

The gPIMS® (Ex) Sensor is ATEX/IECEx certified for use in restricted areas where hazardous atmospheres may be present, to be used with the gPIMS® WiFi FCU (Field Control Unit). The sensor provides Large Area Corrosion Monitoring - with full pipe wall coverage in range; Small Area Thickness Monitoring - on 8 segments around the circumference of the pipe; and Temperature Monitoring.

## **TECHNICAL SPECIFICATION SUMMARY** (Subject to change)





| <b>General Characteristics</b>           |   |
|--|---|
| Application area                         | Upstream/downstream hazardous area pipe monitoring.   |
| Sensor Technology                        | Piezo-electric  |
| Sensor Physical Characteristics          |   |
| Pipe Diameter Range                      | 6" to 48" [DN 150-1200]   |
| 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 <sup>(1)</sup>   |
| Clearance Required                       |   |
| Circumferential                          | Full Circumference  |
| Axial                                    | 200 mm [8"]   |
| Radial                                   | 25 mm [1"]  |
| Radial, at connector                     | 75 mm [3"]  |
| Hazardous Area Certification             |   |
| Intrinsic safety ATEX/UKEX/IECEx         | <ul> <li>II 1G Ex ia IIB T4 Ga (-40°C ≤ Ta ≤ +90°C)</li> <li>II 1G Ex ia IIB T3 Ga (-40°C ≤ Ta ≤ +130°C)</li> </ul> |
| 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 [40mils] thick  |
| Install over Bare Metal                  | Yes   |
| Cable Characteristics <sup>(2)</sup>     |   |
| Maximum cable length                     | 50 m [164 ft]   |
| Connector to Field Control Units         | Detachable (Souriau 851-series) (3)   |
| Maximum Diameter                         | 42.05 mm [1.66"]  |
| Connector to Sensor                      | gPIMS <sup>®</sup> (Ex) proprietary sealed connector <sup>(4)</sup>   |
| Dimensions, W x H                        | 75 mm x 55 mm [3.0" x 2.2"]   |
| Cable Conduit                            | PVC covered galvanised steel <sup>(5)</sup>   |
| Operating Temperature Range              | -20°C to +105°C [-4°F to +221°F]  |
| Diameter                                 | 18 mm [0.7"]  |

<sup>(5)</sup> Liquid tight, very high UV resistance, medium flexibility and fatigue life, resistant to oil, self-extinguishing, crush resistant



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<sup>(1)</sup> Resistant to: UV, water, oil, external shock.
(2) The gPIMS®(Ex) Type CM Cable forms part of the hazardous area certificate.
(3) Suitable for cable routing through small gaps and upgrading to autonomous collectors.
(4) 4-way connectivity with on-board cable orientation detection.