




# Fuel Tanker Overfill Detection

## FloTech™ Overfill Detection Products

<b>Application:</b>	<p>The overfill detection system used on petroleum cargo tanks typically consists of a sensor mounted in each tank compartment, an onboard monitor located near the bottom loading valves and an API compatible socket. The overfill system is intended to detect a pending overfill condition inside the cargo tank compartment and signal the loading rack to close the fuel supply control valve, to prevent a spill of product. These systems are required by law as part of the bottom loading system and considered a secondary emergency shut off device. The overfill system is typically triggered when the primary metering system fails to load the cargo tank compartment with the correct volume of product.</p>
<b>Standards:</b>	<p>Manufactured to American Petroleum Institute standard API RP-1004, which allows for drop in interchange ability with other brands.</p>
<b>Materials:</b>	<p>Dependent upon the component, see each product section for materials.</p>
<b>Features &amp; Benefits:</b>	<ul style="list-style-type: none"> <li>• Knowledge and experienced design: Dixon® electronic staff are seasoned veterans when it comes to overfill systems. Our employees have years of experience in electronics, manufacturing and most important, with in-the-field trouble shooting of overfill terminal and tanker installations. That is why we have focused on easy, drop-in replacement features with improved probe life, and why we have included heavy duty hardware made from premium, corrosion resistant materials.</li> <li>• Trouble free probes and sensors: FloTech™ brand probes/sensors do not use epoxy bonded prisms as a means to seal the prism. Therefore, they are not subject to malfunction due to epoxy/prism interface separation. FloTech™ brand probes/sensors incorporate a double elastomer design which seals and secures the sensitive optic prism tip. The elastomer seals are flexible allowing thermal expansion and resistance to steam cleaning and petroleum chemical attack.</li> </ul> <div data-bbox="673 871 1161 1123" data-label="Image"> </div> <ul style="list-style-type: none"> <li>• "Best in Class" technical support: Our goal is to provide the most reliable overfill components and system available on the market today. Over the years the FloTech™ brand has earned a reputation for reliable overfill components compatible with other common systems. Don't take our word on this; ask one of our many customers!</li> <li>• Easy Installation: FloTech™ brand items are shipped with easy to follow installation instructions and manuals (also available online at <a href="http://dixonvalve.com">dixonvalve.com</a> under the Resources menu, select Petroleum and Dry bulk products). If you need a little extra help call our North American toll free technical service hot line at 877.582.3569 (or from other parts of the world, dial 001-513-874-8499). In fact, call us with any overfill system questions (regardless of the brand) and we will work with you to help solve the problem. FloTech™ brand components are manufactured to be installed easily, even on other systems. We designed them to be drop-in compatible with API systems being used around the world.</li> <li>• Products in stock, delivered on time: FloTech™ brand products are stocked at Dixon® locations throughout the world. Most orders can be processed and delivered within 24 hours. We know that downtime costs you money so we do everything we can to ensure you receive your parts when you need them.</li> <li>• A great product with an unparalleled warranty: FloTech™ brand products are covered by a five year limited warranty. The warranty is part of the total system that makes FloTech™ overfill detection the best choice for your operation. See limited warranty on page 167 for details.</li> <li>• Biofuel compatible: up to E100 (100% Ethanol) and B100 (100% Bio Diesel). For detailed fuel compatibility, please refer to the chart shown on page 4. </li> <li>• Probes are rated to 36PSIG per 49 CFR 178.345-5 Temp Range -40°F to 160°F refractive index range 1.37 to 1.60 viscosity less than 1000SSU.</li> </ul>

**Customer Support**  
877.582.3569

Product instruction sheets and technical data can be viewed on our website at [dixonvalve.com](http://dixonvalve.com)



Biofuel Compatible, see fuel compatibility chart on page 4 for more information.

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## FloTech™ Checkmate Overfill/Retain Plug-n-Play System



<b>Application:</b>	The reason for many overfill system breakdowns is failed or poor wiring connections. The required amperage within the overfill system is so low that any poorly wired or corroded wiring connections tend to fail (the low current cannot pass through corrosion or poor connections). To remove the possibility of wiring system problems, Dixon® has introduced the FloTech™ Plug-n-Play system, all the wire connections are prewired and tested at the factory using high quality weather proof cables and plugs. Plug-n-Play system installation takes a fraction of the time to install when compared to conventional systems, just mount all the components and simply plug them all together.
<b>Standards:</b>	Manufactured to American Petroleum Institute standard API RP-1004, which allows for interchangeability.
<b>Materials:</b>	Dependent upon the component, see each product section for materials
<b>Features &amp; Benefits:</b>	<ul style="list-style-type: none"> <li>• Prewired cables and plugs on sensors, wiring harnesses, onboard monitor and sockets, make it simple to install our Plug-n-Play system in much less time than conventional systems.</li> <li>• Secure and weather tight connections all the time remove the possibility of poor wiring connections. Sealed connectors pass IP67 and DIN40050 salt spray tests.</li> <li>• Easy installation: literally Plug-n-Play, just mount the components and plug them all together.</li> <li>• Biofuel compatible up to E100 (100% Ethanol) and B100 (100% bio diesel)</li> </ul>

Overfill Products

### Monitors with Integrated Dual Sockets

<b>Features &amp; Benefits:</b>	<ul style="list-style-type: none"> <li>• Integrated Optic and Thermistor dual sockets with onboard monitor all in one aluminum case</li> <li>• Takes less space than utilizing separate sockets and monitor</li> <li>• Prewired and factory tested with Plug-n-Play cabling and plugs, eliminates hours of manual crimped wire connections and removes the problems and worries associated with connection problems.</li> <li>• Includes water-tight integrated fuse holder, all stainless steel hardware and terminal blocks prevent corrosion</li> <li>• Built-in configurable high current relay output for pump or signal control</li> <li>• Color coded display shows well on trailers</li> <li>• Sockets come standard with FloTech™ unique guaranteed for life stainless steel wear rings.</li> </ul> <p><b>Available Integrated Options:</b></p> <ul style="list-style-type: none"> <li>• Top (overfill) only monitoring, or both top (overfill) and bottom (retain) monitoring</li> <li>• Pre-wired ground bolt</li> <li>• Pre-wired pressure sensor which can be used to interlock brakes or vapor vents</li> <li>• Pre-wired Trailer Identification Module</li> <li>• Pre-wired dual male pin power cord</li> </ul>
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Part #	Plug-n-Play Connections		Available Accessories Installed					Sockets	
	Top Overfill Detection	Bottom Retain Detection	Ground Bolt	Pressure Sensor Switch	Trailer ID Module	Dual Male Pin - Power Cord	Stainless Steel 'Guaranteed for Life' Wear Rings	Optic	Thermistor
<b>FT208-390</b>							✓	6 contact pins, 3 J-slots	10 contact pins, 4 J-slots
<b>FT208-390G</b>			✓				✓		
<b>FT208-390GS</b>			✓	✓			✓		
<b>FT208-390GST</b>			✓	✓	✓		✓		
<b>FT208-390GT</b>			✓		✓		✓		

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