### FloTech<sup>™</sup> Overfill Detection System



All FloTech™ electronics manufactured after January 1, 2015 are covered by our 5 year warranty.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Overfill

#### **FloTech™ Overfill Detection Products**

	FIGTECH W OVERTIL Detection Products
Application:	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.
Standards:	Manufactured to American Petroleum Institute standard API RP-1004, which allows for drop in interchange ability with other brands.
Materials:	Dependent upon the component, see each product section for materials.
Features & Benefits:	<ul> <li>Knowledge and experienced design: Dixon<sup>®</sup> 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> </ul>
	<ul> <li>Trouble free probes and sensors: FloTech<sup>™</sup> 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<sup>™</sup> 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. Prism Carrier</li> </ul>
	Probe Tube
Customer Support 877.582.3569	• "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 <sup>™</sup> 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!
	• Easy Installation: FloTech <sup>™</sup> brand items are shipped with easy to follow installation instructions and manuals (also available online at dixonvalve.com 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 <sup>™</sup> 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.
	<ul> <li>Products in stock, delivered on time: FloTech<sup>™</sup> brand products are stocked at Dixon<sup>®</sup> 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> </ul>
	• A great product with an unparalleled warranty: FloTech <sup>™</sup> brand products are covered by a five year limited warranty. The warranty is part of the total system that makes FloTech <sup>™</sup> overfill detection the best choice for your operation. See limited warranty on page 169 for details.
	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.
	• 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.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com Biofuel Compatible, see fuel compatibility chart on page 4 for more information.

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



Application:	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 <sup>®</sup> has introduced the FloTech <sup>™</sup> 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.
Standards:	Manufactured to American Petroleum Institute standard API RP-1004, which allows for interchangeability.
Materials:	Dependent upon the component, see each product section for materials
Features & Benefits:	<ul> <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>

### Monitors with Integrated Dual Sockets

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible 877.963.4966

#### FloTech<sup>™</sup> Checkmate Overfill/Retain Plug-n-Play System Monitors with Integrated Dual Sockets (continued)



	Plug-n-Play         Available Accessories Installed					Sockets				
Part #	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	
FT208-390P	1						1			
FT208-390PG	1		1				$\checkmark$	_	10 contact pins, 4 J-slots	
FT208-390PGS	1		$\checkmark$	1			1			
FT208-390PGST	1		$\checkmark$	1	1		1			
FT208-390PGT	1		$\checkmark$		1		1			
FT208-390PGSO	1		1	1		<i>✓</i>	$\checkmark$			
FT208-390PGSTO	1		$\checkmark$	1	1	1	1	6 contact		
FT208-390PP	1	1					1	pins, 3 J-slots		
FT208-390PPG	1	1	1				$\checkmark$			
FT208-390PPGS	1	1	1	1			$\checkmark$			
FT208-390PPGST	1	1	$\checkmark$	1	1		1			
FT208-390PPGT	1	1	1		1		$\checkmark$			
FT208-390PPGSO	1	1	1	1		<i>✓</i>	$\checkmark$			
FT208-390PPGSTO	1	1	1	1	1	<i>✓</i>	1			
FT208-391P	1						1			
FT208-391PG	1		1				1			
FT208-391PGS	1		1	$\checkmark$			$\checkmark$			
FT208-391PGST	1		1	1	1		$\checkmark$	6 contact pins, 4 J-slots		
FT208-391PGT	1		1		1		$\checkmark$		10 contact	
FT208-391PP	1	1					1		pins 4 J-slots	
FT208-391PPG	1	1	1				1			
FT208-391PPGS	1	1	1	1			1			
FT208-391PPGST	1	1	1	1	1		1			
FT208-391PPGT	1	1	1		1		1			

See pages 138 and 139 for repair kits and replacement parts.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

#### FloTech<sup>™</sup> Checkmate Overfill/Retain Plug-n-Play System Stand Alone Monitors

Features & I	Benefits:	<ul> <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 block within the aluminum housing.</li> <li>High tech color coded display shows well on trailers</li> <li>Monitors include advanced diagnostic capabilities as well as signal translation abilities for all socket types (optic, thermistor or float). The system offers true load at any rack compatibility.</li> <li>Available Integrated Options:</li> <li>Top (overfill) only monitoring, or both top (overfill) and bottom (retain) monitoring</li> </ul>	with the second seco		
Part #	Checkmate M	onitor with Plug-N-Play Connectors			
FT208P	top overfill pro	otection only			
FT208PP	top overfill and	and bottom retain detection			
FT208PPC	top overfill and	and bottom retain detection, for canadian 'b' trains			
FT208PSS	dual pressure	ssure switches			
FT208LCM	Checkmate lo				
FT295	alarm interfac	e module assembly			
See page 140	for repair kits a	nd replacement parts.			

### **Stand Alone Socket Assemblies**

Features & Benefits:	<ul> <li>Pre-wired and factory tested with Plug-n-Play cables and plugs, eliminates hours of manual crimping, and removes the problems and worries associated with connection problems.</li> <li>Aluminum housings, with either aluminum hardcoat or stainless steel wear rings, stainless steel contact pins.</li> <li>Dual and triple socket assemblies <i>take less space</i> than multiple single sockets.</li> <li>Available Integrated Options:         <ul> <li>Pre-wired internal ground wire (dual or triple socket assemblies)</li> <li>Pre-wired Trailer Identification Module (dual or triple socket assemblies)</li> <li>FT300P and FT301P sockets are available with Flotech<sup>™</sup> unique guaranteed for life stainless steel wear rings as options. Plug-n-Play dual and triple sockets come standard with guaranteed for life stainless steel wear rings.</li> </ul> </li> </ul>	



FT390PG-20

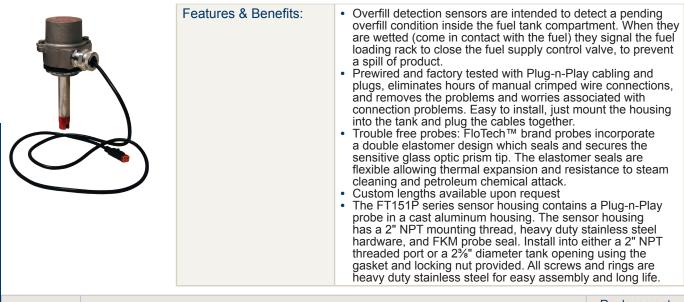
Part #	Socket	API Optic	Thermistor	Optic J560	Internal Ground Wire
FT300P	single socket	6 contact pins and 3 J-slot			
FT300PG	single socket	6 contact pins and 3 J-slot			1
FT301P	single socket		8 contact pins and 4 J-slot		
FT306P	single socket			✓	
FT390PG-20 <sup>1</sup>	dual socket, 20 ft cable	6 contact pins and 3 J-slot	8 contact pins and 4 J-slot		1
FT394P 1	triple socket	6 contact pins and 3 J-slot	10 contact pins and 4 J-slot	1	
FT394PG <sup>1</sup>	triple socket	6 contact pins and 3 J-slot	10 contact pins and 4 J-slot	1	1
FT394VP <sup>1</sup>	triple socket vertical arrangement	6 contact pins and 3 J-slot	10 contact pins and 4 J-slot	1	
FT394VPG <sup>1</sup>	triple socket vertical arrangement	6 contact pins and 3 J-slot	10 contact pins and 4 J-slot	1	1
FT395P-20 <sup>2</sup>	triple socket, 20' cable	6 contact pins and 4 J-slot	10 contact pins and 4 J-slot	1	
FT395PG-20 <sup>2</sup>	triple socket, 20' cable	6 contact pins and 4 J-slot	10 contact pins and 4 J-slot	1	1
FT391P-20	dual socket, 20 feet of Pl	ug-n-Play cable, 4 J-slot			
FT391PG-20	dual socket, 20 feet of Pl	ug-n-Play cable, 4 J-slot, inter	nal ground wire		

<sup>1, 2</sup> Guaranteed for life stainless steel wear rings included (U.S. <sup>1</sup>, Canada <sup>2</sup>)

See pages 141 - 146 for repair kits and replacement parts.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com Biofuel Compatible

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



FT151P housing with 7" Plug-n-Play overfill detection probe, with Plug-n-Play harness connector FT150P	
FT151P-12 housing with 12" Plug-n-Play overfill detection probe, with Plug-n-Play harness connector FT150P-1	2
FT151P-18 housing with 18" Plug-n-Play overfill detection probe, with Plug-n-Play harness connector FT150P-1	8

See page 147 and 149 for repair kits and replacement parts.

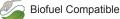
#### **Retain Sensors**

	Features & Benefits:	<ul> <li>Retain sensors inform the loading terminal if the tank compartments are empty, or if there is product left in the tank prior to re-loading the tank (product has been retained).</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. Easy to install, just mount the housing into the tank and plug the cables together.</li> <li>Trouble Free Probes: 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> <li>The FT152 sensor is a bottom retain detection sensor. Sensor is shipped with a ½" NPT weld-on aluminum half coupling for mounting. The main sensor portion is stainless steel to prevent galling in the tank. The wiring box is plastic to prevent corrosion.</li> </ul>
Part #		Description

FT152P housing with Plug-n-Play retain probe, with Plug-n-Play harness connector

See page 148 and 150 for repair kits and replacement parts.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com



### FloTech<sup>™</sup> Checkmate Overfill/Retain Plug-n-Play System Wiring Harnesses

Features & Benefits:	<ul> <li>Pre-wired 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. Easy to install, just mount all the components (sensors, sockets, monitors) onto the tank and plug them into the pre-configured harness.</li> <li>Plug-n-Play cable harnesses come pre-configured for the type of tank (truck mounted tanks or for full length tank trailers) the number of tank compartments, standard harnesses have been designed to fit most standard tank configurations.</li> <li>Custom length harnesses are available.</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> </ul>	



