

SPL440 High Pressure Research Viscometer

PVT Oil Research, Core Analysis & Supercritical Fluids



The SPL440 has recently achieved among the highest accuracy for any portable or laboratory viscometer and it is mercury free.

Operating Principle

Our industry leading viscosity technology is based on a simple and reliable electromagnetic concept. Two coils move the piston back and forth magnetically at a constant force. Proprietary circuitry analyzes the piston's two-way travel time to measure absolute viscosity. Built-in temperature detector (RTD) senses the actual temperature in the sampling chamber.

Fluid flows through 1/4"OD, 0.086" tube for measurement. Fluid may be measured under low flow or static conditions. System measures viscosity, temperature and temperature compensated viscosity. It provides data via RS-232, RS-485 or 4-20 mA signal.

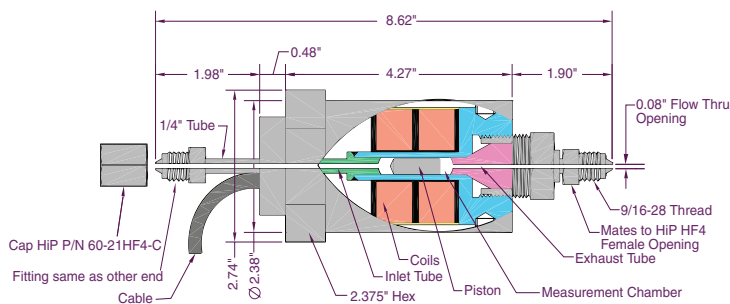
Equipment Description

The model SPL440 installs into a high pressure pump through type system. Both ends mate to HiP HF4 fittings with a 9/16-28 thread. The SPL440 is rated for continuous operation up to 20,000 psi and is static tested to 30,000 psi.

Key Features

- Major technology breakthrough now measures gas & gas condensates
- Industry leading advanced technology
- 10 Fold accuracy improvement over other high pressure viscometers
- Mercury Free
- Less than 2 ml required
- Pressure rated to 20,000 psi
- 4-20 mA, RS-232 and/or RS-485 data output
- Easy installation & Maintenance Free
- Viscosity in cP or cSt / Temperature in °C or °F

The SPL440 correlates with ASTM D445



Specifications

Overall Viscosity	0.02 to 10,000 centipoise (cP)
Viscosity Ranges	0.02-0.2 cP, 0.2-2 cP, 0.25-5 cP, 0.5-10 cP, 1-20cP, 2.5-50 cP, 5-100 cP, 10-200 cP, 25-500 cP, 50-1,000 cP, 100-2,000 cP, 250-5,000 cP, 500-10,000 cP
Accuracy	±1.0% full scale
Repeatability	±0.8% of reading
Temperature Sensor	Internal Platinum RTD
Wetted Materials	Inconel 718 / 17-4 Stainless Steel
Maximum Particle Size	25 - 360 Microns
Maximum Temperature	375°F (190°C)
Maximum Pressure	20,000 psi (1,406 bar)
Standard Cable Length	15 Feet (4.57 Meters)
Power	Requires ViscoPro 2000 electronics

Accessories

- Multiple ranges; easy changeover
- Additional cable
- Integrates directly into PumpWorks®, Labview®, and other laboratory information management software products



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