

OPW[®] Fluid Transfer Group Europe B.V.

A **DOVER**[™] COMPANY

**PROVIDING EXPERT SOLUTIONS FOR THE
SAFE AND EFFICIENT**

PROCESSING

LOADING

UNLOADING

TRANSPORTING

OF HAZARDOUS BULK PRODUCTS WORLDWIDE



Euro-Line Bottom Valves

The line of Civacon pneumatically operated and lightweight Euro 100 bottom valves are in accordance with API RP 1004, ADR and EN13316. The Euro-Line of high-flow bottom valves are available as compact 100-1 series and super compact 100-2 series.

Features and Benefits

- **Die cast aluminum** construction
- **Hard anodized and stainless steel** internals
- **Compact design** available in 4" size or DN100
- **VITON® GFLT seals** compatible with all fuel grades and additives
- **Self-closing** piston-type operation
- **Valve service** inside of the compartment possible
- **Superior gasket sealing** with grooved flanges
- **Manually openable** in case of emergency
- **Stainless steel filter/strainer**
- **Superior flow rate** no moving parts in the flow path
- **Sequenced operation** standard

Accessories

SF100-ST40	Steel sump flange
10.02.43	Aluminium sump flange
10.01.74/EU	Aluminium square outlet flange
10.01.84	Gasket for square outlet flange
Euro 100 kit	Seal repair kit for all Euro-Line models



Euro-Line Bottom Valve Compact



Euro-Line Bottom Valve Super Compact



Euro-Line Bottom Valve Compact

Ordering Specifications

Euro-Line Bottom Valve: Compact Model

Euro 100-1	4" non-pressure balanced
Euro 100-1-S	4" non-pressure balanced sequential operation
Euro 100-1-B	4" pressure balanced
Euro 100-1-BS	4" non-pressure balanced sequential operation

Euro-Line Bottom Valve: Super Compact Model

Euro 100-2	4" non-pressure balanced
Euro 100-2-S	4" non-pressure balanced sequential operation
Euro 100-2-B	4" pressure balanced
Euro 100-2-BS	4" pressure balanced sequential operation



API RP 1004 Tank Truck Adaptors

Civacon API Adaptors are precisely engineered and manufactured to match a standard loading coupler and to deliver superior performance and value. One focus of our engineering effort is on mating-surface materials that allow for a wide range of product solutions. The end result is a wide range of applicable options to match specific needs and situations.

Features and Benefits

- **Mounting flange** meets 4" TTMA specification
- **All API adaptors** and aluminum caps are designed in accordance with API RP 1004, ADR and EN13083
- **Slim line hydrodynamic design** provides for high flow rates and minimum pressure drop
- **Lightweight die cast aluminum** construction for maximum strength
- **Stainless steel shaft/cam/spring** for maximum service life
- **Mounting lugs** for model 200, air interlock 3 2-way valve
- **Super strong** lightweight aluminum lever with two-stage opening provides indication of valve position
- **Grease nipple** on handle provides for easy maintenance
- **VITON® GFLT seals** are standard for compatibility with all fuel grades and additives
- **One-piece** hard anodized replaceable nose ring—897B
- **Designed for dryline applications**
- **Bushed running surfaces** provide for efficient operation and long life
- **Flat bottom valve** body design provides complete draining capability to minimize contamination—891A

Accessories

- 875-AL40** 4" Aluminium dust cap
200 Air Interlock Valve



API Adaptor
897BA



API Adaptor
891A



Tank-truck cabinet with API Adaptors

Ordering Specifications

API Adaptors with Handles

861BA	Handle and sight glass, two-piece design, hard-coated nose
897BA	Handle and sight glass, one-piece design, bronze outlet nose
897BHA (UK)	Handle and raised sight glass, one-piece design, bronze outlet nose
891A	Handle and sight glass, one-piece design, flat bottom, hard-coated nose (available from August 2007)

API Adaptors without Handle

866E	No sight glass, anodized hard-coated body, hard-coated nose
897NB	Sight glass, bronze outlet nose



Aluminum Manhole Covers

Whatever your application, whatever your specification, chances are we have a manhole cover that meets and exceeds industry standards. Available in a wide variety of materials (including steel, stainless steel, aluminum) and standard size of 20", our manholes set the standard for precision and durability.

Features and Benefits

- **Manhole covers** are designed and approved in accordance with API RP 1004, ADR and EN13314 and EN13317 standards
- **10" (254mm) offset pressure activated fillcover (PAF)** for easy and secure access for loading
- **Available with Acrylonitrile or VITON® GFLT seals** for multiple applications
- **Lightweight and strong** aluminum alloy PAF materials of construction
- **360° rotatable orientation** for left and right hand PAF
- **Two-Stage opening** provides safe access
- **Self-latching** (automatic locking of PAF)
- **Keylock**



Aluminum Manhole Cover

Accessories

58.50.99/C	Blank flange with gasket for dipstick/Liberty sensor hole
H 70480	Sensor flange no gasket for dipstick/Liberty sensor hole
H 70898	Sensor gasket flange for dipstick/Liberty sensor hole
LC 01013	Complete Dipstick assembly 1¼" with tube and dipstick 2000mm for B model
NC 000017	Internal P/V vent for manhole covers

Ordering Specifications

Aluminum Manhole Covers

58-00-28C/SERR-SL	20" Manhole, bolted and self-latching (UK market)
58-00-28D/SERR-SL	20" Manhole, bolted and self-latching



Vapor Recovery Vents

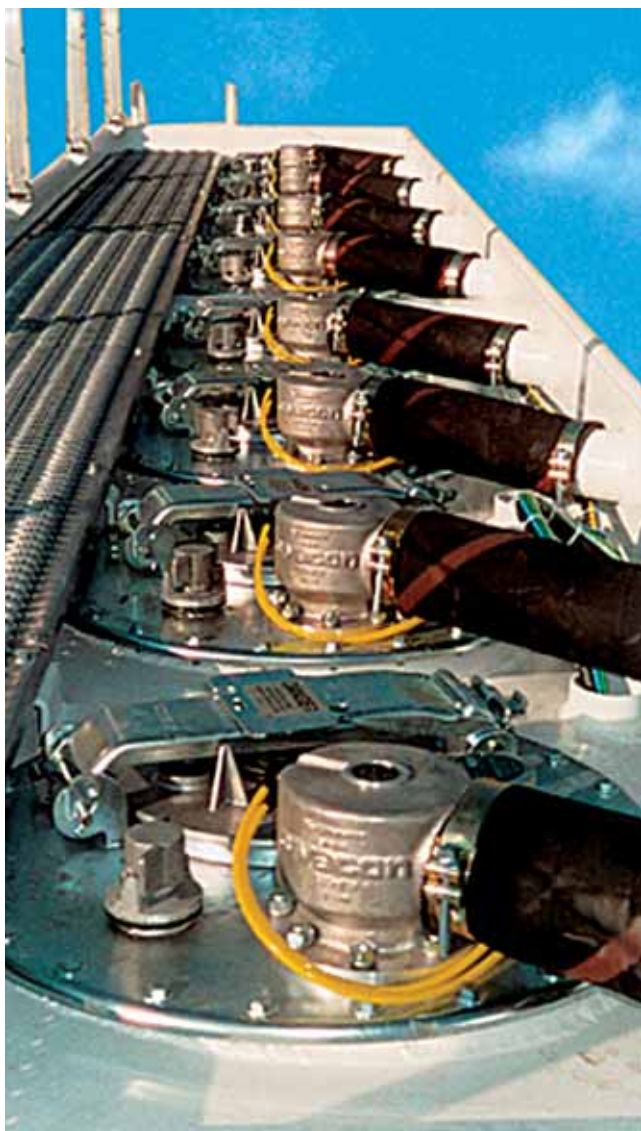
Civacon's Vapor Recovery Vents provide additional safety and security when carrying hazardous liquids. The models listed are designed in accordance with API RP 1004, ADR and EN13082 standards.

