

gPIMS® HT SENSOR

TECHNICAL SPECIFICATION

The gPIMS® HT Sensor enables large-area corrosion monitoring at elevated pipe process temperatures, up to 200°C. It supports automated monitoring when used with a gPIMS® FCU (Field Control Unit), or scheduled monitoring using a Wavemaker® via a gPIMS® Connection Box.

General Characteristics

Application area	Un-zoned high-temperature upstream/downstream pipe monitoring
Sensor technology	Piezo-electric

Sensor Physical Characteristics

Pipe diameter range	2" to 48" (DN 50 to 1200)
Axial length	200 mm [8"]
Weight (approx. for diameter range)	1.4 kg to 10.4 kg [3.3 lbs to 52.8 lbs]
Material	Silicone ⁽¹⁾

Clearance Required

Circumferential	Full Circumference
Axial	200 mm [9"]
Radial	40 mm [1"]

Temperature

Operational temperature	-40°C to +200°C [-40°F to +392°F]
Maximum temperature excursion	+220°C [+428°F]

Interference with

Cathodic protection	No
MFL, EC or UT in-line tools	No

Installation

Coupling method	High temperature epoxy resin
Pipe temperature at time of installation	+10°C to +90°C [+50°F to +194°F]
<i>Curing Time</i>	15 minutes @ 90°C, double time for every decrease of 10°C
Install over Paint and Epoxy	Yes, up to 0.25 mm [0.01"] thick
Install over Bare Metal	Yes

Cable Characteristics

Fixed Cable Length	2 m [6.56 ft]
Cable Conduit	Stainless Steel
Diameter	16 mm [0.63"]
Maximum Extension Cable Length	50 m [164 ft]
Cable Conduit	PVC covered galvanised steel ⁽²⁾
Operating Temperature Range	-20°C to +105°C [-4°F to +221°F]
Diameter	18 mm [0.7"]
Connector to Field Control Unit or Connection Box	Detachable (Souriau 851-series) ⁽³⁾
Maximum Diameter	42.05 mm [1.66"]

(1) Resistant to: UV, water, oil, external shock.

(2) Liquid tight, very high UV resistance, medium flexibility and fatigue life, resistant to oil, self-extinguishing, crush resistant.

(3) Suitable for cable routing through small gaps and upgrading to autonomous collectors.

