

DIFFERENTIAL PRESSURE GAUGE



Model: 1650

MAGNET HELIC DESIGN

Indicating Positive, Negative or Differential, Accuracy within 2%

FEATURES:

- * Magnet-helix indicating mechanism ideal for low DP measurement
- * A wide selection of ranges from 0 to 30Pa, up to 30Kpa
- * Accuracy 2% FS
- * 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 full span accuracy of 2% at 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: +/-2% FS at 20 deg C, (+/-3% for 0.5 in W.C. 125Pa, 10mm W.C., +/-4% for 0.25 in W.C., 6mm W.C., 8mm W.C., 30Pa, 60Pa) See details in range selection chart

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

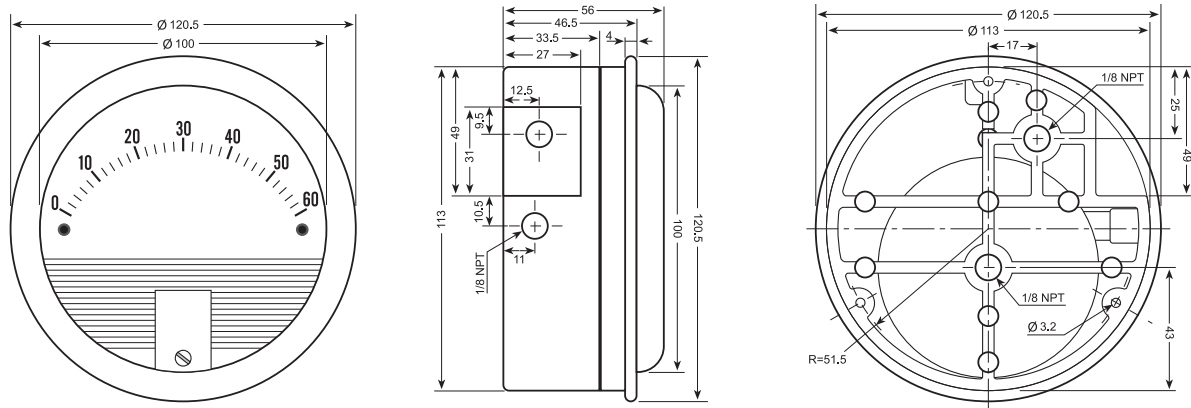
Mounting position: Vertical

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	Zero Center Range		
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	Dual Scale Air Velocity unit For use with pitot tube		
A2-20IN	0-20	A2-150MM	0-150	A2-40CM	0-40	Zero Center Range		Model	Range inHg	
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	Model		Range PSI	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	Zero Center Range		A2-200CM	0-200	A2-3PSI	0-3			
A2-100IN	0-100	A2/Z-20MM	10-0-10	A2-250CM	0-250	Dual Scale (English/Metric Models)				
A2-150IN	0-150	A2/Z-30MM	15-0-15	A2-300CM	0-300	Model	Range in W.C	Range Pa or KPa		
Zero Center Range		Model		Range Mbar		A2/D-0.5	0-0.5	0-125PA		
A2/Z-0.5IN	0.25-0-0.25					A2/D-1.0	0-1.0	0-250PA		
A2/Z-1.0IN	0.5-0-0.5					A2/D-2.0	0-2.0	0-500PA		
A2/Z-2.0IN	1-0-1					A2/D-3.0	0-3.0	0-750PA		
A2/Z-4.0IN	2-0-2					A2/D-4.0	0-4.0	0-1.0KPA		
A2/Z-10IN	5-0-5					A2/D-6.0	0-6.0	0-1.5KPA		
A2/Z-20IN	10-0-10					A2/D-8.0	0-8.0	0-2.0KPA		
A2/Z-30IN	15-0-15					A2/D-10	0-10	0-2.5KPA		
Model	Range mmHg	Zero Center Range		Model	Range inHg					
A2-4MMHG	0-4			A2-5HG	0-5					
A2-10MMHG	0-10	A2/Z-20MBAR	10-0-10	A2-6HG	0-6					

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