



# **Immersion sensor 40-14 ANSI 2", L092, HC2000**

Item no. 21010109

The sensor includes the measurement of sonic velocity and temperature. The wetted parts are made of Hastelloy C-2000. So the sensor is corrosion-resistant in almost all chemicals.

The robust and completely enclosed design requires no gaskets or „windows“ to the process and is thus completely maintenance-free.

Various additional features integrated in the sensor, like flow/stop monitoring and full/empty liquid monitoring in pipes, significantly increase the customer's benefit.

The LiquiSonic® high-power technology guarantees stable measuring results even at proportion of gas bubbles and signal attenuation by the process liquid.

The sensor is installed directly into the pipe or vessel. There are neither a bypass nor smooth flow pipe sections necessary.

## Specifications

### Sensor

immersion length	92 mm (3.6")
material	Hastelloy C-2000 alloy DIN 2.4675
flange	ANSI 2"
maximum pressure stage	150 lbs
process temperature	standard: -20 °C to 120 °C (-5 °F to 250 °F) optional: to 150 °C (300 °F)
options	SonicGraph® (oscilloscope) attenuation measurement

### Electronic housing

type	die-cast housing
dimensions	190 x 115 x 127 mm (7.5" x 4.5" x 5") width x diameter x height
material	aluminium
degree of protection	IP65 (NEMA 4)
ambient temperature range	-25 °C to 60 °C (-15 °F to 140 °F)

### Electrical data

power supply	24 V DC ±15 %
power consumption	3 W
fuse	internal delay fuse with 375 mA rated current
connections	screw terminals, maximum nominal cross section: 2.5 mm <sup>2</sup>
EMC	compliance with directive 2014/30/EU
electrical security	compliance with directive 2014/35/EU

## Data interfaces

sensor bus	standard: maximum 1000 m (3280 ft) cable length optional: longer than 1000 m (3280 ft)
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## Measuring values

sonic velocity	measuring range: 1000 m/s to 3000 m/s resolution: 0.01 m/s repeatability: $\pm 0.02$ m/s accuracy: $\pm 0.1$ m/s configurable update rate: 250 ms to 1000 ms
temperature	measuring range: $-20$ °C to $150$ °C resolution: 1 mK repeatability: $\pm 0.02$ K accuracy: $\pm 0.025$ K configurable update rate: 250 ms to 1000 ms
attenuation (optional)	measuring range: 80 dB resolution: 0.1 dB repeatability: $\pm 0.2$ dB accuracy: $\pm 0.3$ dB configurable update rate: 250 ms to 1000 ms

