Maintenance & Operating Instructions

For

Dixon Bayco

FT100 SERIES SENSORS

FT101 SERIES SENSORS

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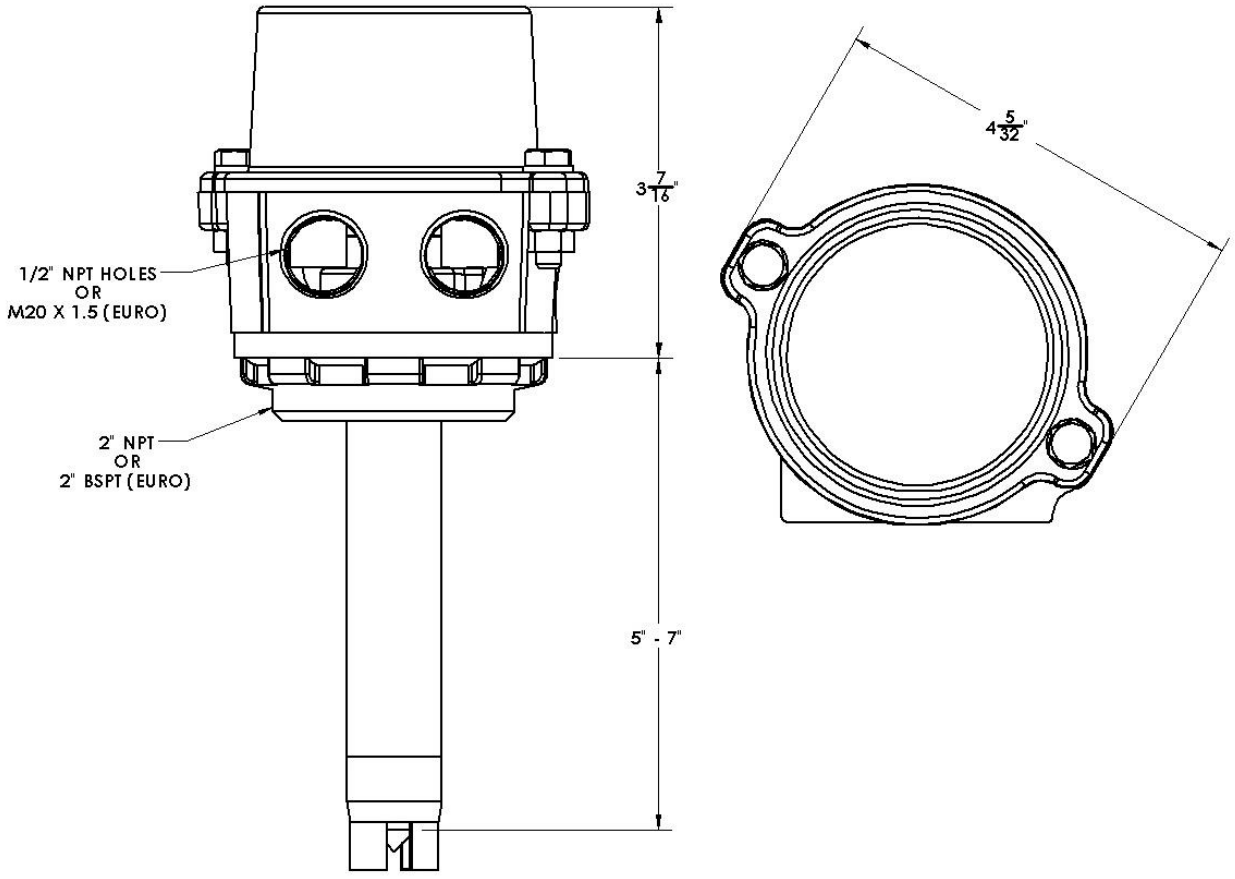
The Right Connection®

INSTALLATION INSTRUCTIONS:

FloTech overfill probe housings can be mounted in a 2”NPT (2” BSPT for European style) female pipe coupling or through a 2 3/8” hole. When mounting in a 2 3/8” hole the gasket and lock nut provided are used to retain the probe holder in the tank shell or manhole. After the sensor is mounted remove the cap.

Loosen the probe clamp screw and adjust the probe to the correct level point. This is typically 60 gallons (227 liters) above the sensor prism OR 3% of compartment volume whichever is greater. It is not recommended cutting the standard 7” sensor to a shorter length. This will cause insufficient time to stop the flow of product within the load racks reaction time. Longer 12” or 18” sensors may be cut to length with a tubing cutter.

IMPORTANT: The actual sensing point adjustment should be determined by the total response time required to prevent a tank overfill condition. The FloTech sensor reaction time is 35ms. Wet testing the sensor should switch instantaneous. The loading rack will also have a reaction time. Once the probe is adjusted to the proper height, tighten the clamp screw.



