Alpha Moisture Systems

Model P35

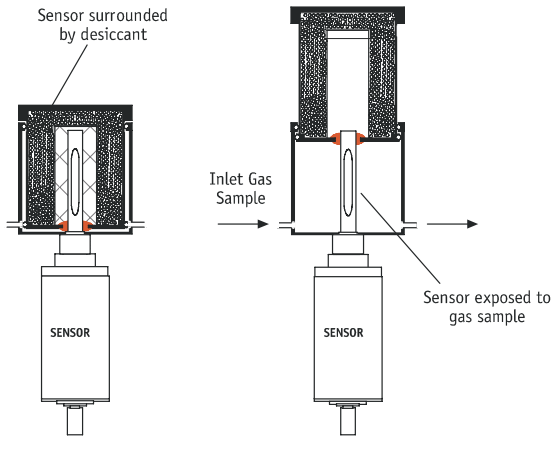
Portable SF_6 Dewpoint Meter

YEAR 2000 COMPLIANT CE

Features :-

- *Overall Range - 80°C to 0°C Dewpoint (-112°F to +32°F)*
- *Guaranteed Accuracy ± 2°C Dewpoint*
- *User Friendly - Simple Operation*
- *Portable - Fully Self Contained*
- *Digital Indication in °C or °F*
- *Automatic Calibration*
- *Sample Flow Indication*
- *Quick Connect SS Fittings*
- *Battery or Mains Operated*
- *Supplied With Calibration Certificate*
- *Sample Flow Control for Inlet Pressure up to 20 barg*
- *Desiccant Dry-Down Chamber For Rapid Measurements*

Model P35 is a fully self-contained portable hygrometer from Alpha Moisture Systems, designed specifically for use during the assembly, commissioning and service of SF_6 gas insulated switchgear, though its features make it ideal for many other on-site applications.
Designed with the operator in mind, ***Model P35*** is extremely easy to use and the microprocessor technology enables accurate and reliable readings over long periods of time, ensuring the most dependable moisture measurement in both industrial and laboratory applications.
The incorporation of the Desiccant Dry-down Chamber, together with stainless steel quick connect fittings and additional components for sample flow control and indication, means that the user can be assured that an accurate reading will be made using a minimal amount of valuable SF_6 gas.
Designed to measure at atmospheric pressure, ***Model P35*** encompasses an overall range from -80°C to 0°C dewpoint. Precise factory calibration ensures guaranteed accuracy and reliability of operation. The instrument can be operated from a switchable mains supply of 100/120V or 200/240V AC, or using self contained internal batteries.
Model P35 is supplied ready for use with batteries installed, calibration certificate traceable to National and International Humidity standards, two metres of stainless steel braided PTFE sampling hose and instruction manual.



To allow rapid spot checks it is essential that the measuring sensor is kept drier than the sample to be measured.
The desiccant dry-down chamber is designed to do just this by keeping the sensor surrounded by desiccant when the instrument is not in use, only exposing it to the sample gas when taking measurements. At no stage is the sensor allowed to come into contact with ambient air.

CERTIFICATE No. FM35600
BS EN ISO 9002

SPECIFICATIONS - Model P35

SENSOR TYPE **:** Aluminium Oxide Ultra High Capacitance Sensor

DISPLAY : 3½ Digit LCD

RANGE **:** -80°C to 0°C Dewpoint (-112 to +32°F)

DISPLAY RESOLUTION **:** 0.1°C Dewpoint

ACCURACY **:** ± 2°C Dewpoint. All sensors supplied with a certificate documenting factory calibration against known moisture levels, traceable to National & International Humidity Standards.

REPEATABILITY **:** ± 0.3°C Dewpoint

OPERATING PRESSURE : Input pressure - 20 Bar Max Sensor Pressure - 0.5 Bar

RESPONSE TIME : Typically 95% of reading within 20 seconds in normal operation.

POWER SUPPLY **:** Either 100-120 or 200-240 V AC switchable, or 9V DC self contained internal batteries (Six "C" type disposable batteries.)

