



## Application

- ✓ Clean rooms
- ✓ Rooms differential pressure
- ✓ HVAC
- ✓ Filter monitoring
- ✓ Fan pressure checking
- ✓ Monitoring pressure drops
- ✗ **Do not use** with corrosive gas to aluminum
- ✗ **Calibrated in vertical position.** For maximum accuracy they should be recalibrated in the same position that they are going to be installed shall it be other than vertical

## Special Features

- ✓ Less wearing and tearing due to minimized physical contact of internals
- ✓ Zero adjusting screw
- ✓ Standard accessories for installation (included in delivery)
- ✓ low pressure differential pressure measurement

## Description

In industries like HVAC where monitoring the air pressure difference between two locations is of high importance, reliable and accurate means to measure differential pressure are needed. There are several ways you can measure low pressure differential pressure. The simplest, and probably the best way considering price and durability, is to measure this value by means of a Differ-Mate differential pressure gauge model 132.

The model 132 is constructed from a coated Aluminum case that can withstand up to 160 hours straight exposure to salt water spray without any noticeable corrosion (tested in InstruMate production plant).

The lack of physical contact between the parts means that there is no wear inside the system that can affect the instrument's accuracy in any way. Differ-Mate 132 with its frictionless movement technology and unique choice of magnet is setting the bar high for low pressure differential pressure gauges.

## Default Specification

|  |   |
|--|---|
| Service  | Nominal size in mm                                  |
| Air or other non-inflammable gases   | 120   |
| Accuracy according to ASME B40.100   |   |
| Grade C 4-3-4% for positive and compound ranges $\leq$ 125Pa or equivalents                      |   |
| Grade B 3-2-3% for positive and compound ranges $>$ 125Pa or equivalents                         |   |
| Process Connection   |   |
| 2 pairs of 1/8 NPT female connection for high and low on the side and on the backside of housing |   |
| Overpressure blow out plug   | Technology  |
| Silicon, opens at about 26 psi   | Magnet and diaphragm                                |
| Magnet   | Permissible Temperature                             |
| Nickel-plated Nd <sub>2</sub> Fe <sub>14</sub> B<br>(neodymium magnet)                           | Ambient: -10...+60 °C<br>Medium: -5...55 °C Maximum |
| Pressure units   | Pressure Element                                    |
| Pascal, Inch W.C   | thin diaphragm                                      |
| Pointer  | Housing   |
| Indicating needle  | Aluminum, Grey coated                               |
| Window   | Dial  |
| Break Resistant Acrylic  | Aluminum  |
| Static Pressure Limitation   | Movement  |
| -0.6 bar to 1 bar Maximum  | Frictionless Technology                             |

## Options

- ✓ Requested process connections other than stated in the table
- ✓ Addition of Maximum pointer
- ✓ Other Scale ranges
- ✓ Mirror dial or colorful dial (as specified by customer)

Pressure ranges of Differ-Mate 132

Dual scale ranges English / Metric - default ranges in stock

|                            |                            |                                    |                            |
|----------------------------|----------------------------|------------------------------------|----------------------------|
| 0...0.25 InWC<br>0...60 Pa | 0...0.5 InWC<br>0...125 Pa | -0.25...+0.25 InWC<br>-60...+60 Pa | 0...1 InWC<br>0...250 Pa   |
| 0...2 InWC<br>0...500 Pa   | 0...3 InWC<br>0...750 Pa   | 0...4 InWC<br>0...1 kPa            | 0...5 InWC<br>0...1.25 kPa |
| 0...6 InWC<br>0...1.5 kPa  | 0...8 InWC<br>0...2 kPa    | 0...10 InWC<br>0...2.5 kPa         | 0...15 InWC<br>0...3.7 kPa |
| 0...20 InWC<br>0...5 kPa   | 0...25 InWC<br>0...6.2 kPa | 0...50 InWC<br>0...12.4 kPa        | 0...60 InWC<br>0...15 kPa  |

\* InWC: Inch of Water Column

\* Pa: Pascal

Single scale ranges InWC

|               |              |              |                           |
|---------------|--------------|--------------|---------------------------|
| 0...0.25 InWC | 0...0.5 InWC | 0...1 InWC   | 0...2 InWC                |
| 0...3 InWC    | 0...4 InWC   | 0...5 InWC   | 0...6 InWC                |
| 0...8 InWC    | 0...10 InWC  | 0...15 InWC  | 0...20 InWC               |
| 0...25 InWC   | 0...50 InWC  | 0...60 InWC  | 0...80 InWC               |
| 0...100 InWC  | 0...120 InWC | 0...160 InWC | 0...250 InWC <sup>1</sup> |

1. without a blow out plug

Single scale ranges mmWC or cmWC

|              |               |              |                |
|--------------|---------------|--------------|----------------|
| 0...6 mmWC   | 0...10 mmWC   | 0...15 mmWC  | 0...25 mmWC    |
| 0...50 mmWC  | 0...80mmWC    | -5...+5 mmWC | -10...+10 mmWC |
| 0...10 cmWC  | 0...12.5 cmWC | 0...15 cmWC  | 0...20 cmWC    |
| 0...25 cmWC  | 0...30 cmWC   | 0...50 cmWC  | 0...80 cmWC    |
| 0...100 cmWC | 0...150 cmWC  | 0...200 cmWC | 0...250 cmWC   |
| 0...300 cmWC | -2...+2 cmWC  | -5...+5 cmWC | -15...+15 cmWC |