Part #	Description
	overfill detection Plug-n-Play cable harnesses for full length tank trailers
FT20801	one compartment tank trailer. Overfill detection (top) cable harness with Plug-n-play connections
FT20802	two compartment tank trailer. Overfill detection (top) cable harness with Plug-n-play connections
FT20803	three compartment tank trailer. Overfill detection (top) cable harness with Plug-n-play connections
FT20804	four compartment tank trailer. Overfill detection (top) cable harness with Plug-n-play connections
FT20805	five compartment tank trailer. Overfill detection (top) cable harness with Plug-n-play connections
FT20806	six compartment tank trailer. Overfill detection (top) cable harness with Plug-n-play connections
	retain detection Plug-n-Play cable harnesses for full length tank trailers
FT20801S	one compartment tank trailer. Retain (bottom) cable harness with Plug-n-play connections
FT20802S	two compartment tank trailer. Retain (bottom) cable harness with Plug-n-play connections
FT20803S	three compartment tank trailer. Retain (bottom) cable harness with Plug-n-play connections
FT20804S	four compartment tank trailer. Retain (bottom) cable harness with Plug-n-play connections
FT20805S	five compartment tank trailer. Retain (bottom) cable harness with Plug-n-play connections
FT20806S	six compartment tank trailer. Retain (bottom) cable harness with Plug-n-play connections
	overfill detection Plug-n-Play cable harnesses for truck mounted tanks
FT20801TWS	one compartment truck mounted tank. Overfill detection (top) cable harness with Plug-n-play connections
FT20802TWS	two compartment truck mounted tank. Overfill detection (top) cable harness with Plug-n-play connections
FT20803TWS	three compartment truck mounted tank. Overfill detection (top) cable harness with Plug-n-play connections
FT20804TWS	four compartment truck mounted tank. Overfill detection (top) cable harness with Plug-n-play connections
FT20805TWS	five compartment truck mounted tank. Overfill detection (top) cable harness with Plug-n-play connections
FT20806TWS	six compartment truck mounted tank. Overfill detection (top) cable harness with Plug-n-play connections
	monitor to harness extensions
FT20800-EXT-2FT	2 ft monitor to harness extension
FT20800-EXT-8	8 ft monitor to harness extension
FT20800-EXT-25	25 ft monitor to harness extension
FT20800-EXT-36	36 ft monitor to harness extension

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com Biofuel Compatible

# FloTech<sup>™</sup> Checkmate Overfill Detection (Black & White 2 Wire) Systems (Top Detection Only)

Features & Benefits:	<ul> <li>FloTech<sup>™</sup> brand overfill system kits provide everything needed to install a new overfill system on your tank. One to eight compartment kits are available from our inventory. Systems include: 1 FT208 monitor, 1 FT151 overfill sensor per compartment, FT404 cable and FT402 strain reliefs (cable glands).</li> </ul>
	Other probe lengths are available



Part #	Description
FT2801	Checkmate, 1 compartment system (top only) - 7" probes
FT2802	Checkmate, 2 compartment system (top only) - 7" probes
FT2803	Checkmate, 3 compartment system (top only) - 7" probes
FT2804	Checkmate, 4 compartment system (top only) - 7" probes
FT2805	Checkmate, 5 compartment system (top only) - 7" probes
FT2806	Checkmate, 6 compartment system (top only) - 7" probes
FT2807	Checkmate, 7 compartment system (top only) - 7" probes
FT2808	Checkmate, 8 compartment system (top only) - 7" probes
FT2801-12	Checkmate, 1 compartment system (top only) - 12" probes
FT2802-12	Checkmate, 2 compartment system (top only) - 12" probes
FT2803-12	Checkmate, 3 compartment system (top only) - 12" probes
FT2804-12	Checkmate, 4 compartment system (top only) - 12" probes
FT2805-12	Checkmate, 5 compartment system (top only) - 12" probes
FT2806-12	Checkmate, 6 compartment system (top only) - 12" probes
FT2807-12	Checkmate, 7 compartment system (top only) - 12" probes
FT2808-12	Checkmate, 8 compartment system (top only) - 12" probes

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

# FloTech<sup>™</sup> Checkmate Overfill Detection (Black & White 2 Wire) Systems (Top and Bottom)

Features & Benefits:	<ul> <li>FloTech<sup>™</sup> brand overfill system kits provide everything needed to install a new overfill system on your tank. One to eight compartment kits are available from our inventory. Systems include: 1 FT208 monitor, 1 FT151 overfill sensor and 1 FT152 retain sensor per compartment,</li> </ul>
	FT404-150 cable and FT403 strain reliefs (cable glands).
	Other probe lengths are available



Part #	Description
FT2811	Checkmate, 1 compartment system (overfill & retain) - 7" probes
FT2812	Checkmate, 2 compartment system (overfill & retain) - 7" probes
FT2813	Checkmate, 3 compartment system (overfill & retain) - 7" probes
FT2814	Checkmate, 4 compartment system (overfill & retain) - 7" probes
FT2815	Checkmate, 5 compartment system (overfill & retain) - 7" probes
FT2816	Checkmate, 6 compartment system (overfill & retain) - 7" probes
FT2817	Checkmate, 7 compartment system (overfill & retain) - 7" probes
FT2818	Checkmate, 8 compartment system (overfill & retain) - 7" probes
FT2811-12	Checkmate, 1 compartment system (overfill & retain) - 12" probes
FT2812-12	Checkmate, 2 compartment system (overfill & retain) - 12" probes
FT2813-12	Checkmate, 3 compartment system (overfill & retain) - 12" probes
FT2814-12	Checkmate, 4 compartment system (overfill & retain) - 12" probes
FT2815-12	Checkmate, 5 compartment system (overfill & retain) - 12" probes
FT2816-12	Checkmate, 6 compartment system (overfill & retain) - 12" probes
FT2817-12	Checkmate, 7 compartment system (overfill & retain) - 12" probes
FT2818-12	Checkmate, 8 compartment system (overfill & retain) - 12" probes

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

# FloTech™ Checkmate Overfill/Retain (Black & White 2 Wire) System Replacement Parts

#### **Checkmate Onboard Monitors**

Features & Benefits:	<ul> <li>Easy to follow programming guide for up to eight compartments top only or top and bottom service with the same monitor</li> <li>Monitor can be programmed up to 100,000 times without sending it back to the factory</li> <li>Stainless steel terminal blocks resist rusting of contacts</li> <li>Stainless steel hardware is used on all products</li> <li>Powder coated color matched components for exceptional appearance</li> <li>Auxiliary input for Hobbs type switches</li> <li>Power control relay output</li> <li>Drop-in compatibility with competitors products, see compatibility chart on pages 61 - 64.</li> <li>Wide input power 12-24 VDC</li> <li>Monitors include advanced diagnostic capabilities as well as signal translation abilities for all socket types (optic, thermistor or float). The system offers true load at any rack compatibility.</li> <li>Available integrated options:</li> <li>Optional FloTech™ feature (patent pending) is only available on Checkmate model onboard monitors. Data Link™ gives maintenance staff the ability to download the performance and diagnostic history of the overfill system. Plug the FloTech™ hand-held diagnostic terminal, into the Checkmate monitor and download to your PC. A time and date stamped report is generated, showing the history of every wetted or failed sensor, rack connection, auxiliary input and load/unload data.</li> </ul>

Part #	Description	OVERFIL SIMON IN
FT208	Checkmate programable monitor and housing	
FT207	Checkmate programable replacement monitor only (no housing)	
		FLOTECH

See page 153 for repair kits and replacement parts. Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.



**Overfill Detection Sensors** 

Features & Benefits:	<ul> <li>The FloTech<sup>™</sup> thermo-optic 2 wire probe is electronically and mechanically compatible for drop-in replacement of other commonly used 2-wire probes with black and white wires. Providing the fast response and reliability of optic technology in a thermistor application.</li> <li>Custom probe lengths available upon request</li> <li>The sensor housing contains a black and white 2 wire probe in a cast aluminum housing. The sensor housing has a 2" NPT mounting thread, heavy duty stainless steel hardware, and FKM probe seal. Install into either a 2" NPT threaded port or 2%" diameter tank opening using the gasket and locking nut provided.</li> </ul>
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Part #	Description	Replacement Probes	
FT151	housing with 7" black and white 2 wire overfill detection probe	FT150	
FT151-12	housing with 12" black and white 2 wire overfill detection probe	FT150-12	<b>A</b>
FT151-18	housing with 18" black and white 2 wire overfill detection probe	FT150-18	

FT151

#### **Retain Sensors**

Features & Benefits:	<ul> <li>Retain sensors inform the loading terminal if the tank compartments are empty, or if there is product left in the tank prior to re-loading the tank (product has been retained).</li> <li>Sensor is shipped with a ½" NPT weld-on aluminum half coupling for mounting. The main sensor portion is stainless steel to prevent galling in the tank. The wiring box is nylon to prevent corrosion and is removable to facilitate installation. Our three port housing design is compatible with previous inline and parallel dual port housing.</li> </ul>
	h (t)

Part #	Description	
FT152	housing with black and white 2 wire retain probe	

See page 148 and 150 for repair kits and replacement parts.



FT152

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

# FloTech<sup>™</sup> ROM Type Overfill Detection (Red and Black 2 Wire) Systems (Top Detection Only)

Features & Benefits:	<ul> <li>FloTech<sup>™</sup> brand overfill system kits provide everything needed to install a new overfill system on your tank. One to six compartment kits are available from our inventory. Systems include: 1 FT204P monitor, 1 FT202 overfill sensor per compartment, FT401 (100') cable and FT402 (20 pieces) strain reliefs (cable glands). Sockets, inline fuse and instruction booklet sold separately.</li> <li>Other probe lengths are available</li> </ul>

		•	
		Part #	Description
		FT2101	ROM type, 1 compartment system (top only) - 7" probes
	<b>e</b> q	FT2102	ROM type, 2 compartment system (top only) - 7" probes
		 FT2103	ROM type, 3 compartment system (top only) - 7" probes
		FT2104	ROM type, 4 compartment system (top only) - 7" probes
- 444 A)(2)(4		FT2105	ROM type, 5 compartment system (top only) - 7" probes
	<u></u>	FT2106	ROM type, 6 compartment system (top only) - 7" probes
		FT2101-12	ROM type, 1 compartment system (top only) - 12" probes
		FT2102-12	ROM type, 2 compartment system (top only) - 12" probes
		FT2103-12	ROM type, 3 compartment system (top only) - 12" probes
		FT2104-12	ROM type, 4 compartment system (top only) - 12" probes
		FT2105-12	ROM type, 5 compartment system (top only) - 12" probes
		FT2106-12	ROM type, 6 compartment system (top only) - 12" probes

# FloTech<sup>™</sup> ROM Type Overfill/Retain Detection (Red and Black 2 Wire) Systems (Top and Bottom)

FloTech™ brand overfill system kits provide everything needed to install a new overfill system on your tank. One to six compartment kits are available from our inventory. Systems include: 1 FT204P monitor, 1 FT202 overfill sensor and 1 FT206 retain sensor per compartment, FT401 (100') cable and FT403 (30 pieces) strain reliefs (cable glands). Sockets, inline fuse and instruction booklet sold separately.
 Other probe lengths are available



