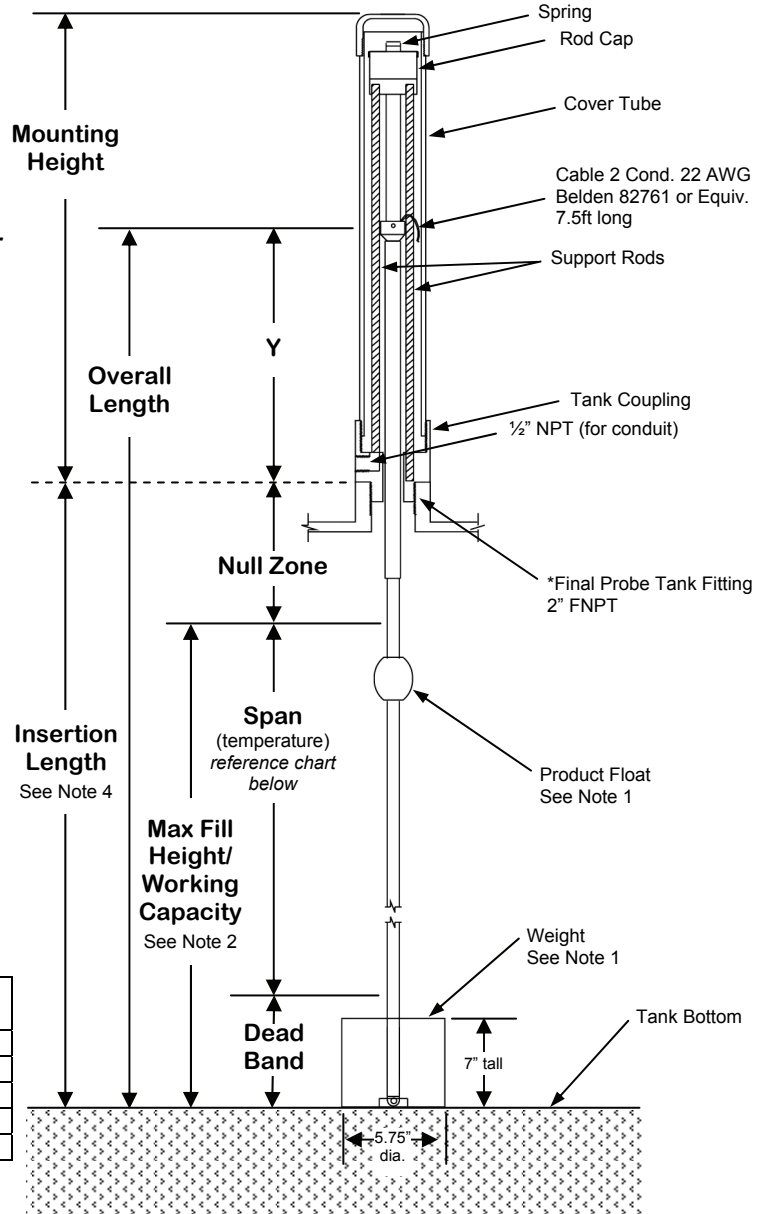
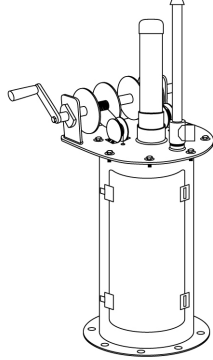


# MTG-FB SERIES PROBE DIMENSION

## APPROVAL SHEET

<b>CUSTOMER</b>
<b>PO#</b>
<b>EL#</b>
<b>SHIP DATE</b>
<b>QUANTITY</b>
<b>PRODUCT</b>
<b>FLOATS</b>
<input type="checkbox"/> 1 Float (product only) <input type="checkbox"/> 2 Floats (product and water) See Note 3

Environmental Chamber  
See Note 4



DIMENSIONS SUPPLIED BY CUSTOMER	
Insertion Length =	
Maximum Fill Height/Working Capacity =	
<i>Note: Insertion length minus maximum fill height/working capacity must be equal to or greater than null zone. Consult factory if insertion length exceeds 840".</i>	

**Overall Length = Insertion Length + "Y"**

Insertion Length (in)	Overall Length (in)	Null Zone @24°C (in)	Dead Band (in)	Y (in)	Mounting Height (in)
192-288	209-305	10	3.65	17	34
289-432	309-452	12	6.25	20	34
433-600	453-620	15	6.50	20	34
601-720	621-740	18	7.00	20	35
721-840	741-860	21	7.00	20	35

