

Explosion-proof online system for the automatization of petroleum product storage tank dewatering. Reliable interface detection for oil in water. Automatic purge operation by user configuration or manual (semi-automatic) operation via push button operation. Remote operation through SNCC.

System consisting of detector, control cabinet and measuring chamber vessel:

Detector: 5 – 25 % range with adjustable alarm threshold.

Control cabinet (transmitter): Convenient operation via hardware buttons for easy menu navigation and semi-automatic purge starts, including an on-board emergency shutdown push button. 4 ATEX cable glands armed in nicked brass for cable entry.

Measuring chamber vessel: Installed online with Teflon-coated capacitive probe inside, explosion-proof circulation chamber mounted on the tank draining pipework.

- ATEX certified explosion-proof:
Cabinet: ATEX INERIS 15ATEX0010X
Measuring chamber vessel: LCIE 04 ATEX 6073
- EAC certified explosion-proof:
EAC Cert. No. RU C-FR.AJK 58.B.01320/21
- Programmable functions: purging frequency, maximum purging duration, valve and purge line flushing, valve shutdown delay.



Detector (incl. control cabinet & measuring chamber)	Seres OL Pautbac II ATEX 5-25 % range	SOL-59.221.100
Configuration	30W heater in electronics cabinet	SOL-89.810.010
Configuration	Rainwater Configuration	on request
Configuration	Steel Frame SS316L not painted	SOL-89.620.010



Water Detection

Capacitive probe

The probe measures the dielectric constant to detect the interface between oil and water.

Sensors/Measurement Equipment

Probe: Teflon-coated

Automatic effluent temperature compensation system

Heater in electronic cabinet (separately available configuration for an ambient temperature of -20°C)

Detector	Measuring range
Pautbac II	5-25 % with adjustable threshold

Specifications and Functionality

Power supply

Voltage:	110 or 230 VAC
Frequency:	50 or 60 Hz
Power consumption:	30 VA

Operation

Display: Color and graphic LCD, 4.3", touchscreen, accessible menu with 3 front buttons

Display of process value, alarm status and time during operation.

Smart and intuitive interface based on separate menu sections: "Measurement", "Maintenance" and "Settings".

User menus in English and French.

Password protection and storage of data records. Storage and graphical display of measurement history.

Alarm Relays

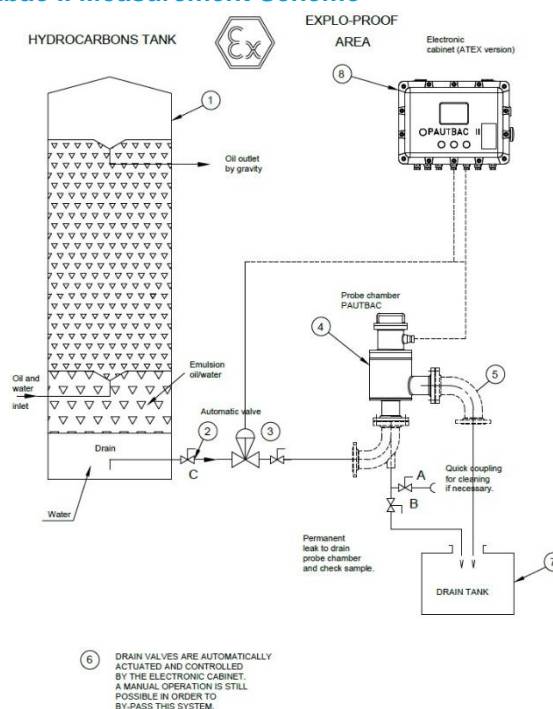
1 summary alarm for "analyzer failure"

Maximum load: 1A / 24 V

Relay Outputs

Valve control dry contact output (or 24VDC)
 Oil alarm (Threshold) dry contact output
 Failure alarm dry contact output
 Rated load: 1A / 24 V

Seres OL Pautbac II Measurement Scheme



Signal outputs

1 programmable signal outputs for measured values (freely scalable, linear).

Current loop: 0 or 4 - 20 mA

Communication interface

RS485 interface (galvanically separated) with Modbus/JBUS RTU protocol included in standard.

Automatic draining	Programmable
Purging frequency	1-999 hours
Max. purging duration	1-999 min
Valve and purge line flushing	0-99 sec
Valve shutdown delay	0-99 sec

Semi-auto function for manual start of cycles.

Explosion-proof

Type	Code
Cabinet:	ATEX INERIS 15ATEX0010X, II 2GD, Ex d IIB + H2 T4 Gb

Measuring chamber vessel:
 LCIE 04 ATEX 6073,
 II 2 G, Ex d IIC T6 Gb.

Complete System:
 EAC Cert.: No. RU C-FR.AJK 58.B.01320/21,
 (1 Ex d IIC T6 Gb)

Analyzer Data

Sample conditions

Flow rate:	5-30 m ³ /h
Temperature:	5 to 85 °C
Inlet pressure _{Abs.} (25 °C):	up to 10 bar
Outlet pressure:	pressure-free

Ambient conditions

Temperature: 0 to 50°C

Sample connections

Measuring chamber vessel:
 Flange 4", PN20 (type ASA150) – DN100

Connection distances

Cabinet to measuring chamber	max. 300m
Cabinet to control room	max. 800m (RS485)

Cabinet

Dimensions: 398 x 298 x 205 mm
 Weight: 35 kg

Measuring chamber

Dimensions: 425 x 700 x 275 mm
 Weight: 75 kg

The valve and the cable between cabinet and measuring chamber vessel are not part of the standard scope of supply.

