



Model: 1650  
MAGNET HELIC DESIGN  
Indicating Positive, Negative or Differential

#### FEATURES:

- \* Magnet-helix indicating mechanism ideal for low DP measurement
- \* A wide selection of ranges from 0 to 30Pa, up to 30Kpa
- \* Inertia-free, drift-free pointer indication

Working Principle of magnet-helix indicating mechanism  
When pressure is applied to both sides of the diaphragm in operation, any difference in pressure causes the diaphragm, the spring that the diaphragm is linked to, and the magnet attached to the spring to move.

The movement of the magnet forces the magnet helix

to turn in order to maintain the gap, and the pointer fixed to the helix turns with it.

#### APPLICATIONS:

The 1650 series DP gauges are designed to measure positive, negative (vacuum) or differential pressure of low air and non-corrosive gases with a competitive price. They are widely used for filter condition checks, HVAC control, and the measurement of fan and blower pressures, air velocity, and pressure drop across orifice plates applications, as well as other applications in the pharmaceutical and semiconductor manufacturing industry.

#### SPECIFICATIONS:

Service: Air and non-combustible, compatible gases

Dial size: 4" (114mm)

Housing: Die cast aluminum case and bezel, gray coating,

Window: Easy to read clear acrylic window

Range: 0 to 30Pa, up to 30Kpa, see details of range selection chart

Accuracy: less than 125PA accuracy : 4%, others range accuracy : 2.5%

Ambient temperature: -7 to 60 deg C

Pressure limit: -68 to 100Kpa

Process connection: 1/8" female NPT, duplicate high and low pressure taps: one pair side and one pair back

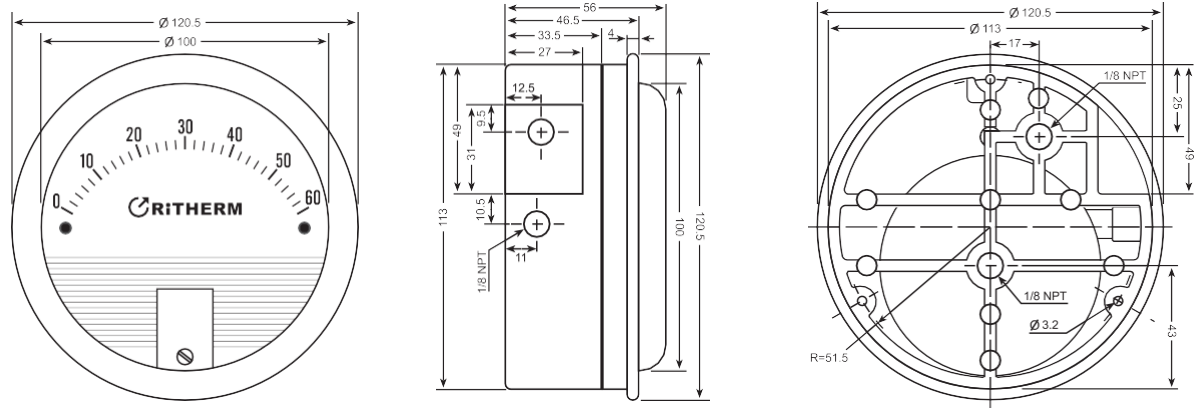
Mounting position: Vertical

Net weight: 486g

Standard accessories: Two 1/8"NPT plugs for duplicate pressure taps, two 1/8" pipe thread to rubber tubing adapter, and three flush mounting adapters with screws

Mounting: Surface mounting, Flush or panel mounting, Pipe mounting

Dimension drawing:



Range selection chart:

