



# 625F

## HEATED (100°C) ABSOLUTE BARATRON® CAPACITANCE MANOMETER WITH TRIP POINTS

The 625F absolute Baratron® 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 625F is heated to 100°C, and is available in Full Scale ranges of 1, 10, 20, 100, 500, and 1000 Torr. The instrument operates with ±15 VDC (±5%) input at <600 mA, and provides an output of 0 to 10 VDC linear with pressure.

The sensor of the 625F exposes only Inconel® to the process permitting the use with corrosive or dirty gases. Measurements are independent of gas composition. The modern stainless steel enclosure provides a cleanroom-compatible product.

### 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

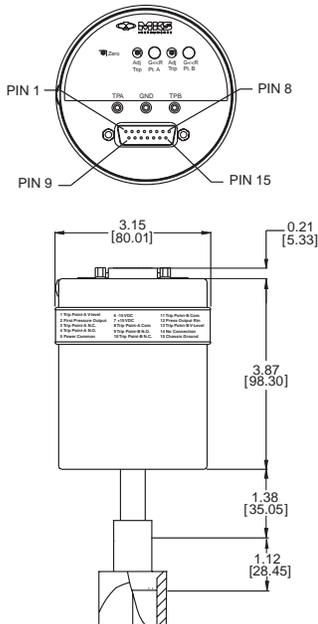
- All Inconel corrosion resistant wetted surfaces
- Integrated sump (US Patent #5,822,685) provides particle protection
- High overpressure rating for improved reliability

#### 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>	1, 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	0.002% of Full Scale/°C
Span	0.02% of Reading/°C
<b>Ambient Operating Temperature</b>	15°C to 50°C
<b>Volume</b>	6.3 cc
<b>Warm-Up Time</b>	2 hours
<b>Overpressure Limit</b>	45 psia (310 kPa)
<b>Materials Exposed to Gases</b>	Inconel® (Optional fittings: 316 SS)
<b>Input Power Required</b>	±15 VDC ±5% @ 0.60 Amps (max.)
<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



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

**Ordering Code Example: 625F11TBAEB**

Model	Code	Configuration
625F	625F	625F
<b>Ranges mmHg (Torr)</b>		
1	01T	11T
10	11T	
20	21T	
100	12T	
500	52T	
1000	13T	
<b>Fittings</b>		
1/2" Tube	BA	BA
8 VCR	CE	
Mini-CF	HA	
NW 16 KF	GA	
NW 16 KF, right angle	GE	
NW 25 KF	GC	
<b>Accuracy (% of Reading)</b>		
0.25%	E	E
<b>Connector</b>		
15 pin Type "D" with Thread Locks	B	B
15 pin Type "D" with Slide Locks	P	
Terminal Block Adapter	U	
15 pin Type "D", Filtered	V	



**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