

The invention relates to the mechanical engineering, namely to the precession planetary transmissions.

The transmission, according to the first variant, includes a body with cover, wherein there are placed a driving shaft and, kinematically joined with it, executing a precession motion, a satellite gear with a device preventing the rotation thereof about its own axis, as well as a driven gear-wheel, interacting with it. The transmission is additionally provided with a bearing bush, placed from the end of the satellite gear and fixed onto the driving shaft. Between the inner end face of the body cover and the end face of the flange of the bearing bush adjacent to it, as well as between the end face of the flange oriented towards the satellite gear, which is made oblique, and the end face of the satellite gear, there is placed one thrust bearing abreast. Between the teeth of the satellite gear and of the driven gear-wheel there are freely placed conic rollers, the number of which is equal to the number of teeth of the satellite gear or of the driven gear-wheel. The mechanism, preventing the rotation of the satellite gear about its own axis, includes at least three balls uniformly placed round the circle, each being freely placed into the socket made onto the lateral surface of the satellite gear, simultaneously being placed into the longitudinal groove made onto the inner wall of the body.

The transmission, according to the second variant, is characterized in that it additionally includes a central gear-wheel, fixed from the end of placement of the driving shaft, opposite to the driven gear-wheel, coaxial to it and interacts with the satellite gear, as well as two bearing bushes, one of which is fixed onto the driving shaft and the second, rigidly joined with it, is mounted into the hub of the driven gear-wheel with the possibility of rotation about it. The end faces of the flanges of the bearing bushes, oriented towards each other, are made oblique and parallel.

Claims: 5

Fig.: 7