



Pressure &

Vacuum Measurement Solutions

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623F

AMBIENT TEMPERATURE BARATRON® ABSOLUTE CAPACITANCE MANOMETER WITH TRIP POINTS

The 623F Absolute Capacitance Manometer features two user adjustable process trip point relays, each with an adjustment range from 0.1% to 100% of Full Scale or voltage equivalent 0.01 to 10 VDC. Dual color LEDs indicate relay status. Typical relay uses include pump cross-over and valve activation. The 623F is an ambient temperature transducer, and is available in Full Scale ranges of 10, 20, 100, 500, and 1000 Torr. The instrument operates with ± 15 VDC ($\pm 5\%$) input at < 100 mA, and provides an output of 0 to 10 VDC linear with pressure.

The sensor of the 623F exposes only Inconel® to the process permitting the use with corrosive or dirty gases. Measurements are independent of gas composition.

Features & Benefits

Accurate

- Percent of Reading accuracy for more repeatable output signal
- Two process trip point relays with LED indicators and voltage test points
- Measures total pressure directly, independent of gas composition

Robust

- All Inconel® corrosion resistant wetted surfaces
- Integrated sump (US Patent #5,822,685) provides particle protection
- High overpressure rating for improved reliability

Compatible

- Cleanroom-compatible stainless steel package
- Compatible with earlier Baratron® capacitance manometers, MKS power supply/readout modules and pressure controllers

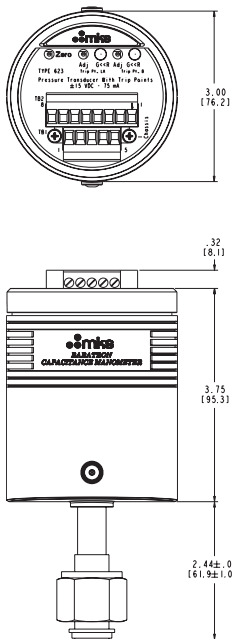


Specifications and Ordering Information

Full Scale Ranges	10, 20, 100, 500, and 1000 Torr
Resolution	0.001% of F.S.
Accuracy	0.25% of Reading (including non-linearity, hysteresis, and non-repeatability)
Temperature Coefficients	
Zero	0.005% of F.S./°C
Span	0.04% of Rdg./°C
Ambient Operating Temperature	0°C to 50°C
Volume	6.3 cc
Warm-Up Time	30 minutes
Overpressure Limit	45 psia (310 kPa)
Materials Exposed to Gases	Incoloy® and Inconel® (Optional fittings: 316 SS)
Input Power Required	±15 VDC ±5% @ 75 mA
Output Signal	Pressure: 0 to +10 VDC into > 10K Ω load
Output Relays	SPDT contacts rated at 1 Amp @ 30 VDC or 0.5 Amp @ 30 VAC resistive
Trip Point Level Signal	0.01 to 10 VDC for each trip point
Compliance	CE
Fittings	Standard: 1/2" (12.7 mm) tubulation; Optional: 8 VCR® female, Mini-CF, NW 16 KF, NW 25 KF

Ordering Code Example: 623F11TAE

Model	Code	Configuration
623F	623F	623F
Ranges mmHg (Torr)		
10	11T	11T
20	21T	
100	12T	
500	52T	
1000	13T	
Fittings		
1/2" Tube	A	A
8 VCR	B	
Mini-CF	C	
NW 16 KF	D	
8 VCO Female	E	
2 3/4" Rotatable CF	L	
NW 25 KF	Q	
Accuracy (% of Reading)		
0.25%	E	E
0.15% (Optional 10, 100, and 1000 Torr only)	D	



Dimensional Drawing —

Note: Unless otherwise specified, dimensions are nominal values in inches (mm referenced).



MKS Instruments, Inc. Global Headquarters

2 Tech Drive, Suite 201
Andover, MA 01810
Tel: 978.645.5500
Tel: 800.227.8766 (in U.S.A.)
Web: www.mksinst.com

MKS Instruments, Inc. Pressure & Vacuum Measurement Solutions

Six Shattuck Road
Andover, MA 01810
Tel: 978.975.2350

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