Features and Benefits

- **Mounting flange** 3" TW
- **Compact design** in 3" (±80 mm) size for 20" manholes
- **Constructed of Aluminum** with corrosion-resistant trim
- **Operates in** temperature range of -20°C to +70°C
- **Self-opening at vacuum** of 6 kPa (60 mbar)
- **VITON® GFLT seals** compatible with all fuel grades and additives



Vapor Recovery Vent 1995TW/SF-2



Vapor Valve with flame arrestor

Accessories

- LC-05052 Vulcanised vapor hose
LC-94022 Hose-clamps

Ordering Specifications

Vapor Recovery Vents

1995TW/S	Vapor Valve
1995TW/SF-2	Vapor valve with flame arrestor
1995TWD-2	Vapor line valve
1995TWD-SV	Vapor line valve (Smartvent) UK IP code of practice



Vapor Recovery Adaptors

Vapor Recovery Equipment: Civacon's Vapor Recovery Adaptor is designed to maximize efficiency of vapor recovery with a minimum pressure drop. The Vapor Recovery Adaptor is in accordance with API RP 1004, ADR and EN13081 standards.

Features and Benefits

- **4" size** or DN100
- **Aluminum** construction
- **Connections:**
 - 4" TTMA flange
- Vapor coupler** connected on hose side with a 4" Kamlok (spec. MIL-C 27487) quick coupler
- **VITON® seals** compatible with all fuel grades and additives
- **Standard on the 633LVB** sight glass and drain plug.

Accessories

- 1711T** Duratuff cap
- 1711T-CA-PL** Duratuff cap with cable
- 201** Air Interlock valve



*633LVB Vapor Recovery Adaptor
with Model 201 Air Interlock Valve*



Vapor Adaptor with Aluminum Coupler



Vapor Recovery



Ordering Specifications

Vapor Recovery Equipment

633LVB	Vapor adaptor without interlock
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Air Interlock Valve Model 200 and 201

The Model 200 and 201 air interlock valves are installed on bottom loading adaptors and vapor recovery fittings to lock the brakes to prevent drive-aways during loading. It also opens the air operated vapor valves during loading and unloading.

Features and Benefits

- **Corrosion resistant** nickel-plated aluminum body
- **Main shaft** wiper seal will prevent contaminants from entering seal area
- **Compact design** fits in all air valve locations
- **Universal mounting** fits all current API adaptors and vapor fittings
- **Rigid mounting** for extended valve life



Air Interlock Valve Model 200



Air Interlock Valve Model 201



Vapor Recovery Adaptor with Air Interlock Valve Model 201



Ordering Specifications

Air Interlock Valve: Model 200 and Model 201

200	Air Interlock Valve, 3 way, for API RP 1004 Tank Truck
201	Air Interlock Valve, 3 way, for 633LVB Vapor Recovery Adaptor



Tank Truck Unloading Equipment

The range of 871 aluminium gravity couplers has been designed for use with API adaptors when discharging the tank truck. The range of 871 gravity couplers can be connected to any API tank-truck adaptor in accordance with API RP 1400, ADR and EN13083 standards.

Features and Benefits

- **Strong** die cast aluminum construction for long lifetime
- **Equipped** with vibration resistant TWIN-KAM cam arms
- **Zink plated** steel chain to connect the Gravity Coupler to the API Adaptor
- **Buna** seals



Unloading operation



Tank-truck Unloading Equipment



Gravity Coupler 871-EDB



Gravity Coupler 871-A

Ordering Specifications

Tank Truck Unloading Equipment

871-A	With Kamlok adaptor (male) for connection to API adaptors with a handle Available sizes: 4" API x 4" Kamlok male 4" API x 3" Kamlok male
871-B	4" API x 4" BSP female Kamlok for connection to API adaptors with handle
871-DB	4" API x 3" BSPP female-thread for connection to API adaptors with handle
871-DBF	4" Same only with 3" Guillemin coupling, optionally with sightglass
871-EDB	4" API with handle x 4" BSP female thread, for use with API adaptor without handle



Pneumatic Control Units

With the Pneumatic Control Units (PCU and PCP) both vapor recovery valves and bottom valves can be opened. In order to open a bottom valve, the corresponding vapor valve has to be open. Visual indicators enable the tank-truck operator to check the status of either the vapor recovery valves and bottom valves.

Features and Benefits

- **Compartment visual indicators** allow the operator to easily see the condition of the bottom valves. Black is closed, Green is open.
- **Material seals** available in both Delrin and Buna-N
- **RF unit** and emergency air switch is optional for additional safety
- **Three emergency** stop switches for improved safety
- **PCU model** is contained in a corrosion-resistant lockable stainless steel box
- **Door brake interlock** is included in the PCU model only
- **Automatic closure** with less than 4.5 bar is also a standard feature on the PCU model
- **PCP model** is manufactured with a mounting plate



PCP-461R



PCU-661L

ABOUT THE PCU AND PCP SYSTEM

By pulling the green vapor button all vapor vents will open.

The indicator under the green push button will turn from black to green indicating all vapor vents are open. By pulling the compartment switches the selected bottom valve will open and the light indicator will change from black to green meaning the bottom valve of the compartment is open.

Pushing the red emergency button in the pneumatic control box will close down all the bottom valves and vapor vents. The compartments with a green indicator will turn black as well as the indicator of the vapor valves.

The PCU model comes standard with two remote emergency buttons

Ordering Specifications

Pneumatic Control Units

PCU-*61**	* Number of compartments (4 to 10)
	** R for right orientation, L for left orientation
Example: 7 compartment tank-truck, with right orientation: PCU-761R	
PCP-*61R	Pneumatic Control Panel, * Number of compartments (2 to 6)
	Example: 3 compartment tank-truck: PCP-361R



Safety and Control System—"SCS"

The SCS sealed parcel delivery system monitors liquid products transported by meter-less tank trucks, and is in accordance with EN15208. EU directive on Volatile Organic Compounds (VOCs) prohibits the use of dipsticks on tank trucks for petroleum products therefore the SCS provides an approved method of tank truck monitoring.

