



Accessories

ACCESSORIES ARE NOT SHOWN TO SCALE

CALCULATOR



The Shaw calculator brings together many different measurement units and also enables calculations to be made for moisture levels at different pressures.

On one side is a conversion table showing dewpoint temperature in Fahrenheit and Centigrade, with the equivalent moisture levels in mg/water per litre, lbs/water per million cubic feet, parts per million water vapour by volume and water vapour pressure in mm of mercury. The other side (illustrated here) enables any dewpoint temperature at any given pressure to be converted to the equivalent dewpoint temperature at any other pressure – with the moisture content in parts per million also shown.

SENSOR HOLDER



The Shaw Sensor Holder is manufactured from solid stainless steel and makes installation of the sensor very easy. The inlet and outlet connections are fitted with high quality stainless steel compression fittings designed for 1/8" (3mm) outside diameter stainless steel or copper pipe. On request we can supply fittings for 1/4" (6.35mm) or 6mm od pipe. We do not recommend using larger pipes as this would cause the system to have a longer response time. The unit has a pressure rating of 245 bars (3600 psig) and is oxygen cleaned as standard.

SU4



The SU4 will reduce the pressure from the dryer to give a flow suitable for measurement. It combines a pressure reduction control, sensor holder and a flow meter for up to 10 litres per minute. (One litre is usual for continuous use). Moisture

measurement under pressure will not give the correct answer but room pressure used in the SU4 will read correctly.

Free calculator & coax lead and Fluon pipe to connect to the hygrometer are included.

Can use with MLPR Moisture Log if required.

FLOW INDICATOR

This compact flow indicator can be used where visual indication of sample flow is required. A fine needle valve is incorporated, and the unit is calibrated for the range 1 to 5 L/min. air at NTP. Supplied complete with fittings for 1/8" od copper or stainless steel piping with fittings for 1/4" or 6mm od pipe available on request. Maximum pressure 100 psig. (NB: To be fitted upstream of the sensor).



FILTER UNIT

Engineered from stainless steel, the Shaw Filter Unit is an effective device for removing particulate contamination from sample gases.

The filter cartridge is made from glass fibre and epoxy resin, and can be washed in most solvents to extend its life. Filtration efficiency is 99.99% removal of particles of 0.6 micron and above. The unit has a pressure rating of

245 bars (3600 psig) and is supplied as standard with fittings suitable for 1/8" od copper or stainless steel pipe. Fittings for 1/4" or 6mm od pipe are available on request. We only recommend using the filter unit when it is necessary, as it will inevitably lengthen the sample system response time.



AUDIBLE ALARM UNIT

The alarm function fitted to most of our instruments provides a red warning light on the front of the instrument and access to a single pole change over relay which may be used to control external equipment.

In some cases an audible alarm is required and Model SAA has been designed for use where no other alarm unit is available. 110 or 230V a.c. power is needed for the Model SAA and it may be located close to the Dewpoint Analyser, or in any other convenient position.



When energised it emits a pulsed tone of 73dba at 3 metres. A red warning lamp on the front of the unit will silence the output when pressed, but the warning lamp remains on until the alarm condition ends. The unit resets itself automatically. Rated IP65 for outdoor use.

PRESSURE REGULATORS

Three pressure regulators are offered, suitable for inlet pressures up to 28 bars (400 psig) and 400 bars (5800 psig). In all cases the metal parts exposed to the sample gas are stainless steel.

The small regulator is capable of reducing the sample gas to 1 bar pressure in a single stage, but with difficult gases like CO₂ it is advisable to connect two regulators in series to give two stage reduction. Supplied with fittings for 1/8" od copper or stainless steel piping. Fittings also available for 1/4" or 6mm pipe on request.



HAZARDOUS AREA APPLICATIONS

Shaw Zener Barrier Unit

A great many of our instruments are used in potentially hazardous areas where there is a high risk of fire or explosion. Petrochemical works and oil/gas platforms are two obvious cases, but there are many others involving the use of hydrogen or other dangerous gases.

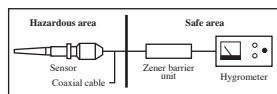


There are two types of use to be considered:

(1) Spot-check readings where the instrument has to be within the hazardous area. The model SADP, described on page 2, has three weeks of daily laboratory checks at Bradford, subject to stringent ISO9001:2000 (pending) quality control and traceable to NPL. Every meter is CE marked and is certified intrinsically safe to: **BASEEFA 2001 Certificate No: baseefa03ATEX0065X** (II G EEx ia IIC T6.) **FM** (pending).

(2) Mains powered instruments where continuous operation is needed, but it is possible to locate the instrument itself in a safe area. Where a safe area is available for the location of the instrument, the sensor may be placed in the hazardous area using a zener barrier unit included in the instrument to sensor cable, providing protection to

BASEEFA 2001. The system certification is: SYST baseefa03Y0070. Barrier Certification: BASO1ATEX7202 cert no: Ex01E2204.



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