DESIGN: MANY VERSIONS – ONE QUALITY.

ROLLER FREEWHEELS

These freewheels feature a cylindrical outer race and an inner race consisting of ramps on which rollers are located. Springs and plungers ensure a permanent contact between the different elements for an instant torque transmission. This rugged, reliable versatile design can be used as an overrunning clutch, indexing clutch or backstop.

Note: the highest overrunning speed is possible if the outer race is overrunning. For this reason it is particularly adapted to high speed overrunning clutch application for dual drivers.

This design is recommended for use as an indexing clutch. To maximise accuracy, specify »V« type, fitted with stronger springs.

SPRAG FREEWHEELS

In this type of freewheel, the two races are cylindrical. The sprags, fitted in a cage, feature an active profile that ensures engagemant or disengagement according to the relative motion of the races.

It is possible to adapt the design of sprags and cage to get significantly different characteristics from one model to another. For example, models which have permanent contact or are contact free during overrunning, are available.

DC DESIGN

This model features a large number of sprags controlled by two concentric cages. The transmitted torque is high compared to the required space. Sprags are synchronised by the double cage design, and individually energized by a special spring.

RSCI, RIZ DESIGN

Sprags in this design, are fitted into a cage connected to the overrunning member. The sprag configuration is such that its center of gravity is offset to its rotation axis.

Centrifugal force creates a lift off moment against an engaging spring. When the centrifugal force moment is greater than that of the spring, the sprag tilts over to a contact free position.

The clamping geometry allows this type of freewheel to accept significant eccentricity tolerances and to work with all the current lubricants used in power transmissions.
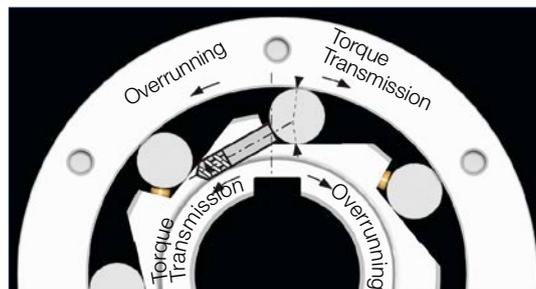
1 Outer race   2 Sprag   3 Inner race
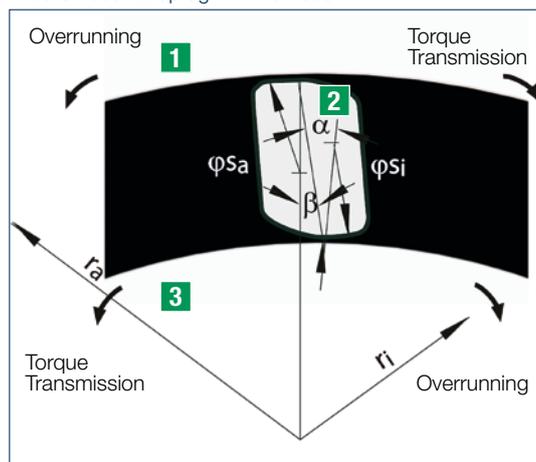
1 Outer race   2 Cage   3 Spring   4 Sprag   5 Inner race

Torque transmission   Overrunning