

# AST-100TSY

## Viscosity Sensor/Transmitter



**The AST-100TSY is a simple solution to viscosity control when special features or elaborate operator interfaces are not required.**

The AST-100TSY – coupled to a simple, remote, loop-powered indicator scaled in engineering units – allows an operator to make better and faster decisions because he/she does not have to rely on unreliable or inconsistent measurement techniques.

Optional  
AST-300SY  
Single-Station  
Controller



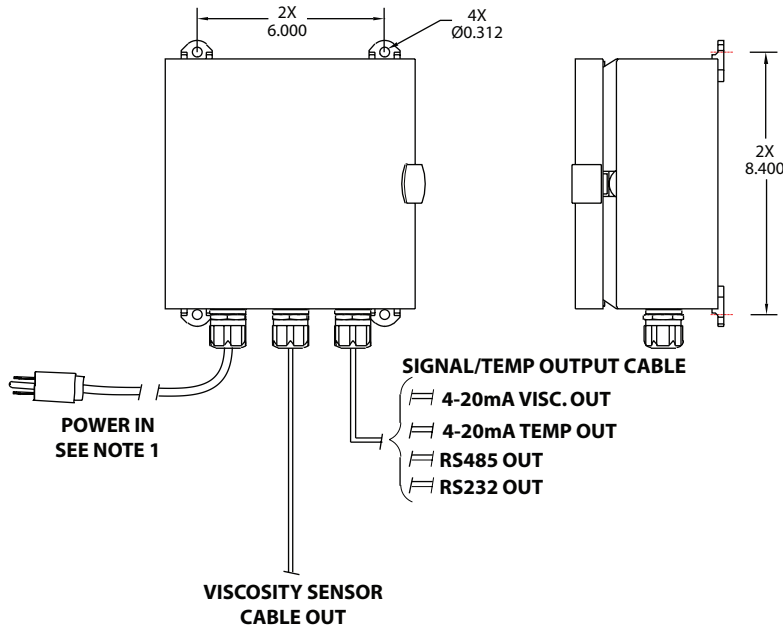
The AST-100TSY is also “ideal” for low cost, seamless integration of viscosity measurements into factory floor, automated control systems (PC, PLC, DCS, etc). Our new AST-100TSY includes a powerful, digital communication feature (Modbus RTU) that allows up to 10 viscometers to be networked into a single, reliable, multi-station, viscosity measurement system. It is easily integrated into a process controller using a single twisted pair wire.

Optional  
AST-400SY  
Multi-Station  
Controller

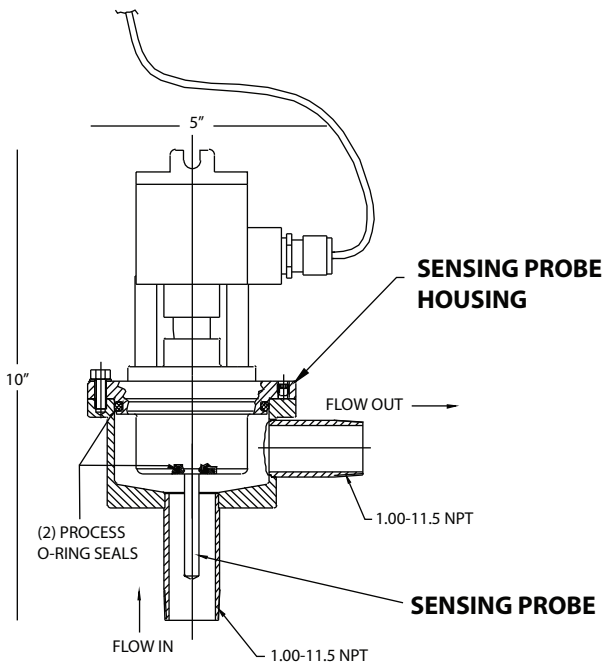


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**NOTE:**  
1. POWER IN CORD MAY BE REMOVED AND POWER MAY BE BROUGHT DIRECTLY INTO THE TERMINAL BOARD LOCATED INSIDE OF THE CONTROLLER ENCLOSURE.



### AST-100 Viscosity Sensor Specifications

Measurement Type:	Torsionally oscillating probe
Measurement Range:	0 to 3,300 cSt using an NIST traceable, Newtonian fluid measured at 25 °C
Process Connections:	1" Male NPT standard, (1½" tri-clamp or 3A design, optional)
Repeatability:	± 1.0% of reading
Wetted Surfaces:	316L stainless steel
Sensor O-Ring:	Isolast for probe, Viton for chamber housing (EDPM or Kalrez®, optional)
Temperature (fluid):	-20 to 120 °C (-4 to 248 °F)

### AST-100TSY Transmitter Specifications

Viscosity Ranges (field selectable):	0–10 cSt, 0–50 cSt, 0–100 cSt, 0–250 cSt, 0–500 cSt, 0–1000 cSt, 0–1500 cSt, 0–2000 cSt, 0–3300 cSt.
Maximum Resolution:	Analog: ± 0.05% of full scale Digital: ± 0.01 cSt
Analog Output (2):	4–20 mA (non-isolated) CH1 = viscosity CH2 = temperature
Serial Port (2):	Port 1 = RS232, simplex, read only, Port 2 = ½ Duplex RS485, Modbus RTU driver
Temperature Range (ambient):	0 to 40 °C (32 to 104 °F)
Electronics Packaging:	Wall mount, NEMA-4 (IP65), 8" x 8" x 6" (203 x 203 x 152mm)
Electrical Area Rating:	NEMA-4, NEMA-7 or APEX are optional
Interconnecting Cable:	25 ft (7.6m) standard: 50 ft (15.2m), 75 ft (22.8m) and 100 ft (304.4m) optional
Supply Voltage:	115V/60 Hz or 230V/50 Hz (± 10% max), power draw <2 amp



**Brookfield Engineering Laboratories, Inc.**  
11 Commerce Blvd. Middleboro, MA 02346-1031 USA  
Tel: 800.628.8139 or 508.946.6200 Fax: 508.946.6262  
www.brookfieldengineering.com