

# SPC/L322 - "BIG DIPPER" VISCOMETER

FOR VISCOSITY MEASUREMENTS FROM 0.2 TO 20,000 CENTIPOISE



One of the industry's most unique viscometers for in tank blending and reaction monitoring.

## Operating Principle

The model SPC/L322 is an in-line process viscometer that is installed in process fluids to provide continuous temperature and viscosity tracking. Our technology is based on a simple and reliable electromagnetic concept. Two coils move a piston back and forth magnetically at a constant force. Proprietary circuitry analyzes the piston's two-way travel time to measure absolute viscosity.

A deflector, positioned over the piston, moves the fluid into the measurement chamber. This feature, coupled with the constant piston motion, keeps the sample fresh and mechanically scrubs the chamber. A built-in temperature detector (RTD) senses actual temperature in the measurement chamber.

The Model SPC/L322 viscometer can be immersed directly into a blend tank or a vessel. The "Big Dipper" provides continuous, accurate measurements of mixing and blending viscosities, as well as reaction tracking.

Measurements can be made in 13 different viscosity ranges within an overall span of 0.2 to 20,000 cP or the equivalent cSt. Maximum flow rate over the sensor head is 10 ft/sec (3 m/sec).

## Key Features

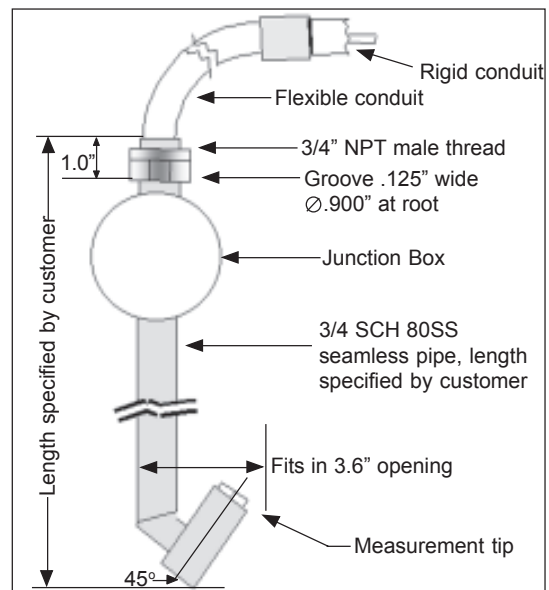
- For blend tanks and vessels
- Accurate and reliable
- Customer specified stem lengths
- Fits in a 3.6" opening
- One moving part, no wear points
- All wetted parts 316L stainless steel
- Approved for CLASS 1, DIV. 1, GROUP C & D
- Approved for EEx d IIC T2,  $-20\text{C} \leq \text{Tamb} \leq 190\text{C}$

## Correlates with ASTM D445

## Specifications

Viscosity	0.2 to 20,000 centipoise (cP)
Piston Ranges	0.2-2cP, 0.25-5cP, 0.5-10cP, 1-20cP, 2.5-50cP, 5-100cP, 10-200cP, 25-500cP, 50-1,000cP, 100-2,000cP, 250-5,000cP, 500-10,000cP, 1,000-20,000cP
Viscosity Accuracy	±1.0% of full scale w/ViscoPro 2000
Repeatability	±0.8% of reading
Temperature Sensor	4 wire internal platinum RTD
Wetted Materials	316L and 430 stainless steel
Maximum Particle Size	25-360 microns (range dependent)
Max Ambient Temperature	375°F (190°C)
Max Operating Pressure	1,000 psi (70.3 bar)
Standard Cable Length	15 feet (4.57 meters)
Power	Requires ViscoPro electronics

## Inserts into a blend tank or vessel



NOTE: ALL ATEX SENSORS ARE SPL ONLY (L = hard wired, C = connector)



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