WIRING INSTRUCTIONS:

It is highly recommended to use FloTech FT400 jacketed 5-conductor cable when wiring a new system. FloTech cable is designed to be oil, UV, and abrasion resistant. We incorporate a noble tin plated stranded copper wire which resist corrosion. These features will provide years of reliable service. Do not use aftermarket cable if bare copper wire (reddish tint) is visible when the wire insulation is stripped.

After all sensors are mounted in each compartment, align the conduit openings so they face the roll over rail. Thread in cable glands and pull a length of cable through the conduit openings between each sensor. Cut to length leaving approximately 8 inches extra length exiting the top of each probe holder.

FOR HOUSINGS USING NPT SIDE OPENINGS:

All sensor wires must enter or leave through one of the ½ NPT openings. Use FloTech FT402 ½ NPT cable glands to ensure a water tight seal. Unused conduit openings must have a ½ NPT pipe plug installed. Use pipe dope on all ½ NPT threads to ensure a water tight seal.

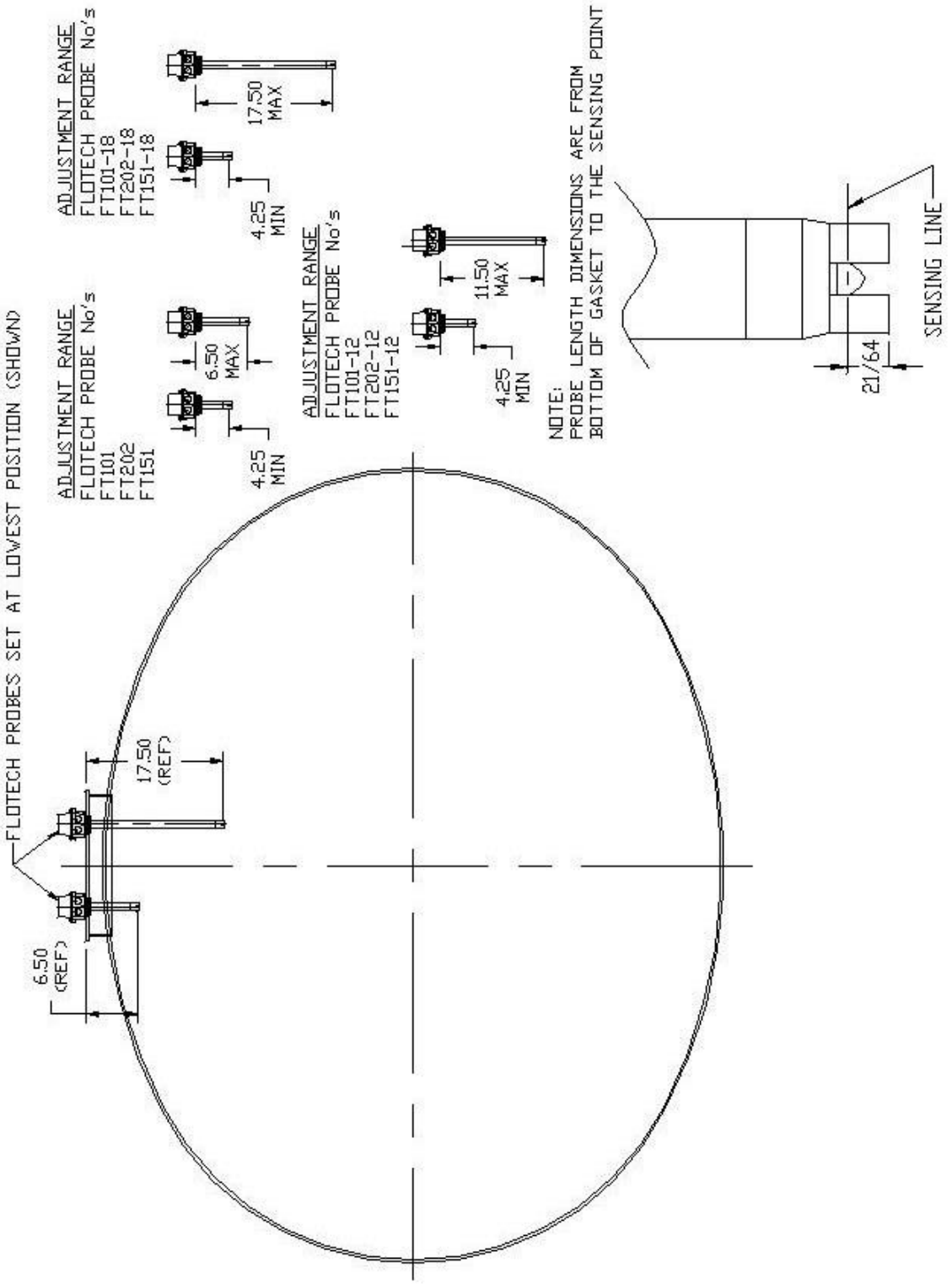
FOR EUROPEAN HOUSINGS USING METRIC M20 X 1.5 SIDE OPENINGS:

