

## Viscosity Sensor MFBO (CE)

### Introduction

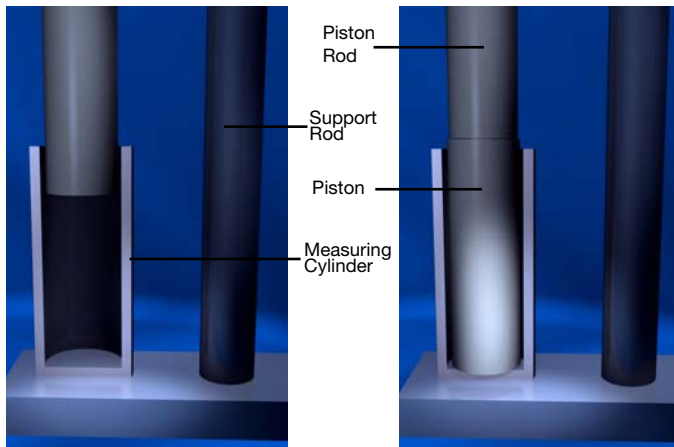


#### WHY THE MFBO?

- Operates like the M8BO, this model is CE approved and intrinsically safe.
- This sensor is good for open tanks between 10" (254 mm) and 24" (610 mm) deep.
- It can be used in water-based and solvent-based applications, such as printing (Flexographic and Rotogravure), glues, and adhesives.
- Works under atmospheric pressure.
- The exposed piston rod and cylinder enables operators to observe its operation.
- Removable wetted parts and open rod construction allow easy cleaning.
- The MFBO is compatible with the MP2000, MP2500 or VISC6000 Controller.

#### WHAT ARE THE SPECIFICATIONS?

Viscosity Range:	0.1- 100,000 cps
Tank Depth:	10" - 24" (254mm - 610mm) Standard sensor fits in a 5 gallon pail
Temperature:	50°F - 250°F (10°C - 121°C)
Electrical:	The MFBO is intrinsically safe and has a 3 meter cable The MFBO requires a 3-way 24vdc Air Valve which is available either UL XP (#08536) or CE EEX (#08764)
Pneumatic Supply:	40psi (2.5 bar), dry air
Wetted Parts:	Stainless Steel SS303 or SS316
Solvent Valve:	If the system will be adding solvent, then a 2-way 24vdc UL XP Solvent Valve (#08537) or CE EEX Solvent Valve (#08765) is required.



Filling Phase

Measuring Phase

#### HOW DOES THE PISTON WORK?

- 1 A piston and piston rod, shown at left in the Filling Phase, is periodically raised by an air lifting mechanism. Thus drawing a sample of the liquid, to be measured, down through the clearance between the piston and the inside of the measuring cylinder, into the space which is formed below the piston, as it is raised.
- 2 In the Measuring Phase the piston and piston rod are then allowed to fall by gravity, expelling the sample out through the same path as it entered. The 'Piston Time-of-Fall' is a measure of viscosity. The clearance between the piston and the inside of the measuring cylinder form the measuring orifice.
- 3 NORCROSS Controllers automatically measure this 'Piston Time-of-Fall', continuously cycle the sensor (typically 2x/min) and indicate and/or control the viscosity.