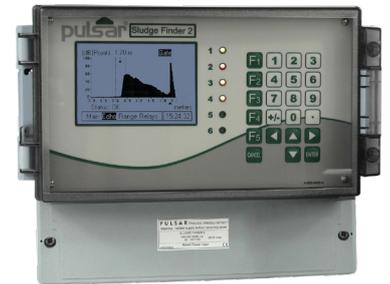


# SLUDGE FINDER 2

## Technical Specifications:

Pulsar's Sludge Finder 2 is a controller and transducer system that provides reliable continuous sludge blanket level measurement. It is used in thousands of applications worldwide for detecting sludge blanket levels in primary, secondary, and tertiary settlement tanks either with stationary or travelling bridges, clarifiers, gravity thickeners, or sequencing batch reactor (SBR) systems.



### PHYSICAL

**Controller Body Dimensions:** 235 mm x 184 mm x 120 mm (9.25 in x 7.24 in x 4.72 in) Wall mount only.

**Weight:** Nominal 1 kg (2.2 lb)

**Enclosure Material/Description:** Polycarbonate, flame resistant to UL94-5V

**Cable Entry Detail:** 10 cable entry knock outs, 5 x M20 and 1 x M16 underside. 4 x PG11 at rear

**Transducer Cable Extensions:** 2 twisted pair 0.5 mm<sup>2</sup> with overall screen

**Maximum Separation:** 200 m (656 ft)

### ENVIRONMENTAL

**IP Rating:** IP65/NEMA 4X

**Max. & Min. Temperature (Electronics):** -20 °C to +50 °C (-4 °F to +122 °F)

**Flammable Atmosphere Approval:** Safe area compatible with approved sensors/transducers. See sensor/transducer spec sheet

**CE Approval:** 2014/30/EU & 2014/35/EU — EMC Directive. Standards applied: EN 61010-1:2010 / EN 61326-1:2013 / EN 55011 / EN 61000 (3-2 / 3-3 / 4-2 / 4-3 / 4-4 / 4-5 / 4-6 / 4-7 / 4-11)

**ATEX Approval:** Controller must be within a safe area. See dB transducers for level sensor approvals

### OUTPUTS

**Analog Output:** 2 off isolated (to 150 V floating) output of 4-20mA or 0-20mA into 1 kΩ (user programmable and adjustable) 0.1% resolution

**Digital Output:** Half duplex RS232

**Volt Free Contacts, Number and Rating :** 6 form "C" (SPDT) rated at 5 A at 115 V AC

**Display:** 192 x 128 pixel illuminated graphical display showing a variety of screens including echo profile. Fully programmable display options, integral keypad with menu navigation keys.

**Radio Modem (Optional):** 4-20mA using wireless exempt frequencies. Maximum range 500 m (1,640 ft) line-of-sight

**Communication Bus (Optional):** RS485 Modbus RTU/ASCII or Profibus DPV0 or DPV1 (slave device)

### PROGRAMMING

**On-board Programming:** By integral keypad

**PC Programming:** Via RS232

**Programming Security:** Via passcode (user selectable and adjustable)

**Programmed Data Integrity:**

Via non-volatile memory

**PC Software:**

Sludge Finder PC within PC Software Suite — compatible with XP (service pack 3), Windows 7/8/10

**SUPPLY**

**Operating Voltage:**

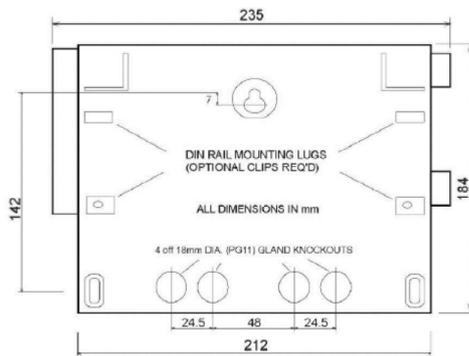
Universal 100-240 V AC 50/60 Hz, 22-28 V DC

**Power Consumption:**

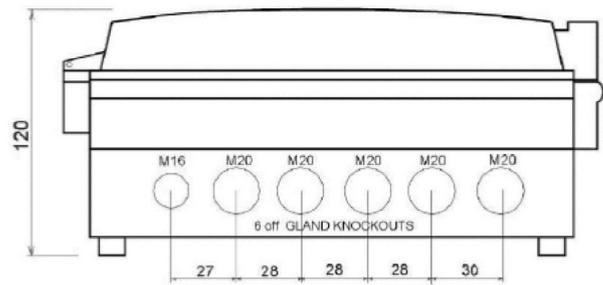
20 W maximum power (typically 11 W)

**Fuse:**

2 A slow blow



Sludge Finder 2 Drawing Back



Sludge Finder 2 Cable Entry Drawing

## Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of reps and distributors 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 allow us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

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



INFO@PULSARMEASUREMENT.COM

*Pulsar Measurement is a trading name of Pulsar Process Measurement, Ltd.*

*Copyright © 2020 Pulsar Measurement  
Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX  
Registered No.: 3345604 England & Wales*

**United States**

11451 Belcher Road South  
Largo, FL 33773

888-473-9546

**Canada**

16456 Sixsmith Drive  
Long Sault, Ont. K0C 1P0

855-300-9151

**United Kingdom**

Cardinal Building, Enigma  
Commercial Centre  
Sandy's Road, Malvern WR14 1JJ

+44 (0) 1684 891371

Rev 1.0