



## ULS-02TM

#### **Ultrasonic Level Sensor**

The ULS-02<sup>TM</sup> ultrasonic level sensor transmits series of ultrasonic pulses which propagate towards the liquid surface. The reflected acoustic wave is received back in the ULS-02<sup>TM</sup> transducer and processed in the electronic module. The distances calculations are based on time flight of the acoustic wave to the level and back.

The ULS-02<sup>TM</sup> and ULS-06<sup>TM</sup> sensors can easily be combined with the new generation open channel noncontact RAVEN-EYE® radar velocity sensor and constitute a custom-tailored non-contact open channel area/velocity flowmeter.

The ULS sensors are ultrasonic level sensors providing continuous level measurement of liquids like water and wastewater. They are self-contained units that include the electroacoustic transducer and the electronic module.

The ULS-02<sup>TM</sup> and ULS-06<sup>TM</sup> level sensors are suited to continuous non-contact level measurement of liquid in closed conduit or open channel applications.



Vertegenwoordigd Flow-tronics in Nederland www.tenkatekool.nl info@tenkatekool.nl tel mobiel 0611366098

### TECHNICAL SPECIFICATIONS

ULS-02TM & ULS-06TM

**Measuring Range** 

ULS-02TM 0,25 m to 2 m ULS-06<sup>TM</sup> 0,25 m to 6 m

Supply Voltage

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> 18...36 VDC

Optional: 10...18 VDC

**Current Supply** 

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> 12 mA

**Voltage Output** 

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> 0...10V

Resolution

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> < 1mm

Accuracy

ULS-02TM 0.3% ULS-06<sup>TM</sup> 0,2%

Temperature Error

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> max.0.04% /K

Beamwidth (-3dB)

ULS-02TM 10° ULS-06<sup>TM</sup> 14°

**Operating Temperature Range** 

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> -30°C... +70°C

**Measuring Period** 

ULS-02TM 0,6s ULS-06<sup>TM</sup> 1,0s

Averaging

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> 4 measurements

**Short Time Temperature Stress Resistance** ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> +90°C /1 hour

Max. Operation Overpressure (on transmission surface)

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup> 0.1MPa

**Protection Class** 

ULS-02TM / ULS-06TM **IP68** 

Weight

ULS-02TM 0,55 kg ULS-06<sup>TM</sup> 0,65 kg

**Current Output** 

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup>: 4...20mA (limit values 3.9 ... 20.5 mA)

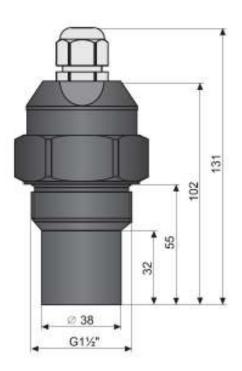






# 

ULS-02TM



ULS-06TM



### TECHNICAL SPECIFICATIONS

ULS-02TM & ULS-06TM

**Voltage Output** 

ULS-02<sup>TM</sup> / ULS-06<sup>TM</sup>

0...10V (limit values 0 ... 10.2 V)

Specifications are subject to change without notice Updated: 10/04/2013



Vertegenwoordigd Flow-tronics in Nederland <a href="https://www.tenkatekool.nl">www.tenkatekool.nl</a> <a href="mailto:info@tenkatekool.nl">info@tenkatekool.nl</a> <a href="mailto:tel">tel mobiel 0611366098</a>

