



Technical Guide FM2.2

CybleTM 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.

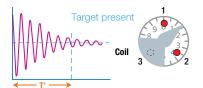
APPLICATIONS

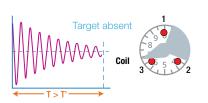
The Cyble Sensor ATEX can be mounted onto the Itron Fluxi 2000/TZ, Delta and MZ meters.

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	Ui ≤ 15 Volt li ≤ 900 mA No polarisation to be observed: wires white and yellow Type dry contact equivalent Anti-tampering (AT): wires grey and green.
Cable length	5 m
Power supply	Lithium battery - not replaceable Life time > 12 years (in normal applications within the specified temperature range)
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

Installation of the Cyble Sensor ATEX onto the meter:



1) Mounting



2) Screwing



3) Sealing

Connection:

0	
Grey Green	
White	
Yellow	



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



Universal totaliser fitted as standard with Cyble target



Scan for more information

Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hygrade Water product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hygrade Water unless expressly stated in any sale and purchase agreement entered into between Hygrade Water and the user. November 2024

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