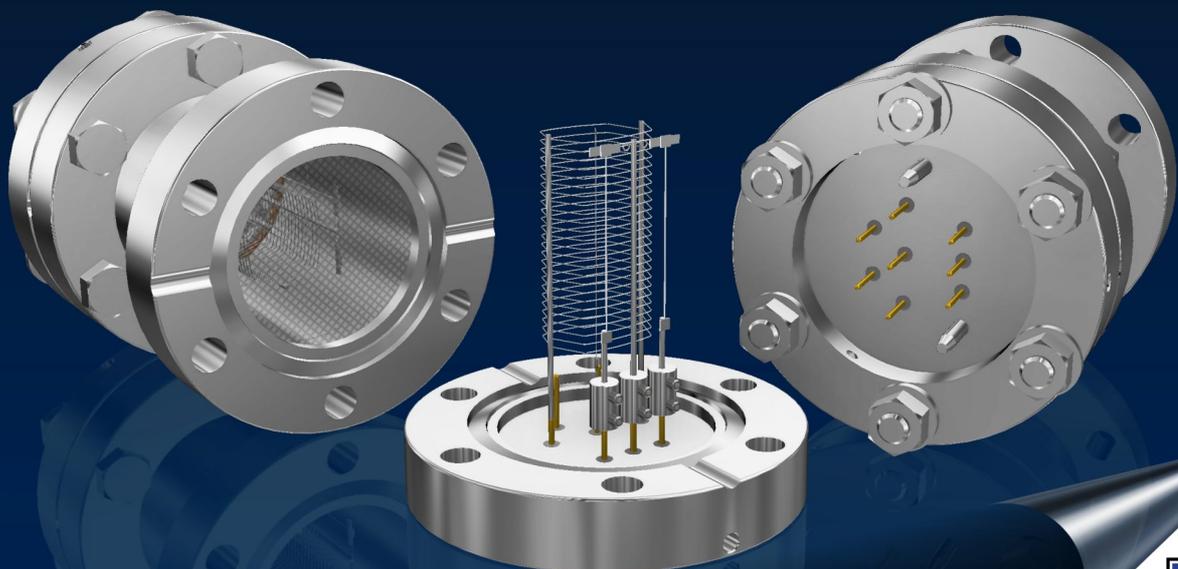


# JEVAmet<sup>®</sup> IOS

## Passive Bayard-Alpert Ionisation Sensor

- pressure measurement between  $10^{-2}$  mbar and  $10^{-11}$  mbar
- high measuring accuracy and reproducibility
- two customer replaceable yttria-coated iridium filaments
- gas-type dependent measuring principle
- vacuum connection CF standard DN40CF
- sensor in stainless steel tube with protection grid
- usable without tube as immersion sensor
- sensor with plugged connection cable bakeable up to 250 °C
- compatible with vacuum control units by JEVATEC and VACOM
- can be combined with already existing components



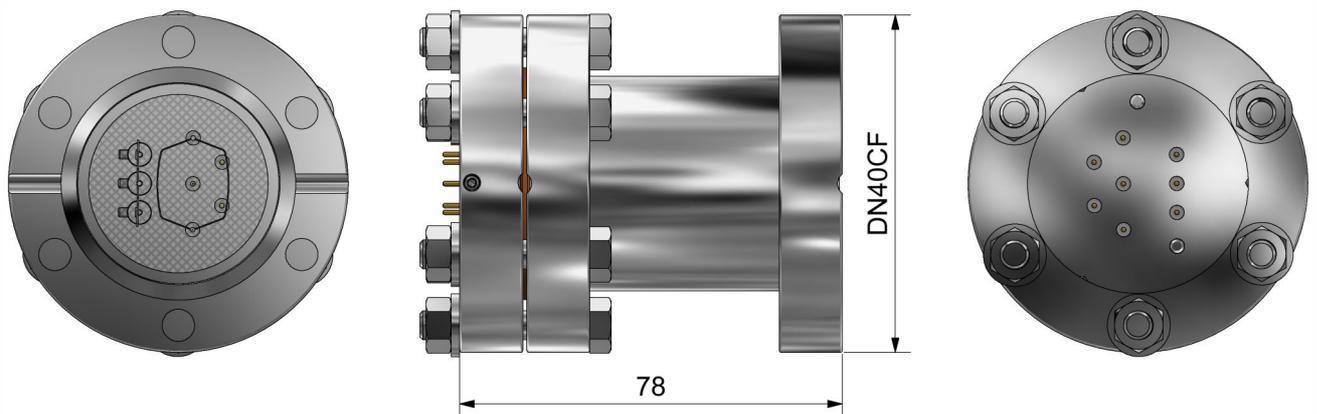
## Technical Data

<b>Vacuum measuring:</b>	Measuring range:	$10^{-2} - 10^{-11}$ mbar
	Measuring principle:	Bayard-Alpert hot cathode ionisation
	Accuracy ( $N_2$ ):	$\pm 10\%$ of measuring value ( $1 \cdot 10^{-2} - 1 \cdot 10^{-8}$ mbar)
	Reproducibility:	$\pm 5\%$ of measuring value
	Sensitivity:	approx. $15 \text{ mbar}^{-1}$ (with tube)
	X-ray limit:	$3 \cdot 10^{-11}$ mbar
	Gas-type dependence:	yes
<b>Sensor:</b>	Vacuum connection:	CF standard DN40CF
	Number of filaments:	2 (stretched), replaceable by customer
	Filaments (cathodes):	Iridium wire, yttria-coated
	Overpressure resistance:	1.5 bar abs.
<b>Materials:</b>	Tube:	stainless steel 1.4301
	Plug-in contacts:	FeNi, gold-plated
	Materials in vacuum:	stainless steel 1.4301, glass ceramic, Cu, W, Mo, Pt, Au, $Y_2O_3$ on Ir
<b>Power supply</b>	Power consumption:	$\leq 15 \text{ W}$ (degas) $\leq 5 \text{ W}$ (measuring mode)
	Connection:	special cable (see accessories)
<b>Bakeout temperature:</b>	with plug and cable:	$250^\circ\text{C}$ max.
<b>Usage:</b>		indoors (2000 m above sea level max.)
<b>Weight:</b>		0.9 kg approx.

## Controller and Accessories

<b>Controller:</b>	JEVATEC – JEVAmet® VCU-B0, JEVAmet® VCU-BM VACOM – MVC3-B0, MVC3-BM
<b>Measuring cables:</b>	JEVAmet® ISL in lengths of 3, 5 or 10 m (other lengths on request) VACOM BSL in various lengths
<b>Replacement filaments:</b>	JEVAmet® Filament Kit (replacement filaments and copper seal)

## Dimensions



(Dimensions in mm)

## More information under:

**JEVATEC GmbH**  
D-07743 Jena, Schreckenbachweg 8  
Phone: +49 3641 3596-0  
Fax: +49 3641 3596-39  
E-mail: [info@jevatec.de](mailto:info@jevatec.de)

**JEVATEC**  
Ideen in der Vakuumtechnik  
[www.jevatec.de](http://www.jevatec.de)