The SCS system is mounted on petroleum tank trucks and has been designed to be electronically sealed to provide a "sealed parcel delivery" system after the loading has been completed.

About the SCS System

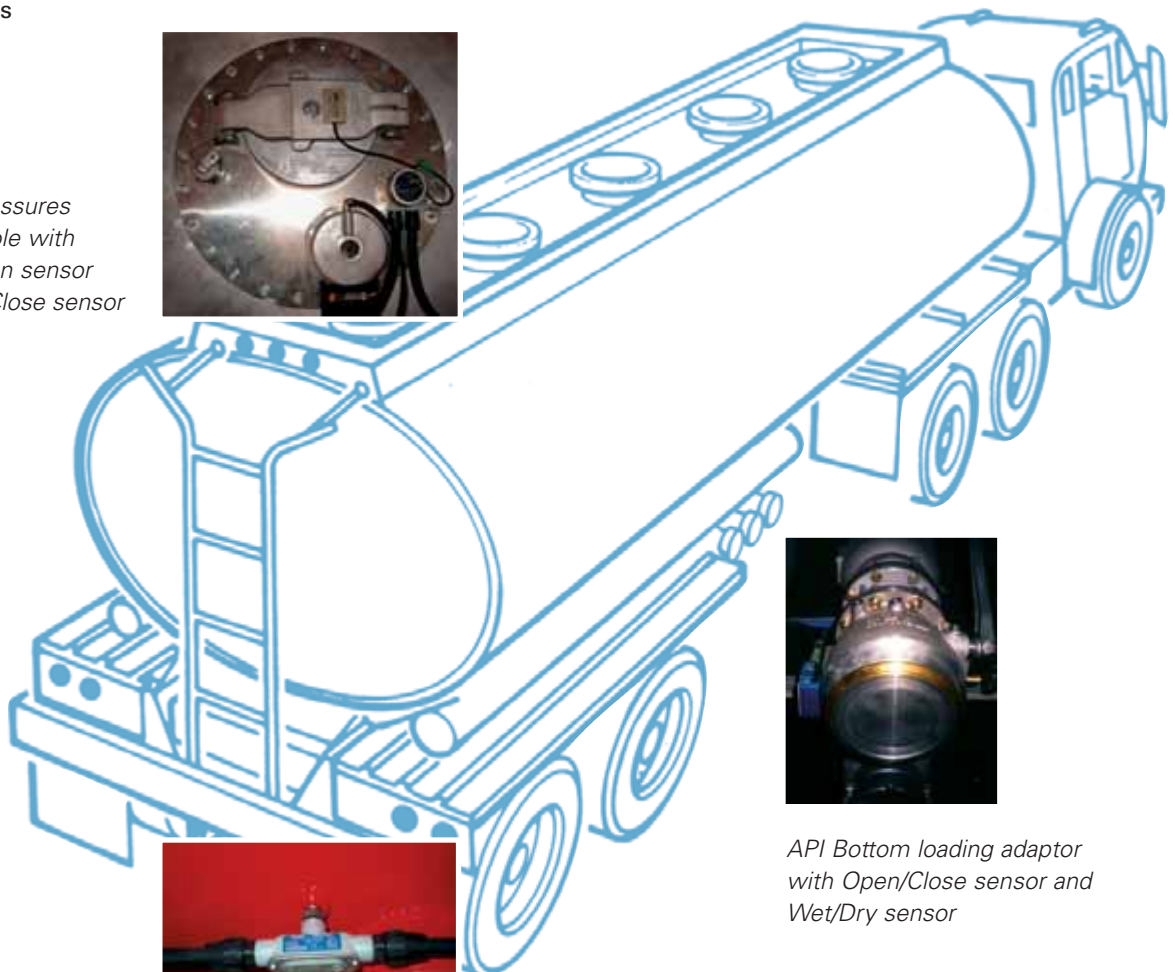
- It will prove that the compartments are sealed at the loading point and the quantities conform to the bill of lading
- At the service station the compartment sealed status can be easily verified so no need for secondary measurement
- After unloading has been completed, the system will indicate the condition of the compartments and discharge lines

- The system eliminates the frustration of verifying deliveries
- The SCS event information with time and date indication can be printed or uploaded to a PC/OTC
- The SCS can communicate via GPRS coordinates information (optional)

SCS System Components

- Sensor mounted on each manhole to indicate if manhole is open or closed
- Liberty overfill prevention sensor communicates with CEN type rack monitors wet/dry indicator
- ROM bottom empty sensor wet/dry indicator
- API adaptor movement sensor to indicate if API adaptor is open or closed
- API adaptor liquid sensor to indicate liquid in discharge line wet/dry
- SCS monitor with power supply and optional wireless ticket printer

Weight and measures approved manhole with overfill prevention sensor and SCS Open/Close sensor



API Bottom loading adaptor with Open/Close sensor and Wet/Dry sensor

ROM Bottom empty sensor



Safety and Control System—"SCS"

The SCS System Working Principle

The display on the SCS monitor will indicate at any point of time the status of all the truck compartments and, by scrolling through the system, the status of any part of the SCS system per tank-truck compartment.

SEALED

After the loading has been completed and the API adaptors have been closed, the status of the tank-truck will visually indicate if it is sealed.

UNSEALED

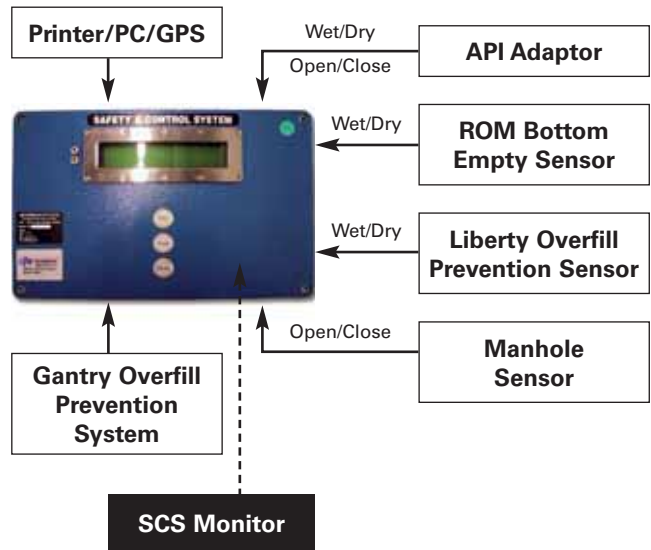
In case of opening of any of the manholes and/or API adaptors after the loading has been completed and before arriving at the service station, the display of the SCS monitor will switch to an un-sealed status allowing the service station owner to refuse the load.

UNSEALED / RESEALED

The SCS system eliminates the frustration of verifying deliveries. In the event that one of the compartments cannot be emptied completely, at the push of a button the truck driver can change the status from "unsealed" to "resealed."

Delivery information and GPRS coordinates can be uploaded and transferred via GPRS and/or printed. SCS monitors and stores data for 40 days on average.

