

PM-1 Digital Pressure Indicator

FEATURES

- Single or dual pressure measurement display
- Digital interface capability via RS232 interface
- Large LCD display
- Pressure modules permanently installed (PPT-1 and PPT-2)
- Pressure measurement accuracies of $\pm 0.10\%$ to $\pm 0.025\%$ of span, range dependent



PM-1
Digital Pressure Indicator

SPECIFICATIONS Reference Temperature: 70 °F

| | |
|------------------------------|--|
| Accuracy: | From $\pm 0.1\%$ to $\pm 0.025\%$ of span, depending on range. |
| Process Connection: | $\frac{1}{8}$ NPT female |
| Calibration: | Traceable calibration certificate included for each pressure module |
| Recalibration: | Complete recalibration can be accomplished over instrument RS232 interface. Zero and span can be accomplished via front panel keypad. |
| Resolution: | $\pm 0.002\%$ of span (max.) |
| Repeatability: | $\pm 0.01\%$ of span (all psi ranges) $\pm 0.01\%$ of span (ranges of 1 through 200 in. H ₂ O) $\pm 0.02\%$ of span (ranges below 1 in. H ₂ O) |
| Operating Temp Range: | 32 °F to 120 °F (0 °C to 49 °C) Temp. Comp. Range: 20 °F to 120 °F (0 °C to 49 °C) |
| Temperature Effect: | $\pm 0.004\%$ of span per °F over compensated range from reference temperature of 70 °F (± 3 °F) |
| Optional Temp. Compensation: | Eliminates temperature error from 20 ° to 120 °F (-7 °C to 49 °C). Available only on PPM2 sensors. |
| Storage Temp.: | -4 °F to 158 °F (-20 °C to 70 °C) |

| ORDERING CODE | PM | 2 | L | N | P | R |
|---|----|---|---|---|---|---|
| Part Number | | | | | | |
| PM - Ashcroft® base unit; no sensors | PM | | | | | |
| Power Supply | | | | | | |
| 1 - 110 Vac/60 Hz | | | | | | |
| 2 - 220 Vac/50 Hz | | 2 | | | | |
| 3 - 100 Vac/60 Hz | | | | | | |
| 4 - No power supply provided | | | | | | |
| Optional Features | | | | | | |
| L - Back Lit display | | | L | | | |
| N - Nicad batteries | | | | N | | |
| A - Alkaline batteries | | | | | | |
| H - Handle | | | | | | |
| P - Panel mounting hardware | | | | | P | |
| R - Series 7 retrofit panel (option P will be required to mount this) | | | | | | R |
| E - Non-standard engineering units | | | | | | |

| | |
|---------------------------------------|---|
| Media: | PPM1: Sensor Type: Clean, dry, non-conductive, non-corrosive gas PPM2: Sensor Type: Any medium compatible with 316 Stainless steel |
| Overpressure: | PPM1 - Low pressure sensors Under/Overpressure capability -15 to 50 psi Maximum static (line) pressure 100 psi PPM2 - Medium/High pressure sensors Overpressure capability 200% for ranges up to 1000 psi 150% for ranges over 1000 psi |
| Display: | Liquid crystal |
| Case Material: | High Impact ABS, black |
| Power Requirements: | Standard: 110 Vac, 60 Hz adapter provided Optional: 220 Vac, 50 Hz or 100 Vac adapter, Nicad or alkaline battery pack |
| Push Button Keypad Functions Include: | Zero adjust, 12 Standard engineering unit select, Tare function, Min/Max recall, Print, Damping, Port select, Display hold, |
| Dual sensor modes: | Add or subtract pressure applied to one module from the second module (differential pressure) |
| Field Recalibratable: | Yes |
| Warm Up: | 5 Min. to rated accuracy 30 Min. to complete stability |
| Display Size: | 2 Line, 0.38" height per line 16 alpha or numeric characters per line (Max) |
| Display Update: | 100 ms |