All socket cables must enter or leave through one of the M20 X 1.5 threaded openings. Use FloTech FT402E M20 X 1.5 cable glands with thread sealant to ensure a water tight seal. Unused conduit openings must have a M20 X 1.5 plug with o-ring installed.

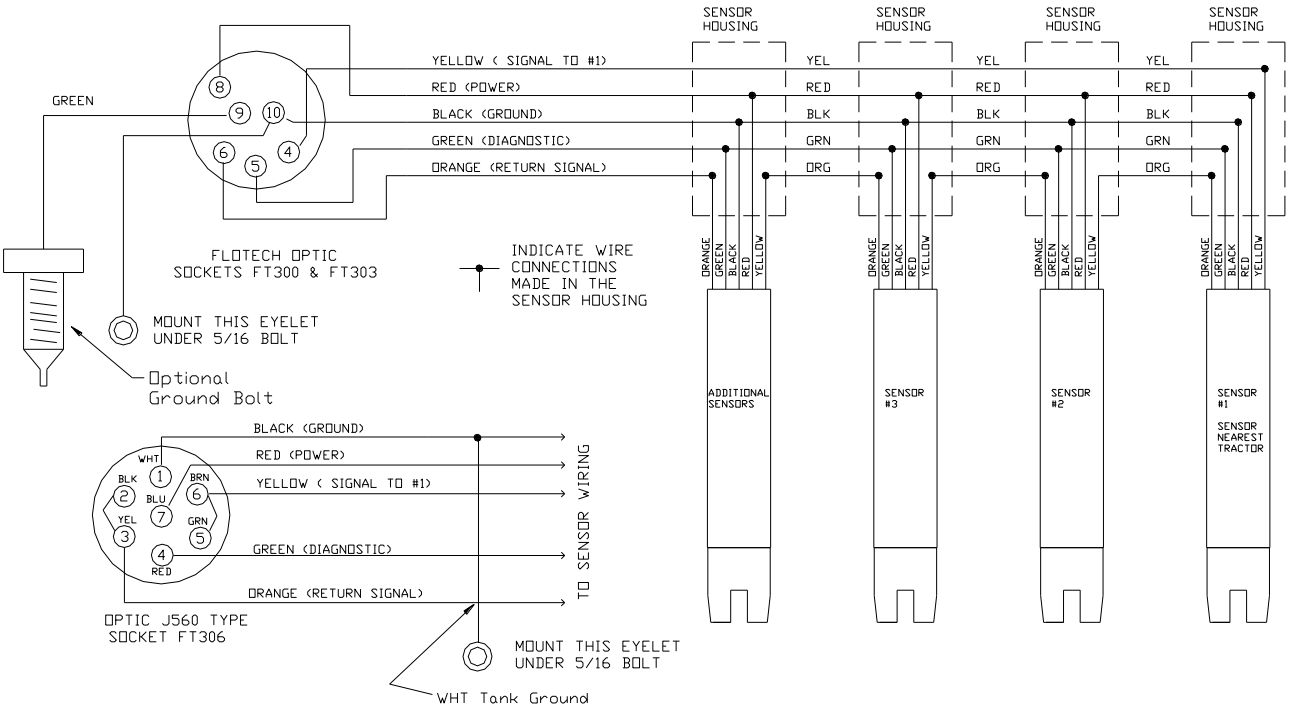
Wire the sensor according to the diagram below. Double check your wiring connection when complete. NOTE: It is highly recommended to use a small amount of Silicone RTV sealant in each crimp connection. Fill the FloTech butt end crimps with Silicone RTV sealant prior to inserting the wires then crimp. This will provide a watertight and vibration resistant connection that will last for years. **Do not use twist on connections "wire nuts"!**

When wiring is complete, replace each sensor cap and o-ring. CAUTION: Do not pinch a sensor wire when installing the cap.

