

Optical Consistency Sensor With Fibre / Ash Determination



AshCon Product Description

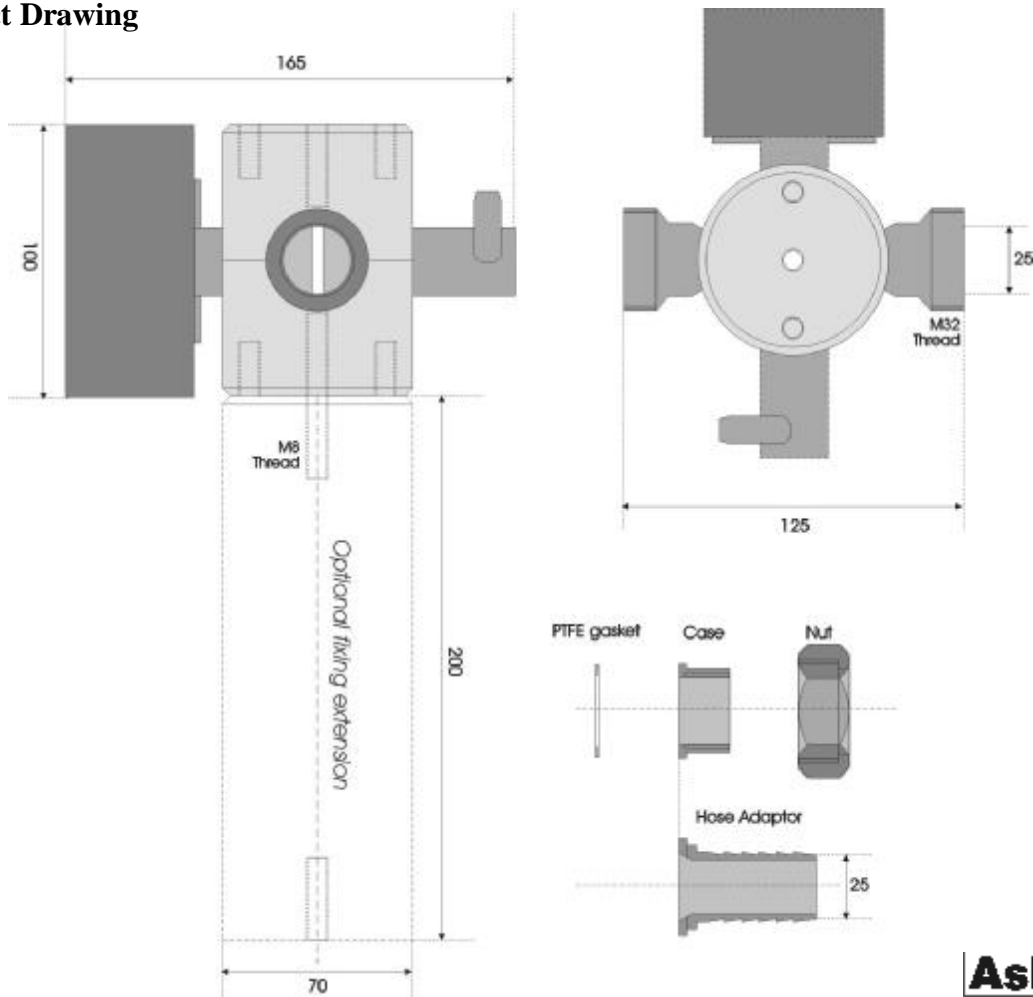
The Ashcon sensor measures the consistency of process streams containing a mixture of cellulose fibre and minerals. The sensor uses a high-energy nIR diode light source with polarised optics with multiple measurement channels. The light depolarising effect from fibre and the scattering effect from filler is modelled to provide a measurement of the fibre proportion and filler proportion.

The sensor is factory pre-calibrated on a custom material mix to simplify on-site calibration. The sensor automatically compensates for process temperature changes as well as any component drift with a reference correction of the light source. The operator interface allows mill lab. to sensor calibration values to be entered as well as any grade-specific measurement compensation.

Typical Applications

The Ashcon sensor is normally used to measure the paper machine wet end Whitewater and Thinstock process streams. It can also be used on other low consistency fibre lines where fillers are present. It is normally installed within a Retention measurement system that includes; process sample handling, automated cleaning and signal processing.

Product Drawing



AshCon

Technical Specification

Measurement: Optical transmission of depolarised near infra-red light.

Optical Gap: 4mm with Venturi tube from 25mm bore

nIR source: GaAs Diode, typically 880nm wavelength

Range: 0 – 100mg/L upto 2%Cs. / 20g/L (Total)
 0 – 10g/L Fibre (typical) = 4-20ma signal
 0 – 10g/L Filler (typical) = 4-20ma signal

Accuracy: Within 3% of range (lab. to sensor 2sigma)

Flow rate: 10 L/min to 50 L/min (min. to max.)

Pressure: PN10 (146 psi.g. / 10 bar.g.)

Temperature: 0 – 60 deg. C (max.)

Material : Wetted parts 316 St.Steel

Weight: 3 Kgs

Connection: 7 core plug (IP65)

Cable: 2 Metres (std.) upto 15 Mtrs

Protection: IP65 (NEMA 4X)

Mount: 4 by M8 Threads (sensor) or
 Extension fixing (optional)

Invista Limited

Unit 16, BVEC Ivy Road
 Aldershot

Hampshire GU12 4QW

United Kingdom

Tel: +44 1276 691030

Fax: +44 1276 691030

Web: www.ivapap.co.uk

Contact :