Model	Range in W.C	Model	Range mm W.C	Model	Range cm W.C	Model	Range KPa	Model	Range Pa
A2-00IN	4	A2-6MM	0-6	A2-1CM	0-1	A2-1KPA	0-1	A2-30PA	0-30
A2-0.25IN	4	A2-8MM	0-8	A2-2CM	0-2	A2-1.5KPA	0-1.5	A2-60PA	0-60
A2-0.50IN	3	A2-10MM	0-10	A2-3CM	0-3	A2-2KPA	0-2	A2-125PA	0-125
A2-1IN	0-1.0	A2-15MM	0-15	A2-4CM	0-4	A2-3KPA	0-3	A2-250PA	0-250
A2-2IN	0-2.0	A2-20MM	0-20	A2-5CM	0-5	A2-4KPA	0-4	A2-300PA	0-300
A2-3IN	0-3.0	A2-25MM	0-25	A2-6CM	0-6	A2-5KPA	0-5	A2-500PA	0-500
A2-4IN	0-4.0	A2-30MM	0-30	A2-8CM	0-8	A2-8KPA	0-8	A2-750PA	0-700
A2-5IN	0-5.0	A2-40MM	0-40	A2-10CM	0-10	A2-10KPA	0-10	<b>Zero Center Range</b>	
A2-6IN	0-6.0	A2-50MM	0-50	A2-15CM	0-15	A2-15KPA	0-15	A2/Z-120PA	60-0-60
A2-8IN	0-8.0	A2-60MM	0-60	A2-20CM	0-20	A2-20KPA	0-20	A2/Z-250PA	125-0-125
A2-10IN	0-10	A2-80MM	0-80	A2-25CM	0-25	A2-25KPA	0-25	A2/Z-500PA	250-0-250
A2-15IN	0-15	A2-100MM	0-100	A2-30CM	0-30	A2-30KPA	0-30	<b>Dual Scale Air Velocity unit For use with pitot tube</b>	
A2-20IN	0-20	A2-150MM	0-150	A2-40CM	0-40	<b>Zero Center Range</b>		<b>Model</b>	<b>Range inHg</b>
A2-25IN	0-25	A2-200MM	0-200	A2-50CM	0-50	A2/Z-1KPA	0.5-0-0.5	A2/D-0.25AV	0-0.25/300-2000
A2-30IN	0-30	A2-250MM	0-250	A2-60CM	0-60	A2/Z-3KPA	1.5-0-1.5	A2/D-0.50AV	0-0.50/500-2800
A2-40IN	0-40	A2-300MM	0-300	A2-80CM	0-80	<b>Model</b>	<b>Range PSI</b>	A2/D-1.0AV	0-1.0/500-4000
A2-50IN	0-50	A2-500MM	0-500	A2-100CM	0-100	A2-1PSI	0-1	A2/D-2.0AV	0-2.0/1000-5600
A2-60IN	0-60	A2-1000MM	0-1000	A2-150CM	0-150	A2-2PSI	0-2	A2/D-10AV	0-10/2000-12500
A2-80IN	0-80	<b>Zero Center Range</b>		A2-200CM	0-200	A2-3PSI	0-3		
A2-100IN	0-100	A2/Z-20MM	10-0-10	A2-250CM	0-250	<b>Dual Scale (English/Metric Models)</b>			
A2-150IN	0-150	A2/Z-30MM	15-0-15	A2-300CM	0-300	<b>Model</b>	<b>Range in W.C</b>	<b>Range Pa or KPa</b>	
<b>Zero Center Range</b>		<b>Model</b>		<b>Range Mbar</b>		A2/D-0.5	0-0.5	0-125PA	
A2/Z-0.5IN	0.25-0-0.25	<b>Zero Center Range</b>		A2/Z-2CM	1-0-1	A2/D-1.0	0-1.0	0-250PA	
A2/Z-1.0IN	0.5-0-0.5	<b>Model</b>		A2/Z-4CM	2-0-2	A2/D-2.0	0-2.0	0-500PA	
A2/Z-2.0IN	1-0-1	<b>Range Mbar</b>		A2/Z-10CM	5-0-5	A2/D-3.0	0-3.0	0-750PA	
A2/Z-4.0IN	2-0-2	A2-20MBAR	0-20	A2/Z-20CM	10-0-10	A2/D-4.0	0-4.0	0-1.0KPA	
A2/Z-10IN	5-0-5	A2-25MBAR	0-25	A2/Z-30CM	15-0-15	A2/D-6.0	0-6.0	0-1.5KPA	
A2/Z-20IN	10-0-10	A2-50MBAR	0-50	<b>Model</b>		A2/D-8.0	0-8.0	0-2.0KPA	
A2/Z-30IN	15-0-15	A2-60MBAR	0-60	<b>Range inHg</b>		A2/D-10	0-10	0-2.5KPA	
<b>Model</b>	<b>Range mmHg</b>	<b>Zero Center Range</b>		A2-5HG	0-5				
A2-4MMHG	0-4	<b>Model</b>		A2-6HG	0-6				
A2-10MMHG	0-10	A2/Z-20MBAR	10-0-10						

Accessories:

Mounting Options:

SM: Surface mounting bracket

FM: Flush or panel mounting bracket

PM: Pipe mounting kit

How to order:

Model – Range – Accessories

For example

1650 – 0-125Pa – SM