Part #	Description
FT2001	ROM type, 1 compartment system (overfill & retain) - 7" probes
FT2002	ROM type, 2 compartment system (overfill & retain) - 7" probes
FT2003	ROM type, 3 compartment system (overfill & retain) - 7" probes
FT2004	ROM type, 4 compartment system (overfill & retain) - 7" probes
FT2005	ROM type, 5 compartment system (overfill & retain) - 7" probes
FT2006	ROM type, 6 compartment system (overfill & retain) - 7" probes
FT2001-12	ROM type, 1 compartment system (overfill & retain) - 12" probes
FT2002-12	ROM type, 2 compartment system (overfill & retain) - 12" probes
FT2003-12	ROM type, 3 compartment system (overfill & retain) - 12" probes
FT2004-12	ROM type, 4 compartment system (overfill & retain) - 12" probes
FT2005-12	ROM type, 5 compartment system (overfill & retain) - 12" probes
FT2006-12	ROM type, 6 compartment system (overfill & retain) - 12" probes

# FloTech<sup>™</sup> ROM Type Overfill/Retain (Red & Black 2 Wire) System Replacement Parts

#### **ROM Type Onboard Monitors**

Features & Benefits:	<ul> <li>Easy to follow programming guide for up to six compartments top only or top and bottom service with the same monitor</li> <li>Monitor can be programmed up to 100,000 times without sending it back to the factory.</li> <li>As the monitor is programmed for the number of compartments, terminators are not required.</li> <li>Stainless steel terminal blocks resist rusting of contacts</li> <li>Stainless steel hardware is used on all products</li> </ul>
	<ul> <li>Powder coated color matched components for exceptional appearance</li> <li>Auxiliary input</li> <li>Wide input power 12-24 VDC</li> <li>Drop-in compatibility with competitors products, see compatibility chart on pages 68 - 71.</li> <li>Monitors include advanced diagnostic capabilities as well as signal translation abilities for all socket types (optic, thermistor or float). The system offers true load at any rack compatibility.</li> </ul>

		ALE OTE	сн 🕷
FT204P F	FloTech™ ROM type programmable monitor and housing.	RETAIN	OVERFILL MO
FT203P F	FloTech™ ROM type programmable replacement monitor only (no housing)	PMT B	5 4 3 2 1 SI
	FloTech™ ROM type programmable replacement monitor with 8-hole cover (no housing or frame)		B 5 4 3 2 1 DICATES WETTED SE

See page 152 for repair kits and replacement parts.

#### **Overfill Detection Sensors**

Features & Benefits:	<ul> <li>Overfill detection sensors are intended to detect a pending overfill condition inside the fuel tank compartment. When they are wetted (come in contact with the fuel) they signal the fuel loading rack to close the fuel supply control valve, to prevent a spill of product.</li> <li>The FloTech<sup>™</sup> optic 2 wire probe is electronically and mechanically compatible for drop-in replacement of other commonly used 2-wire probes with red and black wires, such as the Civacon ROM system.</li> <li>All FloTech<sup>™</sup> brand probes are trouble free probes they come with a unique dual elastomer seal for the glass optic prisms. The elastomer seals are flexible allowing thermal expansion</li> </ul>
	<ul> <li>and resistance to steam cleaning and temperature changes, along with resistance to petroleum chemical attack. The replacement probes have a smooth tapered tip design for easy replacement installation into the sensor housing without gasket damage.</li> <li>Custom probe lengths available upon request</li> <li>The sensor housing contains a red and black 2 wire probe, in a cast aluminum housing. The sensor housing has a 2" NPT mounting thread, heavy duty stainless steel hardware, and FKM probe seal. Install into either a 2" NPT threaded port or 2%" diameter tank opening using the gasket and locking nut provided. All screws and rings are heavy duty stainless steel for easy assembly and long life.</li> </ul>

Part #	Description	Replacement Probes	
FT202	Housing with 7" red and black 2 wire overfill detection probe	FT201	
FT202-12	Housing with 12" red and black 2 wire overfill detection probe	FT201-12	
FT202-18	Housing with 18" red and black 2 wire overfill detection probe	FT201-18	FT202

See page 149 for repair kits and replacement parts. Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

OD

FT204P

#### FloTech<sup>™</sup> ROM Type Overfill/Retain (Red & Black 2 Wire) System Replacement Parts

#### **Retain Sensors**



Features & Benefits:	<ul> <li>The FT206 is a retain detection sensor shipped with a ½" NPT weld-on aluminum half coupling for mounting. The main portion is stainless steel to prevent galling in the tank. The wiring box is plastic to prevent corrosion and is removable to facilitate installation. The side ports come out of the same side (like the overfill sensors) to make wiring easier. The FT206 is compatible with Civacon model 1000 and the Civacon R/OM System. Our three port housing design is compatible with previous inline and parallel dual port housings.</li> <li>Trouble free probes: 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>
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Part #	Description	
FT206	housing with red and black 2 wire retain probe	

See page 150 for repair kits and replacement parts.

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

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#### FloTech<sup>™</sup> FT151RL ROM Link<sup>™</sup> Replacement Parts

Application:	The FT151RL is designed to replace the complete ROM Link <sup>™</sup> sensor assembly. Simply remove the Civacon sensor housing from the manhole lid and install the FloTech <sup>™</sup> FT151RL or FT151RL-12. Plug the FT151RL into the wiring harness using our connector adapter and the change out is complete.
Standards:	Drop in replacement for the Civacon ROM Link <sup>™</sup> sensors 1554-007 & 1554-0012.
Materials:	Aluminum housing with stainless steel hardware
Features & Benefits:	<ul> <li>Trouble free probes: FloTech<sup>™</sup> brand probes incorporate a double elastomer design which seals and secures the sensitive glass optic prism tip. The elastomer seals are flexible allowing thermal expansion and resistance to steam cleaning and petroleum chemical attack.</li> <li>Unlike our competitors, FloTech<sup>™</sup> probes do not use internal coil cord connectors which consistently fail in moisture. All FloTech<sup>™</sup> Plug-n-Play probes are prewired to our harness connector, which has proven itself in moisture.</li> <li>FloTech<sup>™</sup> sensor housings have a sturdy bolt on cap to better seal out water.</li> <li>The FT151RL includes an adapter connector to permit interchange between Civacon's ROM Link<sup>™</sup> system and the FloTech<sup>™</sup> FT150RL sensor.</li> <li>Custom lengths available upon request</li> <li>The FT151RL sensor housing contains a Plug-n-Play probe. The sensor housing has a 2" NPT mounting thread, heavy duty stainless steel hardware, and FKM probe seal. Install into either a 2" NPT threaded port or a 2%" diameter tank opening using the gasket and locking nut provided. All screws and rings are heavy duty stainless steel for easy assembly and long life.</li> </ul>







FT152RL

Part #	Description	
FT151RL	housing with 7" Plug-n-Play overfill detection probe, with Plug-n-Play harness and ROM link jumper cable connector	
FT151RL-12	housing with 12" Plug-n-Play overfill detection probe, with Plug-n-Play harness and ROM link jumper cable connector	
FT152RL	retain sensor with Plug-n-Play harness and ROM link jumper cable	
Replacement Probes		
FT150P	replacement 7" Plug-n-Play probe for FT151RL only	
FT150P-12	replacement 12" Plug-n-Play probe for FT151RL-12 only	
10688	gender adapter	
10605PL	Plug-n-Play harness to monitor connector clip	

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

### FloTech<sup>™</sup> API Optic Overfill Detection (5 Wire) Systems

Application:	The FloTech <sup>™</sup> API Optic 5 wire system is perfectly suited for both new and existing tank installations. The components have a long list of features which make them more reliable than competitor products; the result is years of trouble free service. The FloTech <sup>™</sup> API Optic 5 wire system is a conventionally wired system, which requires wiring connections to be made using crimp connectors. If a simple plug together system is desired, please see our Checkmate Plug-n-Play system as shown on pages 39 thru 45.
Materials:	Dependent upon the component, see each product section for materials
Features & Benefits	<ul> <li>See the features and benefits of each of the system components</li> <li>Biofuel compatible up to E100 (100% Ethanol) and B100 (100% bio diesel)</li> </ul>

#### FloTech<sup>™</sup> API Optic Overfill Detection (5 Wire) Systems (Top Detection Only)



Features & Benefits:	<ul> <li>FloTech<sup>™</sup> brand overfill system kits provide everything needed to install a new overfill system on your tank. One to six compartment kits are available from our inventory. System includes: 1 FT103 monitor, 1 FT101 overfill sensor per compartment, FT300 open socket, FT400 cable and FT402 strain reliefs (cable glands).</li> <li>Other probe lengths are available</li> </ul>
<b>D</b> <i>t t</i>	

Part #	Description		
FT1001	API optic 5 wire, 1 compartment overfill detection system (top only) - 7" probes		
FT1002	API optic 5 wire, 2 compartment overfill detection system (top only) - 7" probes		
FT1003	API optic 5 wire, 3 compartment overfill detection system (top only) - 7" probes		
FT1004	API optic 5 wire, 4 compartment overfill detection system (top only) - 7" probes		
FT1005	API optic 5 wire, 5 compartment overfill detection system (top only) - 7" probes		
FT1006	API optic 5 wire, 6 compartment overfill detection system (top only) - 7" probes		
FT1001-12	API optic 5 wire, 1 compartment overfill detection system (top only) - 12" probes		
FT1002-12	API optic 5 wire, 2 compartment overfill detection system (top only) - 12" probes		
FT1003-12	API optic 5 wire, 3 compartment overfill detection system (top only) - 12" probes		
FT1004-12	API optic 5 wire, 4 compartment overfill detection system (top only) - 12" probes		
FT1005-12	API optic 5 wire, 5 compartment overfill detection system (top only) - 12" probes		
FT1006-12	API optic 5 wire, 6 compartment overfill detection system (top only) - 12" probes		
	Straight systems without monitor- Wire directly to socket		
FT901	API optic 5 wire straight, 1 compartment overfill detection system (top only) - 7" probes		
FT902	API optic 5 wire straight, 2 compartment overfill detection system (top only) - 7" probes		
FT903	API optic 5 wire straight, 3 compartment overfill detection system (top only) - 7" probes		
FT904	API optic 5 wire straight, 4 compartment overfill detection system (top only) - 7" probes		
FT905	API optic 5 wire straight, 5 compartment overfill detection system (top only) - 7" probes		

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

### FloTech<sup>™</sup> API Optic Overfill Detection (5 Wire) Systems Replacement Parts

#### **Onboard Monitors**

Features & Benefits:	<ul> <li>Stainless steel terminal blocks resist rusting of contacts</li> <li>Stainless steel hardware is used on all products</li> <li>Powder coated color matched components for exceptional appearance</li> <li>Drop-in compatibility with competitors products, see compatibility chart on pages 58 - 62.</li> <li>Signal translation ability, allows the connection all socket types (optic, thermistor or float). The system offers true load at any rack compatibility.</li> </ul>	LUET RECATE DATA
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Part #	Description
FT102	FloTech™ API Optic 5 wire replacement monitor only (no housing)
FT103	FloTech™ API Optic 5 wire monitor and housing

See page 151 for repair kits and replacement parts

#### **Overfill Detection Sensors**

Features & Benefits:	<ul> <li>The FloTech<sup>™</sup> API optic 5 wire probe is electronically and mechanically compatible for drop-in replacement of other commonly used 5 wire probes.</li> <li>Custom probe lengths available upon request</li> <li>The sensor housing contains a 5 wire probe, in a cast aluminum housing. The sensor housing has a 2" NPT mounting thread, heavy duty stainless steel hardware, and FKM probe seal. Install into either a 2" NPT threaded port or 2%" diameter tank opening using the gasket and locking nut provided.</li> </ul>	
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Part #	Description	Replacement Probes
FT101	housing with 7" - 5 wire overfill detection probe	FT100
FT101-12	housing with 12" - 5 wire overfill detection probe	FT100-12
FT101-18	housing with 18" - 5 wire overfill detection probe	FT100-18

See page 149 for repair kits and replacement parts.

