1. A groove-type dynamic pressure gas radial bearing, comprising
a bearing outer sleeve and
a bearing inner sleeve,
wherein an outer circumferential face and two end faces of the bearing inner sleeve are respectively provided with regular groove-type patterns;
the regular groove-type patterns on one of the two end faces are in mirror symmetry with the regular groove-type patterns on the other one of the two end faces; and
axial contour lines of the regular groove-type patterns on the outer circumferential face and radial contour lines of the regular groove-type patterns on the two end faces are in one-to-one correspondence and connected to each other.

2. The groove-type dynamic pressure gas radial bearing according to claim 1,
characterized in that,
axial high-position lines of the regular groove-type patterns on the outer circumferential face of the bearing inner sleeve correspond to radial high-position lines of the regular groove-type patterns on the two end faces, and are connected with each other in front of circumferential chamfers on the two end faces;
axial middle-position lines of the regular groove-type patterns on the outer circumferential face correspond to radial middle-position lines on the regular groove-type patterns on the two end faces, and are connected with each other in front of the circumferential chamfers on the two end faces; and
axial low-position lines of the regular groove-type patterns on the outer circumferential face correspond to radial low-position lines of the regular groove-type patterns on the two end faces, and are connected with each other in front of the circumferential chamfers one the two end face.

3. The groove-type dynamic pressure gas radial bearing according to claim 1 or 2,
characterized in that:
the regular groove-type patterns are of impeller shape.

4. The groove-type dynamic pressure gas radial bearing according to any of the preceding claims,
characterized in that:
a matching clearance between the bearing outer sleeve and the bearing inner sleeve is 0.003-0.008 mm substantially.

5. The groove-type dynamic pressure gas radial bearing according to any of the preceding claims,
characterized in that:
stop rings are arranged at two ends of the bearing outer sleeve.

6. The groove-type dynamic pressure gas radial bearing according to any of the preceding claims,
characterized in that:
through holes and concave holes are coaxially formed on an outer circumference of the bearing outer sleeve; and
the through holes are located within the concave holes.