

# BARION<sup>®</sup> *smartF/smart*

EN

Passive Wide Range Gauge (hot cathode and Pirani)



- Innovative in-situ bake-able wide range gauge
- Transducer (*VaX linkB*) or conventional cable usage (*VaX*) possible
- Low heat load <6 W



NICHTS ist unerreichbar.

## Technical Data

■ Product name	BARION® <i>smartF</i>	BARION® <i>smart</i>
■ Principle of measurement	Hot cathode ionization (Bayard-Alpert) and Heat conduction (Pirani)	
■ Measurement range	1 · 10 <sup>-9</sup> to 1 · 10 <sup>5</sup> Pa   1 · 10 <sup>-11</sup> to 1000 mbar   7.5 · 10 <sup>-12</sup> to 750 Torr	
■ Accuracy	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	DN40CF	DN16KF, DN25KF, DN40CF
■ Bakeout temperature	200 °C (in operation with VaX and cable) 150 °C at chamber flange (in operation with VaX <i>linkB</i> )	
■ Operating temperature	200 °C (in operation with VaX and cable) 50 °C (in operation with VaX <i>linkB</i> )	
■ Filaments	2x iridium, yttria coated (replacable)	2x iridium, yttria coated (not replacable)
■ Materials in vacuum	SS, W, Au, Y <sub>2</sub> O <sub>3</sub> on Ir, glass, Ag, Pt, Cu	
■ Weight	1 kg	ca. 0.5 kg (flange dependent)
■ Mounting position	any (see manual)	
■ Electrical Connection	VACOM special plug (11 Pins)	
■ Dimensions in mm	ØxH: 70x91	ØxH: max. 70x97 (flange dependent)
■ Scope of delivery	gauge	
■ Corresponding display and control devices	VaX Vacuum Explorer VaX <i>linkB</i>	
■ Accessory	<ul style="list-style-type: none"> <li>■ BARION-FILAMENT-SINGLE</li> <li>■ CABLE-VAX-BARIONBPS-X (X = cable length)</li> <li>■ CABLE-VAX-VAXlinkB-X (X = cable length)</li> </ul>	<ul style="list-style-type: none"> <li>■ CABLE-VAX-BARIONBPS-X (X = cable length)</li> <li>■ CABLE-VAX-VAXlinkB-X (X = cable length)</li> </ul>

## Compatible display units and accessories



### VaX *linkB*

From passive (conventional) to active (transducer) – the independent electronic for BARION® *smart* and all other passive BARION® gauges.



### Vacuum Explorer VaX

The control unit for active (transducer) and passive (conventional) gauges.

Take the display technology – vacuum pressure on a mobile device.



### CABLE-VAX-BARIONBPS-X

Length of 3, 5, 10 or 15 meters. Other lengths on request. Bakeout temperature up to 200 °C.