



Process Analyzer

Flash Point Analyzer Model P-500

Credible Solutions for the Oil and Gas Industry

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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.

The flash point temperature is defined as the lowest temperature at which application of an ignition source causes the vapor of specimen of the sample to ignite under specified conditions of test.



Your partner
for innovative
system solutions.



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

Correlates with ASTM

Capable of handling high sulfur samples

Rapid measuring cycle of 5 minutes

Independent sample and flash chamber temperature control

APPLICATION

The Flash Point of mid-distillate products is one of the properties that must be maintained and controlled in order to produce and sell products to the market. The ORB P-500 is a state-of-the-art analyzer that implements the newest of electronics and detection principles for a low cost means of monitoring the Flash Point of a product during the refining process.

**Special Features:**

- **Correlates with ASTM D56 (TAG) and ASTM D93 (Pensky Martens Closed Cup)**
- **Micro-processor controlled**
- **External programming**
- **Color graphics screen**
- **Remote diagnostics over IP**

Norms and Standards:**Correlates with:**

- **ASTM D56**
- **ASTM D93**

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**



EXPLOSION PROTECTION

Ex protection marking ATEX: Ex d IIB+H2 T6 Gb
CSA/CUS Class I Div 1 Group B, C + D
CE₀₅₁₈

TECHNICAL DATA

Technology measurement / small stainless steel flash chamber, spark ignition

Method correlates with:
ASTM D56, ASTM D93

Measuring range 25 to 125°C (77 to 257°F)

Repeatability ± 1°C or better

Reproducibility ≤ ASTM

Measuring cycle measuring cycle typical 5 min or better

■ **Electrical data**

Nominal voltage 100 to 120 VAC 1 phase; 50/60 Hz
200 to 240 VAC 1 phase; 50/60 Hz

Maximum power consumption less than 500 W

■ **Protection class** IP 65

■ **Ambient conditions**

Ambient temperature operation 5 up to 40°C (41 to 104°F)

Ambient humidity less than 90 %

■ **Sample Quality** filtered 10 µm, without water or moisture

Consumption 0.9 to 6 l/h

Pressure at inlet 1.4 to 10 bar (20 to 150 psi)

Temperature at inlet min. 10 K below expected FP temperature < 85°C

■ **Utilities**

■ **Instrument air Consumption**

Purge 60 l/h at 10 seconds per cycle
Operation 48 to 60 l/h continuous

Pressure at inlet 2.7 to 6.8 bar (40 to 100 psi)

Quality clean dry, instrument air

■ **Coolant** None required

Signal outputs and inputs

Analog outputs Flash Point, sample temperature

Digital outputs sample FP alarm, analyzer maintenance warning, analyzer fault alarm

Digital 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 optional

Digital outputs up to 3 dry contacts programmable, alarm critical, come read, alarm warning

Digital inputs up to 4 dry contact inputs

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 approx. 228 kg (500 lbs)

Dimensions (W x H x D) approx. 940 x 1803 x 762 mm (37" x 71" x 30" in)

Optional interfaces

Analog outputs optional, cell temperature

MODBUS interface TCP/IP or Serial/RTU MODBUS output available

Important notice P-500 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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