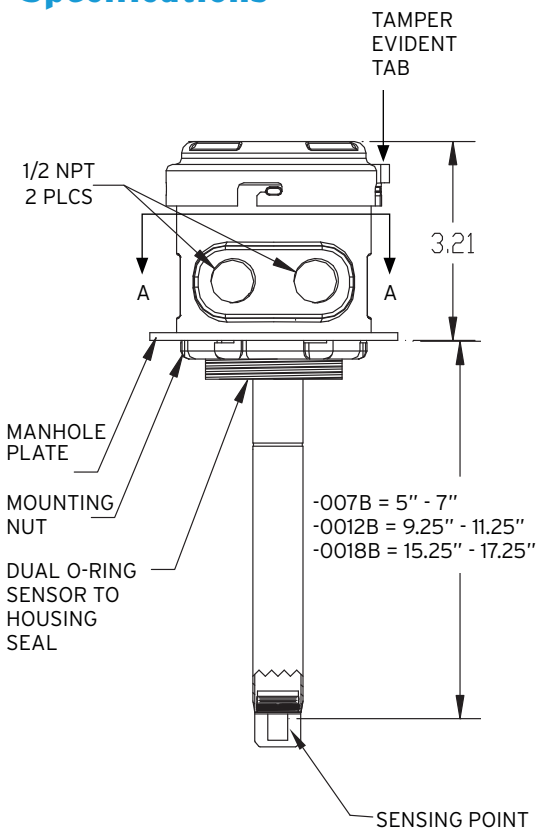
2 & 5-Wire Overfill Sensors

Optic overfill sensors detect the presence of liquid at a preset level. The new Civacon Universal 2 & 5-Wire Sensor is fully compatible with all our current Sensors and Monitors, as well as all industry standard signal formats. These Universal Sensors feature an exclusive, digital electronic circuitry design that will work directly with 2 & 5-wire loading racks when wired directly to a blue "optic" socket, as well as with all Onboard Monitors like our Liberty™. All of the features & benefits of these sensors are also available in our new 2-wire sensor version as well (see separate data sheet).

Specifications



Features and Benefits

- **Product Number Materials**
- **1551 & 1112E-XXXX Sensor Cap** - Glass Filled Nylon
- **Cap O-ring seals** - Silicone
- **Sensing Length Adjustability** Sensor Housing - Aluminum
- **Locking Nut** - Plated Steel
- **Product Range** Sensor Shaft - Aluminum
- **Viscosity** of less that 1000 SSU Prism
- **Snap Ring** - Stainless
- **Weight** 0.521 kg
- **Operating Temperature** -40° C to 70° C
- **Storage Temperature** -56.6°C to 137.7° C
- ****Special length sensors** are available upon request
- **In accordance** with EN13922
- **Intrinsically safe operation**
- **Approvals** ATEX + IECeX & FM
- **Continuously** self checking