Typical Components For One Compartment



SCS system with user-friendly display up to 12 compartments



Liberty Overfill Prevention Systems

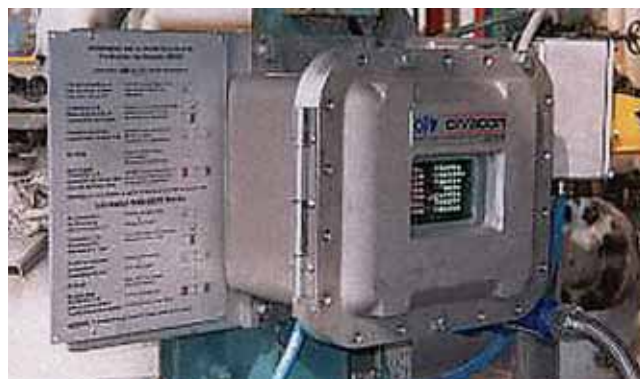
Security During Loading and Unloading Procedures

The OPWFTG Civacon Liberty

The OPWFTG Civacon Liberty overfill prevention system is designed for tank trucks, tank-truck loading stations (for top and bottom loading), storage depots and service stations. In the event of a possible overfill situation sensed by the Liberty sensors, the Liberty rack monitors output relay will send a signal to a terminal automation system, control valve, or pump, to shutdown the loading operation.

The Liberty

The Liberty failsafe and self-checking electronic sensors are available as 2-wire Thermistor, 2-wire quick start Optic, or 5-wire Optic. The Liberty on-board control monitors, with diagnostic display, offer 2-wire and 5-wire optic sensor compatibility with all other brands of rack monitors.



The ROM

The ROM on-board system combines overfill with retain feature of detecting presence of liquid in a compartment prior to loading. All on-board monitors can also be used as stand-alone truck system to close down tank-truck bottom valves in case of an overfull situation. The Liberty system conforms to Atex, Cenelec, and EN standards.

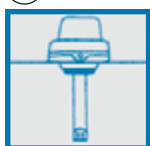
Ordering Specifications

OPW Liberty Overfill Prevention Systems

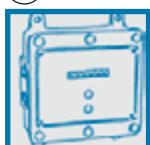
8500E

8-Channel thermistor and 12-Channel optic monitor with diagnostic display and infrared by-pass switch. Including ground verification.

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②



③

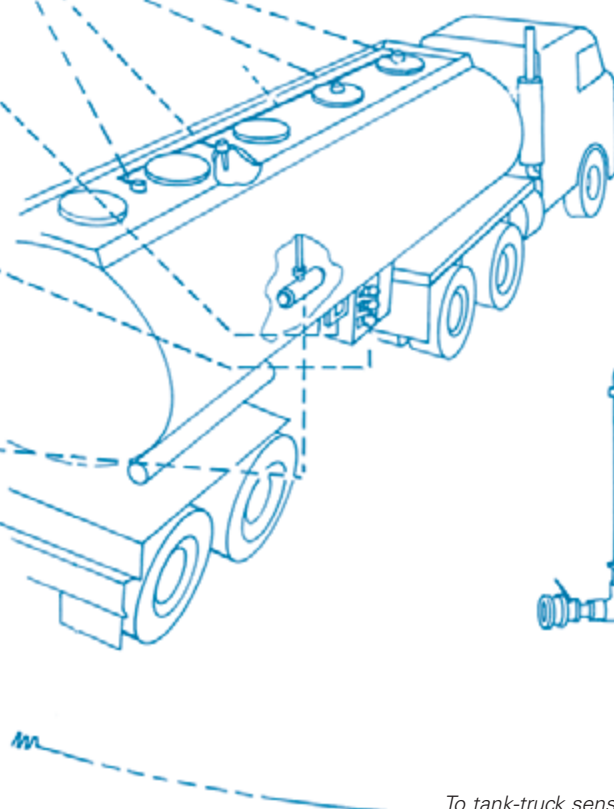


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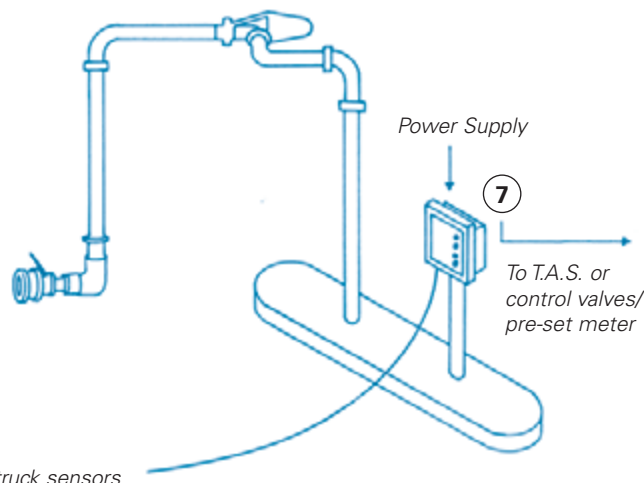


Trailer Equipment List

- 1 | Sensor(s): (One Per Compartment) Plus Sensor Cable
- 2 | On-board Control Monitor / ROM
- 3 | Rack-Compatible Socket(s)
- 4 | Retain Bottom Sensor

Loading Rack Equipment

- 5 | Rack Monitor
- 6 | Connecting Plug
- 7 | Plug/Monitor Cord Set





ROM II Plus™ Retained—Overfill On-Truck Monitoring System

Features and Benefits

- **Overfill Detection** and Bottom Empty Monitoring in one unit
- **ROM II Plus** on truck monitor with top and bottom compartment sensors, compatible with all industry standard sensor/rack monitor formats
- **Alerts driver** of product in a compartment, loading cannot proceed without activation of the reset circuit
- **Bottom sensor** override timer automatically cancels timing when plug removed from socket
- **ROM II Plus monitor** automatically closes bottom valves for added overfill prevention
- **Support for** up to 8 compartment tankers using 2-wire optic overfill and bottom sensors
- **Support for** up to 12 compartment tankers using 5-wire optic overfill sensors only.
- **Number of** installed sensors automatically “programmed” and blocked at installation
- **Compatible with** four separate auxiliary input devices (such as brake interlock, vapor return hose connection, etc.), with individual LED confirmation
- **Includes LED socket connection** status for proper connection assurance



Status indications of LEDs per compartment:

- | | |
|------------------------|--------------------------------------|
| 1 - Overfill situation | <i>Steady red light</i> |
| 2 - Wire shortcuts | <i>One flash every 5 seconds</i> |
| 3 - No Grounding | <i>Two flashes every 5 seconds</i> |
| 4 - Shorted Sensors | <i>Three flashes every 5 seconds</i> |

