

A rotor position sensor system for a slotless
motor

Abstract

5 The present invention relates to a slotless motor comprising a
rotor position sensing element. The motor has a rotor having a
rotational axis and a plurality of coil windings arranged into
an integer N number of distinct blocks, each block being arranged
about the rotational axis and having a gap between each adjacent
10 pair of blocks. The rotor position element has a sensor ring
having a sensor fixed to the sensor ring and a sensor ring
attachment extending from the sensor ring wherein the sensors
are spaced around the rotational axis and wherein the rotor
position sensing element is configured to hold the sensor ring
15 relative to at least one of the blocks such that the sensor is
held in a predetermined position.

[Figure 2]