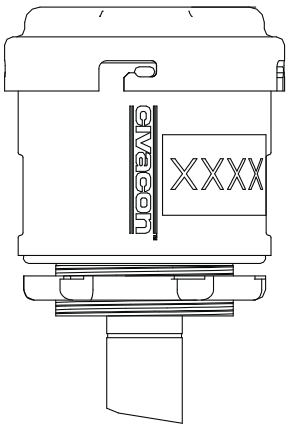
General specifications

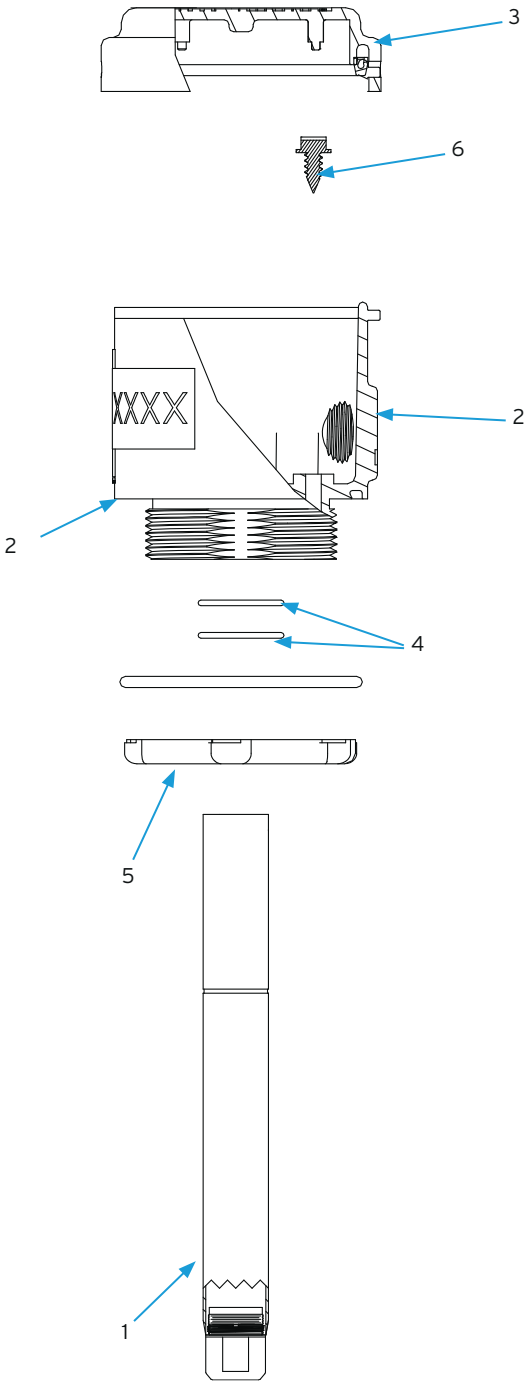
Zone specification	Zone 0
Working Temperature	-40°C to +70°C
Signals	Intrinsically safe
Weight	0,521 kg

Spare parts

Repair kit
12435 Probe Housing & Cap

Item	Part Nr	Description	QTY
1	1301-0018GEB	Replacement optic overfill sensor no housing 18" probe	1
2	H52840	Housing machined	1
3	H52936M	Cap probe housing with u-cup	1
4	H52842M	O-ring 2-021 buna	2
5	H52477M	Lock ring	1
6	H52898M	Screw	1





Related products

Art. number	Description
4103-series	6-Pin Optical Socket
4403-series	10-Pin Optical/Thermistor Socket
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable Gland blue
EL00001	Ground Bolt
1551-series	2-Wire Optic Quick Start Sensors
1000RB	2-Wire Optic Bottom Retain Sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
3205E	On-board Monitoring System

Ordering specifications

Art. number	Description
K1-1112-007EB	Adjustable 5-wire optic sensor with 2-inch BSP housing 7-inch shaft length
K1-1112-0018EB	Adjustable 5-wire optic sensor with 2-inch BSP housing 18-inch shaft length
1551-0018JB	Adjustable 2-wire optic sensor with 2-inch BSP housing 18-inch shaft length

2 & 5-Wire Overfill Sensors

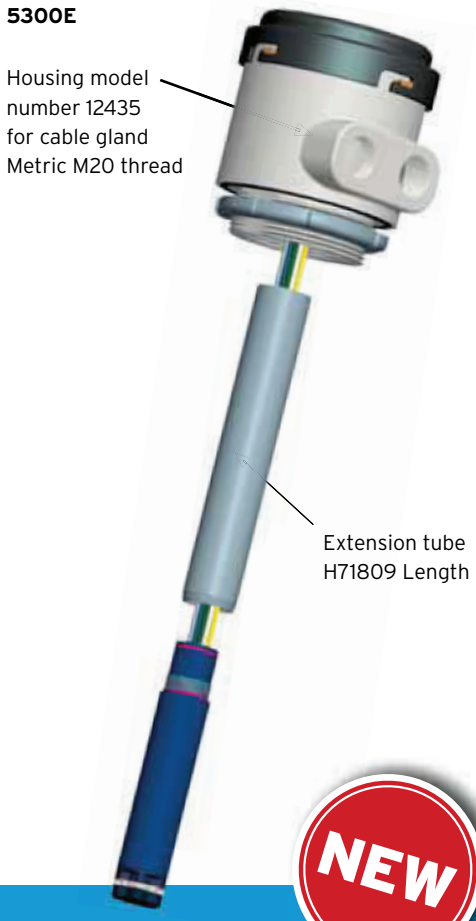
Optic overfill sensors detect the presence of liquid at a preset level.
The new Civacon Universal 2 & 5-Wire Sensor is fully compatible with all our current Sensors and Monitors, as well as all industry standard signal formats. These new Universal Sensors feature an exclusive, digital electronic circuitry design that will work directly with 2 & 5-wire loading racks when wired directly to a blue "optic" socket, as well as with all Onboard Monitors like our Liberty™. The new Civacon Universal 2 & 5-Wire Sensors are a direct replacement for our existing Liberty™ optic sensors. With their universal industry compatible signal format, they are a perfect choice for all of your overfill detection sensor applications.
All of the features & benefits of these new sensors are also available in our new 2-wire sensor version as well (see separate data sheet).