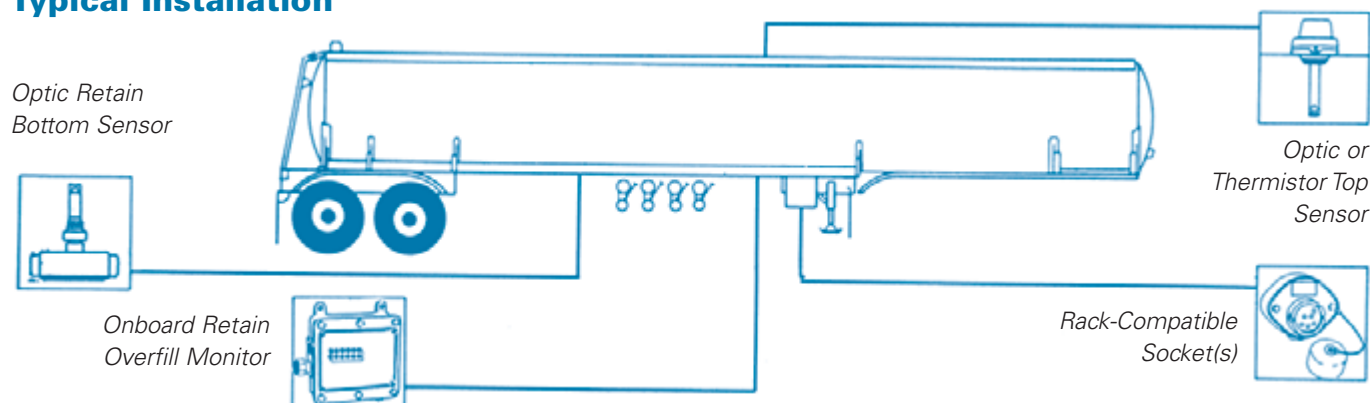


Ordering Specifications

Retained—Overfill On-Truck Monitoring System

3204E	ROMII Plus 8 compartment on-board monitor
8500E	8-Channel thermistor and 12-channel optic monitor with diagnostic display
1051	ROM 2-wire optic sensor
1551	2-Wire optic sensor quick start
1000R	ROM 2-wire retain bottom sensor

Typical Installation





875 API Dust Cap

Our Civacon 875 API Dust Cap is lightweight and corrosion resistant. Best of all, Civacon API Dust Caps keep their shape, even if dropped or mishandled.

Features and Benefits

- **Lightweight die-cast aluminum** construction for maximum strength
- **Extends valve seal life** and protects poppet face of API
- **Ease of operation** due to radial cam and lug design
- **Dust cap** meets API RP 1004 specification
- **Glass-filled nylon** cams eliminate risk of contamination and reduce wear
- **Buna-N seal** for increased performance
- **API Dust Cap** is lockable
- **Guaranteed** up to 3 bar (ADR approved as third point of closure ADR 4.3.4.1.1)
- **Corporate logo** and text on API Dust Cap is optional



Ordering Specifications

875 API Dust Cap

875-AL40

API Dust Cap



Two-Wire Optic Sensor

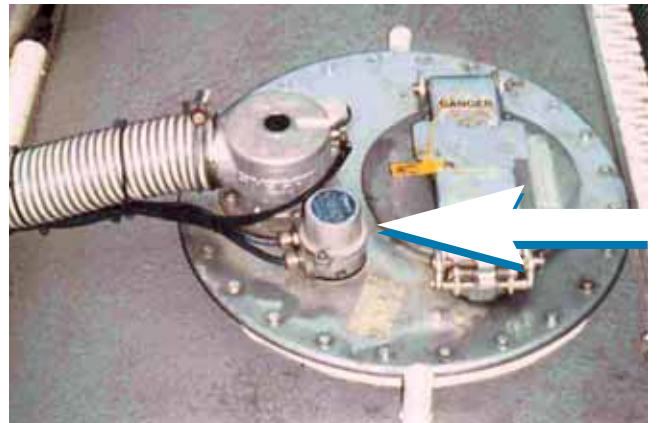
The OPWFTG Two-Wire Optic Sensors are designed for overfill prevention of liquid petroleum products. The Two-Wire Optic Quick Start Sensor is designed as an alternative for the Two-Wire Thermistor Sensor. Not only are they instantly permissive and specially designed for optimal communication with our 8500E-series Rack Monitors (conforming to EN13922); but they are also compatible with all other brands of Rack Monitors (which conform to EN13922 standards as well).

Features and Benefits

- **Conforms to** API RP 1004, ATEX and EN13922
- **Intrinsically safe**
- **Self checking**
- **Temperature range** -20°C to +70°C
- **Certified for use in zone 0**
- **Instant permissive signal** (no warm-up time)
- **Easy adjustable shaft** when shorter length is necessary
- **Immediate system shutdown** in case of compartment 'wet' detection (250 ms)
- **Immediate re-permit** in case of compartment 'dry' detection



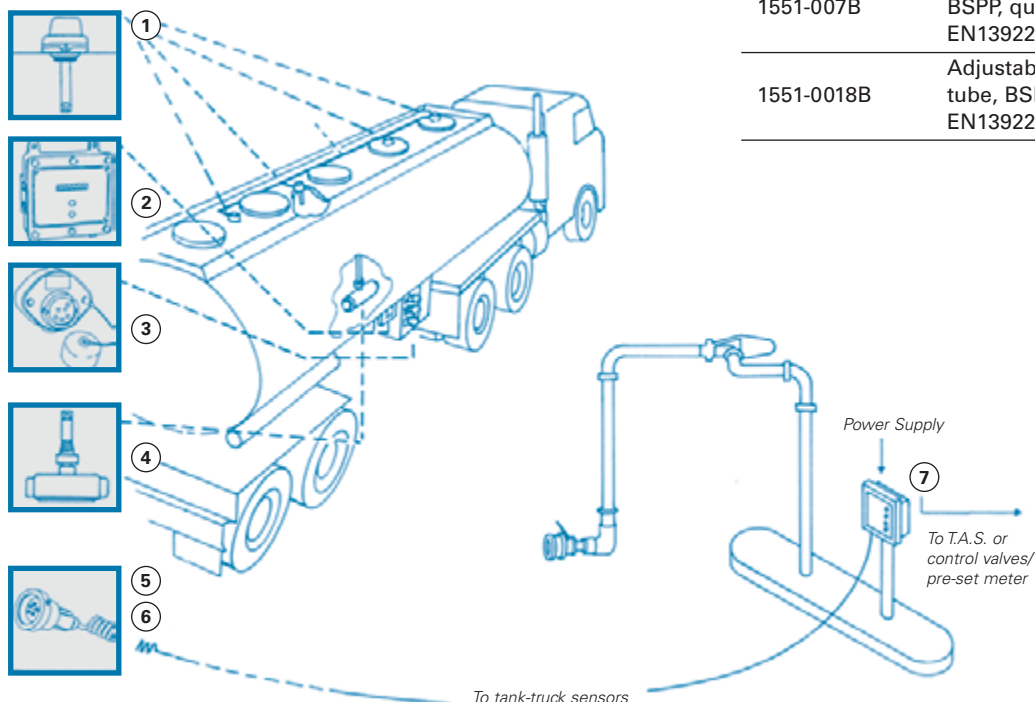
1551-007B Two-Wire Optic Sensor



Ordering Specifications

Two-Wire Optic Sensor

1551-007B	Adjustable two-wire optic sensor, 7" tube, BSPP, quick start, in accordance with EN13922 standards
1551-0018B	Adjustable two-wire optic sensor, 16" tube, BSPP, quick start, in accordance with EN13922 standards