PPM-1 Gauge, in. H₂O, Differential Pressure Modules

| ORDERING CODE | Example: | PPM | 1 | C | A | D | INWC/ | 100 | A |
|---|----------|-----|---|---|---|---|-------|-----|---|
| Model | | | | | | | | | |
| PPM - Heise pressure sensor | | PPM | | | | | | | |
| Sensor Type | | | | | | | | | |
| 1 - Capacitive sensor — Low pressure 0.25 - 200 in H ₂ O | | | 1 | | | | | | |
| Sensor Accuracy | | | | | | | | | |
| B - ±0.1% Accuracy (STD.) | | | | | | | | | |
| C - ±0.06% Accuracy (STD.) ("C" accuracy is ±0.06% for ranges 1.0 in H ₂ O and higher) | | | | C | | | | | |
| C - ±0.07% Accuracy (STD.) ("C" accuracy is ±0.07% for ranges 0.5 in H ₂ O and below) | | | | | | | | | |
| Media Compatibility | | | | | | | | | |
| A - Non-isolated sensor, clean dry gas | | | | | A | | | | |
| Pressure Type | | | | | | | | | |
| C - Compound | | | | | | | | | |
| D - Differential | | | | | | D | | | |
| Pressure Units | | | | | | | | | |
| INWC | | | | | | | INWC/ | | |
| Ranges | | | | | | | | | |
| Differential | | | | | | | | | |
| 0.25 - IWC (in. H ₂ O) | | | | | | | | | |
| 0.5 - IWC (in. H ₂ O) | | | | | | | | | |
| 1.0 - IWC (in. H ₂ O) | | | | | | | | | |
| 2.0 - IWC (in. H ₂ O) | | | | | | | | | |
| 3.0 - IWC (in. H ₂ O) | | | | | | | | | |
| 5.0 - IWC (in. H ₂ O) | | | | | | | | | |
| 10 - IWC (in. H ₂ O) | | | | | | | | | |
| 15 - IWC (in. H ₂ O) | | | | | | | | | |
| 25 - IWC (in. H ₂ O) | | | | | | | | | |
| 50 - IWC (in. H ₂ O) | | | | | | | | | |
| 100 - IWC (in. H ₂ O) | | | | | | | | 100 | |
| 150 - IWC (in. H ₂ O) | | | | | | | | | |
| 200 - IWC (in. H ₂ O) | | | | | | | | | |
| Compound | | | | | | | | | |
| 0.125 - IWC (in. H ₂ O) | | | | | | | | | |
| 0.25 - IWC (in. H ₂ O) | | | | | | | | | |
| 0.50 - IWC (in. H ₂ O) | | | | | | | | | |
| 1.0 - IWC (in. H ₂ O) | | | | | | | | | |
| 1.5 - IWC (in. H ₂ O) | | | | | | | | | |
| 2.5 - IWC (in. H ₂ O) | | | | | | | | | |
| 5.0 - IWC (in. H ₂ O) | | | | | | | | | |
| 7.5 - IWC (in. H ₂ O) | | | | | | | | | |
| 12.5 - IWC (in. H ₂ O) | | | | | | | | | |
| 25 - IWC (in. H ₂ O) | | | | | | | | | |
| 50 - IWC (in. H ₂ O) | | | | | | | | | |
| 75 - IWC (in. H ₂ O) | | | | | | | | | |
| 100 - IWC (in. H ₂ O) | | | | | | | | | |
| Inlet Fitting | | | | | | | | | |
| A - 1/8 NPT Female | | | | | | | | | A |