BATTERY LIFE **:** In excess of 150 hours during continuous operation.

ELECTROMAGNETIC COMPATIBILITY (EMC)
Immunity : Complies with EN 50082-1 : 1992
Emissions : Complies with EN 50081-1 : 1992

FLOW RATE **:** 0.2 to 1 litres/minute SF_6 at NTP

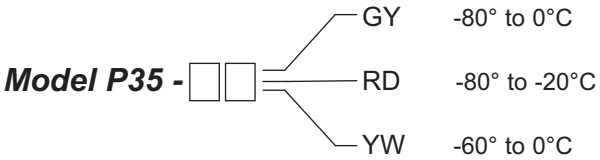
OPERATING CONDITIONS
Temperature : -20°C to +50°C
Humidity : 0-98% RH, Non-condensing
Storage Temperature : -50°C to +70°C

CONNECTIONS
Inlet : *Swagelok* quick-connect Stainless steel coupling
Outlet : ¼ OD *Swagelok* stainless steel tube fitting

SAMPLE TUBE **:** Stainless Steel Braided PTFE Hose

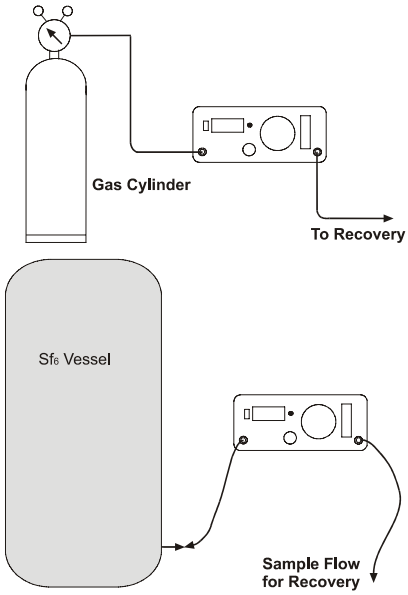
WARRANTY **:** 1 year from date of delivery against faulty materials or workmanship.

ORDERING INFORMATION



Example : If your requirement is for P35 with a range of -80°C to -20°C dewpoint then please order as : ***Model P35-RD***

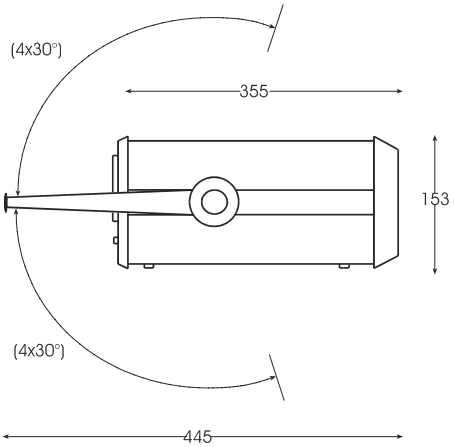
INSTALLATION SCHEMATICS

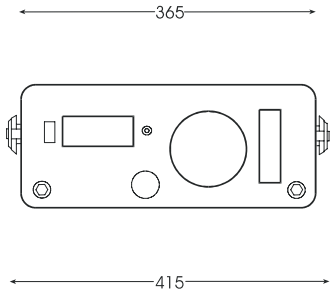


Corrosive Gases

The Sensor should not be exposed to corrosive gases (or corrosive contaminants in the main gas sample) as they would chemically attack the sensor and render it useless. Examples of such gases are mercury (Hg), ammonia (NH_3), chlorine (Cl_2) and wet acid vapours i.e. acid vapours in gas with moisture content greater than 100ppm (v). Strong oxidising agents such as ozone (O_3) should also be prevented from coming into contact with the sensor.

WEIGHTS & DIMENSIONS





Weight unpacked - 9.4 Kgs (Nett)
Weight packed - 11.5 Kgs (Gross)

Product specification may be subject to change, without prior notice, as part of our ongoing product development programme.