Features and Benefits

- **5300E 5-Wire optic sensor**
  5350E 2-Wire optic sensor
  Sensor Cap - Glass Filled Nylon
- **Cap O-ring seals** - Silicone
- **Sensing Length Adjustability**
  Sensor Housing - Aluminum
- **Locking Nut** - Plated Steel
- **Product Range** Sensor Shaft - Aluminum
- **Viscosity** of less that 1000 SSU Prism
- **Snap Ring** - Stainless
- **Weight** 0.521 kg
- **Operating Temperature**
  -40° C to 70° C
- **Storage Temperature** -56.6°
  to 137.7° C
- ****Special length sensors** are available upon request
- **In accordance** with EN13922
- **Intrinsically safe operation**
- **Approvals** ATEX + IECeX & FM
- **Continuously** self checking

Specifications

5300E



NEW

- New patented design
- Easier installation
- Diagnostic by means of LED
- Automated production and Automated testing
- Design, certification and production in our European facility
- 5 years Warranty

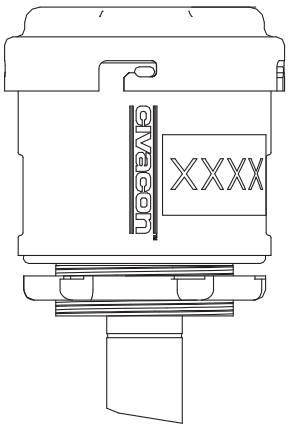
General specifications

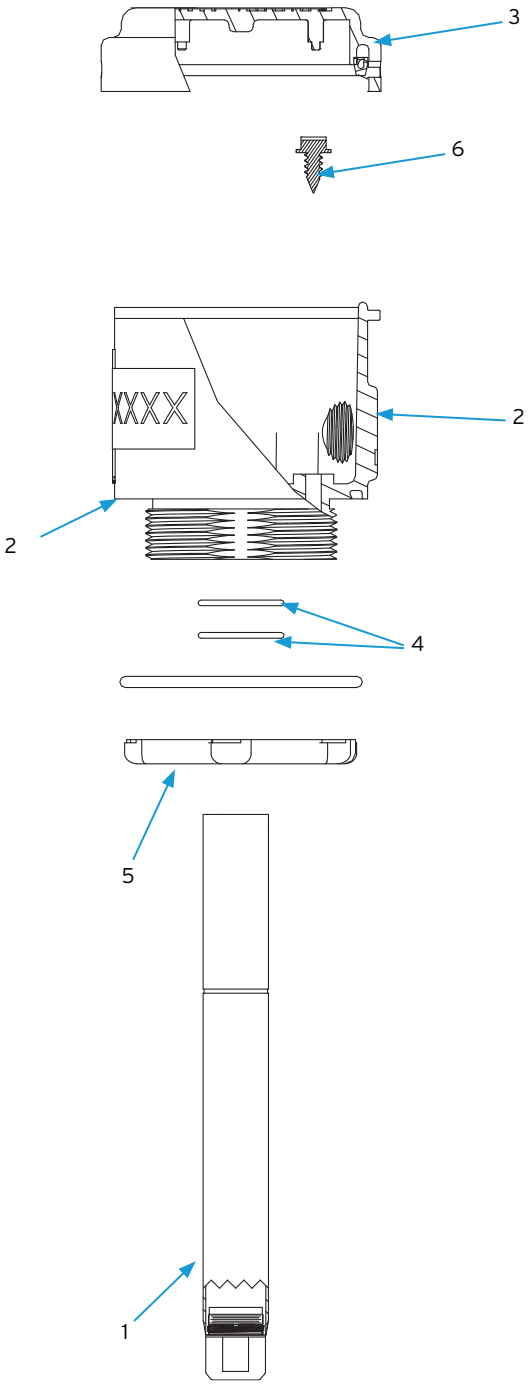
Zone specification	Zone 0
Working Temperature	-40°C to +70°C
Signals	Intrinsically safe
Weight	0,521 kg

