

Viscosity Sensor M20

Introduction



WHY THE M20?

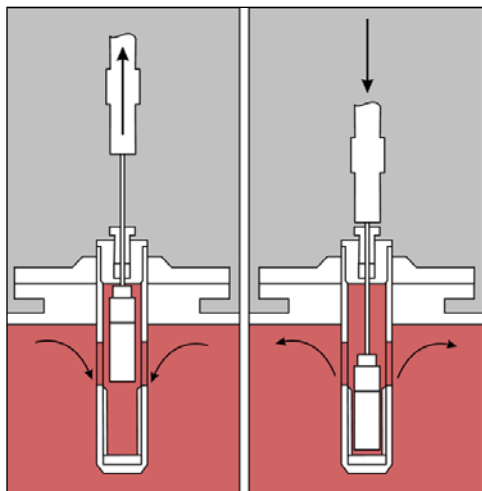
- Versatile mounting options such as on the top, side or bottom of a chemical reactor and into a tee or elbow of a pipeline.
- It can be used with Norcross Viscosity Controller MP2000/MP2500 or VISC6000.

WHAT ARE THE SPECIFICATIONS?

Viscosity Range:	1,000 - 1,000,000 cps
Temperature:	0°F - 300°F (-18°C - 149°C)
Electrical:	Air Valve - 24vdc, 10 watts UL XP Class 1, Div 1, Group C, D Limit Switch UL XP Class 1, Div 1, Group C, D
Pneumatic Supply:	100psi (7 bar), lubricated air (use #10 non-detergent lubricating oil)
Wetted Parts:	Stainless Steel SS316
Valve:	Integral 4-way Air Valve with throttling ports

Part#	Probe Length	Flange Size	Max. Operating Pressure
62055	7" (178mm)	2"	150# ASA 100psi / 7bar / 689KPa
62061	7" (178mm)	2"	300# ASA 300psi / 21bar / 2,067KPa
62031	12" (305mm)	2"	150# ASA 100psi / 7bar / 689KPa
62041	12" (305mm)	2"	300# ASA 300psi / 21bar / 2,067KPa

HOW DOES THE PISTON WORK?



Filling Phase

Measuring Phase

- 1 The piston is attached to a two-way air cylinder by a small connecting rod through a stuffing box as shown below. Air is first supplied to retract the piston (Filling Phase), drawing a sample of the liquid to be measured down through the space between the piston and the inside of the tube (the measuring orifice) into the space formed under the piston when it is raised.
- 2 Air is then applied to drive the piston down (Measuring Phase), expelling the sample out the same path as it entered. The time required to force the piston to the bottom and operate the switch is a measure of viscosity.
- 3 NORCROSS Controllers automatically measure this 'Piston Time-of-Fall' and continuously cycle the sensor (typically 2x/min) and indicate and/or control the viscosity.