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

#### **Stainless Steel Probe and Sensor Housings**

#### **Black and White 2 Wire**

		Features & Benefits:	<ul> <li>The FloTech<sup>™</sup> stainless steel probes and sensor housings are designed to be used with chemicals. All wetted services are 316 stainless or PTFE. These probes are designed to thread onto a DOT 407 tank 3" clean out nipple.</li> <li>All FloTech<sup>™</sup> brand probes are trouble free probes, they come with a unique dual elastomer seal for the glass optic prisms. The elastomer seals are flexible allowing thermal expansion and resistance to steam cleaning and temperature changes, along with resistance to petroleum chemical attack. The replacement probes have a smooth tapered tip design for easy replacement installation into the sensor housing without gasket damage.</li> <li>Maximum working pressure 900 PSI at 70°F (21°C)</li> <li>Custom probe lengths can be available by using <sup>3</sup>/<sub>4</sub>" pipe nipples upon request.</li> </ul>
Part #			Description
FT150S	<b>S</b> 7" 316 stainless steel-black and white 2 wire, overfill detection probe only (no housing)		
FT191S	stainless steel pr	obe housing, 3" female NPS	thread (housing only, order probe separately)
20 page 150	a page 150 for repair kits and replacement parts		

See page 150 for repair kits and replacement parts.

	5	Wire
FT191S and FT100S	Features & Benefits:	<ul> <li>The FloTech<sup>™</sup> stainless steel probes and sensor housings are designed to be used with chemicals. All wetted services are 316 stainless or PTFE. These probes are designed to thread onto a DOT 407 tank 3" clean out nipple. Sensor length can be adjusted using ¾" NPT pipe nipples.</li> <li>All FloTech<sup>™</sup> brand probes are trouble free probes: they come with a unique dual elastomer seal for the glass optic prisms. The elastomer seals are flexible allowing thermal expansion and resistance to steam cleaning and temperature changes, along with resistance to petroleum chemical attack. The replacement probes have a smooth tapered tip design for easy replacement installation into the sensor housing without gasket damage.</li> <li>Maximum working pressure 900 PSI at 70°F (21°C)</li> <li>Custom probe lengths available upon request.</li> </ul>
Part #		Description

7" 316 stainless steel 5 wire overfill detection probe only (no housing)

See page 150 for repair kits and replacement parts.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

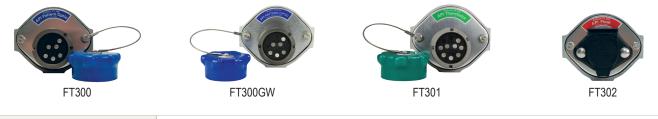
stainless steel probe housing, 3" female NPS thread (housing only, order probe separately)

**FT100S** 

**FT191S** 

Overfill Products

#### Single Sockets with Aluminum Hardcoat J-slot



Features & Benefits:	<ul> <li>Single face plate sockets have hard coated aluminum alloy J-slot wear rings, these ensure a long service life. Single sockets with "guaranteed for life" stainless steel wear rings are also</li> </ul>
	available.
	Stainless steel hardware and contact pins prevent corrosion
	Sockets and caps are color coded with industry standardized colors which allows for easy
	identification of socket type (optic sockets are blue, thermistor sockets are green, and float
	sockets are red, colored caps are included for optic and thermistor models only).

Part #	Description	
FT300	Optic socket API / WOGA, 6 pin and 3 J-slot (US)	
FT300GW	Optic socket API / WOGA, 6 pin and 3 J-slot with ground wire	
FT307	Optic socket, 6 pin and 4 J-slot (Canada)	
FT306	Optic socket, J560 pin type	
FT301	Thermistor socket, API, 8 pin and 4 J-slot (US)	
FT301GW	Thermistor socket, API, 8 pin and 4 J-slot with ground wire	
FT304	Thermistor socket, 10 pin and 4 J-slot (Canada/Europe)	
FT305	Thermistor socket, J560 pin type	
FT302	Float, API, J560 pin type socket	

#### **Replacement Face Plates and Dust Caps**

Part #	Description
FT310	API optic face plate assembly, 6 pin, 3 J-slot (US) with dust cap
FT317	Optic pattern face plate assembly, 6 pin, 4 J-slot (Canada) with dust cap
FT316	Optic replacement face plate, J560 type with dust cap
FT311	API thermistor face plate assembly, 8 pin, 4 J-slot (US) with dust cap
FT314	Thermistor face plate assembly, 10 pin 4 J-slot (Canada/Europe) with dust cap
FT315	Thermistor replacement face plate, J560 type with dust cap
FT320	replacement blue optic dust cap
FT321	replacement green thermistor dust cap

See pages 15 thru 156 for repair kits and replacement parts. Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

877.963.4966

Products Overfill

#### Single Sockets with GFL (Guaranteed for Life) Stainless Steel J-slot Wear Rings



FT300SSGW



FT301SS

Features & Benefits:		<ul> <li>Available on any configuration J-slot socket</li> <li>Tougher and more corrosion resistant than any other on the market</li> <li>Guaranteed for life against wear</li> <li>US patent 6,824,423</li> </ul>	
Part #		Description	
FT300SSGW	Optic socket API / WOGA, 6 pin and 3 J-slot, GFL stainless J-slot wear ring with ground wire		
FT307SS	Optic socket, 6 pin and 4 J-slot, GFL stainless J-slot wear ring (Canada)		
FT301SS	Thermistor socket, API, 8 pin and 4 J-slot, GFL stainless J-slot wear ring (US)		
FT300SS	Optic socket API / WOGA, 6 pin and 3 J-slot, GFL stainless J-slot wear ring (US)		
FT301SSGW	Thermistor socket, API, 8 pin and 4 J-slot, GFL stainless J-slot wear ring with ground wire		
FT304SS	Thermistor socket, 10 pin and 4 J-slot, GFL stainless J-slot wear ring (Canada/Europe)		

### **Replacement Face Plates and Dust Caps**

Part #	Description
FT310SS	API optic face plate assembly, 6 pin, 3 J-slot, GFL stainless J-slot wear ring (US) with dust cap
FT317SS	Optic pattern face plate assembly,6 pin, 4 J-slot, GFL stainless J-slot wear ring (Canada) with dust cap
FT311SS	API thermistor face plate assembly, 8 pin, 4 J-slot, GFL stainless J-slot wear ring (US) with dust cap
FT314SS	Thermistor face plate assembly 10 pin, 4 J-slot, GFL stainless J-slot wear ring (Canada/Europe) with dust cap
FT320	replacement blue optic dust cap
FT321	replacement green thermistor dust cap

See pages 154 thru 156 for repair kits and replacement parts. Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

overfill oducts

#### **EZ-Cept Double Sockets**



FT390

Part #	Description
FT390	Optic 6 pin, 3 J-slot, and thermistor 10 pin, 4 J-slot, horizontal mount, GFL stainless J-slot wear rings (US)
FT390V	Optic 6 pin, 3 J-slot, and thermistor 10 pin, 4 J-slot, vertical mount, GFL stainless J-slot wear rings (US)
FT390G	Optic 6 pin, 3 J-slot, and thermistor 10 pin, 4 J-slot, horizontal mount, GFL stainless J-slot wear rings, internal ground wire (US)
FT390GT	Optic 6 pin, 3 J-slot, and thermistor 10 pin, 4 J-slot, horizontal mount, GFL stainless J-slot wear rings, internal ground wire Trailer Identification Module chip (US)
FT390T	Optic 6 pin, 3 J-slot, and thermistor 10 pin, 4 J-slot, horizontal mount, GFL stainless J-slot wear rings, Trailer Identification Module chip (US)
FT390-20	Optic 6 pin, 3 J-slot, and thermistor 10 pin, 4 J-slot, horizontal mount, GFL stainless J-slot wear rings, 20' of cable (US)
FT390G-20	Optic 6 pin, 3 J-slot, and thermistor 10 pin, 4 J-slot, horizontal mount, GFL stainless J-slot wear rings, internal ground wire, 20' of cable (US)
FT391	Optic 6 pin, 4 J-slot, and thermistor 10 pin, 4 J-slot, horizontal mount, GFL stainless J-slot wear rings (Canada)
FT391V	Optic 6 pin, 4 J-slot, and thermistor 10 pin, 4 J-slot, vertical mount, GFL stainless J-slot wear rings (Canada)

See pages 157 and 158 for repair kits and replacement parts. Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

### **EZ-Cept Triple Sockets**



<ul> <li>socket type (optic sockets are blue, thermistor sockets are green, and float soc colored caps are included for optic and thermistor models only).</li> <li>Unique stainless steel alloy J-slot ring is guaranteed for life.</li> <li>Pre-wired ready for tank installation, simply bolt to the trailer and connect to the in the on board monitor.</li> <li>Internal ground wire and ID chip ready: Both internal ground wire and ID chip a mounted inside the EZ-Cept housing to protect from the corrosive elements. Ca mounted to the trailer frame and the wire connected to the EZ-Cept internal wire.</li> <li>Corrosion resistant hard powder coated housing, stainless steel hardware and our unique keep dry enclosure design keeps your trailer in service and corroside</li> </ul>		<ul> <li>Sockets are color coded with industry standardized colors allowing for easy identification of socket type (optic sockets are blue, thermistor sockets are green, and float sockets are red, colored caps are included for optic and thermistor models only).</li> <li>Unique stainless steel alloy J-slot ring is guaranteed for life.</li> <li>Pre-wired ready for tank installation, simply bolt to the trailer and connect to the terminal block</li> </ul>	
	Part # Description		
	FT393 Optic 6 pin, 3 J-slot, thermistor 10 pin, 4 J-slot, and float J560, horizontal mount, GFL stainless J-slot wear rings (US)		ot, thermistor 10 pin, 4 J-slot, and float J560, horizontal mount, GFL stainless J-slot wear rings (US)
	FT394	Optic 6 pin, 3 J-slot, thermistor 10 pin, 4 J-slot, and optic J560, horizontal mount, GFL stainless J-slot wear rings (US)	
	ET2040	Optic 6 pin, 3 J-slot, thermistor 10 pin, 4 J-slot, and optic J560, horizontal mount, internal ground wire,	