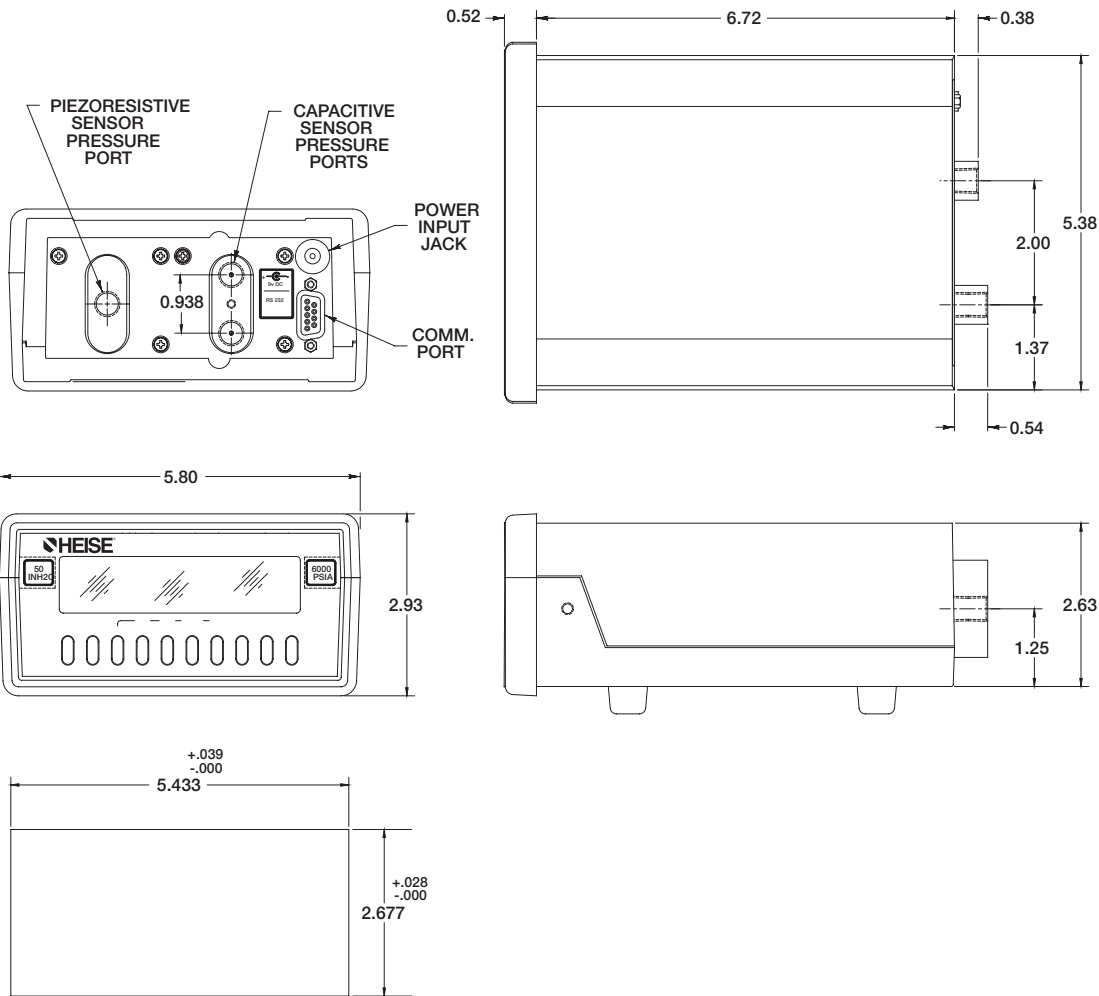
PPM-2 Gauge, Absolute Pressure Modules

| ORDERING CODE | Example: | PPM | 2 | C | I | G | PSI | 100 | A |
|---|----------|-----|---|---|---|---|-----|-----|---|
| Model | | | | | | | | | |
| PPM - Heise pressure sensor | | PPM | | | | | | | |
| Sensor Type | | | | | | | | | |
| 2 - Piezoresistive sensor — High pressure 5 psi to 10,000 psi | | | 2 | | | | | | |
| Accuracy | | | | | | | | | |
| B - ±0.1% accuracy (STD.) | | | | | | | | | |
| C - ±0.05% accuracy (STD.) | | | | C | | | | | |
| D - ±0.025% accuracy (STD.) | | | | | | | | | |
| F - ±0.1% Enhanced temperature compensation 20 °F to 120 °F | | | | | | | | | |
| G - ±0.05% Enhanced temperature compensation 20 °F to 120 °F | | | | | | | | | |
| H - ±0.025% Enhanced temperature compensation 20 °F to 120 °F | | | | | | | | | |
| Media Compatibility | | | | | | | | | |
| I - Isolated (no special cleaning) | | | | | I | | | | |
| W - Clean to ASME B40-100 Level IV | | | | | | | | | |
| Pressure Type | | | | | | | | | |
| G - Gauge | | | | | | G | | | |
| A - Absolute | | | | | | | | | |
| V - Vacuum | | | | | | | | | |
| C - Compound | | | | | | | | | |
| Pressure Units | | | | | | | | | |
| psi | | | | | | | PSI | | |
| Ranges | | | | | | | | | |
| Isolated | | | | | | | | | |
| 5 - 5 psi | | | | | | | | | |
| 10 - 10 psi | | | | | | | | | |
| 15 - 15 psi | | | | | | | | | |
| 20 - 20 psi | | | | | | | | | |
| 25 - 25 psi | | | | | | | | | |
| 30 - 30 psi | | | | | | | | | |
| 50 - 50 psi | | | | | | | | | |
| 60 - 60 psi | | | | | | | | | |
| 100 - 100 psi | | | | | | | | 100 | |
| 150 - 150 psi | | | | | | | | | |
| 200 - 200 psi | | | | | | | | | |
| 250 - 250 psi | | | | | | | | | |
| 300 - 300 psi | | | | | | | | | |
| 500 - 500 psi | | | | | | | | | |
| 600 - 600 psi | | | | | | | | | |
| 1000 - 1,000 psi | | | | | | | | | |
| 1500 - 1,500 psi | | | | | | | | | |
| 2000 - 2,000 psi | | | | | | | | | |
| 2500 - 2,500 psi | | | | | | | | | |
| 3000 - 3,000 psi | | | | | | | | | |
| 5000 - 5,000 psi | | | | | | | | | |
| 6000 - 6,000 psi | | | | | | | | | |
| 7500 - 7,500 psi | | | | | | | | | |
| 10000 - 10,000 psi (gauge only) | | | | | | | | | |
| Vacuum | | | | | | | | | |
| 15 - 15 psi | | | | | | | | | |
| Compound | | | | | | | | | |
| 10 - ±10 psi | | | | | | | | | |
| 15 - ±15 psi | | | | | | | | | |
| 30 - -15/30 psi | | | | | | | | | |
| 60 - -15/60 psi | | | | | | | | | |
| Inlet Fitting | | | | | | | | | |
| A - ½ NPT Female (STD.) | | | | | | | | | A |
| B - ½ NPT Female w/flush port | | | | | | | | | |
| C - G ½ BSP inlet manifold | | | | | | | | | |
| D - G ½ BSP inlet w/flush port | | | | | | | | | |

PM-1 Digital Pressure Indicator

DIMENSIONS In inches

For reference only, consult Ashcroft for specific dimensional drawings



Panel Cutout: 5.433" x 2.677"

Weight: 3.0 lbs (with 2 modules installed)