

MSL600

Sludge Blanket Level Monitoring

- *Continuous measurement of sludge blanket level interface*
- *Integral air purge cleaning system ensures reliable measurement and minimal maintenance*
- *Optimized for use with clarifiers and thickeners containing municipal and industrial wastewater treatment sludge*
- *An abundant range of built-in display, control and alarm features*
- *Easy to use menu driven programming allows complete configuration of the unit in just a few minutes*



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MSL600 Control Unit and Transducer



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- System includes a bridge mounted control unit and ultrasonic transducer
- Easy installation using a handrail mounting bracket
- Transducer self-cleaning facility
- Display shows trend and sludge profile

Additional Information

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TABLE 1. MSL600 Transducer Ordering Information

★The Standard offering represents the most common options. The starred options (★) should be selected for best delivery. The Expanded offering is subject to additional delivery lead time.

Model ⁽¹⁾	Product Description	
Standard		Standard
MSL603	MSL600 transducer with integral galvanized mild steel mounting bracket and 33 ft. (10 m) cable/hose	★
MSL603/SS	MSL600 transducer with integral 316L stainless steel mounting bracket and 33 ft. (10 m) cable/hose	★
MSL603/1	MSL600 transducer with 33 ft. (10 m) cable / hose, 3/4-in. BSP to 1 1/4-in. BSP adaptor, no mounting bracket	★
Typical Model Number: MSL603		

(1) The MSL603 transducer replaces the MSL602. To replace an old style MSL602 transducer, order MSL603/1.

TABLE 2. MSL600 Control Unit Ordering Information

★The Standard offering represents the most common options. The starred options (★) should be selected for best delivery. The Expanded offering is subject to additional delivery lead time.

Model	Product Description	
MSL600	Controller with integral air clean compressor	
115/230 Vac, Bracket/Wall Mount		
Standard		Standard
Z0	Standard bracket and wall mount version of the control unit	★
Typical Model Number: MSL600 / Z0		

Specifications

CONTROL UNIT AND SENSOR

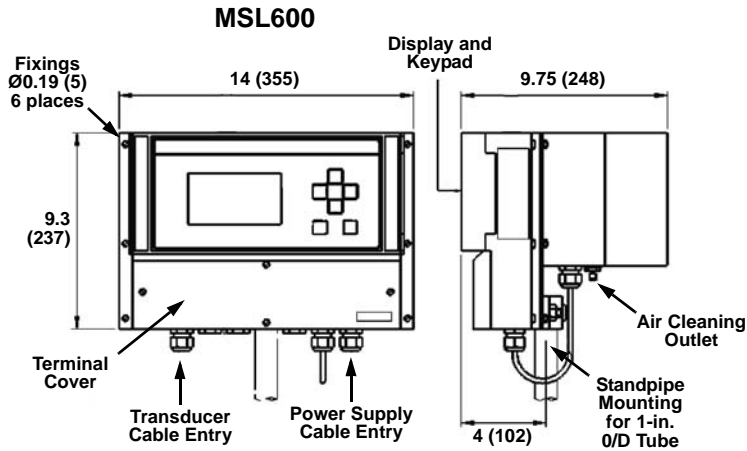
General	
Product	Wall or Bracket Mounted MSL600 Control Unit
Measurements	
Range	23 ft. (7 m) maximum
Deadband	1ft. (0.3 m) minimum
Accuracy	±1.4 in. (±35 mm)
Resolution	1 in. (25 mm)
Functional	
Outputs	2 x programmable relays SPDT, 1 x fault relay SPDT, and 0/4–20mA isolated
Cleaning	Transducer self cleaning facility – automatic timed air-purge using the integral air compressor
Physical	
Sensor Material	Ceramic face, PTFE cleaning nozzle, UPVC body
Sensor Cable	Fully encapsulated with 10m / 33ft cable and air clean polyurethane hose
Mounting Thread	1 ¹ / ₄ -in. BSPT. Supplied with ³ / ₄ -in. BSP adaptor
Electrical	
External Power Supply	115 or 230 Vac (50/60Hz)
Environment	
Operating Temperature	Control Unit: –4 to 130 °F (–20 to 55 °C)
	Sensor: –40 to 150 °F (–40 to 65 °C)
Enclosure Rating	IP66
Sensor Rating	IP68

