

gPIMS® Ex SENSOR

Technical Specifications

GUL MONITORING

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® Ex WiFi Field Control Unit (FCU). 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)*



General Characteristics	
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 <i>(approx. for diameter range)</i>	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"]
Hazardous Area Certification	
Intrinsic safety ATEX/UKEX/IECEX	II 1G Ex ia IIB T4 Ga (-40°C ≤ Ta ≤ +90°C)
	II 1G Ex ia IIB T3 Ga (-40°C ≤ Ta ≤ +130°C)
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 ⁽²⁾	
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®(Ex) proprietary sealed connector ⁽⁴⁾
Dimensions, W x H	75 mm x 55 mm [3.0" x 2.2"]
Cable Conduit	PVC covered galvanised steel ⁽⁵⁾
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) 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.

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