

## BAG402 Medium to Ultra-High Vacuum Gauge

---

The INFICON single Bayard-Alpert Hot Ion Gauge BAG402 covers a wide measurement range from  $5 \times 10^{-10}$  mbar to  $2.7 \times 10^{-2}$  mbar ( $3.75 \times 10^{-10}$  Torr to  $5 \times 10^{-2}$  Torr). Choose the INFICON BAG402 for affordable and repeatable process to base pressure measurements in a compact active gauge package. The unique, supported dual filaments offer superior accuracy, longterm stability and longevity.



### BENEFITS

---

- Measurement range from  $5 \times 10^{-10}$  mbar to  $2.7 \times 10^{-2}$  mbar ( $3.75 \times 10^{-10}$  Torr to  $5 \times 10^{-2}$  Torr)
- Excellent repeatability in the process pressure range from  $10^{-8}$  ...  $10^{-2}$  mbar of 5%
- Overpressure detection protects the filament from premature burnout
- Two long-life yttrium oxide coated iridium filaments
- Automatic emission current selection reduces control complexity
- Easy to exchange sensing element with on-board calibration data guarantees high reproducibility
- RoHS compliance

### ORDERING INFORMATION

---

Type	BAG402
BAG402 DSUB9 CF40	353-601
BAG402 DSUB9 KF25	353-600

## SPECIFICATIONS

Type	BAG402	
Measurement range (air, O <sub>2</sub> , CO, N <sub>2</sub> )	mbar	5×10 <sup>-10</sup> ... 2.7×10 <sup>-2</sup>
Measurement range (air, O <sub>2</sub> , CO, N <sub>2</sub> )	Torr	3.75×10 <sup>-10</sup> 5×10 <sup>-2</sup>
Accuracy		
10 <sup>-8</sup> ... 10 <sup>-2</sup> mbar	% of reading	±15
Repeatability		
10 <sup>-8</sup> ... 10 <sup>-2</sup> mbar	% of reading	5
Degas (1)		
p < 7.2 × 10 <sup>-6</sup>	mbar	electron bombardment, max. 3 min
Pressure, max.	bar (absolute)	2
Temperature		
Operation (ambient)	°C	0 ... +50
Storage	°C	-20 ... +70
Bakeout at flange without electronics BPG402-S	°C	80
Supply voltage	V (dc)	+20 ... +28
Supply voltage	A (dc)	≤0.8
Output signal analog (4)		
Output signal	V	0 ... +10
Measurement range log / lin	V	0 ... +9
Error signal	V	> +10
Output signal analog (4)		
Voltage vs. pressure	volts per decade	1
Output signal analog (4)		
Load impedance, min.	kΩ	10
Output signal analog (4)		
Secondary analog output		none
Setpoint relay		
Number of setpoints		none
Digital functions		degas and emission
Interface (digital) (2)		Diagnosis port
Emission control		manual
Filament		two Yttriumoxid (Y <sub>2</sub> O <sub>3</sub> ) coated Iridium (Ir)
Filament status / relay		LED / relay

## SPECIFICATIONS

Type		BAG402
Electrical connection		D-Sub, 9-pin, male
Cable length, max.	m (ft.)	100 (330)
Materials exposed to vacuum		Y <sub>2</sub> O <sub>3</sub> , Ir, Pt, Mo, NiFe, NiCr, stainless steel, glass
Internal volume KF / CF	cm <sup>3</sup> (in. <sup>3</sup> )	24 (1.46) / 34 (2.1)
Weight KF / CF	g	450 / 710
Degree of protection		IP30

1) Reduced accuracy during degas

2) Simultaneous use of RS232C or VGC40x series controllers and Fieldbus is not allowed

## SPAREPARTS

	BAG402
Spare sensor head BAG402 DN 25 ISO-KF	354-484
Spare sensor head BAG402 DN 40 CF-R	354-485

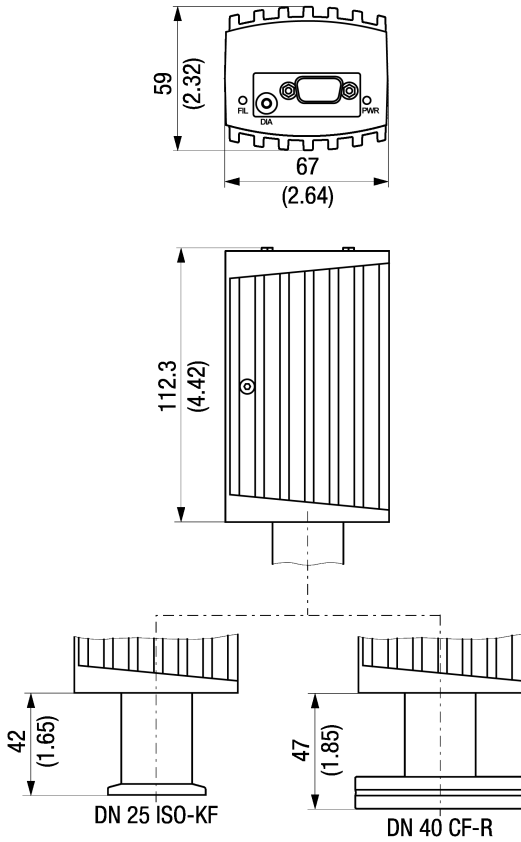
## ACCESSORIES

	BAG402
Diagnostic cable 1.9m (P3)	303-333

## DIMENSIONS

### BAG402 (D-Sub, 9-pin)

mm (inch)



[www.inficon.com](http://www.inficon.com)    [reachus@inficon.com](mailto:reachus@inficon.com)

Due to our continuing program of product improvements, specifications are subject to change without notice. RateWatcher is a trademark of INFICON. All other trademarks are the property of their respective owners.

(2015-04)    © 2015 INFICON