

Technical explanations

Indicated torque adjustment

The EAS[®]-NC torque limiting clutch offers the comfort of the indicated torque adjustment at the adjusting nut (not for sizes 02/03). The possibility for indication offers a substantially simplified torque adjustment and a simple monitoring of the set releasing value with an installed clutch.

- The limiting torque can be adjusted sensitively and indicated exactly by the fine pitch threaded graduated adjusting nut.
- The positive locking of the adjusting nut protects against self-acting unintended adjustment of the pre-set limiting torque. For the EAS[®]-NC sizes 4–6 additional mechanical locking against blocking and backtwisting.

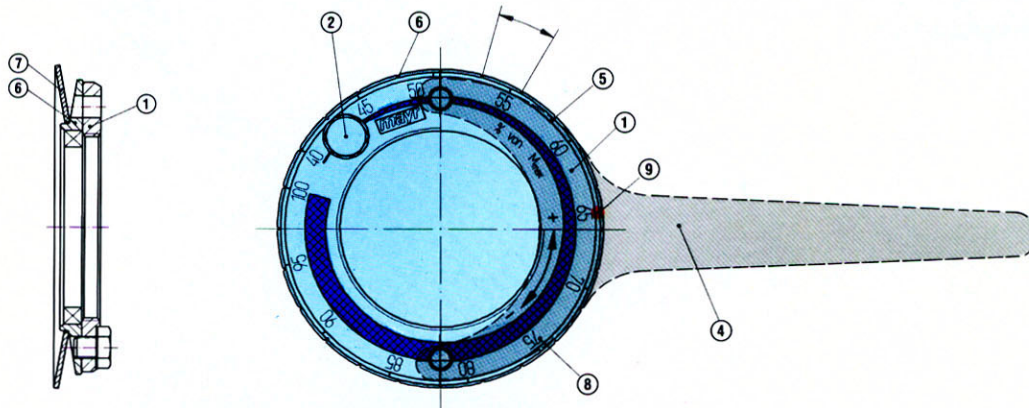


Fig. 1

Torque adjustment

The adjustment is made by turning the adjusting nut. The cup springs operate in the negative area of their characteristics (see figure 2). A stronger pre-tension of the cup springs effects a decrease of the spring pressure. Turning the adjusting nut in a clockwise direction reduces the torque, and in anti-clockwise direction increases the torque (viewed in the direction of the nut – figure 1).

EAS[®]-NC sizes 01–6 are adjusted **generally** at approx. 70%–75% of the corresponding max. torque and marked (calibrated) at the factory, if no other torque adjustment is required.

EAS[®]-NC sizes 03+02 must be adjusted as per the included adjusting diagrams, if there is no adjustment or calibration made at the factory.

Torque adjustment by the aid of the adjusting diagram

- Grease thread and contact faces of the adjusting nut, retaining ring and hub.
- Manually screw on adjusting nut (1) until contact is made with the cup springs (7).
- Continue turning until the 4 graduations (5) at the circumference of the adjusting nut (1) and the notches in the retaining ring (6) are in line with each other.
- Using a face wrench, turn the adjusting nut (1) through the number of graduations corresponding to the required torque (Fig. 3) (number of graduations as per setting diagram).
- The graduations at the circumference of the adjusting nut (5) and retaining ring (6) must remain in the same position.
- Put Loctite 242 onto the securing screw (2) and screw it into the adjusting nut (1).

Attention!!

After dismantling the clutch (e.g. by changing the cup springs or cup spring layers) the clutch must be re-adjusted.

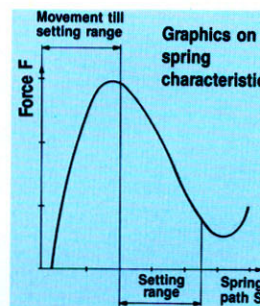


Fig. 2

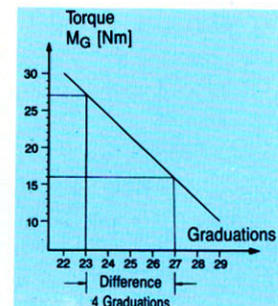


Fig. 3

Adjusting the torque

Remove the retaining screw (2) (for sizes 4–6, 4 setscrews) from the adjusting nut.

Turn adjusting nut clockwise or anti-clockwise with the use of a face wrench according to the engraved graduation (for sizes 03 and 02 setting diagram) until the required torque is set. The required torque is achieved when the graduation in the retaining ring and the indication on the percentage in the adjusting nut (for sizes 03 and 02 from the graduations on the adjusting diagram) are overlapped. Afterwards the retaining screw or setscrew, respectively (locking by Loctite 242) are screwed into the adjusting nut again, whereby the 4 graduations in the adjusting nut and retaining ring must remain in the same position.

Example:

Existing adjustment 65% of the max. torque.
The customer requires 90% of the max. torque.

Turn adjusting nut anti-clockwise, as described above, until 90% of the graduation are in line with the notches in the retaining ring. If necessary, the alignment of the notches at the circumference of the adjusting nut must be overlapped with the graduations of the retaining ring.