



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 ($\pm 5\%$) 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

Resolution

Accuracy

Temperature Coefficients

Zero

Span

Ambient Operating Temperature

Volume

Warm-Up Time

Overpressure Limit

Materials Exposed to Gases

Input Power Required

Output Signal

Output Relays

Trip Point Level Signal

Fittings

Standard

Optional

Compliance

1, 5, 10, 20, 100, 500, and 1000 Torr

0.001% of Full Scale

0.12% of Reading (including non-linearity, hysteresis, and non-repeatability)

0.002% of Full Scale/°C

0.02% of Reading/°C

15°C to 40°C

6.3 cc

2 hours

45 psia (310 kPa)

Inconel® (Optional fittings: 316 SS)

±15 VDC ±5% @ 0.40 Amps (max.)

Pressure: 0 to +10 VDC into > 10K Ω load

SPDT contacts rated at 1 Amp @ 30 VDC or 0.5 Amp @ 30 VAC resistive

0.01 to 10 VDC for each trip point

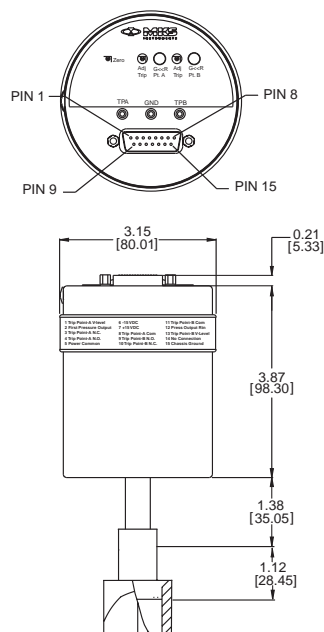
1/2" (12.7 mm) tubulation

8 VCR® female, Mini-CF, NW 16 KF, NW 25 KF

CE

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		
½" 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	



Dimensional Drawing —

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



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