

OPTICAL ENCODER



The precise way to read water flow.

Catalogue Numbers

Part No.	Description
WMRS1	Optical Encoder Polymer PD



Description

The Optical Encoder unit reads water meters that are equipped with an optical disc and translates water flow into pulses.

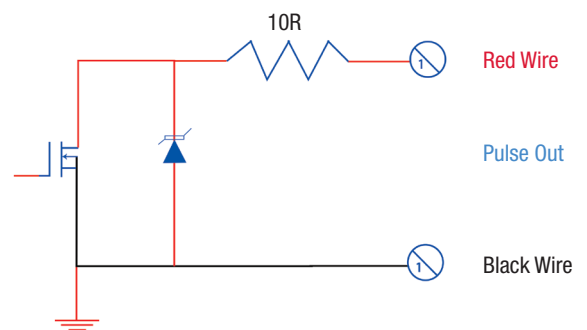
Features and Benefits

- The Optical Encoder is protected from electromagnetic interference and from sunlight.
- The product is based on a microprocessor that works on rotation directions, counts revolutions, and switches on pulses on the basis of sensor readings.
- The algorithm is protected from faults in case of optical disc vibration.
- The sensors are operating in the infrared spectrum and read IR LED pulses reflected off an optical disc.
- The optical disc construction: Half of the disc is black and the other half is reflective.
- The Optical Encoder is powered by Primary Lithium batteries: High voltage (3.6V), high capacity, minimal self-discharge and a wide range of operating temperatures.
- The Optical Encoder output has open drain pulses that correspond to forward flow. There are no pulse outputs for backward flow.

Technical Specifications

Power Source:	Internal Lithium Primary Batteries - not replaceable
Battery Lifetime:	10 years (Calculated for 25°C average ambient temperature)
Case Protection:	IP68
Operating Temperature Range:	-15°C ~ +55°C
Output Types:	Open Drain
Polarity:	Important! Follow connection diagram below.
Supplied Cable Length:	1.5 meter
Maximum Voltage:	50Vdc
Maximum Power Dissipation (Steady State):	250mQ
Dimensions:	H x W x D 36mm x 97mm x 73mm

Red	Pulse Out
Black	GND



Installation Instructions

Step 1

Insert optical encoder onto meter. Line up locking connectors on meter and optical encoder.



Step 2

Twist optical encoder to secure connection.



Step 3

Insert locking pin.



Assembled



Please note: Water meter not included.