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1 Automatic Vacuum Regulation

As an accessory available from Retsch GmbH, the automatic vacuum regulation allows for the automatic control of the airflow strength on the Air Jet Sieving Machine AS 200 jet in the control range $\Delta p$ of 20 mbar.

The AS 200 jet measures the current negative pressure in the nozzle chamber (A) and accordingly controls the automatic vacuum regulation. As a result, fluctuations caused by the industrial vacuum cleaner are compensated and thus the negative pressure kept stable.

1.1 Connecting the Automatic Vacuum Regulator

**CAUTION**

Hearing damage
Due to suction noises at the suction opening a high sound level may be generated

- Excessive noise in terms of level and duration can cause impairments or permanent damage to hearing.
- Ensure suitable noise protection measures are taken or wear ear protection.

**CAUTION**

Danger of objects being ejected
Connection of compressed air instead of an industrial vacuum cleaner

- If compressed air is connected to one of the two air ducts, the sieve lid and the test sieve will be ejected.
- The device may not be operated with compressed air!

*Fig. 1:* Installation of the automatic vacuum regulation
≥ Insert the automatic vacuum regulation (AU) into the air outlet duct (E).
≥ Connect the 5-pin control cable (SK) to the device interface (C) for the automatic vacuum regulation.
≥ Connect the suction pipe (SR) of the industrial vacuum cleaner to the automatic vacuum regulation (AU).

If the control cable of the automatic vacuum regulation is connected to the AS 200 jet, it is automatically detected and the icon is displayed in the control unit (H). If no automatic vacuum regulation is connected, the icon is displayed in grey.

1.2 Adjustment of the Automatic Vacuum Regulation

① In order to relocate the control range Δp in a negative pressure range (p3) as high as possible, slide the slider (AU1) completely over the elongated hole (AU2) of the automatic vacuum regulation.
② To relocate the control range Δp in a negative pressure range (p1) as low as possible, leave the elongated hole (AU2) of the automatic vacuum regulator completely open.

In between, the negative pressure range (p2) can arbitrarily be set continuously using the slider.

**Fig. 2:** Automatic vacuum regulation

The automatic vacuum regulation can keep the negative pressure stable in a control range Δp of 20 mbar. By means of the slider (AU1) the control range can be shifted in the desired negative pressure range.
Fig. 3: Control range $\Delta p$ in different negative pressure ranges $p_1$, $p_2$, $p_3$
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