

MAG050, MAG060

Cold Cathode Gauges – Passive

The INFICON passive Cold Cathode Gauge Heads MAG050 and MAG060 are designed for use with the INFICON Vacuum Gauge Controller VGC083C. They are constructed of a compact metal design resulting in a simple yet rugged gauge suitable for numerous industrial applications. Gauge Head MAG050 utilizes an elastomer internal seal while the MAG060 uses a metal seal allowing pressure measurements in the UHV range. The Gauge Head assembly can be easily disassembled and cleaned allowing long term use with minimal down time. A Gauge Head ignition aid mounted on the anode improves the time it takes to set the Cold Cathode Gauge Head on.

MAG050 measures low as 2×10^{-9} hPa | mbar and MAG060 down to 1×10^{-10} hPa | mbar.

The MAG050 is made for industrial use in different applications and bakeable to 150 °C.

The MAG060 is made for R&D applications down to 1×10^{-10} hPa | mbar and bakeable up to 250 °C and radiation resistant.



ADVANTAGES

- Reliable and proven gauge head design
- Bakeable to 150 °C (MAG050) or 250 °C (MAG060).
- Good ignition properties
- Corrosion resistant with ceramic feed through
- MAG060 radiation resistant design
- Easy to maintain

ORDERING INFORMATION

Type	MAG050 FPM sealed	MAG060 metal sealed
DN 25 ISO-KF	399-840	–
DN 40 ISO-KF	399-841	399-845
DN 40 CF-F	399-842	399-846

ACCESSORIES

Cable to VGC083C	MAG050/060 250 °C	MAG050/060 80 °C
3 m (9.0 ft)	399-830	399-820
8 m (25.0 ft)	399-831	399-821
15 m (50.0 ft)	399-832	399-822

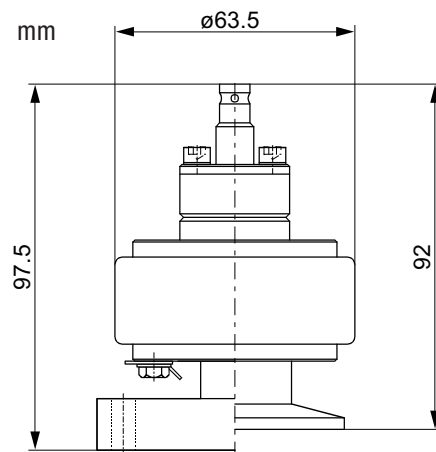
Other lengths on request

SPECIFICATIONS

Type		MAG050 FPM sealed	MAG060 metal sealed
Measurement system		cold cathode ionization measurement system (according to the inverted magnetron principle)	
Measurement range (air, N ₂)	hPa mbar	2×10 ⁻⁹ ... 5×10 ⁻³	1×10 ⁻¹⁰ ... 5×10 ⁻³
Accuracy (N ₂ , typical)	% of reading	30 ¹⁾	
Repeatability (typical)	% of reading	5 ¹⁾	
Overpressure	kPa (bar)	≤900 (9)	
Mounting orientation		any	
Admissible temperature			
Operation	with normal cable °C	+5 ... +80	+5 ... +80
	with high temperature cable °C	+5 ... +150	+5 ... +250
Bakeout	°C	150	250
Storage	°C	-40 ... +80	-40 ... +80
Relative humidity		max. 80 % at temperatures up to +31 °C, decreasing to 50 % at +45 °C	
Use		indoors only, altitude up to 2000 m	
Radiation resistance	rad	–	10 ⁹
Operating voltage (in measuring chamber)	kV	≤3.3	
Operating voltage (in measuring chamber)	µA	≤700	
Electrical connection		SHV coaxial cable	
Connector			
Type			
Cable length between gauge & measurement unit	m	≤100 ≤40, if the lower limit of the measurement range is used	≤100 ≤6, if the lower limit of the measurement range is used
Materials exposed to vacuum		stainless steel, Al ₂ O ₃ , FPM, Mo	stainless steel, Al ₂ O ₃ , Ag, Mo
Internal volume	cm ³	20	
Weight			
DN 25 ISO-KF	g	600	–
DN 40 ISO-KF	g	600	600
DN 40 CF-F	g	850	850
CE compliance ¹⁾	EMC Safety RoHS	2014/30/EU, EN61000-6-2, EN61000-6-4, EN61326-1 EN61010-1 2011/65/EU	

¹⁾ When used with VGC083C

DIMENSIONS



INFICON Instruments for Intelligent Control™

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Due to our continuing program of product improvements, specifications are subject to change without notice.

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