FT394G	
F1394G	GFL stainless J-slot wear rings (US)
FT394V-G	Optic 6 pin, 3 J-slot, thermistor 10 pin, 4 J-slot, and optic J560, vertical mount, internal ground wire,
113340-0	GFL stainless J-slot wear rings (US)
FT395	Optic 6 pin, 4 J-slot, thermistor 10 pin, 4 J-slot, and optic J560, horizontal mount, GFL stainless J-slot wear rings (Canada)
FT395G	Optic 6 pin, 4 J-slot, thermistor 10 pin, 4 J-slot, and optic J560, horizontal mount, internal ground wire,
F1395G	GFL stainless J-slot wear rings (Canada)
FT395V	Optic 6 pin, 4 J-slot, thermistor 10 pin, 4 J-slot, and optic J560, horizontal mount, internal ground wire,
F1395V	GFL stainless J-slot wear rings (Canada)
	Optic 6 pin, 4 J-slot, thermistor 10 pin, 4 J-slot, and optic J560, vertical mount, internal ground wire,
FT395V-G	GFL stainless J-slot wear rings (Canada)

See pages 159 thru 160 for repair kits and replacement parts. Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

#### Socket Cleaner

Company of	Application:	Used to clean dirty or corroded overfill socket contact blocks.
SOCKETCLEN TECHHOUM B77.582334	Features & Benefits:	<ul> <li>Improves electrical connection and reduces drop out of permit signal.</li> <li>Simple handheld contact cleaner</li> <li>3M Scotch-Brite<sup>™</sup> pad</li> </ul>
	Part # FT406 socket cleaner	Description
	Multi	-Wrench
	Application:	Used for threading, and unthreading lock nuts.
ACT ACTAN	Features & Benefits:	<ul><li>Hard coated for corrosion resistance.</li><li>Laser etched.</li></ul>
	Part #	Description
	40530AI multi-sided wre	ench for installing FT9000/VR6030SQ

**40530AL** multi-sided wrench for installing FT9000/VR6030SQ

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Overfill

Overfill Products

# **Fuel Tanker Overfill Detection**

### **Grounding Ball and Bolt**







FT451

# FT452



FT452-002

Products

Part #		Description	
FT450	ground verification bolt		
FT451	ground verification ball		
FT452	ground wire for single sockets		
FT452-002	ground wire for dual sockets	NEW	

See page 161 for repair kits and replacement parts. Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

#### FloTech<sup>™</sup> Checkmate Overfill/Retain (Black & White 2 Wire) System Sensor Dummy



Part #	Description
FT155	Thermistor sensor dummy (each dummy adds up to 5 compartments)



#### **FloTech™ Trailer Identification Modules**



### **Optic System Testers**

Application:	Used to trouble shoot overfill system circuits
Standards:	Will work with any optic overfill system
Materials:	Durable plastic case, heavy duty cable connectors and test leads
Features & Benefits:	The FT520 optic test kit includes a tester and test lead set to test 5 wire optic pulse, 5 wire optic probes, two wire optic probes, plug & play optic probes as well as onboard monitor & socket outputs. It uses the same permissive signal verification as an optic rack monitor. Optional FT521, FT522, FT523 optic test plugs are available for an entire trailer Go, No/Go test, 2 9-volt batteries (included)

Part #	Description
FT520	Optic system tester, 5 piece set of test leads, batteries and instructions
FT520CASE	optional storage case for FT520
FT520WOGA	Optic system tester, with FT521 API optic 6 pin and 3 J-slot plug, batteries and instructions
FT520WOGACASE	optional storage case for FT520WOGA
FT521	API optic test plug, 6 pin and 3 J-slot
FT522	Optic test plug, 6 pins and 2 or 4 J-slot (plug fits both 2 and 4 J-slot sockets)
FT523	Optic test plug J560 type
10622	Plug-n-Play test lead set
FT9037	replacement test lead set for FT520



Overfill Products

FT520



# **Trailer Identification Module Chip Readers**

Application:	Designed to read and test Trailer Identification Modules mounted inside API compatible overfill sockets.	
Features & Benefits:	<ul> <li>Designed to read Trailer Identification Module chips</li> <li>Solid aluminum construction</li> <li>Backlit LCD display</li> <li>Interchangeable optic or thermistor J-slot screws</li> <li>Provides long battery life</li> </ul>	

Part #	Description
FT530	Trailer Identification Module chip reader





### FloTech<sup>™</sup> Truck Testers



FT555

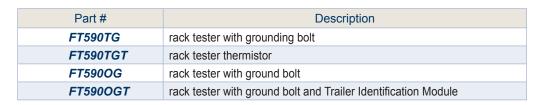


FT555PA

Application:Allows complete testing of ground bolt grounding systems. Tests ground bolt in forward and reverse just like the rack monitor.Features & Benefits:• Reads Trailer Identification Modules and displays the serial number on the screen • Automatic mode allows all four tests, or any combination, to run for a complete test of the trailer • LCD screen displays the final test results and a pass/fail indication for easy rapid testing of the overfill system • One man "Wet Test" feature FT555 signal an audible alarm sounding a number of beeps that match the wetted sensor • Microprocessor controlled with designed in flexibility to expand into a number of applications • Requires two D cell flashlight batteries that can be changed through a side battery access door		
<ul> <li>Benefits:</li> <li>Automatic mode allows all four tests, or any combination, to run for a complete test of the trailer</li> <li>LCD screen displays the final test results and a pass/fail indication for easy rapid testing of the overfill system</li> <li>One man "Wet Test" feature FT555 signal an audible alarm sounding a number of beeps that match the wetted sensor</li> <li>Microprocessor controlled with designed in flexibility to expand into a number of applications</li> <li>Requires two D cell flashlight batteries that can be changed through a side</li> </ul>	Application:	
		<ul> <li>screen</li> <li>Automatic mode allows all four tests, or any combination, to run for a complete test of the trailer</li> <li>LCD screen displays the final test results and a pass/fail indication for easy rapid testing of the overfill system</li> <li>One man "Wet Test" feature FT555 signal an audible alarm sounding a number of beeps that match the wetted sensor</li> <li>Microprocessor controlled with designed in flexibility to expand into a number of applications</li> <li>Requires two D cell flashlight batteries that can be changed through a side</li> </ul>

Part #	Description
FT555	truck tester
FT555PA	truck tester with handle and test leads (US)

### FloTech<sup>™</sup> FT590 Series Rack Monitor Testers and Mini Trailer Overfill System



FT590TG



#### **API Compatible Loading Rack Cords**

Application:	API loading rack cords are used to connect the loading rack monitor to the socket on the fuel tanker.
Standards:	Cord sets are interchangeable with Civacon
Materials:	Reinforced nylon plugs with stainless steel contact pins and hardware. Heavy duty and highly visible safety orange cord.
Features & Benefits:	<ul> <li>FT600 and FT620 are compatible with API thermistor and optic configurations.</li> <li>Cords available in coiled or straight lengths</li> <li>Cord features a heavy highly visible safety orange jacket to meet trip hazard requirements.</li> <li>Cord is bonded mechanically and has superior abrasion and oil resistance.</li> <li>Plug body is color coded optic blue or thermistor green.</li> <li>Button contacts are made from 316 stainless steel to prevent corrosion or galling</li> </ul>

### **API Optic Cord Assemblies**

Part #	Description
FT620	blue plug with 6 contact pins and 3 J-slot, on a 30' coiled blue cable
FT620S	blue plug with 6 contact pins and 3 J-slot, on a 20' straight blue cable
FT620P	blue plug with 6 contact pins and 3 J-slot on a 30' blue coiled cord and 7 pin connector aluminum J560 plug
FT620SP	API Optic plug, aluminum J560 plug w/30 Straight Cable
FT621	replacement blue plug assembly with 6 contact pins and 3 J-slot
FT622	replacement 30' blue coiled cord, Optic 6 conductor
FT623	Optic plug storage hanger
FT624	replacement 20' blue straight cord, Optic 6 conductor

See pages 162 and 163 for repair kits and replacement parts.

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

### **API Thermistor Cord Assemblies**

Part #	Description					
FT600	green plug with 8 contact pins and 2 J-slot, on a 30' coiled orange cable					
FT600-4	green plug with 8 contact pins and 4 J-slot, on a 30' coiled orange cable					
FT600P	green plug with 8 contact pins and 2 J-slot on a 30' orange coiled cord and 13 pin connector nylon J560 plug					
FT600P-4	API Thermistor plug, 13 contact pins, J560, 4 J-slot, 8 pin, w/30' coiled cable					
FT600S	green plug with 8 contact pins and 2 J-slot, on a 20' straight orange cable					
FT600S-4	API Thermistor plug, 8 contact pins, 4 J-slot, on a 20' straight cable					
FT600C	green plug with 10 contact pins and 4 J-slot, on a 30' coiled orange cable					
FT600C-2	API Thermistor plug, 2 J-slot, on a 30' cord					
FT600CP	green plug with 10 contact pins and 4 J-slot, on a 30' coiled orange cord and 13 pin connector nylon					
FT600SC	green plug with 10 contact pins and 4 J-slot, on a 20' straight orange cable					
FT601	replacement green plug assembly with 8 contact pins and 2 J-slot					
FT601-10	replacement green plug assembly with 10 contact pins and 4 J-slot					
FT602	replacement 30' orange coiled cord, Thermistor 10 conductor					
FT603	Thermistor plug storage hanger					
FT604	replacement 20' orange straight cord, Thermistor 10 conductor					
FT606	Thermistor 30' coiled replacement cord (8) pin					
FT607	Thermistor 20' straight replacement cord (8) pin					

FT600

See pages 162 and 163 for repair kits and replacement parts.

Please refer to chart on pages 70 thru 73 for cross references to other manufacturer part numbers.

