



Pressure &

Vacuum Measurement Solutions

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## 623F

### UNHEATED ABSOLUTE BARATRON® CAPACITANCE MANOMETER WITH TRIP POINTS

The 623F unheated 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 unheated temperature transducer, and is available in Full Scale ranges of 10, 20, 100, 500, and 1000 Torr. The instrument operates with  $\pm 15$  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

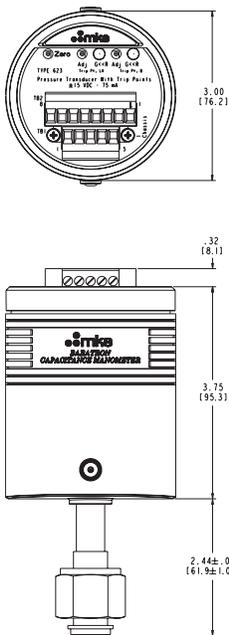


# Specifications and Ordering Information

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

## Ordering Code Example: 623F11TAE

Model	Code	Configuration
623F	623F	623F
<b>Ranges mmHg (Torr)</b>		
10	11T	11T
20	21T	
100	12T	
500	52T	
1000	13T	
<b>Fittings</b>		
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	
<b>Accuracy (% of Reading)</b>		
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).



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