**TYPICAL SPECIFICATION**

**ECHO-SCALE™ ULTRASONIC LEVEL SENSOR**

**With WIZARD 4000™ DISPLAY**

ULTRASONIC SENSOR: An ultrasonic level sensor shall be provided for each tank. Ultrasonic sensor shall be of the “self-contained” type, outputting a 4-20 mA signal proportional to the tank level. Sensor shall have a range of up to \_\_\_\_\_\_ ft. (meters) [6’/2m,10'/3m or 25'/6m]. Sensor shall have a NEMA 4X, PVDF transducer housing and polycarbonate body and shall have \_\_\_\_\_\_ feet (20'/6M standard) of sensor cable.

INSTRUMENT ENCLOSURE, OUTPUTS & ALARMS: Indicator shall carry CE marking and shall be housed in a NEMA 4X, UL approved enclosure. Indicator shall have a 20 key digital keypad & ability to simultaneously display two channels on a backlit, alphanumeric display. If more than two channels are being monitored, display shall automatically scan all channels in the system. Indicator shall have adjustable 4-20mA signals that output net amount or feed rate for each channel. Indicator shall display an alarm in any of the following conditions: Low level, high level, low feed rate, high feed rate, max daily use, min daily use, and load cell failure. An alarm log shall store the most recent 10 alarm conditions with time and date of occurrence. A quantity of \_\_\_\_relays (*OPTIONAL*: up to 12 per indicator) shall be provided for remote alarm indication or transfer pump control.

DISPLAY & INVENTORY CONTROL SOFTWARE: Keypad and Menu items shall have independent password protection to prevent unauthorized operation. Both a numerical and a bar graph display shall give operator the ability to monitor chemical by weight, volume or percent full. Each channel shall have a user selectable, two digit ID number and shall display net remaining, feed rate, daily usage, total amount used, days until empty, gross weight and tare weight. A TANK LOAD key shall pause & project usage accumulation during chemical re-supply to maintain accurate usage data over multiple tank loads. A data log shall store the DAILY USAGE for each of the previous 31 days.

Sensor shall carry a Full 3-Year Factory Warranty. “Limited” warranties shall be considered unacceptable. Accuracy shall be better than or equal to +/- 0.1”. Sensor shall be ECHO-SCALETM Model DR-5\_\_80 with electronic WIZARD 4000™ digital display, as manufactured by FORCE FLOW, 2430 Stanwell Drive, Concord, CA 94520 USA (www.forceflowscales.com).

Model Numbers:

 Model Range Feet of Cable

SENSOR: **DR-5080** 4" -79"(102mm - 1975mm)20'/6m Cable (Std)

 **DR-5180** 1' - 10' (30cm - 305cm) 20'/6m Cable (Std)

 **DR-5280** 1' - 20' (30cm - 610cm) 20'/6m Cable (Std)

INDICATOR: **4000-1** 1 Channel

 **4000-2** 2 Channel

 **4000-3** 3-Channel

 **4000-4** 4-Channel

**FORCE FLOW 1-800-893-6723**

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