

# Model P35

Portable SF<sub>6</sub> Dewpoint Transmitter

## Features :-

- Overall Range - 80°C to 0°C Dewpoint (-112°F to +32°F)
- Guaranteed Accuracy  $\pm 2^\circ\text{C}$  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<sub>6</sub> gas insulated switchgear, though its features make it ideal for many other on-site applications.

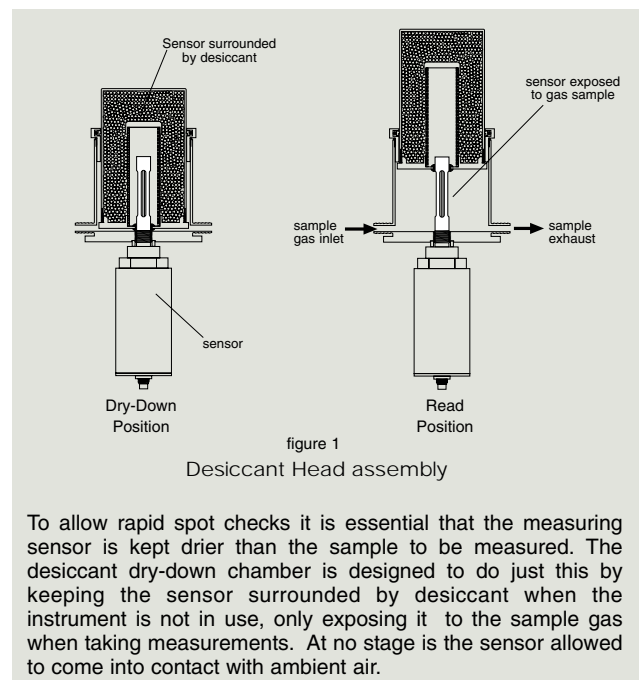
Designed with the operator in mind, Model P35 is extremely easy to use and the microprocessor technology enables accurate and reliable readings over long periods of time, ensuring the most dependable moisture measurement in both industrial and laboratory applications.

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<sub>6</sub> 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.



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# Model P35 - Portable SF<sub>6</sub> Dewpoint Transmitter

## Specifications

### 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 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 SF6 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

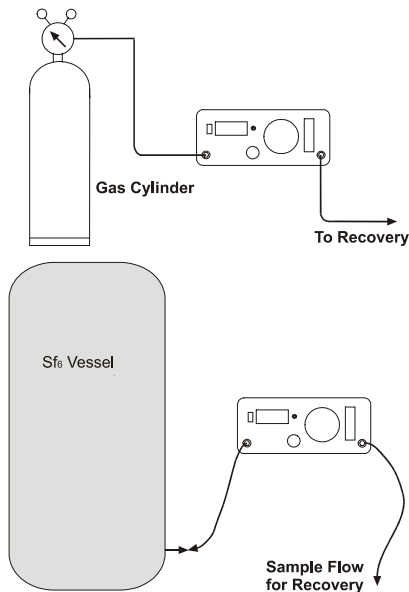
Stainless Steel Braided PTFE Hose

### WARRANTY

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

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

## 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<sub>3</sub>), chlorine (Cl<sub>2</sub>) and wet acid vapours i.e. acid vapours in gas with moisture content greater than 100ppm (v). Strong oxidising agents such as ozone (O<sub>3</sub>) should also be prevented from coming into contact with the sensor.

## Ordering Information

	CODE	RANGE
Model P35 - [ ] [ ]	GY	-80° to 0°C
	RD	-80° to -20°C
	YW	-60° to 0°C

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

## Weights and Dimensions