Spare parts

Repair kit
12435 Probe Housing & Cap

Item	Part Nr	Description	QTY
1	5300E	Replacement optic overfill sensor no housing 18" probe	1
2	H52840	Housing machined	1
3	H52936M	Cap probe housing with u-cup	1
4	H52842M	O-ring 2-021 buna	2
5	H52477M	Lock ring	1
6	H52898M	Screw	1





Related products

Art. number	Description
4103-series	6-Pin Optical Socket
4403-series	10-Pin Optical/Thermistor Socket
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable Gland blue
EL00001	Ground Bolt
1551-series	2-Wire Optic Quick Start Sensors
1000RB	2-Wire Optic Bottom Retain Sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
3205E	On-board Monitoring System

Ordering specifications

Art. number	Description
K1-5100E	Adjustable 5-wire optic sensor with 2-inch BSP housing 14-inch shaft length
K1-5600E	Adjustable 2-wire optic sensor with 2-inch BSP housing 14-inch shaft length

Sockets

CIVACON's Sockets are designed for optimal communication between tank-truck and EN13922 rack systems.

4403E Socket

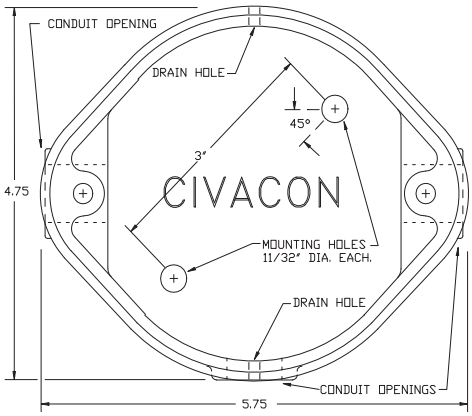
4103E Socket

Features and Benefits

- **In accordance with** API standards
- **4403B-model in accordance with** EN13922
- **Pressure switch** standard on 4103PS and 4403B in accordance to VOC requirements
- **Simple and durable connection** using 3 J-slots (4103-model) or 4 J-slots (4403-model)
- **Colour coded** labels and caps for easy identification
- **Brake interlock switch** on 4403SQS
- **Grounding pin** incorporated in all models
- **Connecting up to**
  - 8 thermistor sensors
  - 8 2-wire optic sensors
  - 12 5-wire optic sensors

Specifications

4103/4403



4403B Socket

General specifications

Weight	4103E-EURO	1,1 Kg
	4103PS	1,3 Kg
	4403B & 4403E	1,2 Kg

Spare parts

4150-4150 Repairkit for 4103E:

1	H50025M	Dust Cap, Blue
2	H50288M	Cable

4450-4450 Repairkit for 4403E:

