

The invention relates to the measuring devices and may be used for diagnosing the internal combustion engines, namely for measuring the total clearance in the crank bearings.

The device for diagnosing the crank mechanism of the internal combustion engine comprises a body (7) fixed onto the cylinder head (9), a bush (6) installed therein with the possibility of axial displacement and a piston position determining element (14), at the same time the body (7) is equipped with a fitting (11) joined by a pipeline with a vacuum source. Novelty consists in that the bush (6) is provided with a microscrew (8), and the piston position determining element is fixed therein, being made in the form of elastic clamping bush (5), clamping one of the ends of the optical cable (1), including a transmitting optical fiber (2), connected to a radiation source (17), powered by a pulse oscillator (18), and two receiving optical fibers (3 and 4), each being connected in series to a photoreceiver (19 and 20), an analog-to-digital converter (21 and 22), a counter (23, 28) and a code conversion element (25, 27), correspondingly. The second output of the first counter (23) is connected in series to a comparison element (24), to an electronic switch (26), the second input of which is connected to the first analog-to-digital converter (21) and the output – to the second code conversion element (27) and the second input of the first code conversion element (25), connected to the third counter (30), the first output of which is connected to the comparison element (24) and the second – to a divider (29), the second input of which is connected to the second code conversion element (27), and the output – to a digital indication device (31).

Claims: 1

Fig.: 2

