BARTEC ORB

Process Analyzer

Viscosity Index Analyzer Model P–950

Credible Solutions for the Oil and Gas Industry

Viscosity Index Analyzer Model P–950

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 viscosity index is a widely used and accepted measure of the variation in kinematic viscosity due to changes in the temperature of a petroleum product between 40°C and 100°C. A higher viscosity index indicates a smaller decrease in kinematic viscosity with increasing temperature of the product.

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.

Capillary type of viscometer

Correlates with ASTM D445 / ASTM D2270

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** (kinematic output in cSt)
- **Continuous Sample Viscosity and Viscosity Index output**
- **Does not require atmospheric recovery system**
- **Modbus**
- **Remote Bath Temperature Set Point Change**
- **Up to 8 programmable Viscosity Points**

Norms and Standards:

Correlates with:

- **ASTM D445**
- **ASTM D2270**

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**

Viscosity Index Analyzer Model P–950

EXPLOSION PROTECTION

Ex protection marking	ATEX: Ex d II B + H2 [ia II C] T3 Gb CSA/CUS Class I Div 1 Group C + D CE 0518

TECHNICAL DATA

Technology	dual bath capillary type
Method	correlates with: ASTM D445, ASTM D2270
Measuring ranges and temperatures	up to 4000 cP
Repeatability	± 1 % full scale
Reproducibility	correlates with: ASTM D445, ASTM D2270
Measuring cycle	continuous
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	30 A, less than 6000 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	less than 10 µm, filtered
Properties	
Consumption	5 l/h (fixed meter in 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	3 standard, VI, V40 and V100
Digital outputs	up to 3 dry contacts programmable, remote standby, analyzer fault, value alarm
Digital inputs	up to 2, customer alarm, remote standby

Electrical data of signal outputs and inputs

Analog outputs	3 standard
Digital outputs	3 standard
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. 272 kg (600 lbs)
Dimensions (W x H x D)	approx. 1575 x 1938 x 381 mm (62” x 76” x 30” in)

Optional interfaces

Analog outputs	optional (bath temperature, density)
MODBUS interface	TCP/IP or Serial/RTU 485

Important notice P-950 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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BARTEC GROUP

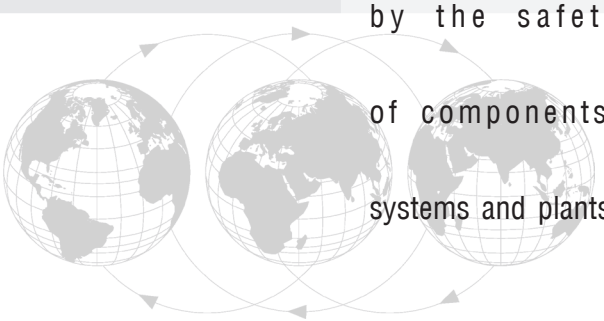
protects people and

the environment

by the safety

of components,

systems and plants.



- **Flash Point Analyzer Model P–500**
- **Salt In Crude Analyzer Model P–600**
- **Reid Vapor Pressure Analyzer Model P–700**
- **Freeze Point Analyzer Model P–800LT, Low Temperature**
- **Cloud Point Analyzer Model P–820LT, Low Temperature**
- **No Flow Point Analyzer Model P–840/P–840LT**
- **Viscosity Analyzer Model P–900**
- **Viscosity Index Analyzer Model P–950**
- **UV Oil In Water Analyzer Model W–800**

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