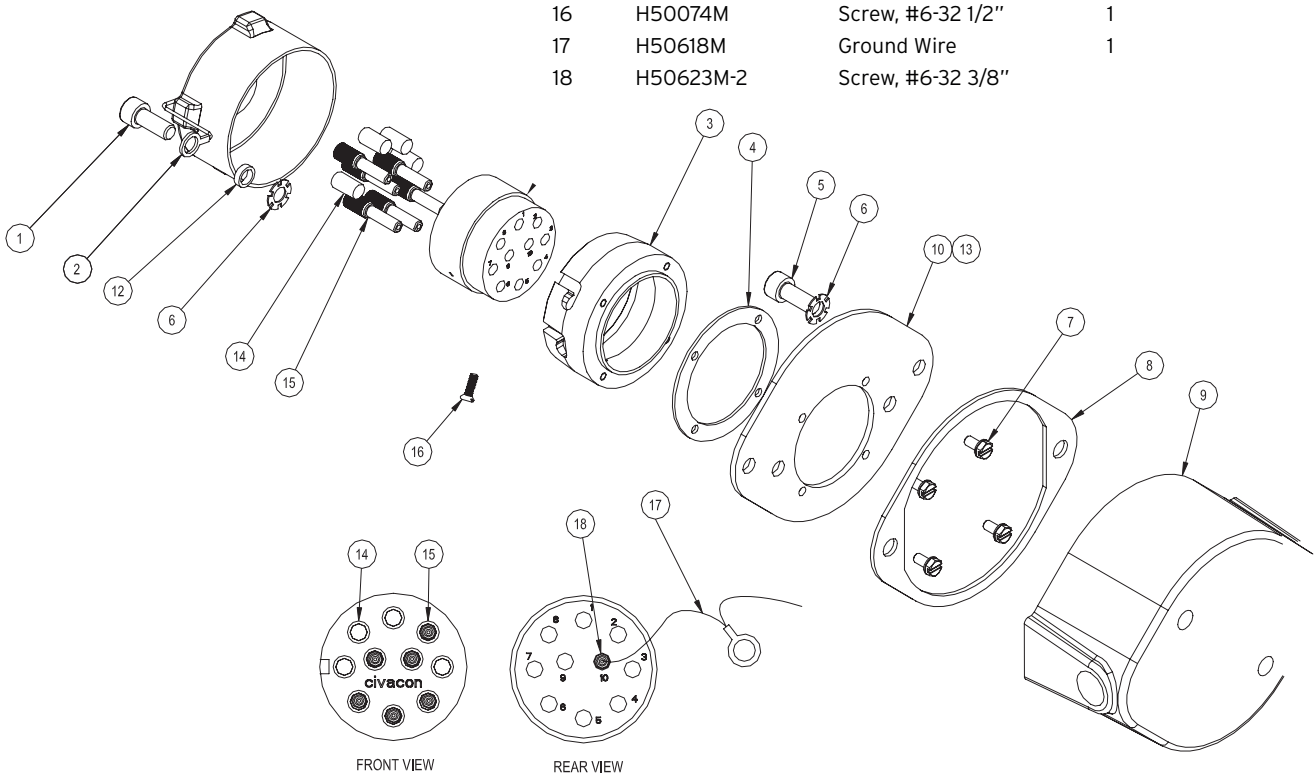
1	H50065M	Dust Cap, Green
2	H50288M	Cable

4450B Repairkit for 4403B:

1	H52535M	Dust Cap, Black
2	H50288M	Cable

Spare part only supplies as complete kit

Item	Part Nr	Description	QTY
1	H52538M	Screw, M8 X 1.25 X 20Mm	2
2	H50288M1	Cable	1
3	C40151A-3	"J" Slot Socket - 3	1
4	H52479M	Gasket, Neoprene	1
5	H52538M	Screw, M8 X 1.25 X 20Mm	2
6	H50250M	Washer, 5/16 Ss	2
7	H53048M	Screw, #8-32 3/8"	4
8	H50064M	Gasket, Neoprene	1
9	D52537A	Body	1
10	H52962M	Plate	1
11	H50288M1	Cable	1
12	H50291M	Spacer	1
13	H53038M-4103E	Label	1
14	H50617M	Insert	4
15	H50616M	Contact, Button	6
16	H50074M	Screw, #6-32 1/2"	1
17	H50618M	Ground Wire	1
18	H50623M-2	Screw, #6-32 3/8"	



Related products

Art. number	Description
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable gland HSK-K -EX; M20x1,5; 6-12mm blue
EL00001	Ground bolt
K1-1112-series	5-Wire optic overfill sensor
K1-5300E	5-Wire optic overfill sensor
1551-series	2-Wire optic overfill sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
1000RB	2-Wire optic bottom retain sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
3205E	Onboard monitoring system

