**2015
NEW PROCESSOR**

Typical application fields

- **Petroleum: oil, fuels, lubricants**

- **Chemistry: polymers, detergents, surfactants**

- **Coating: paints, lacquers, inks, varnishes**

- **Cosmetics: creams, gels, pastes**

- **Printing & Packaging: inks, varnishes, cardboard glues, adhesives**

Whatever your industry, we understand and develop solutions for many applications. For a personalized approach, contact us at
instruments@sofraser.com

RELIABLE AND VERSATILE PROCESSOR FOR PROCESS CONTROL

Sofraser **9701 viscosity, density and temperature processor** receives signals from the MIVI sensor to accurately measure and display real-time viscosity, density and temperature and calculate viscosity at reference temperature.

- **User-friendly touchscreen display:** The **9701 viscosity, density and temperature processors** offer instantaneous and continuous display in the form of values, bar graphs, trend curves as well as relevant equipment information.

- **Personalized and intuitive use:** Security codes, compensated viscosity tables, offset adjustment, viscosity and density filtering, viscosity, density and temperature Min/Max values and units are easily accessed and programmed on the detailed settings menu.

- **Additional 9701 functions:** Instantaneous kinematic viscosity value measurement available through the measurement of density and dynamic viscosity. Viscosity at reference temperature is easily calculated with the temperature compensated viscosity table.

- **Improve process management and production:** Programmable analog outputs and alarm relays increase viscosity, density and temperature measurement use. Compensated viscosity and density are also possible during process controls.
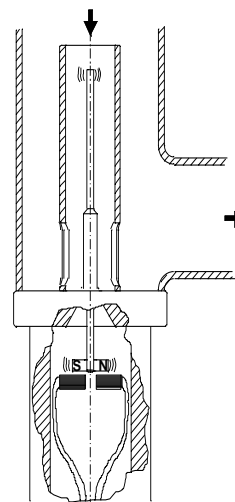
9701 Viscosity, Density & Temperature Processor

Standard Features and Specifications

Versions	• **9701 Viscosity, Density and Temperature Processor** For 1 MIVI sensor with 1 parameters set
Inputs	• Viscosity: MIVI sensor • Density: MIVI sensor or external density meter • Temperature: Pt100
Resolution	• Viscosity: between 0.1% and 0.5% of measurement from 10% to 90% of the full scale range • Density: 0.001g/cc
Outputs	• 4 x 4 - 20mA single-ended outputs for viscosity, temperature, viscosity at reference temperature and density ±0.1%, Zmin. = 1kΩ, Zmax.= 500Ω • 1 x RS232 (RJ-11), • 1 x RS485 (RJ-11), Modbus protocol, 2 wires, 1200m max / 3900ft max
Relays	• 9 x NO (Normally Open) relays for low and high alarms and diagnosis • Power cut-off 3A, 8A max per common, 250VAC or 30VDC
Screen & Display	• 5.7", LCD illuminated, color touchscreen • 24 keys alpha-numeric keypad & virtual keyboard • Display of instantaneous values • Alarms, relays and output status display
Operating conditions	• Working temperature: 0 to 45°C / 30°F to 110°F • Front panel IP65 / NEMA 4X - Back panel IP20 / NEMA 1
Dimensions & characteristics	• Panel dimensions: 228mm x 146mm / 9" x 5 ¾ " • Total depth: 121.5mm / 4.8" • Weight: 1.1kg / 2.4lb • Parameters backup: 7 years on battery
Security	• Configuration and parameters password-secured
Power input	• 24VDC (21.6 to 26.4VDC)
Regulatory	• CE marked (European conformity)
Options & accessories	• Insertion in an ATEX Ex-proof box, for use in hazardous areas • Insertion in a watertight box (IP65) (basic or with pre-wiring and terminal block) • Power supply: din-rail type 88 to 264VAC - 24VDC or universal plug type 100 to 240VAC - 24VDC
Service options	• Extension of density range (min. 0.6g/cc, max. 1.6g/cc) • Calibration and calibration report at 1, 2 or 4 viscosity point(s) up to 1000cP and 100°C • Calibration and calibration report at 1 density point between 0.6 to 1.2g/cc up to 100°C • Programming of temperature compensation table or settings according to end-user "viscosity versus temperature"

In 1981, Sofraser invented & patented the world's first vibrating viscometer at resonance frequency.

The amplitude and frequency of the vibration vary according to the viscosity and density of the product in which the rod is immersed.

The active part of the sensor, a vibrating rod held in oscillation at resonance frequency, is driven by constant electrical power.

Sofraser remains unsurpassed in process reliability and accuracy.

Quality System

afaq
ISO 9001
Qualité
AFNOR CERTIFICATION

CE

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