



Technical Guide W8.9

Cyble™ Sensor ATEX

A Smart Pulse Transmitter for Gas Meters

The Cyble Sensor ATEX has been designed specifically for gas utilities needing to connect electronic devices with a LF pulse input, such as volume converters to a gas meter. It can be mounted at any time onto any Itron meter equipped with an Itron universal totaliser. It provides a completely flexible solution for current or future remote reading technologies.

KEY BENEFITS

- » High reliability for remote reading.
- » Magnetic tampering is impossible.
- » Easily retrofittable (no breaking of seals) onto meters equipped with the Itron universal totaliser.
- » Long term experience: Since 1995, more than 5 M. modules in the field

PRINCIPLE OF OPERATION

The Cyble Sensor ATEX works as follows:

- » A Cyble target is fitted as a standard into the Itron universal totaliser. It rotates proportionally to the registered volume of gas.
- » 3 coils fitted in the Cyble Sensor ATEX detect the rotation of the target by measuring the change of induction in front of each coil.
- » An electronic board records the complete rotation of the target. This detects and compensates for any backflows: the meter index and remote register are identical. When a complete rotation is validated, a pulse is sent out at the output of the Sensor.

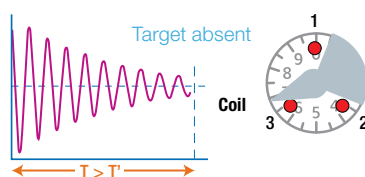
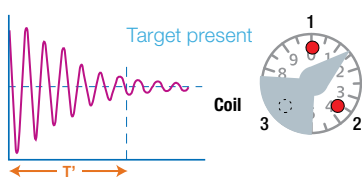
APPLICATIONS

The Cyble Sensor ATEX can be mounted onto the Itron Fluxi 2000/TZ, Delta and MZ meters.

It can be used to ensure reliable transmission of the non-corrected volume from the meter to the Itron Corus volume converter or to any volume converter using a standard low frequency input.

The Cyble M-Bus, RF and Coder presented are also available for other applications.

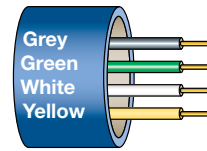
They can also be used to ensure a reliable remote reading of the meter.



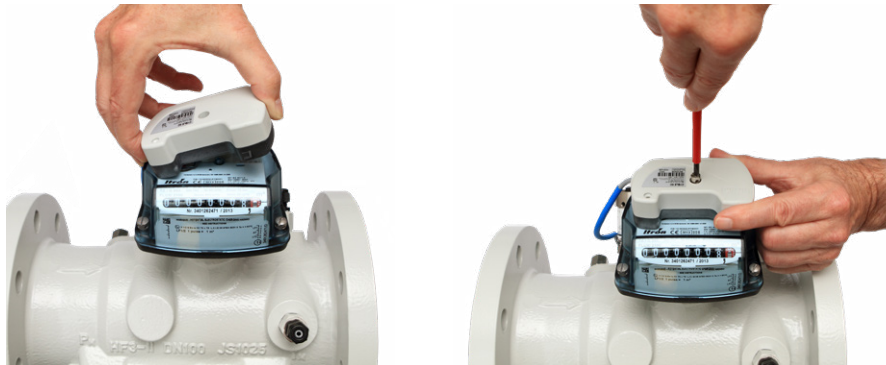
Technical Specifications

Intrinsic safety approval	L.C.I.E. 06 ATEX 6044 X
Intrinsic safety level	⚡ II 1 G Ex ia IIC T3
Signal output	<p>U_i ≤ 15 Volt</p> <p>I_i ≤ 900 mA</p> <p>No polarisation to be observed: wires white and yellow</p> <p>Type dry contact equivalent</p> <p>Anti-tampering (AT): wires grey and green.</p>
Cable length	5 m
Power supply	<p>Lithium battery - not replaceable</p> <p>Life time > 12 years (in normal applications within the specified temperature range)</p>
Working temperature	-25°C to +55°C
Storage temperature	-25°C to +55°C
Protection	IP68
E.M.C standards	EN 61000-6-2, EN 61000-6-3, EN 60947-5-6

Connection:



Fluxi 2000/TZ fitted with the universal totaliser and the Cyble Sensor ATEX



1) Mounting

2) Screwing



3) Sealing



Universal totaliser fitted as standard with Cyble target