Ordering specifications

Art. number	Description
4103E	6- pin Socket for optic sensors, BASEEFA
4103PS	4103E with pressure switch conform 94/63EC (VOC)
4403B	10- pin Socket with pressure switch for optical and /ther mistor sensors, black label and cap, in accordence to EN13922 and VOC
4403E	10-pin Socket for thermistor sensors with green label and cap

Retain Overfill Monitoring 3205E

OPW Model 3205E ROM (Retain Overfill Monitoring) monitor secondary overfill prevention system incorporating retained product monitoring used in tank truck loading operations. ROM indicates Wet/dry conditions, wire short cuts, grounding conditions and shorted sensors by means of advanced diagnostics by means of LED and separate display.

Features and Benefits

- **In accordance with** ATEX
- **Compartment empty and overfill detection** in one unit
- **Compatible** with all industry standard sensors and rack monitors
- **After system alerts,** loading cannot proceed without activation of the reset circuit
- **Reset circuit** for bottom sensors only
- **Bottom retain sensor** override timer cancels override timing when plug is removed from socket
- **ROMII Plus monitor automatically** closes bottom valves for additional security if connected.
- **Support for** up to 8 compartment tankers using 2-wire optic overfill and bottom sensors
- **Support for** up to 12 compartments using 5-wire optic overfill sensors
- **Number of installed sensors** automatically configured at installation
- **Timer with progress indicator** Infrared function key
- **Individual LED indication** per auxiliary input device
- **LED indication per compartment and status** symbols on display
- **Rack monitor connection** status for proper connection assurance
- **Working temperature** from -40ºC to +70ºC
- **Graphic dispay** showing error codes
- **Infrared** bypass key

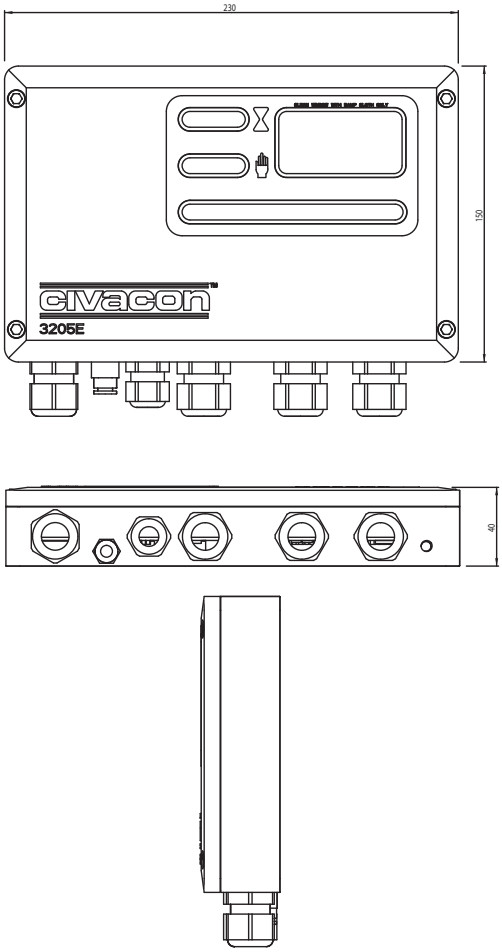
General specifications

ROMII Plus Onboard Monitoring System

Power	24 VDC
Working temperature	-40ºC to +70ºC
Weight	2,2 Kg

Specifications

3205E ROM



Related products

Art. number	Description
4103-series	6-pin Socket for optic sensors
4403-series	10-pin Socket for optic and thermistor sensors
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable gland HSK-K -EX; M20x1,5; 6-12mm blue
EL00001	Ground bolt
K1-1112-series	5-Wire optic overfill prevention sensor
1551-series	2-Wire optic quick start overfill prevention sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
1000RB	2-Wire optic bottom retain sensor
7215-7215	30m 10-Wire straight cable, 45 meter (150 FT)

Ordering specifications

Art. number	Description
3205E	ROM onboard monitoring system

TESTER TYPE 1397E-1398E

The 1397E and 1398E tester is a new simple handheld tester for tank trucks equipped with 5-wire overfill sensors.