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com

Biofuel Compatible

**Overfill Products** 

# **Fuel Tanker Overfill Detection**

### FloTech<sup>™</sup> Junction Boxes

	Application:	protected point of service for rack cord accessories. When installed correctly, the junction box will protect rack cords from excessive wear and tear, and cord
FT7500	Features & Benefits:	<ul> <li>connections from water and corrosion while in harsh environments.</li> <li>Water-tight construction helps prevents condensation and moisture from causing corrosion on the with rack connections.</li> <li>Twelve position terminal block for quick replacement of various cord types including optic, thermistor, ground, and deadman cables.</li> <li>Large internal volume allows ample room for wiring and easy installation.</li> <li>Mesh cord grip reduces cable strain and prevent cable pull-out.</li> <li>Integrated cord hook holds the cable while not in use.</li> </ul>
	Material:	powder coated weather-resistant aluminum
NOVCENNY COLL. Market College		
	Part #	Description
FT7501	FT7500	single cord junction box
-	FT7501	dual cord junction box
	FT7502	junction box with yellow 13 pin socket

FT7502

### **Junction Box and Cord Assembly Accessories**

Dert	Junction		Terminetien	Longth	Cord	0. IT		API Plug		
Part #	Box	Rack Cord	Termination	Length	Color	Cord Type	Conductors	Color	J Slots	
FT7600	FT7500	FT600	flying leads	30'	orange	coiled	8	green	2	
FT7600-4	FT7500	FT600-4	flying leads	30'	orange	coiled	8	green	4	
FT7600C	FT7500	FT600C	flying leads	30'	orange	coiled	10	green	4	
FT7600C-2	FT7500	FT600C-2	flying leads	30'	orange	coiled	10	green	2	
FT7600CP	FT7502	FT600CP	yellow 13 pin plug	30'	orange	coiled	10	green	4	
FT7600P	FT7502	FT600P	yellow 13 pin plug	30'	orange	coiled	8	green	2	
FT7600P-4	FT7502	FT600P-4	yellow 13 pin plug	30'	orange	coiled	8	green	4	
FT7600S	FT7500	FT600S	flying leads	20'	orange	straight	8	green	2	
FT7600SC	FT7500	FT600SC	flying leads	20'	orange	straight	10	green	4	
FT7600SP	FT7502	FT600SP	yellow 13 pin plug	20'	orange	straight	8	green	4	
FT7605C	FT7500	FT605C	flying leads	30'	orange	coiled	6	green	4	
FT7620	FT7500	FT620	flying leads	30'	blue	coiled	6	blue	3	
FT7620P	FT7502	FT620P	metal J560	30'	blue	coiled	6	blue	3	
FT7620S	FT7500	FT620S	flying leads	20'	blue	straight	6	blue	3	
FT7620SP	FT7502	FT620SP	metal J560	20'	blue	straight	6	blue	3	
FT7630	FT7500	FT630	flying leads	30'	blue	coiled	10	black	4	
FT7630D	FT7503	FT630D	D connector	30'	blue	coiled	10	black	4	
FT7640-3	FT7500	FT640-3	flying leads	30'	blue	coiled	10	black	3	
FT7640-4	FT7500	FT640-4	flying leads	30'	blue	coiled	10	black	4	

Product instruction sheets and technical data can be viewed on our website at dixonvalve.com Biofuel Compatible

### FloTech<sup>™</sup> FT7000 Series Rack Control Monitor



FT7000



Application:	Overfill prevention, ground verification, trailer identification, data communication. Automatic, continuous and self-checking micro based control. Per NPFA rules, FT7000 FloTech™ RCM provides secondary overfill protection for loading of petroleum or chemical liquids into cargo or rail tanks. It is designed for Hazardous locations using EXd explosion proof enclosure and intrinsically safe electronics. FT7000 RCM holds US and international safety approvals and certifications. FloTech™ FT7000 RCM was designed for high reliability with redundant test circuits and output relays. Relay operation is monitored to determine proper operation. FT7000 RCM has the ability for redundant communication of monitor status independent of relay status. Permits can be verified via a digital communication path not dependent on relay status.					
Standards:	<ul> <li>Certified to the following standards:</li> <li>CSA C22.2 No. 61010-1-12, No. 30-M1986, No. 157-92, No. 60079-0:11, No. 60079-1:11, No. 60079-11:14</li> <li>UL 61010-1, UL 1203, UL 913, UL 60079-0, UL 60079-1, UL 60079-11</li> <li>IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60529</li> <li>EN 60079-0, EN 60079-1, EN 60079-11</li> </ul>					
Material:	Explosion proof IP54 weathertight aluminum pow	/der coated housing				
Features & Benefits:	<ul> <li>FT7000 RCM provides robust communication of monitor overfill status, ground verification, trailer identification data and events via RS-485 and Modbus compliant. All function in one unit with ability to connect through existing TAS or through FloTech™ terminal software.</li> <li>Overfill, ground, and trailer identification in one enclosure.</li> <li>Auto Switching between optic and thermistor (2 wire or 5 wire) sensors.</li> <li>Compatible with all analog and digital sensors</li> <li>Monitor up to (8) 2 wire or (12) 5 wire sensors.</li> <li>Various plug cord and junction box assemblies compatible with worldwide standards.</li> <li>Visual display of all functions.</li> </ul>					
	Sensors	Identification	Earthing/Ground Devices			
	<ul> <li>5 wire optic sensors; 1-12 sensors</li> <li>2 wire black and white thermistor sensors; 1-8 sensors</li> <li>2 wire grey-grey universal thermistor sensors; 1-8 sensors</li> <li>2 wire analog thermistor sensors; 1-8 sensors</li> <li>onboard monitors</li> </ul>	<ul> <li>trailer Identification modules</li> </ul>	<ul> <li>ground bolt/bolt/wire</li> <li>ground loop/restive bond</li> </ul>			
	Note: Not compatible with float type sensors, or 3	3 wire analog therm	istor sensors			

### **API Rack Cord Assemblies**

			API		Со	rd		J-Slot			Pin		Breakav	vay Plug
FloTech™ Part #	Civacon Part #	Scully Part #	Thermistor	Optic	20' Straight	30' Coiled	2	3	4	6	8	10	Optic J560 Aluminum	Thermistor 13 Pin Plastic
FT600	7300SR-7300	21818	1			1	1				1			
FT600C	7300CSR-7300	31090	1			1			1			1		
FT600C-2	7300C-7300		✓			1	1					$\checkmark$		
FT600P	7320SR-7320		✓			1	1				$\checkmark$			$\checkmark$
FT600S	7300-STRAIGHT	20830	$\checkmark$		1		1				$\checkmark$			
FT600SC	7300C-STRAIGHT		1		1				1			$\checkmark$		
FT600S-4			✓		1				1		$\checkmark$			
FT620	7100SR-7100	21831		$\checkmark$				1		1				
FT620P	7100-J560			$\checkmark$				1		1			1	
FT620S	7100-STRAIGHT	21764		$\checkmark$	1			$\checkmark$		1				

### **API Rack Cord Parts**

FloTech™	Civacon	Scully	API		Cc	ord		J-Slot			Pin	
Part #	Part #	Part #	Thermistor	Optic	20' Straight	30' Coiled	2	3	4	6	8	10
FT601	7310SR-7310		1				1				1	
FT603	7350-7350		1						1			
FT621	7110SR-7110	21766		$\checkmark$				1		1		
FT622	7220-7220	31099		$\checkmark$		$\checkmark$		1				
FT623	7150-7150			1				1				

### **Reelcraft® Static Discharge Reels**



Application:	Used to ground equipment in hazardous atmospheres, such as fuel trucks or carts transferring flammable materials. When properly clamped to ground, the static discharge reel dissipates static electrical buildup, reduces chances of sparking and the potential for explosion.
Features & Benefits:	<ul> <li>Supplied with a 3/32" OD steel aircraft cable</li> <li>DC resistance is approximately one ohm per 50' of steel cable</li> </ul>

Part #	Description			
G3050	single 7 x 7 stranded steel grounding wire			

## FloTech™ Replacement Parts

Part #	Description	Refer to Page
FT9000	sensor housing 2" NPT with parallel ports, complete with all hardware	140
FT9000P	Plug-n-Play sensor housing 2" NPT with parallel ports, complete with all hardware	138
FT9001	complete sensor housing gasket and O-ring kit	138,140
FT9002	complete sensor housing gasket, O-ring and hardware kit	140
FT9003	replacement on-board monitor housing	142-143
FT9004	replacement on-board monitor hardware kit	142-143
FT9005	replacement on-board bezel 5 wire (FT103)	142
FT9006	replacement on-board bezel 2 wire (FT204)	143
FT9007	replacement socket rear housing	133-134, 145, 147
FT9008	replacement socket contact block with pins FT300 Optic series	132, 147
FT9009	replacement socket contact block with pins FT301 Thermistor series	132, 147
FT9010	replacement socket contact block with 10 pins FT304 Thermistor series	147
FT9011	replacement sensor housing cap with screws and lock washers	138, 140
10128	replacement 2" NPT sensor housing lock nut	138, 140
FT9013	replacement socket faceplate 4 J-slot, no contact block or hardware	132, 147
FT9019	faceplate assembly to fit small housing	
FT9020	socket pin, screw and crimp lug	132, 147
FT9021	crimp connector 100 pieces per bag	55
FT9022	GE RTV 103 silicone rubber sealant 2.8 oz. tube	55
FT9023	stripping tool for cable jacket	55
FT9024	crimp tool for splice connections	55
FT9025	terminal pin, 14-16 AWG 100 pieces	55
FT9026	sensor flat gasket for 2" NPT through punched hole in man lid	106-107,138, 140
FT9027	sensor housing probe, FKM O-ring	138, 140
FT9028	gasket for monitor face plate	
FT9029	J560 contact block, 7 way	134, 137, 145, 151
FT9030	fuse holder with 1/4 Amp fuse	142
FT9031	fuse holder with 1/2 Amp fuse	143-144
FT9032	socket face plate gasket	134, 145, 147

## FloTech<sup>™</sup> Replacement Parts (continued)

Part #	Description	Refer to Page
FT9033	sensor housing, lower no hardware	140
FT9034	replacement socket face plate 3 J-slot, no contact block or hardware	132, 147
FT9035	program module for FT204P and FT208	130, 131, 143-144
FT9036	FT208 replacement bezel kit	131, 144
FT9037	FT520 test lead set	56
FT9038	fuse ¼ Amp - for FT103	142
FT9039	fuse 1/2 Amp - for FT208 and FT204	131, 143-144
FT9040	Checkmate housing with lid	131, 144
FT9041	replacement 3 J-slot, aluminum socket nose ring	133, 147
FT9042	replacement 4 J-slot, aluminum socket nose ring	133, 147
FT9043	replacement 3 J-slot, stainless socket nose ring	130, 135, 137, 147, 149, 151
FT9044	replacement 4 J-slot, stainless socket nose ring	130, 135, 137, 147, 149, 151
FT9045	replacement gasket for the FT208 series Checkmate lid	130, 131, 144
FT9046	bag of 10 replacement socket pins	132, 147
FT9049	sensor cap O-ring	138, 140
FT9050	threaded half coupling $\frac{1}{2}$ " for retain probe	139, 141
FT9051	replacement short contact block for FT390/393 Optic 6 pin	130, 135-136, 149, 151
FT9052	replacement short contact block for FT390/393 Thermistor, 10 pin	130, 135-136, 149, 151
FT9053	replacement gasket for bezel on monitors FT103/204P	142-143
FT9054	replacement lid frame for monitors FT103/204P	142-143
FT9059	replacement face plate and bezel assembly for FT204P	143
FT9061	replacement contact pin for FT390/393 series socket	130, 135, 137, 147, 149, 151
FT9062	nose ring assembly, Thermistor, 4 J-slot, 10 Pin contact block, pin, and hardware for FT390 & FT393	130, 135-136, 149, 151
FT9063	nose ring assembly, optic, 3 J-slot, 6 Pin contact block, pin, and hard-ware for FT390 & FT393	130, 135-136, 149, 151
FT9064	bezel for FT203P-SPEC	143
FT9065	bezel gasket for FT203P-SPEC	143
FT9068	replacement contact block attachment screws and washers (4 each)	130, 132, 135-136, 139, 141, 147, 149, 151

