

Viscosity Sensor MXBOC (CE)

Introduction



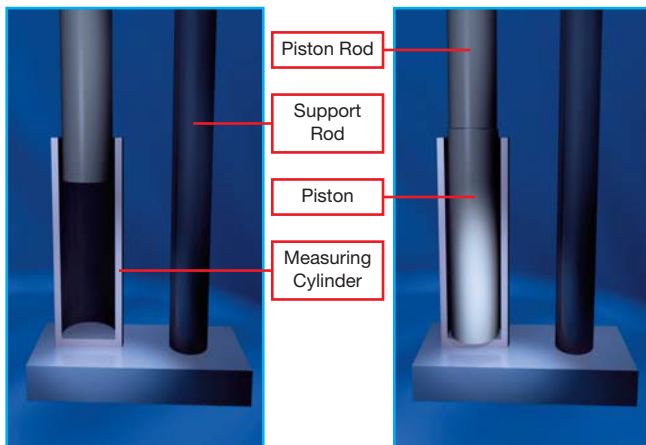
MXBOC
(Photo 1621a)

WHY THE MXBOC?

- Operates like the M8BO, except this model is CE and ATEX compliant.
- 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 MXBOC is compatible with the MP2000A and VISC series 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 MXBOC is furnished with a 2 meter electrical cable for switch. The MXBOC requires a 3-way 24VDC Air Valve CE EEX (08764), not shown
Pneumatic Supply:	40psi (2.76bar, 2.81Kg/cm ² , 0.276 MPa), dry air
Wetted Parts:	Stainless Steel SS303/SS304 or SS316
Solvent Valve:	If the system will be adding solvent, then a 2-way 24VDC CE EEX Solvent Valve (08765) is required.



Filling Phase
(Photo 0681)

Measuring Phase
(Photo 0680)

HOW DOES THE PISTON WORK?

1. A piston and a 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.