### Thermometer Spacing

**Span = Max Fill Height/Working Capacity - Dead Band**

Probe Type	Overall Probe Length	Thermistor Spacing @ 24°C
MTG-FB-R5	209" ≤ L ≤ 305"	(Span + 3.65")/6
MTG-FB-R5	309" ≤ L ≤ 452"	(Span + 6.25")/6
MTG-FB-R5	453" ≤ L ≤ 620"	(Span + 6.50")/6
MTG-FB-R5	621" ≤ L ≤ 740"	(Span + 7.00")/6
MTG-FB-R5	741" ≤ L ≤ 860"	(Span + 7.00")/6

Note 1: Float and weight type and geometry are dependant on application.  
 Note 2: Temperature sensors are spaced over range specified.  
 Note 3: For dual float probes with overall length greater than 288", a float spacer will be required between two floats.  
 Note 4: When using an Environmental Chamber an additional 32" must be added to the Insertion Length.  
 \*Supplied by others

**\*\*\* ALL SECTIONS BELOW MUST BE COMPLETED \*\*\***

Name: \_\_\_\_\_ Company: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

If environmental chamber is required check here to confirm 32" was added to insertion length.

**IMPORTANT:** The signature above confirms the buyer's acceptance of all the dimensions contained in this document and authorizes OMNTEC to release order for production. Custom parts are non cancellable and non returnable.

Note: Current published specifications are subject to change without notification. Verify specifications with manufacturer.



**OMNTEC**  
Advanced Tank Monitoring & Leak Detection

## **FLEXIBLE FIXED BOTTOM MTG PROBE** **MTG-FB SERIES**

MTG-FB Series is a flexible PVDF magnetostrictive tank inventory management probe which enables fully accurate product level and measurement of as little as 1" (25mm) of water in the bottom of tanks. It also provides five temperature measurements spaced evenly 1m from the tank floor.

The MTG-FB Series benefits from a bottom reference approach by resting a heavy hollow weight on the bottom of each tank. This unique OMNTEC bottom reference design takes full advantage of the tank bottom stability versus known instabilities of a tank roof. The tank bottom reference design is further enhanced by a top mounted constant-tension feature. This feature maximizes the probe's level accuracy to less than 0.01 of an inch by removing tank movements and its influence on measurement. In turn this OMNTEC exclusive design maximizes the operator's ability to manage inventory with accuracy and confidence

The MTG-FB Series is typically installed on a 6" or larger process fitting. Other fitting may be accommodated. Please consult the factory for a detailed review of your unique application.

Numerous product float options are available, dependent on the density and composition of the tank product.



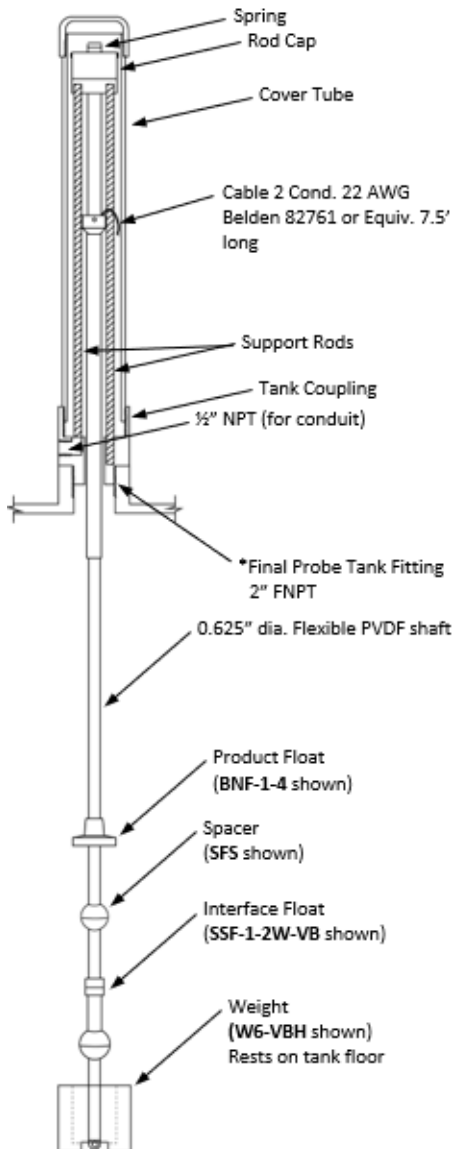
**ALL FROM ONE TANK OPENING...  
ALL WITHOUT TAKING YOUR  
TANK OUT OF SERVICE**