Trailer Equipment List

- 1 | Sensor(s):
(One Per Compartment)
Plus Sensor Cable
- 2 | On-board Control Monitor / ROM
- 3 | Rack-Compatible Socket(s)
- 4 | Retain Bottom Sensor

Loading Rack Equipment

- 5 | Rack Monitor
- 6 | Connecting Plug
- 7 | Plug/Monitor Cord Set



Five-Wire Optic Sensor

The OPWFTG Five-Wire Optic Sensors are designed for overfill prevention of liquid petroleum products. Not only are they instantly permissive and specially designed for optimal communication with our 8500E-series Rack Monitors (conforming to EN13922); but they are also compatible with all other brands of Rack Monitors (which conform to EN13922 standards as well).

Features and Benefits

- **Conforms to** API RP 1004, ATEX and EN13922
- **Intrinsically safe**
- **Self checking**
- **Temperature range** -20°C to +70°C
- **Certified for use in zone 0**
- **Instant permissive signal** (no warm-up time)
- **Easy adjustable shaft** when shorter length is necessary
- **Continuously checking** of system operation such as wiring, sockets and sensor itself
- **Immediate system shutdown** in case of compartment 'wet' detection (250 ms)
- **Immediate re-permit** in case of compartment 'dry' detection



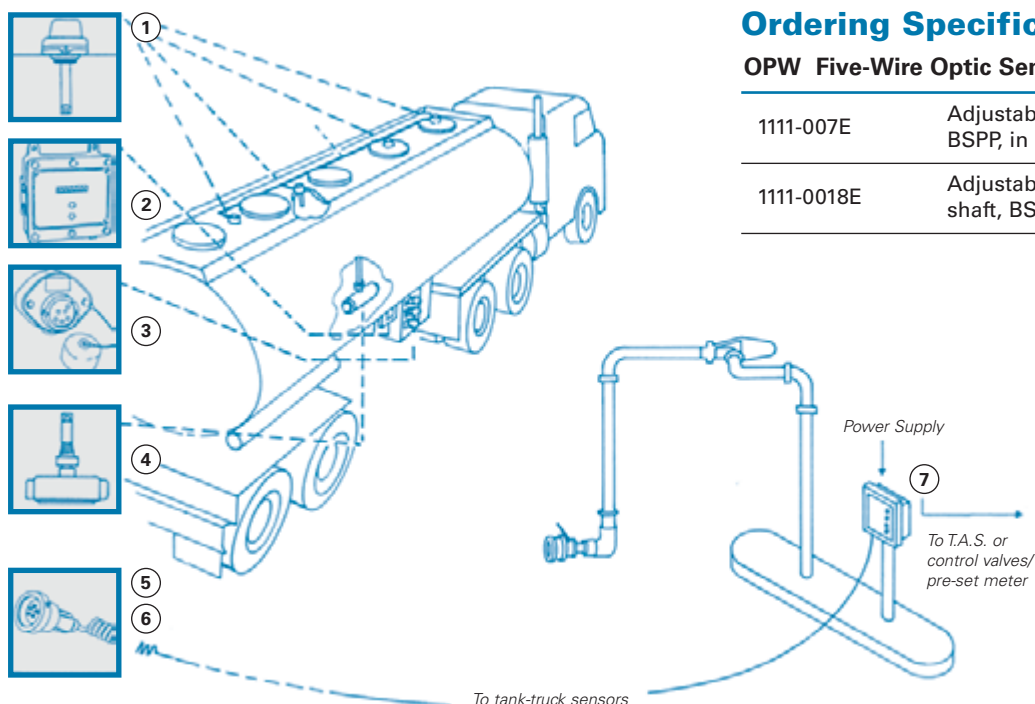
1111-0018 Five-Wire Optic Sensor



Ordering Specifications

OPW Five-Wire Optic Sensor

1111-007E	Adjustable five-wire optic sensor, 7" shaft, BSPP, in accordance with EN13922
1111-0018E	Adjustable five-wire optic sensor, 18" shaft, BSPP, in accordance with EN13922



Trailer Equipment List

- 1 | Sensor(s):
(One Per Compartment)
Plus Sensor Cable
- 2 | On-board Control Monitor / ROM
- 3 | Rack-Compatible Socket(s)
- 4 | Retain Bottom Sensor

Loading Rack Equipment

- 5 | Rack Monitor
- 6 | Connecting Plug
- 7 | Plug/Monitor Cord Set



Overfill Prevention Sockets

The OPWFTG Liberty Overfill Prevention Sockets are designed for optimal tank-truck to rack system communications. Not only are they instantly permissive and specially designed for optimal communication with our 8500E-series Rack Monitors (conforming to EN13922); but they are also compatible with all other brands of Rack Monitors (which conform to EN13922 standards as well).

Features and Benefits

- **All sockets conform** to API standards
- **The 10-pin socket** is designed to conform to EN13922 and make cross-boarder loading/unloading available. Model 4401B also meets VOC requirements.
- **Simple and durable connection** by the use of 3 J-slots (4100EURO/PS) or 4 J-slots (4401E/4401B) between socket and connector
- **Durable housing** to prevent socket mounting, probe wiring connection and heavy road travel problems
- **Colour-coded** labels and caps for easy identification
- **Integral pressure switch** standard on 4100PS and 4401B
- **Air brake interlock switch** on 4401SQS
- **PIN for tanker earthing** incorporated
- **The Thermistor Socket** is used to connect up to 8 Thermistor Sensors
- **The Two-Wire Optic Socket** is used to connect up to 8 Two-Wire Optical Sensors
- **The Five-Wire Optic Socket** is used to connect up to 12 Five-Wire Optical Sensors



