FlowPulse



FOUR-POLE FLOWPULSE PULSE SENSOR

FlowPulse is a static pulse emitter designed to integrate Maddalena MVM, MVM PLUS C and WMAP EVO water meters into remote reading, dosing and monitoring systems. Based on a microprocessor and an inductive electronic sensor, it enables reliable pulse detection without affecting the meter's metrological performance. The five-conductor structure allows pulse, flow direction, fraud signalling, ground and forward pulse counting to be managed. Thanks to its IP68 protection rating, environmental class C and electromagnetic class E2, FlowPulse is suitable for demanding technical applications. It can also be installed at a later stage on pre-equipped meters, simplifying upgrades and retrofits of existing systems.

maddalena®
METERING EXPERTISE

FlowPulse

GENERAL FEATURES

- Static pulse emitter with NPN open collector output.
- Equipped with microprocessor and inductive electronic sensor.
- Five-conductor cable for complete signal management.
- Detects removal from the meter, useful for fraud signalling.
- Discriminates flow direction, distinguishing forward and reverse flow.
- Insensitive to mechanical vibrations.
- Can also be installed at a later stage on pre-equipped meters.
- Does not affect meter performance.
- Configurable with dual pulse output.
- IP68 protection rating



TECHNICAL SPECIFICATIONS

Type	Microprocessor, inductive sensor
Maximum pulse frequency	4 Hz
Protection rating	IP 68
Operating temperature	-10 °C ÷ +55 °C
Storage temperature	-20 °C ÷ +70 °C
Electromagnetic class	E2
Environmental class	C
Power supply	3 V lithium battery
Battery service life	15 years (average duration under standard conditions)
Standard temperature profile used to calculate battery life	between -10 °C and +0 °C for 10% of the service life between 1°C and +30°C for 80% of the service life between +31°C and +55°C for 10% of the service life

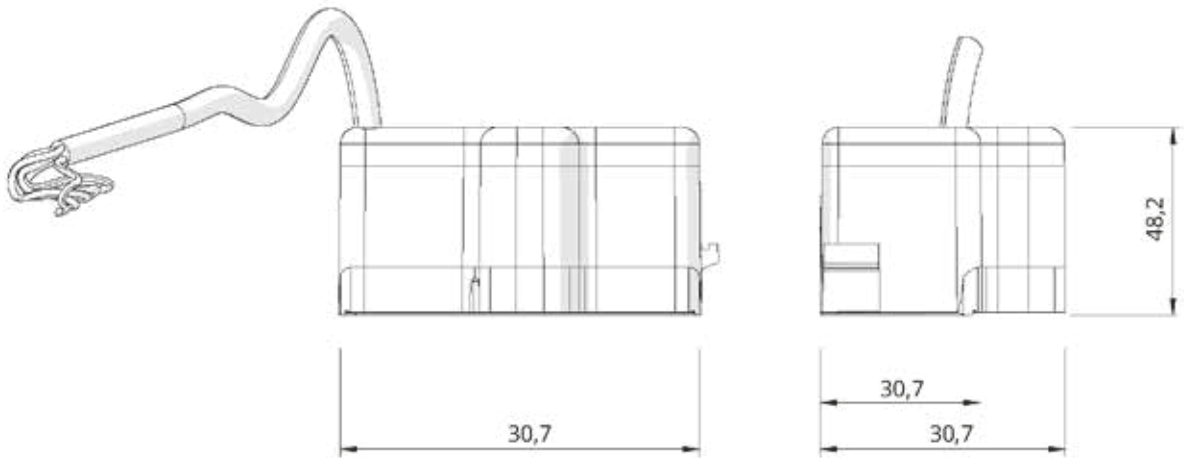
OUTPUTS

Digital outputs (5 conductors)	Pulse output, flow direction, fraud, ground, forward pulse counter	
Output type	NPN open collector, 30 V cc, 50 mA cc	
Pulse duration	125 ms	
Pulse factor	**MVM-MVM PLUS C** DN 15-DN 32: 1 pulse/litre DN 40: 1 pulse/10 litres	**WMAP EVO** DN 50-DN 100: 1 pulse/10 litres DN 125-DN 200: 1 pulse/100 litres
Cable length	2m	

COMPLIANCE WITH STANDARDS

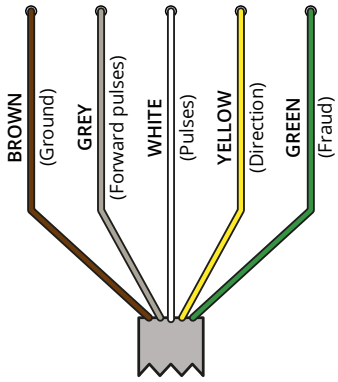
EMC Directive 2014/30/EU	RoHS Directive 2011/65/EU and subsequent revisions
EN 61000-6-3:2007	UNI EN14154-3:2005
EN 61000-6-2:2005	EN 50581:2012
EN 62368-1:2014 + AC:2015 + AC:2017 + A11:2017	

DIMENSIONS



CONNECTIONS

Conductors	Signal	Description
White	Pulses	Signal both with forward flow and reverse flow
Yellow	Direction	Contact closed = reverse
Green	Fraud	Contact open = fraud
Brown	Ground	Common
Grey	Forward pulses	In case of reverse flow, the meter internally records the volume up to a maximum of 1,000 pulses. When normal flow is restored, no pulses are generated until the previously totalised volume value has been reset to zero.



For installation information, please refer to the instruction sheet.

COMPATIBLE DEVICES



WMAP EVO



MVM PLUS



MVM PLUS C



MVM

maddalena
METERING EXPERTISE

MADDALENA spa Via G.B. Maddalena 2/4 33040 Povoletto (Udine) Tel. +39 0432 634811 www.maddalena.it

Rev. 5 08/26 | Subject to technical modifications | Images for demonstration purposes: elements may vary