

Positive Displacement Flow Meter

900 Series Positive Displacement Water Flood Meters

DESCRIPTION

Blancett 900 Series positive displacement flow meters are designed specifically for the measurement of floodwater line flow in secondary oil recovery operations. Using a time-proven rotary vane mechanism, the 900 Series flow meters provide reliable long-term measurement and totalization with minimum attention and maintenance.

FEATURES

- Interchangeable inlet inserts with three different sized orifices
- Pre-calibrated orifices for specific low, medium, and high meter flow ranges
- Vaned impeller operates at pressures up to 5000 psi
- Two end connections: 2 in. NPT (male) and 1 in. NPT (female)



INSTALLATION

Install the flow meter with the flow arrow, which is cast on the exterior of the meter body, pointing in the direction of fluid flow.

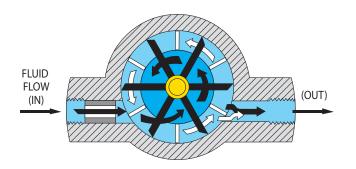
REPAIR KITS

Repair kits are available for field or factory service. The 900 Series repair kits contain a magnetic drive assembly, an impeller assembly, two O-rings, two gears, and an inlet insert. A decal is added to kits ordered with a register. See "Specifications" on page 2 for further details.



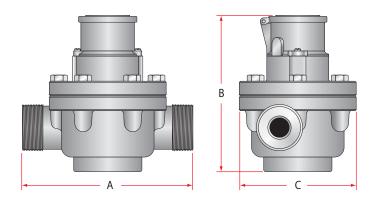
OPERATING PRINCIPLE

Fluid enters the inlet port and passes through the pre-selected orifice into the cylindrical measuring chamber. The flowing fluid is separated into two streams, rotating a vaned impeller at a speed directly proportional to flow rate. The impeller is connected to a meter register through a magnetic drive assembly. Each impeller rotation is mechanically tabulated and displayed by the register atop the meter.





DIMENSIONS



A	B	C
End to End	Height	Diameter
8.80 in. (223.5 mm)	8.00 in. (203.2 mm)	6.10 in. (154.9 mm)

SPECIFICATIONS

	Body	Stainless steel		
Materials of Construction	Rotor			
	Bearings	High tech polymers for high		
	Rotor Shaft	chemical/abrasion resistance		
	Rotor Support			
Operating Temperature	30200° F (-193° C)			
Pressure rating	5000 psi maximum			
End Connections	1 in. NPT (female), 2 in. NPT (male)			
Turndown Ratio	low - 2.5:1, med - 9:1, high 2:1			
Accuracy	2%			
Repeatability	±0.1%			
Calibration	_			
Pickup	_			
Certifications	_			

PART NUMBER INFORMATION

Part Number	Bore Size	End Connections	Max PSI	¹ Flow Ranges	Available Units	Strainer Mesh	Approx. K-factor	Weight	End to End Length	Description
B090-900	1, 2 in.	1 in. NPT (Female), 2 in. NPT (Male)	5000 PSI	68172 bpd	42 Gallon Barrel	60	_	_	8.80 in. (223.5 mm)	Low Range Standard Meter
B090-901	1, 2 in.	1 in. NPT (Female), 2 in. NPT (Male)	5000 PSI	1721543 bpd	42 Gallon Barrel	60	_	_	8.80 in. (223.5 mm)	Mid Range Standard Meter
B090-902	1, 2 in.	1 in. NPT (Female), 2 in. NPT (Male)	5000 PSI	15433086 bpd	42 Gallon Barrel	60	_	_	8.80 in. (223.5 mm)	High Range Standard Meter
B090-904	1, 2 in.	1 in. NPT (Female), 2 in. NPT (Male)	5000 PSI	545 gpm	U.S. Gallon	60	_	_	8.80 in. (223.5 mm)	Mid Range Meter in U.S. Gallons
B090-906	1, 2 in.	1 in. NPT (Female), 2 in. NPT (Male)	5000 PSI	25.9244.8 m ³ /d	Cubic Meter	60	_	_	8.80 in. (223.5 mm)	LowMid Range Meter in Cubic Meters

¹ bpd is standard

Repair Kits

Model 900	Description
B090-900	Repair Kit Complete with Register, 42 Gallon Barrel, Low
B090-901	Repair Kit Complete with Register, 42 Gallon Barrel, Mid
B090-902	Repair Kit Complete with Register, 42 Gallon Barrel, High
B090-904	Repair Kit Complete with Pulse Register, US Gallon
B090-906	Repair Kit Complete with Register, Cubic Meter
	B090-900 B090-901 B090-902 B090-904

*Complete repair kit contains: register, top of seal cup gasket, bottom of measuring element gasket, lid gasket, measuring element, impeller wheel, and cup o-ring.

Repair Kit Part Number Less Register and Register Gear	Model 900	Description
B250-922	B090-900	Repair Kit Less Register and Register Gear, 42 Barrel, Low
B250-926	B090-901	Repair Kit Less Register and Register Gear, 42 Barrel, Mid
B250-924	B090-902	Repair Kit Less Register and Register Gear, 42 Barrel, High
B250-932	B090-904	Kit Less Register and Register Gear, US Gallon
B250-928	B090-906	Repair Kit Less Register and Register Gear, Cubic Meter

