



## Typical application fields

- **Petroleum:** oil, fuels, lubricants
- **Chemistry:** polymers, detergents, surfactants
- **Cosmetics:** creams, gels, pastes
- **Food & beverage:** dairy products, sauces, emulsions
- **Coating:** paints, lacquers, inks, varnishes

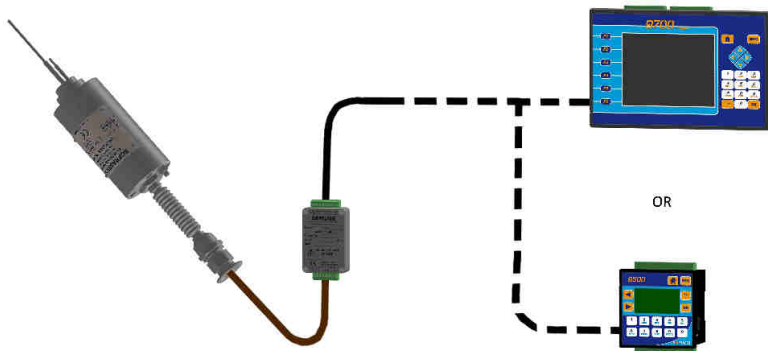
Whatever your industry, we understand and develop solutions for many applications. For a personalized approach, contact us at [instruments@sofraser.com](mailto:instruments@sofraser.com)

## THE SIMPLE DIGITAL TRANSDUCER

Sofraser's **9000 digital transducer** processes the signals from **MIVI** viscometer and transfers the data to Sofraser 9510 or 9710 HMI.

- **Performance:** The **9000 transducer** takes advantage of the latest Sofraser innovation and it forms with its dedicated **with its dedicated MIVI** sensor the resonant loop. The set is offering instantaneous, continuous and reliable measurement.
- **Easy and simplified installation:** 9000 transducer is located right next to its MIVI sensor thanks to the standard 3 meters long sensor cable and is connected to its HMI by RS485 bus that allows distance up to 1000 meters.
- **Interchangeability:** The setting parameters of the unit are stored in the non-volatile EEPROM memory of the 9000 transducer that allows the connection to any 9510 or 9710 Sofraser HMI.
- **Versatile protection:** 3 types of enclosure allow the implementations of 9000 transducer either in electronics cabinet, either in safe area, either in Exproof environment.
- **Improved process operations:** Reliable, repeatable and continuous viscosity and temperature measurements combined with superior quality result in permanent production efficiency and increased profitability.

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## 9000 Digital Transducer

### Standard Features and Specifications

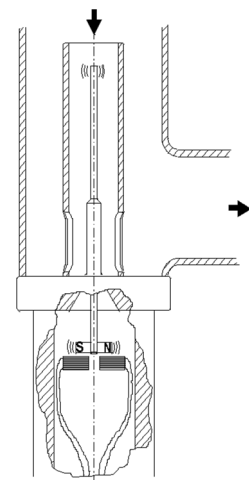
<b>Input</b>	<ul style="list-style-type: none"> <li>MIVI viscosity sensor (forming the resonant loop)</li> </ul>
<b>Resolution</b>	<ul style="list-style-type: none"> <li>Between 0,1% and 0,5 % of measurement from 10% to 90% of the full scale range</li> </ul>
<b>Output</b>	<ul style="list-style-type: none"> <li>1 x RS485, 2 wires, 1200 m max / 3900 feet max to 9510 or 9710 processor</li> </ul>
<b>HMI</b>	<ul style="list-style-type: none"> <li>9510 viscosity and temperature processor for one single MIVI 9000 viscometer</li> <li>9710 multi-sensors processor for up to 4 MIVI 9000 viscometers</li> </ul>
<b>IP20 enclosure</b>	<ul style="list-style-type: none"> <li>Dimensions: 80 x 55 x 25 mm / 3.15 x 2.16 x 0.98 inch</li> <li>Weight: 0.2 kg / 0.45 lbs</li> <li>Aluminium</li> <li>Ingress protection rating: IP20</li> <li>Working temperature: 0 to 50 °C / 32 to 122 °F</li> <li>5% to 95% RH (non condensing)</li> </ul>
<b>IP65 enclosure</b>	<ul style="list-style-type: none"> <li>Dimensions: 160 x 100 x 60 mm / 6.30 x 3.94 x 2.36 inch</li> <li>Weight: 0.7 kg – 1.55 lbs</li> <li>Aluminum with Epoxy painting – 3 polyamide cable glands</li> <li>Ingress protection rating: IP65</li> <li>Working temperature: 0 to 50 °C / 32 to 122 °F</li> </ul>
<b>ATEX Exproof enclosure</b>	<ul style="list-style-type: none"> <li>Dimensions: 198 x 198 x 150 mm / 7.79 x 7.79 x 5.90 inch</li> <li>Weight: 6 kg – 13.5 lbs</li> <li>Aluminum with Epoxy painting – 3 nickel-plated brass cable glands</li> <li>Ingress protection rating: IP66</li> <li>ATEX marking: II 2 G/D Exd T6</li> <li>Working temperature: 0 to 40 °C / 32 to 104 °F</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>Settings stored in EEPROM memory</li> </ul>
<b>Power input</b>	<ul style="list-style-type: none"> <li>24 VDC (21,6 to 26,4 VDC)</li> </ul>
<b>Regulatory</b>	<ul style="list-style-type: none"> <li>CE marked (European conformity)</li> </ul>
<b>Options Accessories</b>	<ul style="list-style-type: none"> <li>Power supply: Din-rail type 88 to 264 VAC – 24 VDC</li> <li>Power supply: universal plug type 100 to 240 VAC – 24 VDC</li> </ul>

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

The vibration amplitude varies according to the viscosity 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 regarding process reliability and accuracy.



# SOFRASER

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