

The invention relates to engine-building, in particular to high-heat diesels with systems of local air cooling. A valve with flow-through cavity cooled with compressed air is separated by partition to upper chamber in stem and the lower one in disk and has a control element as flat valve that is installed in bridge. The control element is closed at decreased pressure of compressed air and at partial not high-heat modes and is unseated with increase of air pressure at engine operation at high-heat modes, with increase of intensity of heat removal. Use of the invention increases reliability of valve unit and decreases power consumption connected with pumping compressed air at partial modes.