

# BARION<sup>®</sup> *HV/atm II*

EN

Hot cathode (*HV*) with Pirani (*atm*) gauges with on top electronics



- Excellent reliability in the relevant process pressure range  $1 \cdot 10^{-8}$  to 10 mbar
- Intelligent safety measures and plug-and-play replacement parts
- Small from the outside but robust on the inside



NICHTS ist unerreichbar.

## Technical data

■ Product name	BARION® HV	BARION® atm II
■ Principle of measurement	Hot cathode ionization (Bayard-Alpert)	Hot cathode ionization (Bayard-Alpert) and Heat conduction (Pirani)
■ Measurement range	5 · 10 <sup>-8</sup> to 1 Pa   5 · 10 <sup>-10</sup> to 1 · 10 <sup>-2</sup> mbar   3.75 · 10 <sup>-10</sup> to 7.5 · 10 <sup>-3</sup> Torr	5 · 10 <sup>-8</sup> to 1 · 10 <sup>5</sup> Pa   5 · 10 <sup>-10</sup> to 1000 mbar   3.75 · 10 <sup>-10</sup> to 750 Torr
■ Accuracy	± 10 % (1 · 10 <sup>-8</sup> to 1 · 10 <sup>-2</sup> mbar)	± 10 % (1 · 10 <sup>-8</sup> to 1 · 10 <sup>-2</sup> mbar) ± 25 % (1 · 10 <sup>-2</sup> to 10 mbar)
■ Reproducibility	± 5 % of reading (1 · 10 <sup>-8</sup> to 1 · 10 <sup>-2</sup> mbar)	
■ Pressure reading gas type dependent	yes	
■ Vacuum connection	KF16/KF 25/CF40	
■ Bakeout temperature	150 °C at chamber flange	
■ Operating temperature	10 ... 50 °C	
■ Filaments	2x iridium, yttria coated (not replaceable)	
■ Materials in vacuum	SS, W, Au, Y <sub>2</sub> O <sub>3</sub> on Ir, glass, Ag, Cu	SS, W, Au, Y <sub>2</sub> O <sub>3</sub> on Ir, glass, Ag, Pt, Cu
■ Weight	ca. 570 g (flange dependent)	
■ Mounting position	any for < 10 mbar, position-dependent for > 10 mbar (see manual)	
■ Dimensions	(HxWxD): 122x73x66 mm	
■ Power supply	24 V ± 10 %, 24 W	
■ Interfaces	Data I/O: D-Sub, 9 pin with RS232, analog (0...10 V, 0...20 mA, 4...20 mA)	
■ Protection category	IP 40	
■ Set points	1 x relais (floating, max. 30 V/0.5 A) 1 x open collector (OC) (max. 30 V/ 0.5 A)	
■ Scope of delivery	gauge, power supply	
■ Corresponding display and control devices	VaX Vacuum Explorer (optional) VMG (optional)	
■ Upgrade via firmware	yes	
■ Appropriate Software	VACOM Vacuum Measurement and Demonstration Program (VVD)	
■ Accessory	Gauge BARION® HV (flange: KF16/ KF 25/CF40) Electronic BARION® HV CABLE-VAX-LAH-X (X = cable length) CABLE-VMG-LAH-X (X = cable length)	Gauge BARION® atm II (flange: KF16/ KF 25/CF40) Electronic BARION® atm II CABLE-VAX-LAH-X (X = cable length) CABLE-VMG-LAH-X (X = cable length)

## Compatible display units and accessories



### VMG

External display and power supply for BARION® atmII wide range gauge.



### Vacuum Explorer VaX

The control unit for active (transducer and passive (conventional) gauges. Take the display technology – vacuum pressure on a mobile device.



### BAFFLE-KF25/ BAFFLE-CF40

The baffle increases the life cycle of the BARION® atmII in demanding applications.