Overfill Products

#### **Overfill Products**

# **Fuel Tanker Overfill Detection**

#### Competitor Cross Reference Chart Liquid Level Sensors

FloTech™ Part #	Civacon Part #	Scully Part #	Description
FT100	1302-007	9209	Replacement probe, optic, 5-wire, 7" long
FT100-12	1302-0012	9214	Replacement probe, optic, 5-wire, 12" long
FT100-18	1302-0018		Replacement probe, optic, 5-wire, 18" long
FT100S	1410RS-0060		Replacement stainless steel probe, optic, 5-wire, 7" long
FT101	1112-007 / 1110-007	9208	Sensor, optic, 5-wire, 2" NPT housing, 7" probe
FT101-12	1112-0012 / 1110-0012	9213	Sensor, optic, 5-wire, 2" NPT housing with 12" probe
FT101-18	1112-0018 / 1110-0018		Sensor, optic, 5-wire, 2" NPT housing with 18" probe
FT150	1651-007	9409	Replacement probe, thermo-optic, 7" long, 2-wire (black & white)
FT150-12	1651-0012	9414	Replacement probe, thermo-optic, 12" long, 2-wire (black & white)
FT150-18	1651-0018		Replacement probe, thermo-optic, 18" long, 2-wire (black & white)
FT151	1551-007	9408	Sensor, thermo-optic, 2" NPT housing, 7" probe, 2-wire (black & white)
FT151-12	1551-0012	9413	Sensor, thermo-optic, 2" NPT housing, 12" probe, 2-wire (black & white)
FT151-18	1551-0018		Sensor, thermo-optic, 2" NPT housing, 18" probe, 2-wire (black & white)
FT151RL	1554-007		Sensor, ROM Link™ replacement thermo-optic, 2" NPT housing, 7" probe, 2-wire (black & white)
FT151RL-12	1554-012		Sensor, ROM Link™ replacement thermo-optic, 2" NPT housing, 12" probe, 2-wire (black & white)
FT152		8819	Thermo optic retain sensor (black & white)
FT155	1920-5	08298 & 08542	Thermistor dummy, 5 compartment
FT201	1351-007		Replacement ROM type, 7" top probe, 2-wire (red & black)
FT201-12	1351-0012		Replacement ROM type, 12" top probe, 2-wire (red & black)
FT201-18	1351-0018		Replacement ROM type, 18" top probe, 2-wire (red & black)
FT202	1057-007		Top sensor ROM type, 2" NPT housing, 7" probe, 2-wire (red & black)
FT202-12	1057-0012		Top sensor ROM type, 2" NPT housing,12" probe, 2-wire (red & black)
FT202-18	1057-0018		Top sensor ROM type, 2" NPT housing,18" probe, 2-wire (red & black)
FT206	1000R & 1001R		Retain sensor ROM type, 1/2" NPT sensor (red & black)
FT9000	1355-1355 & 1455-1455		Probe housing

#### **Onboard Monitors**

FloTech™ Part #	Civacon Part #	Scully Part #	Description	
FT102	3150-3150	8563	Replacement module API compatible	
FT103	3100-3100	8687	API compatible on-board monitor, with housing	
FT203P	3252-3252		Replacement module, ROM type on-board monitor	
FT203PSPEC	3250 & 3252		Replacement module, ROM type on-board monitor with 8 hole cover and fram	
FT204P	3202-3202 & 3202R-3202	ROM type on-board monitor, with housing		
FT207		09100, 09111, 09584, 09585	Replacement module, Checkmate on-board monitor	
FT208		09109, 09107, 09562, 09566	Checkmate programmable monitor for top, or top and bottom sensors	

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**Overfill Products** 

# **Fuel Tanker Overfill Detection**

#### Competitor Cross Reference Chart (continued) Sockets

FloTech™ Part #	Civacon Part #	Scully Part #	Description
FT300	4103-4103	7974	API compatible optic socket with cap (6 pin, 3 J-slot)
FT301	4400-4400	7720	API compatible thermistor socket with cap (8 pin, 2/4 J-slot)
FT302	4600-4600	8116	API compatible float socket
FT303	4201-4201	7976	Optic pattern with thermistor J-slot, and cap (6 pin, 2/4 J-slot) (U.S.)
FT304	4403-4403	7716	Canadian / European thermistor socket with cap (10 pin, 4 J-slot)
FT305	4500-4500	7681	Thermistor socket, J560 type
FT306	4300-4300	8199	Optic socket, J560 type
FT307	4201-4201	7976	Optic pattern with thermistor J-slot and cap (6 pin, 2/4 J-slot) (Canada)
FT310	4110-4110	21790	API optic face plate assembly with cap
FT311	4111-4111	20770	API thermistor face plate assembly with cap
FT314		20768	Canadian / European thermistor replacement face plate with cap
FT320	4150-4150	8575	Blue optic dust cap
FT321	4450-4450	8474	Green thermistor dust cap
FT390	4820L & 4820R	9060	EZ-Cept dual socket assembly
FT390G	4822L & 4822R		EZ-Cept dual socket assembly with ground bolt

#### Hardware & System Testers

FloTech™ Part #	Civacon Part #	Scully Part #	Description
FT400	2100-2100	22056	5 conductor cable 100'
FT400-500	2200-2200		5 conductor cable 500'
FT401	2310-2310	27382	7 conductor cable 100'
FT401-1000	2401-2401		7 conductor cable 1000'
FT401-150	2300-2300		7 conductor cable 150'
FT402	2510-2510		20 strain relief fittings, 1/2" NPT
FT403	2530-2530		30 strain relief fittings, 1/2" NPT
FT450	GS1000	8560	Stainless steel grounding bolt
FT451		8274	Stainless steel grounding ball
FT470		08836	Trailer indentification module
FT520	1391-1391		Optic system tester
FT521	1396-1396		API optic test plug, 6 pins & 3 J-slot
FT522	1395-1395		Optic test plug, 6 pins and 2 or 4 J-slot (plug fits both 2 & 4 J-slot sockets)
FT523	1397-1397		Optic test plug J560 type
FT555		08938	Truck tester

#### **API Rack Cords**

FloTech™ Part #	Civacon Part #	Scully Part #	Description		
	API Optic Cord Assemblies				
FT620	FT620 7100SR-7100 21831 Blue plug with 6 contact pins and 3 J-slot, on a 30' coiled orange cable		Blue plug with 6 contact pins and 3 J-slot, on a 30' coiled orange cable		
FT620S	7100-STRAIGHT	21764	Blue plug with 6 contact pins and 3 J-slot, on a 20' straight orange cable		
FT620P	7100-J560		Blue plug with 6 contact pins and 3 J-slot on a 30' orange coiled cord and J560 Plug		
FT621	7110SR-7110	21766	Replacement blue plug assembly with 6 contact pins and 3 J-slot		
FT622	7220-7220	31099	Replacement 30' orange coiled cord, Optic 6 conductor		
FT623	7150-7150		Optic plug storage hanger		
FT624		31098	Replacement 20' orange straight cord, Optic 6 conductor		
		AP	Thermistor Cord Assemblies		
FT600	7300SR-7300	21818	Green plug with 8 contact pins and 2 J-slot, on a 30' coiled orange cable		
FT600P	7320SR-7320		Green plug with 8 contact pins and 2 J-slot on a 30' orange coiled cord and 13 pin connector		
FT600S	7300-STRAIGHT	20830	Green plug with 8 contact pins and 2 J-slot, on a 20' straight orange cable		
FT600C	7300CSR-7300	31092	Green plug with 10 contact pins and 4 J-slot, on a 30' coiled orange cable		
FT600SC	7300C-STRAIGHT		Green plug with 10 contact pins and 4 J-slot, on a 20' straight orange cable		
FT601	7310SR-7310	20769	Replacement green plug assembly with 8 contact pins and 2 J-slot		
FT601-4			Replacement green plug assembly with 8 contact pins and 4 J-slot		
FT601-10		8959	Replacement green plug assembly with 10 contact pins and 4 J-slot		
FT602		31097	Replacement 30' orange coiled cord, Thermistor 10 conductor		
FT603	7350-7350		Thermistor plug storage hanger		
FT604		20834	Replacement 20' orange straight cord, Thermistor 10 conductor		
	Civacon and ROM Link are registered trademarks of Civacon / Dover Corporation				

### **Competitor Cross Reference Chart (continued)**

#### **Onboard Systems**

FloTech™ Part #	Civacon Part #	Scully Part #	Description
FT1001	2001-2001	08328L1	API compatible 1 compartment system 7" probes
FT1001-12	2001S-0012		API compatible 1 compartment system 12" probes
FT1002	2002-2002		API compatible 2 compartment system 7" probes
FT1002-12	2002S-0012		API compatible 2 compartment system 12" probes
FT1003	2003-2003		API compatible 3 compartment system 7" probes
FT1003-12	2003S-0012		API compatible 3 compartment system 12" probes
FT1004	2004-2004	8305	API compatible 4 compartment system 7" probes
FT1004-12	2004S-0012		API compatible 4 compartment system 12" probes
FT1005	2005-2005	8306	API compatible 5 compartment system 7" probes
FT1005-12	2005S-0012		API compatible 5 compartment system 12" probes
FT1006	2006-2006		API compatible 6 compartment system 7" probes
FT1006-12	2006S-0012		API compatible 6 compartment system 12" probes
FT2001	3021-3021		ROM type, 1 compartment system, overfill & retain, 7" probes
FT2001-12	3021S-0012		ROM type, 1 compartment system, overfill & retain, 12" probes
FT2002	3022-3022		ROM type, 2 compartment system, overfill & retain, 7" probes
FT2002-12	3022S-0012		ROM type, 2 compartment system, overfill & retain, 12" probes
FT2003	3023-3023		ROM type, 3 compartment system, overfill & retain, 7" probes
FT2003-12	3023S-0012		ROM type, 3 compartment system, overfill & retain, 12" probes
FT2004	3024-3024		ROM type, 4 compartment system, overfill & retain, 7" probes
FT2004-12	3024S-0012		ROM type, 4 compartment system, overfill & retain, 12" probes
FT2005	3025-3025		ROM type, 5 compartment system, overfill & retain, 7" probes
FT2005-12	3025S-0012		ROM type, 5 compartment system, overfill & retain, 12" probes
FT2006	3026-3026		ROM type, 6 compartment system, overfill & retain, 7" probes
FT2006-12	3026S-0011		ROM type, 6 compartment system, overfill & retain, 12" probes
FT2101	3031-3031		ROM type, 1 compartment system, overfill only, 7" probes
FT2101-12	3031S-0012		ROM type, 1 compartment system, overfill only, 12" probes
FT2102	3032-3032		ROM type, 2 compartment system, overfill only, 7" probes
FT2102-12	3032S-0012		ROM type, 2 compartment system, overfill only, 12" probes
FT2103	3033-3033		ROM type, 3 compartment system, overfill only, 7" probes
FT2103-12	3033S-0012		ROM type, 3 compartment system, overfill only, 12" probes
FT2104	3034-3034		ROM type, 4 compartment system, overfill only, 7" probes
FT2104-12	3034S-0012		ROM type, 4 compartment system, overfill only, 12" probes
FT2105	3035-3035		ROM type, 5 compartment system, overfill only, 7" probes
FT2105-12	3035S-0012		ROM type, 5 compartment system, overfill only, 12" probes
FT2106	3036-3036		ROM type, 6 compartment system, overfill only, 7" probes
FT2106-12	3036S-0012		ROM type, 6 compartment system, overfill only, 12" probes