4401E Thermistor Socket



4401B 10-pin socket conforms to EN13922 and VOC

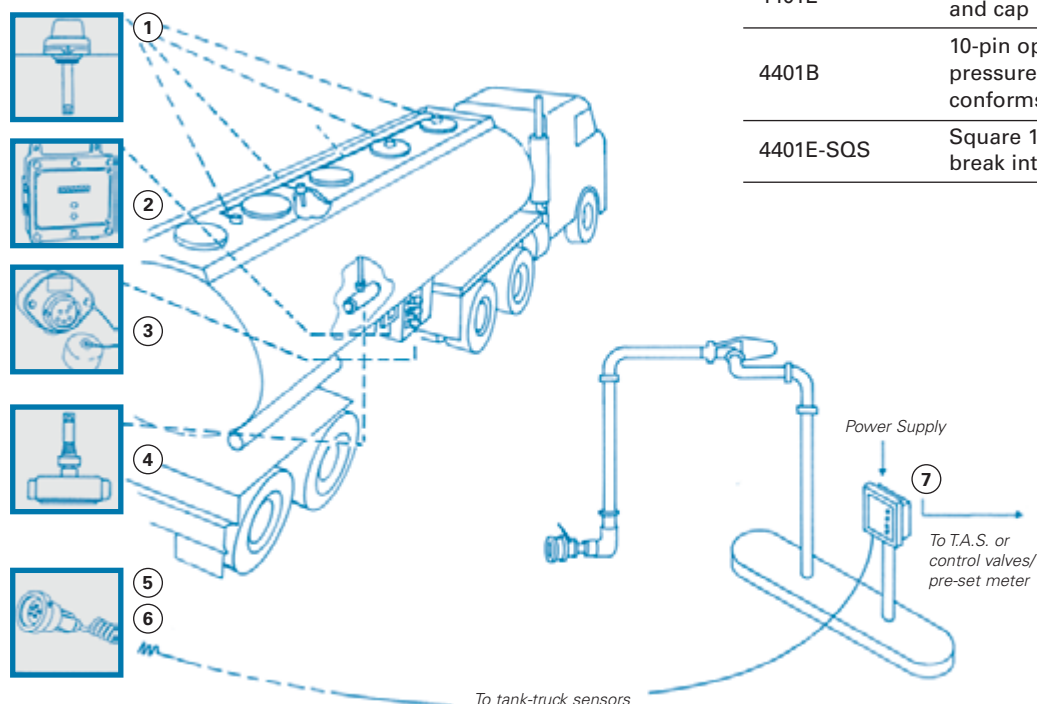
Accessories

- 4150-4150** Replacement cap & cable for 4100E, Blue
- 4450-4450** Replacement cap & cable for 4401E, Green
- 4450B** Replacement cap & cable for 4401B, Black, conform EN13922

Ordering Specifications

OPW Liberty Overfill Prevention Sockets

4100E-EURO	6-pin optical socket, BASEEFA
4100-PS	4100E-EURO with pressure switch conform 94/63EC (VOC)
4401E	10-pin thermistor socket, green label and cap
4401B	10-pin optic/thermistor socket with pressure switch, black label & cap, conforms to EN13922 and VOC
4401E-SQS	Square 10-pin thermistor socket with break interlock and pressure switch



Trailer Equipment List

- 1 | Sensor(s):
(One Per Compartment)
Plus Sensor Cable
- 2 | On-board Control Monitor / ROM
- 3 | Rack-Compatible Socket(s)
- 4 | Retain Bottom Sensor

Loading Rack Equipment

- 5 | Rack Monitor
- 6 | Connecting Plug
- 7 | Plug/Monitor Cord Set



Two-Wire Retain Bottom Sensor

The OPWFTG Two-Wire Retain Bottom Sensors are designed for detection of retained liquid petroleum products. Not only are they instantly permissive and specially designed for optimal communication with our 8500E-series Rack Monitors (conforming to EN13922); but they are also compatible with all other brands of Rack Monitors (which conform to EN13922 standards as well).

Since the Retain Bottom Sensor does not have a warm-up time, the sensor is instantly ready use.

Features and Benefits

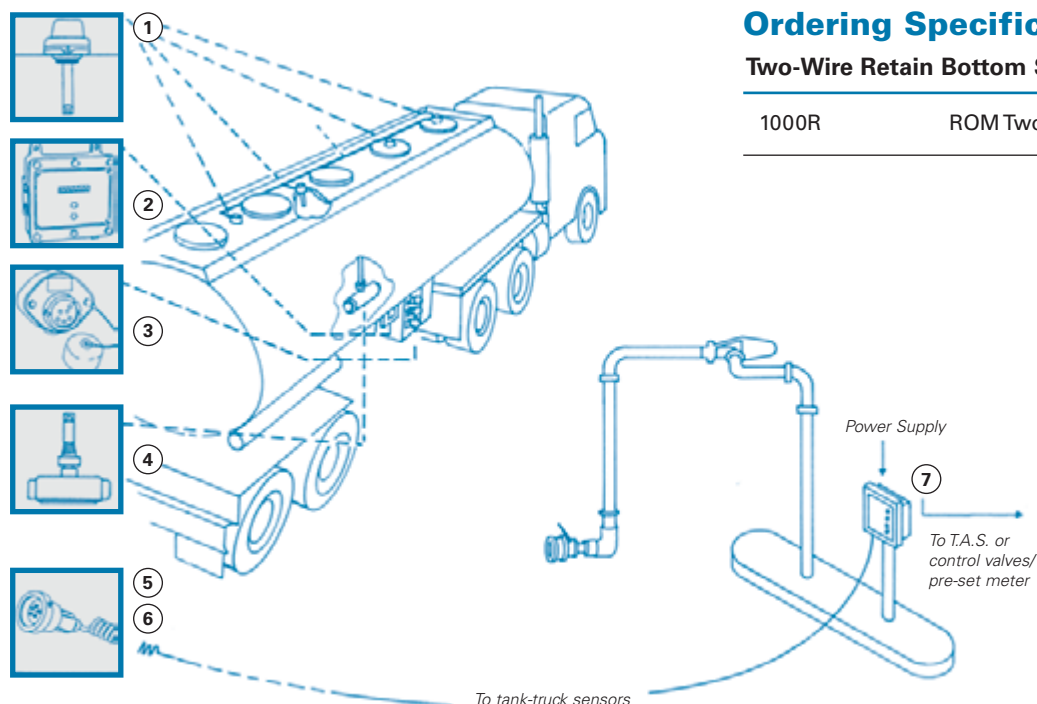
- **Meets requirements** of API RP 1004, ATEX and EN13922
- **Intrinsically safe**
- **Temperature range** -20°C to +70°C
- **Instant ready to use** (no warm-up time)
- **Certified for use** in zone 0
- **Continuously checking** of system operation such as wiring, sockets and sensor itself
- **Immediate system shutdown** in case of compartment 'wet' detection (250 ms)
- **Immediate re-permit** in case of compartment 'dry' detection

Accessories

H70997 Weld coupling (steel or aluminum) for retain bottom sensor



1000R ROM Sensor



Ordering Specifications

Two-Wire Retain Bottom Sensor

1000R	ROM Two-Wire Retain Bottom Sensor
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Trailer Equipment List

- 1 | Sensor(s):
(One Per Compartment)
Plus Sensor Cable
- 2 | On-board Control Monitor / ROM
- 3 | Rack-Compatible Socket(s)
- 4 | Retain Bottom Sensor

Loading Rack Equipment

- 5 | Rack Monitor
- 6 | Connecting Plug
- 7 | Plug/Monitor Cord Set



Two-Wire Thermistor Sensor

The OPWFTG Two-Wire Thermistor Sensors are designed for overfill prevention of liquid petroleum products. Not only are they instantly permissive and specially designed for optimal communication with our 8500E-series Rack Monitors (conforming to EN13922); but they are also compatible with all other brands of Rack Monitors (which conform to EN13922 standards as well).