The 1397E and 1398E tester give users, the possibility to do a quick diagnosis from the grounding and the overfill sensors.

LED indicator explanation

The tester is equipped with two LEDS on the back of the plug
One white led (with the text GND)
One bi-color LED (with the text dry/wet)
The white LED informs the user over the grounding status.
LED off: Bad or no grounding
LED flashing: grounding OK
The bi-color LED indicator flashes green when the sensors are permissive.
The bi-color LED indicator flashes red when the sensors are non-permissive.

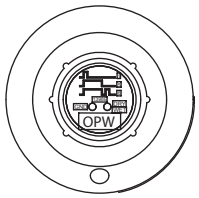
The flash pattern of the LED indicator depends upon the number of compartments; LED indicator flashes every 5-seconds Number/times of flashes indicates number of sensors A long flash of 1-second represents 5-compartments A short flash of 250 ms represent 1-compartments Example; 7-compartments is indicated by one long and two short flashes.

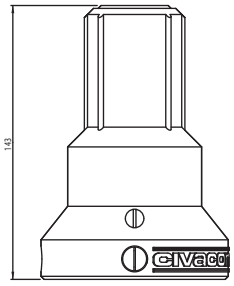
Features and Benefits

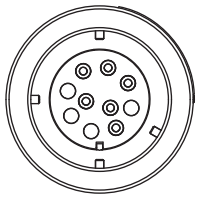
- **No operating** action required
- **Led indicator** for amount of compartments
- **Separate Led indicator** for ground verification
- **Test ground** loop and ground bolt
- **Fitted** ATEX emergizer
- **Available** for 3-J and 4-J slots
- **Extra diagnostic** information available
- **Small housing,** can be located in truck cabin
- **Auto switch off** when removed from socket

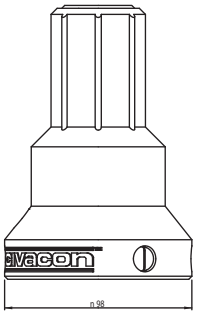
Specifications

1397E
1398E









Related products

Art. number	Description
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable gland HSK-K -EX; M20x1,5; 6-12mm blue
EL00001	Ground bolt
K1-1112-series	5-Wire optic overfill prevention sensor
1551-series	2-Wire optic quick start overfill prevention sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
1000RB	2-Wire optic bottom retain sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
ROMII-Plus	Onboard monitoring system
SCS-300	Sealed parcel delivery system

Ordering specifications

Art. number	Description
1397E	Truck tester for 3J socket
1398E	Truck tester for 4J socket

2-Wire Optic Bottom Sensors

The CIVACON'S 2-Wire Optic Bottom Sensors are designed for compartment empty detection of liquid petroleum products. Not only are they instantly permissive and specially designed for optimal communication with our Rack Monitors, but they are also compatible with all other brands of Rack Monitors

Features and Benefits

- **In accordance with:**
  - ATEX
  - API RP 1004
- **Certified** for use in zone 0
- **Intrinsically** safe signals
- Instant permissive signal (no warm up time)
- **Continuously checking** of system operation such as wiring, sockets and sensor itself
- **Temperature** range -40C° to +70°C
- **Immediate system shutdown** (250 ms) in case of compartment 'wet' detections
- **Immediate re-permit** in case of compartment 'dry' detection
- **Approvals** ATEX + IECeX & FM