Overfill Products

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### **Competitor Cross Reference Chart (continued)**

#### **Onboard Systems**

FloTech™ Part #	Civacon Part #	Scully Part #	Description	
FT2801		08251, 09640	Checkmate system, 1 compartment system, overfill only, 7" probes	
FT2802		08352, 09641	Checkmate system, 2 compartment system, overfill only, 7" probes	
FT2803		08352,09642	Checkmate system, 3 compartment system, overfill only, 7" probes	
FT2804		08354, 09643	Checkmate system, 4 compartment system, overfill only, 7" probes	
FT2805		08355, 09644	Checkmate system, 5 compartment system, overfill only, 7" probes	
FT2806		08356	Checkmate system, 6 compartment system, overfill only, 7" probes	
FT2807		08380	Checkmate system, 7 compartment system, overfill only, 7" probes	
FT2808		08381	Checkmate system, 8 compartment system, overfill only, 7" probes	
FT2811		08361	Checkmate system, 1 compartment system, overfill & retain, 7" probes	
FT2812		08362	Checkmate system, 2 compartment system, overfill & retain, 7" probes	
FT2813		03363	Checkmate system, 3 compartment system, overfill & retain, 7" probes	
FT2814		08364	Checkmate system, 4 compartment system, overfill & retain, 7" probes	
FT2815		08365	Checkmate system, 5 compartment system, overfill & retain, 7" probes	
FT2816		08366	Checkmate system, 6 compartment system, overfill & retain, 7" probes	
FT2817		08382	Checkmate system, 7 compartment system, overfill & retain, 7" probes	
FT2818		08383	Checkmate system, 8 compartment system, overfill & retain, 7" probes	

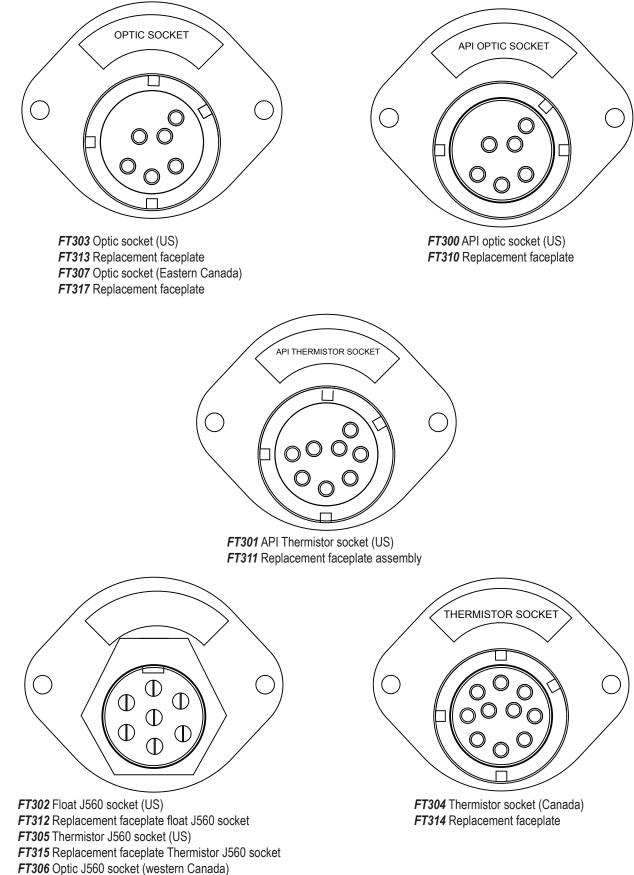
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Civacon is registered trademark of Civacon / Dover Corporation

#### **Overfill Products**

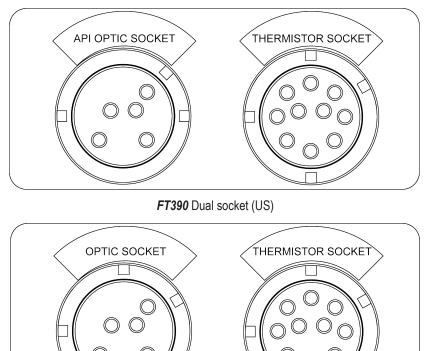
## **Fuel Tanker Overfill Detection**



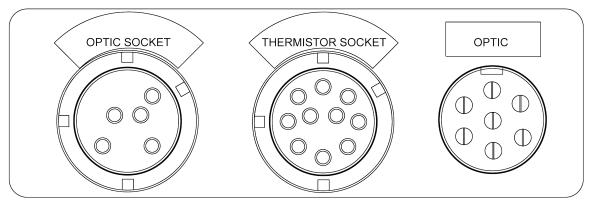


FT316 Replacement faceplate optic J560 socket

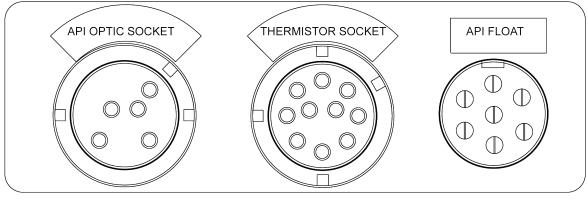
**Socket Profiles** 



FT391 Dual socket (Canada)



FT395 Triple socket (Canada)



FT393 Triple socket (US)

NEW	SureDrop™ Cross Drop Prevention System
Application:	The SureDrop <sup>™</sup> system provides a reliable, affordable and easy to use system to prevent cross drops during petroleum delivery. It requires the driver to perform the product drop task in a specific sequence every time. The tag scanning and confirmation process is aligned with the normal product delivery procedure while locking out non-matching products.
Features & Benefits:	<ul> <li>Compatible with existing tank trailer components (API's elbows, and internal valves) for easy retrofit.</li> <li>Wireless RFID product matching technology.</li> <li>Event logging and wireless data reporting.</li> <li>Upgradable system components for additional functions.</li> </ul>
	SureDrop™ Basic Systems
Features & Benefits:	RF scanning wand     charging gradle

- charging cradle compartment indicators • wiring kit
  - trailer tags

Part #	Accessories / Options	Qty
XD100-01	1 compartment system	1
XD100-02	2 compartment system	1
XD100-03	3 compartment system	1
XD100-04	4 compartment system	1
XD100-05	5 compartment system	1

#### **Internal Valve Controller**

Features & Benefits:       • Optional XD4000 Internal valve controller:         • Locks out internal valve unless product is matched to storage tank.         • Mechanical and tag bypass modes         • Integrated Betts air distributor	<ul> <li>Locks out internal valve unless product is matched to storage tank.</li> <li>Mechanical and tag bypass modes</li> </ul>
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XD1000 REGULAR

SURE DROP 0	Part #	Description
SURE DROP 0	XD4000-1C	1 compartment system
	XD4000-2C	2 compartment system
	XD4000-3C	3 compartment system
	XD4000-4C	4 compartment system
	XD4000-5C	5 compartment system
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NOTE: For multiple tank systems, such as truck tank and trailer, please call 877.582.3569 for ordering assistance.





# NEW SureDrop™ Cross Drop Prevention System Accessories



digital compartment indicator XD3000 / XD3001



UST RFID tag mounting bracket XD281



cellular data communication module XD5000



RFID product grade tags RFID utility tags

Part #	Accessories / Options	Qty
XD5000	Cellular Data Communication Module uploads time stamped event data to the cloud, reports available via secure website.	1
XD3000	compartment indicator- master (compartment #1)	1
XD3001	compartment indicator- slave (compartments #2-8)	1
XD3100	digital compartment indicator – master (compartment #1)	1
XD3101	digital compartment indicator – slave (compartments #2-8)	1
XD2000	wand charger	1
XD1000	RFID scanning wand	1
XD280	RFID tag mounting cable, vinyl coated stainless steel RFID tag attachment cables; crimp connection	1
XD281	UST RFID tag mounting bracket, mounts the RFID tag on the diameter of the spill bucket for easy reading	1
XD282	API adapter mounting bracket, standard compartment indicator	1
XD283	TTMA flange mounting bracket, digital compartment indicator	1
XD3010	Trailer wiring kit	1
F08-02AMB	Air filter with automatic drain	1

Part #	RFID Product Grade Tags	Qty
XD28-REG-25	RFID product grade tag for storage tanks - Regular	25
XD28-MID-25	RFID product grade tag for storage tanks – Mid-Grade/Plus	25
XD28-PRE-25	RFID product grade tag for storage tanks - Premium	25
XD28-DSL-25	RFID product grade tag for storage tanks - Diesel	25
XD28-DYE-25	RFID product grade tag for storage tanks – Dyed Diesel	25
XD28-E85-25	RFID product grade tag for storage tanks – E-85	25
XD28-ETH-25	RFID product grade tag for storage tanks - Ethanol	25
XD28-BIO-25	RFID product grade tag for storage tanks – Bio-Diesel	25
XD28-KER-25	RFID product grade tag for storage tanks - Kerosene	25

Part #	RFID Utility Tags	Qty
XD28-LOA-25	RFID utility tag for system function – Load	25
XD28-RST-25	RFID utility tag for system function – Reset	25
XD28-BYP-25	RFID utility tag for system function – Bypass	25
XD28-ELB-25	RFID utility tag for system function – Elbow	25