



Pressure &

Solutions Vacuum Measurement

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624F

HEATED (45°C) ABSOLUTE BARATRON® CAPACITANCE MANOMETER WITH TRIP POINTS

The 624F 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 624F is heated to 45°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 <400 mA, and provides an output of 0 to 10 VDC linear with pressure.

The sensor of the 624F 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

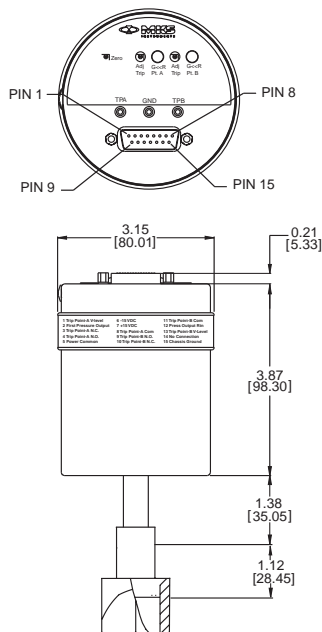
Compatible

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



Specifications and Ordering Information

Full Scale Ranges	1, 5, 10, 20, 100, 500, and 1000 Torr
Resolution	0.001% of Full Scale
Accuracy	0.12% of Reading (including non-linearity, hysteresis, and non-repeatability)
Temperature Coefficients	
Zero	0.002% of Full Scale/°C
Span	0.02% of Reading/°C
Ambient Operating Temperature	15°C to 40°C
Volume	6.3 cc
Warm-Up Time	2 hours
Overpressure Limit	45 psia (310 kPa)
Materials Exposed to Gases	Inconel® (Optional fittings: 316 SS)
Input Power Required	±15 VDC ±5% @ 0.40 Amps (max.)
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
Fittings	
Standard	1/2" (12.7 mm) tubulation
Optional	8 VCR® female, Mini-CF, NW 16 KF, NW 25 KF
Compliance	CE



Dimensional Drawing —

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

Ordering Code Example: 624F11TBACB

Model	Code	Configuration
624F	624F	624F
Ranges mmHg (Torr)		
1	01T	11T
5	05T	
10	11T	
20	21T	
100	12T	
500	52T	
1000	13T	
Fittings		
1/2" Tube	BA	BA
8 VCR	CE	
Mini-CF	HA	
NW 16 KF	GA	
NW 25 KF	GC	
Accuracy (% of Reading)		
0.12%	C	C
Connector		
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	



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