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Dimensional Drawings

MSL600 CONTROLLER

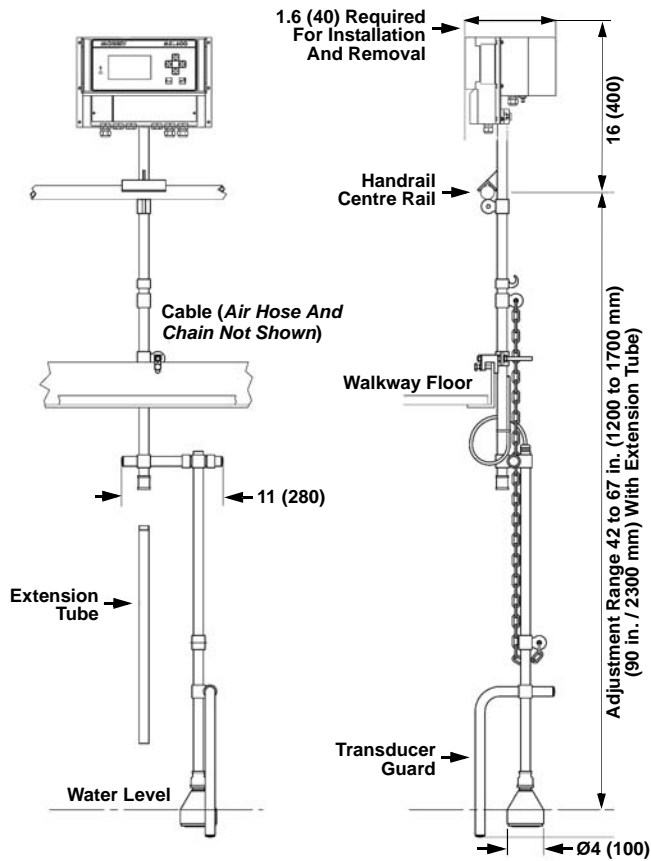
Note: Dimensions are in inches (mm)



M20 cable glands fitted into 0.8-in. (20 mm) entries are supplied as standard, suitable for 0.3-in (8 mm) cable

MOUNTING ASSEMBLY

Note: Dimensions are in inches (mm)



Product Data Sheet

IP261, Rev DA

October 2010

MSL600

Rosemount Level Solutions

Emerson provides a complete range of Rosemount products for level measurement applications.

Vibrating Fork Switches – Point Level Detection

For high and low alarms, overflow protection, pump control, including wide pressure and temperature requirements, and hygienic applications. Flexible mounting. Immune to changing process conditions and suitable for most liquids.

The product line consists of:

- Rosemount 2160 Wireless
- Rosemount 2130 Extreme Temperature
- Rosemount 2120 Full-featured
- Rosemount 2110 Compact

Differential Pressure – Level or Interface Measurement

Flexible mounting for liquid tank levels, including those with wide temperature and pressure requirements. Can be isolated by valves. Unaffected by: vapor space changes, surface conditions, foam, corrosive fluids, internal tank equipment. Optimize performance with direct mount, Tuned-System Assemblies:

- Rosemount DP Level Transmitters and Remote Seals
- Rosemount 3051S_L, 3051L, and 2051L Liquid Level Transmitters

Ultrasonic – Level Measurement

Top mounted, non-contacting for simple tank and open air level measurements. Unaffected by fluid properties such as: density, viscosity, dirty coating and corrosiveness. Appropriate for routine applications outside of explosion proof areas.

The product line consists of:

- Rosemount 3100 Series Ultrasonic Process Level Transmitters

Guided Wave Radar – Level and Interface Measurement

Top mounted, direct level and interface measurement of liquids or solids, including those with wide temperature and pressure requirements. Unaffected by changing process conditions. Good fit for small spaces and easy swap for older technologies.

The product line consists of:

- Rosemount 5300 Series – Accurate, superior performance transmitter in most applications including process vessels and control
- Rosemount 3300 Series – Versatile and easy-to-use transmitter in most liquid storage and monitoring applications

Non-contacting Radar – Level Measurement

Top mounted, direct level measurement for liquids or solids, including those with wide temperature and pressure requirements. Can be isolated by valves. Unaffected by changing process conditions. Good for dirty, coating and corrosive applications.

The product line consists of:

- Rosemount 5400 Series – Accurate, superior performance 2-wire transmitters for most liquid level applications and process conditions
- Rosemount 5600 Series – 4-wire transmitters with maximum sensitivity and performance for solids, challenging reactors, rapid level changes and excessive process conditions

Chambers for Process Level Instrumentation

- Rosemount 9901 – High quality chambers for external mounting of level measurement and control instrumentation on process vessels