

gPIMS[®] SENSOR

TECHNICAL SPECIFICATION

The gPIMS[®] Sensor enables large-area corrosion monitoring with full pipe wall coverage, small-area thickness monitoring across eight circumferential segments beneath the sensor, and temperature monitoring. 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 Midstream and Un-zoned Upstream/Downstream pipe monitoring

Sensor technology Piezo-electric

Sensor Physical Characteristics

Pipe diameter range 3" to 72" (DN 80 to 1800)

Axial length 200 mm [8"]

Weight (approx. for diameter range) 1.4 kg to 10.4 kg [3.1 lbs to 23 lbs]

Material Polyurethane ⁽¹⁾

Clearance Required

Circumferential Full Circumference

Axial 200 mm [8"]

Radial 25 mm [1"]

Radial, at connector 75 mm [3"]

Temperature

Operational temperature -40°C to +90°C [-40°F to +194°F]

Maximum temperature excursion +130°C [+266°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 +60°C [+50°F to +140°F]

Install over Paint and Epoxy Yes, up to 1 mm [0.040"] thick

Install over Bare Metal Yes

Cable Characteristics



Maximum Cable Length 50 m [164 ft]

Connector to Field Control Unit Detachable (Souriau 851-series) ⁽²⁾

Maximum Diameter 42.05 mm [1.66"]

Connector to Sensor gPIMS[®] proprietary sealed connector ⁽³⁾

Dimensions, W x H 75 mm x 55 mm [3.0" x 2.2"]

Cable Conduit PVC covered galvanised steel ⁽⁴⁾

Operating Temperature Range -20°C to +105°C [-4°F to +221°F]

Diameter 18 mm [0.7"]

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

⁽²⁾ Suitable for cable routing through small gaps and upgrading to autonomous collectors.

⁽³⁾ 4-way connectivity with on-board cable orientation detection.

⁽⁴⁾ Liquid tight, very high UV resistance, medium flexibility and fatigue life, resistant to oil, self-extinguishing, crush resistant