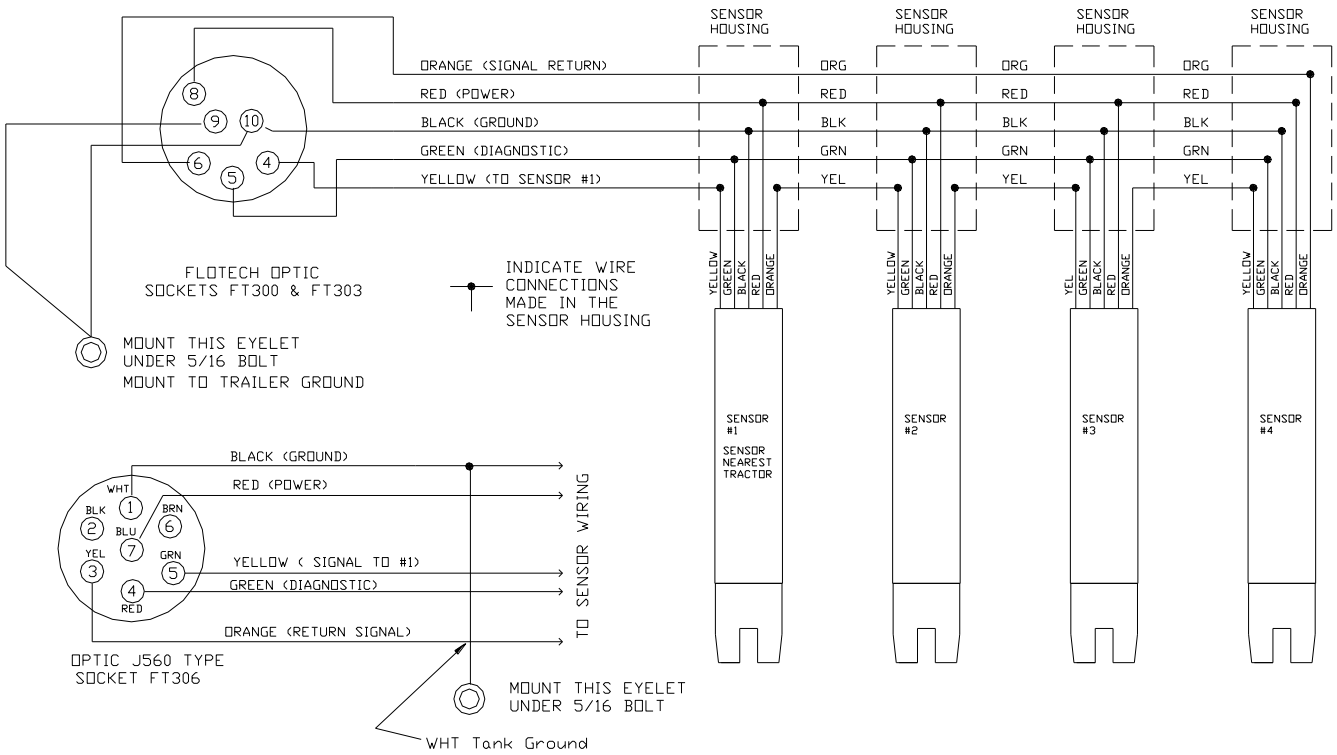
Note: Trailer wiring for the US is different that trailer wiring in Canada. Both schematics are provided.


FLOTECH PROBES SET AT LOWEST POSITION (SHOWN)
17.50 (REF)
6.50 (REF)
ADJUSTMENT RANGE
FLOTECH PROBE No's
FT101
FT202
FT151
6.50 MAX
4.25 MIN
ADJUSTMENT RANGE
FLOTECH PROBE No's
FT101-18
FT202-18
FT151-18
17.50 MAX
4.25 MIN
ADJUSTMENT RANGE
FLOTECH PROBE No's
FT101-12
FT202-12
FT151-12
11.50 MAX
4.25 MIN
NOTE:
PROBE LENGTH DIMENSIONS ARE FROM
BOTTOM OF GASKET TO THE SENSING POINT
21/64
SENSING LINE

US 4 COMPARTMENT SYSTEM



CANADA 4 COMPARTMENT SYSTEM



SENSOR TUBE CUTTING INSTRUCTIONS

1. Remove black plastic thread protector.
2. Measure new length of sensor. Sensor length should be set so a minimum outage of 60 gallons (US) (250 liters Canada) or 3% of compartment capacity, whichever is greater, remain in the tank after the probe is wetted. See diagram below and refer to American Petroleum Institute recommended practice 1004.
3. Hold the tube in hand when cutting with a tubing cutter. DO NOT put the sensor in a vise. This will damage the sensor!
4. Cut the tube with a tubing cutter. DO NOT use any type of saw. DO NOT cut tube shorter than 7 inches overall length.
5. DO NOT cut below the scribed line on the sensor tube. Doing so will void the warranty.
6. Carefully deburr the inside of the tube and replace the thread protector.