

value. In this case the contact which stipulates the pressure is situated below or above the manometer-pointer contact: the working contact of the KU-48 24-V relay in the circuit of the electronic attachment shown in Fig. 2 are also chosen in accordance with this.

For a normally closed relay circuit the oil is pumped into the press cylinder by the pump after the contacts which are touching at the beginning of operation have separated due to the pressure drop in the press cylinder. In this case the pressure setting contact fixes the upper pressure limit. The lower limit is caused by the inertia of the electronic circuit, and therefore the difference between the limits may be very small. The circuit of the electronic attachment and the automatic connection of the pump allow up to 100-150 turn-ons per minute to be performed. The frequency of pump turn-ons depends on the volume of the cylinder and receiver, the efficiency of the pump, and the rate of oil scouring (the latter may be controlled), and also on the state of the contact surfaces (in the circuit shown in Fig. 2 the current does not exceed $40 \mu\text{A}$, and no scorching of the surface occurs). For example, on the press which develops a force of 300 tons the pumping turn-on period was at least 10 min.

The described device for pressure stabilization is convenient in operation and recommended itself well during continuous operation at the Institute of High-Pressure Physics over a period of five years.

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