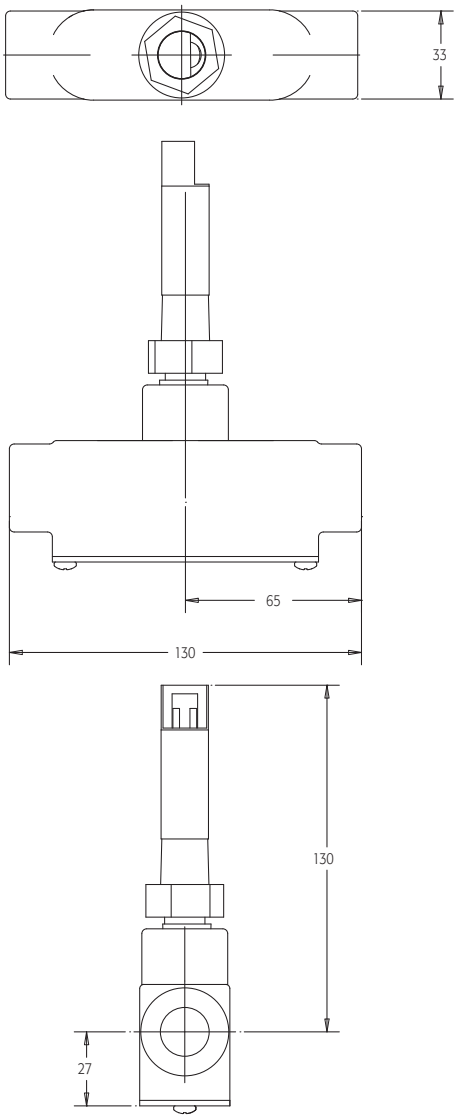
General specifications

Bottom Sensor

Zone specification	Zone 0
Working Temp.	-40°C to +70°C
Signals	Intrinsically safe
Weight	320 g

Specifications

1000RB



Related products

Art. number	Description
4103-series	6-Pin Optical Socket
4403-series	10-Pin Optical Socket
2100E-L30	30m 5-Wire straight cable conform EN13922
EL00001	Ground Bolt
K1-1112-series	5-Wire optic overfill prevention sensor
1551-series	2-Wire optic quick start overfill prevention sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
3205E	On-board Monitoring System
7215-7215	30m 10-Wire straight cable, 45 meter (150 FT)

Ordering specifications

Art. number	Description
1000RB	Optic sensor, rom retain sensor with bottom inline housing

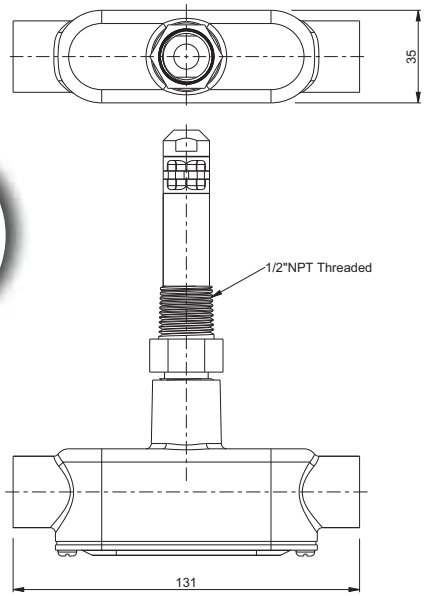
2-Wire Optic Bottom Sensors

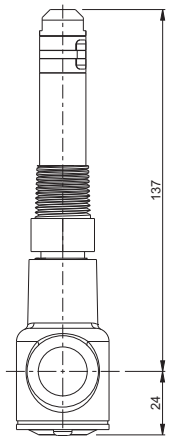
The CIVACON'S 2-Wire Optic Bottom Sensors are designed for compartment empty detection of liquid petroleum products. Not only are they instantly permissive and specially designed for optimal communication with our Rack Monitors (conforming to EN13922), but they are also compatible with all other brands of Rack Monitors which conforms to EN13922 standards.

NEW

Specifications

5000E
5030E





Features and Benefits

- **In accordance with:**
  - ATEX
  - API RP 1004
- **Certified** for use in zone 0
- **Intrinsically** safe signals
- Instant permissive signal (no warm up time)
- **Continuously checking** of system operation such as wiring, sockets and sensor itself
- **Temperature** range 40C° to +70°C
- **Immediate system shutdown** (250 ms) in case of compartment 'wet' detections
- **Immediate re-permit** in case of compartment 'dry' detection
- **Approvals** ATEX + IECeX & FM

General specifications

Bottom Sensor

Zone specification	Zone 0
Working Temp.	-40°C to +70°C
Signals	Intrinsically safe
Weight	320 g

Related products

Art. number	Description
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5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
3205E	On-board Monitoring System
7215-7215	30m 10-Wire straight cable, 45 meter (150 FT)

Ordering specifications

Art. number	Description
1000RB	Optic sensor, rom retain sensor with bottom inline housing