\* mmWC: millimeter of Water Column

\* cmWC: Centimeter of Water Column

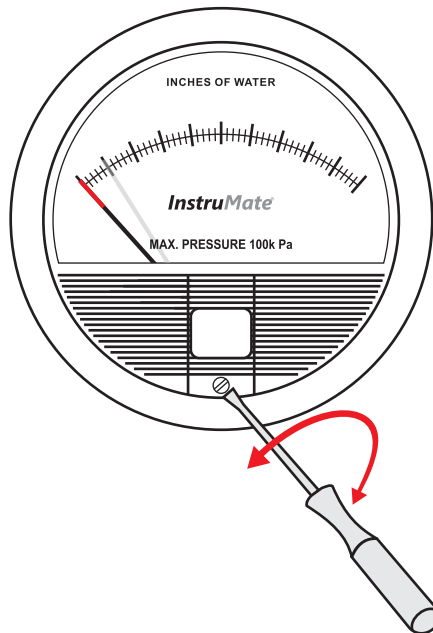
## Accessories



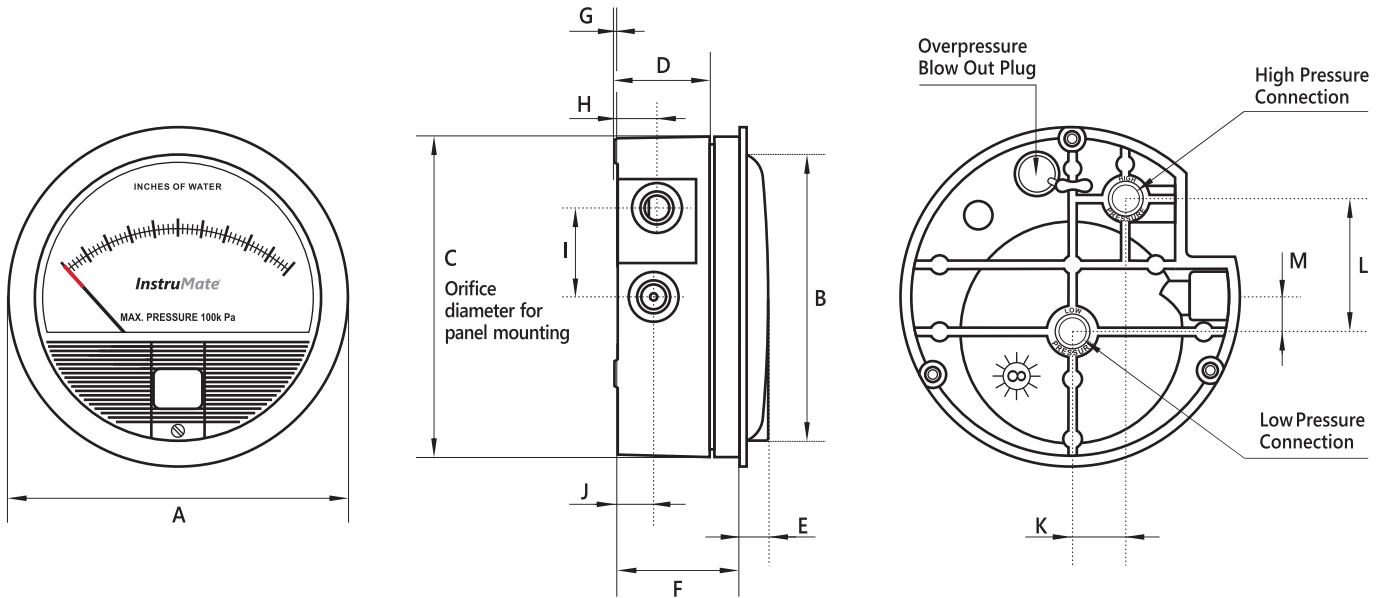
Accessories  
Included in the delivery

## Zero Adjustment

There is a zero adjustment screw on front window, very well sealed and easily accessible. After calibrating InstruMate 132 in factory, we make the pointer to stand a little ahead of zero to make sure end user will not alter the calibration by moving the pointer in wrong direction against zero stop. So please kindly return the pointer to zero position after installation. Both high and low connections must be open to ambient atmosphere pressure when you are doing so.



Dimensions (in mm)



| NS  | A   | B   | C     | D  | E  | F  | G   | H  | I    | J  | K    | L    | M  | KG    |
|-----|-----|-----|-------|----|----|----|-----|----|------|----|------|------|----|-------|
| 120 | 120 | 101 | 113.7 | 34 | 11 | 44 | 0.6 | 13 | 31.5 | 12 | 17.5 | 44.5 | 13 | 0.432 |

How To Order

Product Group Name    Model    Scale Range    Options

Example:

|             |     |                          |   |
|-------------|-----|--------------------------|---|
| Differ-Mate | 132 | 0...3 InWC<br>0...750 Pa | - |
|-------------|-----|--------------------------|---|

Or simply order by item number on the basis of your previous purchases.

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