Features and Benefits

- **Conforms to** API RP 1004, ATEX and EN13922
- **Intrinsically safe** signals
- **Temperature range** -20°C to +70°C
- **Certified for use** in zone 0
- **Shaft adjusts easily** when shorter length is necessary
- **Continuously checking** of system operation such as wiring, sockets and sensor itself
- **Immediate system shutdown** in case of compartment 'wet' detection (250 ms)
- **Immediate re-permit** in case of compartment 'dry' detection



1511-007B Two-Wire Thermistor Sensor

Ordering Specifications

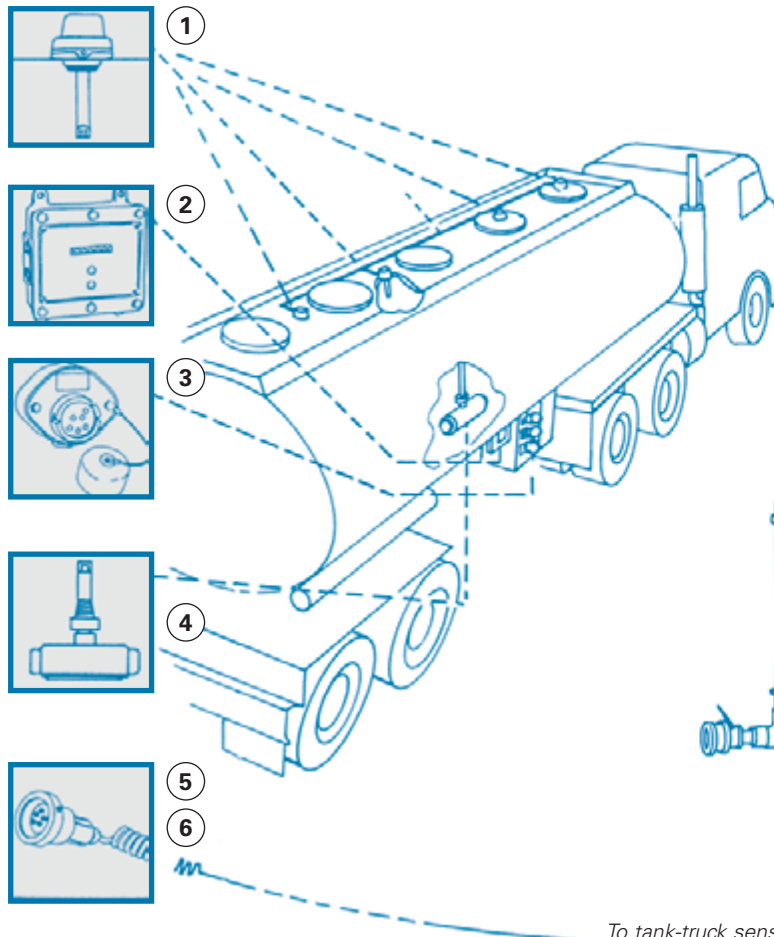
OPW Two-Wire Thermistor Sensor

1511-007B

Two-Wire Thermistor Sensor, 7" shaft, BSPP, conforms to EN13922

Accessories

1601-1601 Replacement thermistor tip, conforms to EN13922

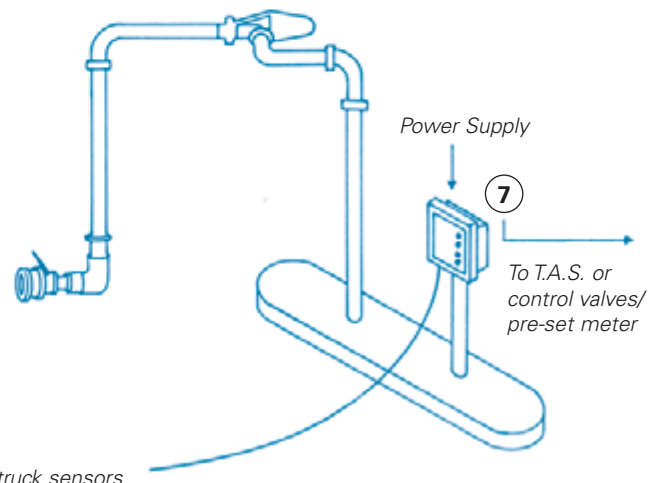


Trailer Equipment List

- 1 | Sensor(s): (One Per Compartment) Plus Sensor Cable
- 2 | On-board Control Monitor / ROM
- 3 | Rack-Compatible Socket(s)
- 4 | Retain Bottom Sensor

Loading Rack Equipment

- 5 | Rack Monitor
- 6 | Connecting Plug
- 7 | Plug/Monitor Cord Set



Petroleum Manhole Assembly



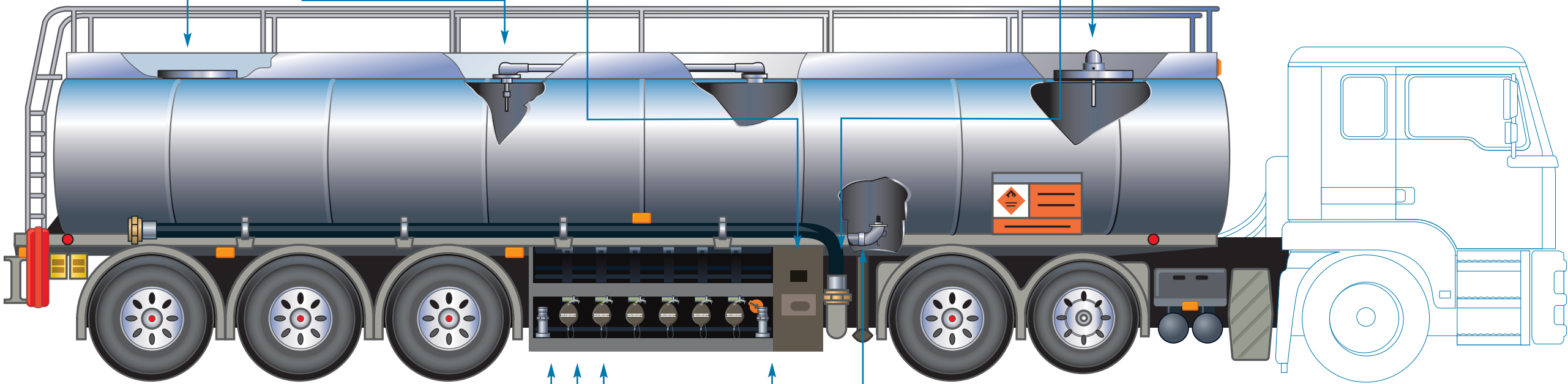
Sequential Vapor Valves



Seal Parcel Delivery



Overfill Detection and Electronics



Vapor Recovery Components



Pneumatic Control Unit



Bottom Loading Components



CivaFlo Manifold Systems



Bottom Valves

