

GROOVE-TYPE DYNAMIC PRESSURE GAS RADIAL BEARING

A groove-type dynamic pressure gas radial bearing, comprises a bearing outer sleeve and a bearing inner sleeve, the outer circumferential face and the two end faces of the bearing inner sleeve are respectively provided with regular groove-type patterns, and the groove-type pattern in one end face is in mirror symmetry with the groove-type pattern in the other end face, and the axial contour lines of the groove-type patterns in the outer circumferential face and the radial contour lines of the groove-type patterns in the left and right end faces are in one-to-one correspondence and are connected with each other. The groove-type dynamic pressure gas radial bearing provided by the invention can achieve a load capacity of 1-3 kg and a limit rotating speed of 200,000 rpm to 450,000 rpm, it can realize the application of groove-type dynamic pressure gas radial bearings in ultra-high-speed areas.

[Fig. 1]