

### **Probe Description & Product Application**

Mag-FLEX In-Tank Probes for Monitoring **Gas, Diesel, & Alternative Fluids** in both USTs and ASTs



	Part # & Description	Approved Products	Monitoring Functionality Options		
Specific Products Monitored / Product Compatibility	1. 0889591-4xx Mag-FLEX probe with gasoline & water floats, wired, UL/cUL * 2. 0889591-5xx Mag-FLEX probe with diesel & water floats, wired, UL/cUL * 3. 0889591-6xx Mag-FLEX probe with no water float, wired, UL/cUL * 4. 0889591-8xx Mag-FLEX probe for methanol tanks with no water float, wired, UL/cUL 5. 0889591-1xx Mag-FLEX probe with gasoline & water floats, wireless, UL/cUL 6. 0889591-2xx Mag-FLEX probe with diesel & water floats, wireless, UL/cUL 7. 0889591-3xx Mag-FLEX probe with no water float, wireless, UL/cUL 8. 0889591-7xx Mag-FLEX probe for methanol tanks with no water float, wireless, UL/cUL 9. 0889591-7xx Mag-FLEX probe with gasoline & water floats, wired, ATEX 10. 0889561-4xx Mag-FLEX probe with diesel & water floats, wired, ATEX 11. 0889561-6xx Mag-FLEX probe with no water float, wired, ATEX 12. 0889561-8xx Mag-FLEX probe for methanol tanks with no water float, wired, ATEX 13. 0889561-1xx Mag-FLEX probe with gasoline & water floats, wireless, ATEX 14. 0889561-2xx Mag-FLEX probe with diesel & water floats, wireless, ATEX 15. 0889561-3xx Mag-FLEX probe with no water float, wireless, ATEX 15. 0889561-3xx Mag-FLEX probe with no water float, wireless, ATEX	Gasohol (<=15% Ethanol)	No Leak Detection / Inventory Only		
		Gasoline with <=7% Methanol and 8% TBA			
		Gasoline with <=15% MTBE			
		Gasoline with <=17% TAME			
		Leaded Gasoline			
		Mineral Spirits			
		Premium Unleaded Gasoline			
		Regular Unleaded Gasoline			
		Gasoline with <=15% ETBE			
		Gasoline with <=12% TBA			
		Diesel (Fuel Oil #2) **			
		Kerosene (Fuel Oil #1) **			
		Bio Diesel (Low Density) **			
	16. 0889561-7xx Mag-FLEX probe for methanol tanks with no water float, wireless, ATEX	Methanol ***			
	* Only compatible with TLS4, TLS4B, and TLS-450PLUS consoles, software version 6.A or higher				

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<sup>\*\*\*</sup> Applicable to 0889591-8xx, 0889561-8xx, 0889591-7xx, and 0889561-7xx part numbers only

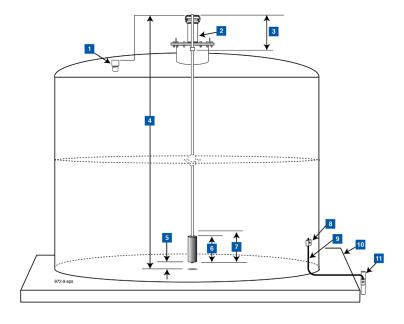
Console Compatibility	Maximum Probes / Console	Probe Interface Modules					
		Module Part #	Module Description	# of Modules per Console	# of Probe Inputs per Module	Availability	
TLS-450PLUS (8600 Series) with TLS-XB installed (3 max per system)	64	0332812-001	Universal Sensor Module (USM) Interface for Probes, Sensors, and DPLLD	Up to 4	16	Sold Separately (either Factory Installed or as a Spare Module)	
TLS4 (8601 Series)	12	No mandrilla manufund mucha immut annahilitu faratam imatallad					
TLS4B (8601 Series)	6	No module required, probe input capability factory installed					
TLS-350/R/PLUS	16	0329356-002	4-Input Probe Interface Module	4	4	Sold Separately (either Factory Installed or as a Spare Module)	
TLS-300i	4	No module required, probe input capability factory installed					
TLS-300C	2	No module required, probe input capability factory installed					

<sup>\*\*</sup> Only compatible with the Diesel Float Kit



	Part # & Description	Float Size		Special Instructions	Min/Max Probe Length		
Float Installation Kits	0330020-776 Kit – Low Level Water Float (1.9" for Gasoline) 4" (10.16cm		n)	Low level water float kits require			
	0330020-777 Kit – Low Level Water Float (1.9" for Diesel) 4" (10.16cm		n)	a 4" tank opening and connect directly to the	5' (1.5m) - 72.1' (22m)		
	0330020-824 Kit – Low Level Water Float (1.9" for Bio-Diesel)	1 / (11) 16cm)		existing water float. Wall guide included.			
Other Installation Accessories	0848100-004 Over voltage protection device 1 per probe recommended 0576008-708 2" (5.08cm) NPT Adapter for installation of Mag-FLEX AST probes (req'd 1/probe)						
Specifications	Product	Water					
Measurement Accuracy	+/- 0.0800" (2.032mm)			+/- 0.12" (3.048mm)			
Resolution – One Sample Reading	+/- 0.02" (0.508mm)		+/-(	+/- 0.02" (0.508mm)			
Minimum Measurement	+/- 7.3" (18.542cm) probe; 1.5" (3.81cm) float		+/- !	+/- 5.5" (13.97cm) Std; 1.9" (4.826cm) low level			
Operating (Working) Temperature Range	-40°F to +140°F (-40°C to +60°C)						
Thermistors	5 Thermistors						
Product	Material						
Probe Canister	Stainless Steel 303						
Rigid Shaft Sections	Stainless Steel 304						
Corrugated Flexible Shaft & Floats	Stainless Steel 316 Ti						
Weight	Stainless Steel 303						
Magnet Casing	Conductive Plastic						
Third Party Evaluation / Agency Listings	http://www.nwglde.org/evals/veeder_root_j.html						
Product Installation Guide	https://www.veeder.com/us/technical-document-library						

## **Example Installation**



- Insertion measuring point for 2" (5.08cm) pipe cap installations (top of pipe cap to tank bottom)
- Insertion measuring point for 4" (10.16cm) riser pipe installations (top of riser pipe to tank bottom).
   Add 2" (5.08cm) for brass ring/and riser cap.
- 3. Null zone typical all probes
- 4. Measured insertion length (always order smaller probe if measured insertion length falls between two probes in table
- 5. Clearance off bottom
- 6. Weight length
- 7. Dead zone
- 8. Tank grounding bracket
- 9. Grounding cable
- 10. Concrete tank pad
- 11. Earth grounded electrode with cable bracket

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### **Example Illustrations**

Illustrations used in this guide for example sensor installations may contain components that are customer supplied and not included with the sensor. Please check with your Veeder-Root Distributor for recommended installation accessories.

#### **Third Party Evaluations**

Third party evaluations of the Veeder-Root sensors contained in this application guide can be found under the Veeder-Root vendor name on the National Work Group on Leak Detection Evaluations (NWGLDE) website: <a href="http://www.nwglde.org">http://www.nwglde.org</a>