

ABSTRACT

A hydrodynamic axial bearing for mounting a shaft (40) which is mounted rotatably in a bearing housing (20), comprising an axial stop (21) of the bearing housing and a bearing comb (10) which rotates with the shaft. A lubricating gap (52) which is loaded
5 with lubricating oil and is delimited by a profiled circular ring face (31) and a sliding face (22) being formed between the axial stop (21) and the bearing comb (10). The profiled circular ring face (31) and the sliding face (11) are configured in such a way that the lubricating gap (52) is constricted radially to the outside with regard to the axial direction. As a result, temperature deformations which occur during operation and
10 deformations on account of centrifugal, shearing and other forces in the bearing comb can be compensated for.

(Fig. 9)