio.

Same thin cross section as drawn cup bearings – allows bearings to be used on either side of clutch to carry a radial load.

Light weight.

Easy installation - press fit into housing with no retention device required.

Engineering support for new designs, analysis and recommendations.

Koyo Drawn Cup Roller Clutches

Get ultimate motion control with drawn cup roller clutches. They transmit torque between the shaft and housing in just one direction while allowing free overrun in the opposite direction.

Koyo®

Call Koyo Today 1-800-331-5696

Our sales and service engineers are available to assist with product design needs, maintenance recommendations, and technical support.

To learn more, contact your sales representative or visit us online at:

www.JTEKT-NA.com

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Rev. December 2016