### **FEATURES**

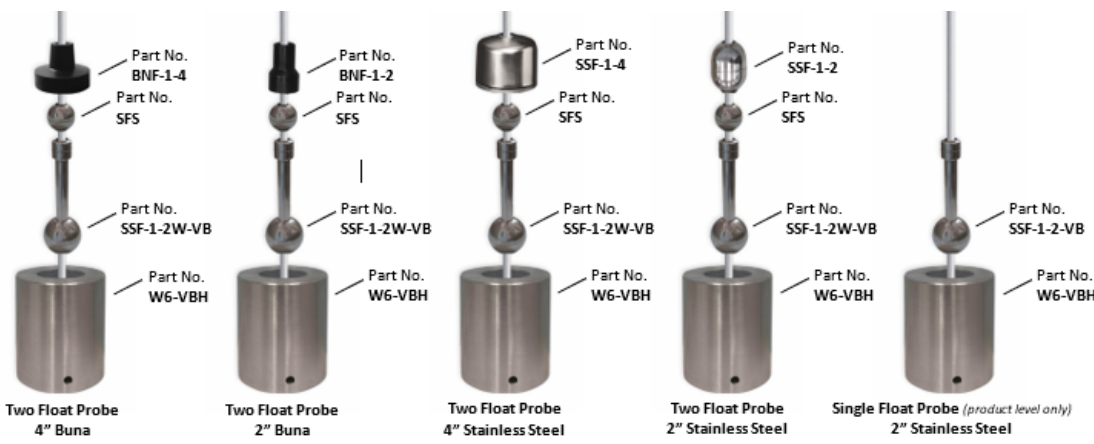
- COMPENSATE FOR ROOF MOVEMENT
- UNPARALLELED INVENTORY ACCURACY
- ACCURATE TEMPERATURE COMPENSATION
- MEASURE AS LOW AS 1" OF WATER OFF TANK BOTTOM

# FLEXIBLE FIXED BOTTOM MTG PROBE

## Part NO. MTG-FB Series



SPECIFICATIONS	
Part No.	MTG-FB Series
Input Voltage	16 - 31 VDC
Overall Probe Length	209" to 860"
Enclosure Rating	PVDF, IP 68
Typical Level Resolution	0.010"
Linearity	+/- 0.01% of Full Scale +/- 0.010", whichever is greater
Repeatability	+/- 0.001% of Full Scale +/- 0.00025", whichever is greater
Temperature Measurement	Up to 5 along the sensor span
Temperature Accuracy	+/- 2 °F
Typical Temperature Resolution	+/- 0.01 °F
Temperature Sensing Range	-40 °F to +158 °F or -40 °C to 70 °C
Operating Temperature Range	-40 °F to +158 °F or -40 °C to 70 °C
Probe Output	Pulse Position Modulation
Distance to Monitor	1000' using Belden 8761
Compatible Controllers	OEL8000II <b>PROTEUS Series:</b> OEL8000III-B, OEL8000III-K, OEL8000III-X
Floats	<b>BNF-1-4</b> 4" Buna Product Float <b>BNF-1-2</b> 2" Buna Product Float <b>SSF-1-4</b> 4" Stainless Steel Product Float <b>SSF-1-2</b> 2" Stainless Steel Product Float <b>SSF-1-2W-VB</b> 2" Stainless Steel Water Float for low water detection applications (used with W6-VBH weight) <b>SSF-1-2-VB</b> 2" Stainless Steel Product Float for low product detection applications (used with W6-VBH weight) <i>Specs based on 4" buna</i>
Weight	<b>W6-VBH</b> 5.75" (dia) x 7" (h) Stainless Steel Weight for use in low water or product applications when used in conjunction with floats SSF-1-2W-VB and SSF-1-2-VB. Requires a 6" accessible opening on tank top.
Spacer	<b>SFS</b> Stainless Steel Float Spacer required on probe lengths 288" or greater
Listings	UL, intrinsically safe when used in accordance with OEL8000II/OEL8000III control drawing



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