

Model VP 016/020/025 pressure and vacuum pumps



Description

BCM VP016 pumps feature a high speed hand-operating vacuum and pressure unit, the output of which is in a range of -880 mbar ~ 16 bar. Those pumps are specially designed and manufactured to calibrate the vacuum and pressure instruments working in these pressure ranges.



There is a vacuum/pressure switch on the pump, which is the key for switch between the vacuum and pressure output. With this switch the pump can be used as a negative pressure source or positive pressure source for calibration. With a so-called volume-controlled vernier-adjuster one can adjust the output for a precise/desired value of the vacuum or pressure.

Thanks to its small size and light weight, the pump is portable, handy and easy for operation in the field. When accompanied with a precision vacuum/pressure indicator the pump can be integrated into a complete vacuum or pressure set.

Construction and Working Principle

BCM VP 016 pumps consist of a vacuum/pressure switch, a vent-valve, a volume-controlled vernier-adjuster, a cylinder and a piston, two pressure ports, and a pair of hand-grips. When the vacuum/pressure switch is put on the "vacuum" side the pump generates vacuum, while the pump generates the pressure when the switch is put on the "pressure" side.

Through two female threads of the two pressure ports (one on the top of the pump and the other on the flexible hose), the pump can be connected to a master pressure gage and the pressure instrument to be calibrated.

The hand-grips of the pump can be pressed and released repeatedly to develop vacuum or pressure. During this operation, the piston moves up and down in the cylinder. When the vacuum or pressure is developed, a more precision vacuum or pressure value can be reached by adjusting the vernier-adjuster.

To release the vacuum/pressure, twist off gradually the vent-valve. After the calibration, dismount the instrument.

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Specifications

output pressure range:

-880 mbar ~ 16 bar (model VP 016)

operating temperature: -20 ~ 50 °C

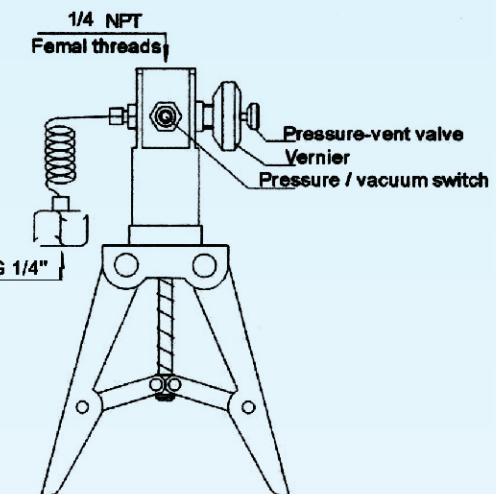
operating relative humidity: ~ 100%

flexible hose connector: G 1/4", female

master gage connector: 1/4 NPT, female

dimensions: 235 x 120 x 65

weight: 0.6 kg



Sketch of BCM VP 020 Hand Pump

Accessories

Thread adaptor: 1/4 NPT (male) to G 1/4" (female), one piece

The additional accessories are available on

Notice in Application

When the volume-controlled vernier-adjuster is used to adjust vacuum or pressure to a precise value, the vernier-adjuster should not exceed a red mark (a red circling-line printed on the vernier-adjust cylinder). This red mark can be seen at the end when one twists off the vernier-adjuster along the cylinder.

Warranty

All BCM instruments are made to the high quality standard according to ISO 9001 regulations, and all the BCM products carry one year warranty against manufacturing defects. In line with the policy of continuous development of technology, BCM reserve the right to alter the specifications of the instruments manufactured without prior notice.

Ordering Guide

When place an order, please specify the following necessary information :

Model – Pressure Range – Thread of Master Gauge Port – Thread of Instrument Port
Example : VP016 --880 mbar/16bar– 1/4 NPT female – G1/4" female

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