BARTEC ORB

Process Analyzer

Salt in Crude Analyzer Model P–600

Credible Solutions for the Oil and Gas Industry

Salt In Crude Analyzer Model P–600

Process Analyzer

To remain competitive, today's refiners must employ all optimization and product control techniques available. The use of online physical property analyzers is one of the key features to reach those objectives because they measure important quality properties in the process directly.

Salt in crude is the amount of chloride based salts found in the sample in weight per volume.

BARTEC ORB

Your partner for innovative system solutions.

The BARTEC specialists have many years of experience. They create system solutions that you can rely on: efficient and dependable for decades to come.

- Variable measurement ranges of up to 0–400 PTB (0–1000 mg/L)
- Rapid analysis cycle of 6 minutes
- Superior repeatability of 2% of scale
- Reliability better than 99% uptime
- Micro sample analysis reduces solvent consumption
- Precise bi–directional cell temperature control
- Incorporated rinse/flush system
- Remote diagnostics over IP

APPLICATION

In certain areas of the world, crude oils with high level of salts exist. This crude oil must still be transported and refined and the high levels of salt pose problems if left untreated. De-Salting technology is well established but to be utilized effectively the need for quick and accurate measurements of the level of salt concentration is necessary. The immediate response of an on-line analyzer allows the operator to use De-Salters as efficiently as possible.

Special Features:

- Micro samples
- Low solvent consumption
- Cell temperature control
- Enclosed solvent tanks
- Fully automatic
- Local interface
- Supports Modbus
- Remote stand by option

Norms and Standards:

Correlates with:

- ASTM D3230

Make your decision for a strong partner!

Choose BARTEC GROUP also for:

- **Fast Loop Systems**
- **Sample Conditioning Systems**
- **Validation Systems**
- **Recovery Systems**
- **Chillers**
- **Air Conditioning Systems/HVAC**
- **Pre Commissioned Analyzer Shelters/ Turn–Key Solutions**

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EXPLOSION PROTECTION

Ex protection marking	ATEX: Zone 1 II B + H2 T6 CSA/CUS Class I Div 1 Group B, C + D CE 0518

TECHNICAL DATA

Technology	chemical mixing
Method	correlates with: ASTM D3230
Measuring range	0 to 400 PTB (0 to 1000 mg/L)
Repeatability	2 % of scale
Reproducibility	± 1 % of scale
Measuring cycle	6 min typical
Measuring temperature	programmable, typical 50°C (122°F)
■ **Electrical data**	
Nominal voltage	110 or 220 VAC, 1 phase; 50/60 Hz
Maximum power consumption	600 W
■ **Protection class**	IP 65
■ **Ambient conditions**	
Ambient temperature	operation 5 to 40°C (41 to 104°F)
Ambient humidity	up to 90 %

Sample

Quality	filtered 100 µm, without water
Properties	
Consumption	3.0 to 6.0 l/h
Pressure at inlet	2 to 10 bar (29 to 145 psi)
Temperature at inlet	10 to 60°C (50 to 140°F)

Utilities

■ **Instrument air**	
Consumption	less than 60 l/h
Pressure at inlet	4 to 8 bar (58 to 116 psi)
Quality	clean dry, instrument air
■ **Coolant**	Not required

Signal outputs and inputs

Analog outputs	1 standard, 1 optional
Digital outputs	3 dry contacts programmable
Digital inputs	up to 4 dry contact inputs, (customer alarm, remote standby, stream switch, validation request)

Electrical data of signal outputs and inputs

Analog outputs	up to 2 to 4-20 mA self powered and isolated, 1 is standard
Analog inputs	None required
Digital outputs	up to 3 dry contacts programmable, alarm critical, come read, alarm warning
Digital inputs	up to 4 dry contact inputs, (customer alarm, remote standby, stream switch, validation request)

User interfaces

Display	7“ color graphics
Keyboard	5 button magnetic, no hot work permit required

Connections

Sample inlet	1/4“ FNPT
Sample outlet	1/4“ FNPT
Vent/Drain	1/4“ FNPT

Weight and dimensions

Weight	228 kg (500 lbs)
Dimensions (W x H x D)	940 x 1803 x 762 mm (37” x 71” x 30” in)

Optional interfaces

Analog outputs	optional, conductivity, cell temperature
MODBUS interface	TCP/FP or Serial/RTU MODBUS output available

Important notice P-600 is subject to continuous product improvement, specifications are preliminary and may be subject to change without notice. If your technical data do not comply with existing data, please contact us for technical clarification.

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