

# FLOW PULSE

## Technical Specifications:

Flow Pulse is a unique, non-invasive flow sensor that clamps to the outside of a pipe and is simply secured with a screwdriver. Flow Pulse offers you exceptional repeatability at a fraction of the cost of an equivalent mag flow meter. It can reliably monitor flow across a variety of pipe materials including rigid plastic, stainless steel, cast iron, and even corrugated pipes.



### PHYSICAL

|  |   |
|--|---|
| <b>Sensor Body Dimensions:</b>         | 120 mm x 65 mm x 65 mm (4.8 in x 2.6 in x 2.6 in) |
| <b>Weight:</b>                         | Nominal 1.5 kg (3.3 lb)                           |
| <b>Enclosure Material/Description:</b> | Type 316 stainless steel casting                  |
| <b>Cable Entry Detail:</b>             | 1 cable entry M20 x 1.5 mm (0.06 in) gland        |
| <b>Maximum Separation:</b>             | Up to 500 m (1,640 ft)                            |

### ENVIRONMENTAL

|   |  |
|---|--|
| <b>IP Rating:</b>                                 | IP68 (Optional versions of the sensor can be supplied, fitted with factory potted cable) |
| <b>Max. &amp; Min. Temperature (Electronics):</b> | -20 °C to +70 °C (-4 °F to +158 °F)  |
| <b>CE Approval:</b>                               | Listed in the Certificate of Conformity within the manual                                |

### PERFORMANCE

|  |   |
|--|---|
| <b>Accuracy / Repeatability:</b>       | ±5% typical subject to installation and pipe conditions   |
| <b>Resolution:</b>                     | 3 mm/s (0.1 in/s)   |
| <b>Velocity Range:</b>                 | <ul style="list-style-type: none"> <li>• 300 mm/s to 4 m/s (11.8 in/s to 13.1 ft/s) <i>standard version</i> (or)</li> <li>• 300 mm/s to 10 m/s (11.8 in/s to 32.8 ft/s) <i>high-flow version</i></li> </ul> |
| <b>Response Time:</b>                  | Fully adjustable (1-second minimum)   |
| <b>Minimum Particle Size:</b>          | >100 µm   |
| <b>Minimum Particle Concentration:</b> | >200 ppm  |
| <b>Pipe Diameter:</b>                  | <ul style="list-style-type: none"> <li>• V1: 30 mm to 350 mm (1.2 in to 14 in) (or)</li> <li>• V2: 30 mm to 1.3 m (1.2 in to 4.1 ft) (or)</li> <li>• V3: up to 2 m (6.6 ft)</li> </ul>                      |
| <b>Pipe Wall Thickness:</b>            | Metal or rigid pipe up to 20 mm (0.8 in) thick  |
| <b>Signal Processing:</b>              | RSSA (Refracted Spread Spectrum Analysis)   |

### OUTPUTS

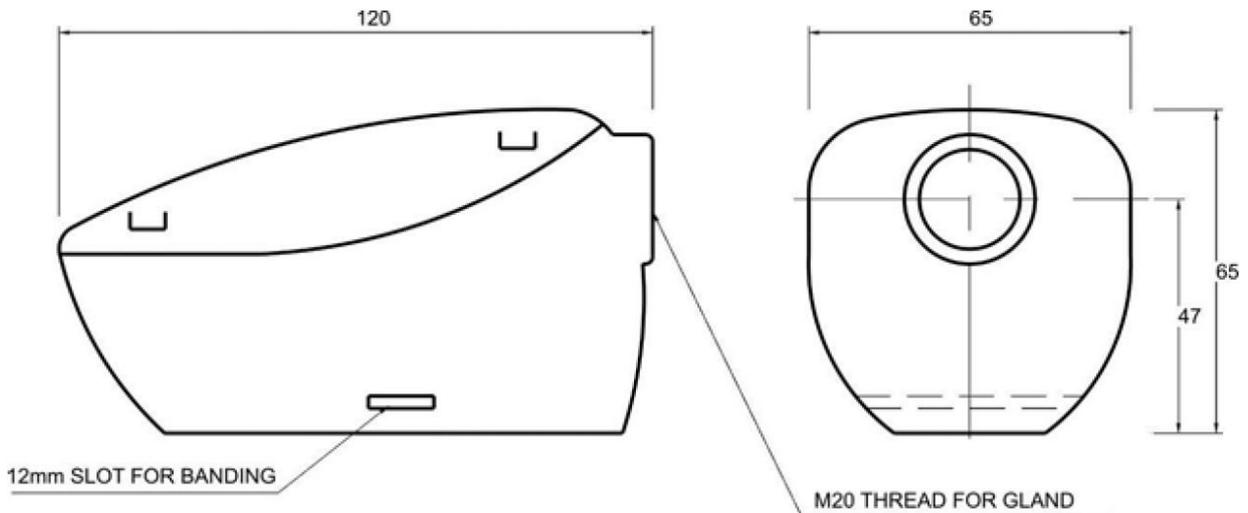
|  |   |
|--|---|
| <b>Analog Output:</b>                          | 4-20mA into a 1 kΩ load (when supply voltage is 22 V DC or greater) with 20 µA resolution and user programmable span. |
| <b>Digital Output:</b>                         | Full Duplex RS232 to PC Software, Half Duplex RS485 to PC Software, Half Duplex RS485 with Modbus RTU                 |
| <b>Volt Free Contacts, Number, and Rating:</b> | 1 form "C" (SPDT) rated at 1 A at 24 V DC   |

## PROGRAMMING

|                                   |  |
|-----------------------------------|--|
| <b>PC Programming:</b>            | Via RS232 or RS485 using Flow Pulse PC |
| <b>Programmed Data Integrity:</b> | Via non-volatile RAM                   |

## SUPPLY

|                           |  |
|---------------------------|--|
| <b>Power Supply:</b>      | 18-28 V DC                                 |
| <b>Power Consumption:</b> | 2.4 W at 24 V typical, 3 W at 24 V maximum |



Flow Pulse Drawing Side and Back

## Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia, allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

For more information, please visit our website:

[www.pulsarmeasurement.com](http://www.pulsarmeasurement.com)



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