



QUADBEAM TECHNOLOGIES

~ Specialists in process suspended solids & turbidity ~

MSSD33 Controller

The MSSD33 controller is an advanced microprocessor based suspended solids controller capable of accurately determining the milk/water interface (Transition or phase detection) in product recovery and CIP applications.

Simple Set-up & Calibration

Although microprocessor based, the MSSD33 is simple to set-up, calibrate and install. The only equipment needed is a screw driver and a general purpose digital multi-meter with a 0 to 10 volt range.

Applications

The MSSD33 has two control relays and two adjustable setpoints. Where the instrument is used for product recovery, the setpoints are adjusted so that all product that falls between the two setpoints is recovered. Any product that falls below the lower setpoint usually goes to the waste water treatment plant.

This controller is also used with a Series 20 immersion sensor to maintain a sludge blanket in primary sedimentation tanks in waste water application. Refer to application note "AN03 De-sludging of Primary Sedimentation (Clarifier) Tanks" available at www.quadbeam.co.nz

Fault Detection

The MSSD33 also has a fault relay which is activated when the microprocessor determines that the measurement is no longer valid or if the power to the instrument is failed. This relay would normally be wired back to either a PLC or alarm annunciator panel to advise that urgent attention is required.



Series 20 Hygienic Sensor

Most commonly used sensor with the MSSD33 Controller. It comes in an Industry standard 3" Triclover connections.

Hygienic style sensors are designed for installation directly into food product lines where CIP cleaning is used.

One piece polypropylene construction with a surface finish of better than $R_a = 0.9\mu m$ eliminates bacteria traps.

SPECIFICATIONS*

Measurement Input:

For use with Quadbeam™ S Series Suspended Solids Sensors.

Measurement Units:

Probe Signal Units.

Calibration:

This unit is pre-calibrated from 0 to 10,000 probe signal units.

Accuracy:

+/- 2%.

Repeatability:

+/-1%. The effect of the hysteresis adjustment is additional.

Ambient Operating Range:

-20°C to +60°C

Response Time:

1.6 Seconds (Controller and Sensor)

SENSOR

Operating Temperature Range:

0 to 85°C

Pressure:

10 BarG

MODEL NO. SELECTION GUIDE

Basic Model No:

MSSD33S - Surface mounted enclosure to **IP66**.

Output:

R - Two SPST voltage free control relays are standard and rated at 10A/250 Vac non inductive. The third relay is a fault relay and is rated at 0.5A/250 **Vac**.

Supply Voltage:

LV - 18 to 36 Volt DC only.

Mounting Bracket:

SS - Stainless steel mounting brackets are supplied as standard which allow for vertical or horizontal mounting. 18 to 36 Volt DC only.

Sample model no: MSSD33S-R-LV

Optional Extras:

SS Pipe Mounting Kit - Used instead of the mounting brackets to allow for mounting on a 2" pipe mount.

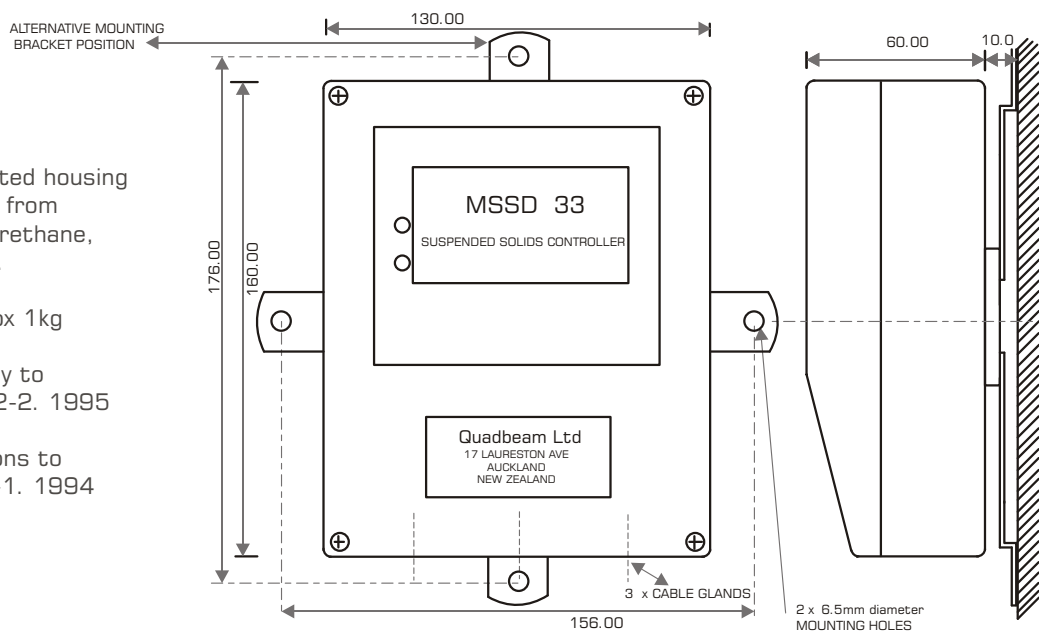
MSSD33 Suspended Solids Controller

Surface mounted housing manufactured from moulded polyurethane, rated to IP66.

Weight: Approx 1kg

EMC: Immunity to BS/EN500082-2. 1995

EMC: Emmissions to BS/EN50081-1. 1994



* Due to our policy of continuous improvements, specifications are subject to change without notice.