



Process Analyzer

Viscosity Analyzer Model P-900

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.

Absolute viscosity provides a measure of a fluid's internal resistance to flow.



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.

Capillary type of viscometer

Correlates to ASTM D445

Continuously measures dynamic viscosity

Certified for installation in hazardous areas

APPLICATION

Given today's highly competitive environment, oil refiners are demanding instrumentation that aids in the optimization of the refining process. Therefore, refineries require a reliable and accurate viscosity analysis system to meet the required specifications. This analysis will allow the operators to optimize the refining process and therefore lower production costs while improving product quality.



Special Features:

- **Customizable 2–4000 cP Sample Range**
(optional kinematic output)
- **Does not require atmospheric recovery system**
- **Modbus**
- **Optional densitometer**

Norms and Standards:

Correlates with:

- **ASTM D445**

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 II B + H2 [ja II C] T3 Gb
CSA/CUS Class I Div 1 Group C + D
CE₀₅₁₈

TECHNICAL DATA

Technology capillary type,
absolute / dynamic viscosity

Method

Measuring ranges and temperatures 2-4000 cP

Repeatability ± 1 % full scale or better

Reproducibility correlates with:
ASTM D445

Measuring cycle continuous, response time T90: 180 Sec

Product streams lube oils, asphalts and bunker fuels

■ **Electrical data**

Nominal voltage 220 VAC, 50/60 Hz; 1 phase -
Heater and Pumps
120/220 VAC, 50/60 Hz; 1 phase -
Electronics

Maximum power consumption less than 4000 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 10 µm - optional sample,
conditioning system available,
without free water

Properties

Consumption 5 l/h (fixed metering pump)

Pressure at inlet 1.4 to 14 bar (20 to 203 psi)

Temperature at inlet ± 38°C (68°F) of bath temperature

Process sample max temperature 111°C (232°F)

Utilities

■ **Coolant**

Consumption depends on application (consult factory)

Temperature 0 to 50°C (32 to 122°F)

Pressure at inlet 1 to 60 bar (14 to 870 psi)

Quality clean and filtered (10 µm)

Signal outputs and inputs

Analog outputs 1 standard for viscosity, programmable
for cST or cP, selectable for sample
viscosity values, analyzer system /
maintenance warning or analysis
measurement indication

Digital outputs 3 dry contact outputs, selectable for
sample viscosity value alarm,
analyzer maintenance warning or
analyzer fault alarm

Digital inputs up to 2, customer alarm, remote standby

■ **Electrical data of signal
outputs and inputs**

Analog outputs isolated 4-20 mA output, 1 standard,
1 optional

Digital outputs 3 SPDT Relays with contacts rated at 3A
resistive load at 250 VAC

Digital inputs dry contact

■ **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

■ **Weight and dimensions**

Weight approx. 159 kg (350 lbs)

Dimensions (W x H x D) approx. 1341 x 1803 x 762 mm
(52.75" x 71" x 30" in)

■ **Optional interfaces**

Analog outputs optional (bath temperature, density)

MODBUS interface TCP/IP or Serial/RTU 485

Important notice P-900 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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