



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.

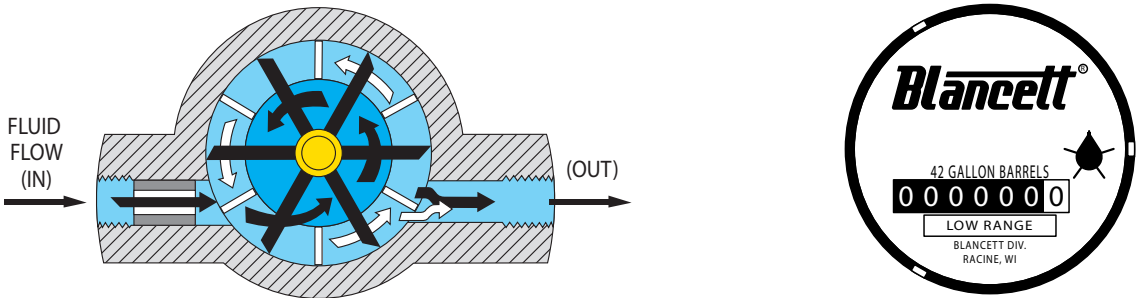
REPAIR KITS

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.

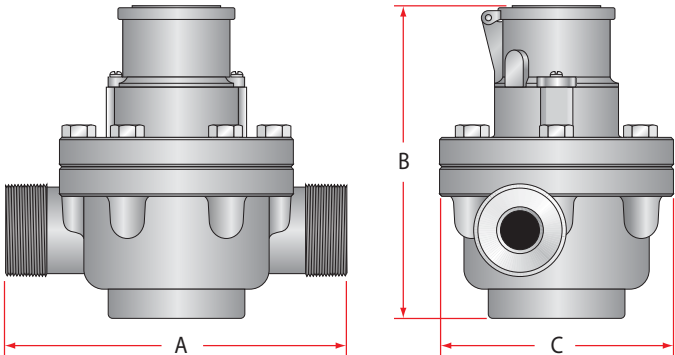


OPERATING PRINCIPLE

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

SPECIFICATIONS

Materials of Construction	Body	Stainless steel
	Rotor	High tech polymers for high chemical/abrasion resistance
	Bearings	
	Rotor Shaft	
	Rotor Support	
Operating Temperature	30...200° F (–1...93° 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	68...172 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	172...1543 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	1543...3086 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	5...45 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	25.9...244.8 m ³ /d	Cubic Meter	60	—	—	8.80 in. (223.5 mm)	Low...Mid Range Meter in Cubic Meters

¹ bpd is standard

Repair Kits

Repair Kit Part Number Complete*	Model 900	Description
B250-921	B090-900	Repair Kit Complete with Register, 42 Gallon Barrel, Low
B250-925	B090-901	Repair Kit Complete with Register, 42 Gallon Barrel, Mid
B250-923	B090-902	Repair Kit Complete with Register, 42 Gallon Barrel, High
B250-927	B090-904	Repair Kit Complete with Pulse Register, US Gallon
B250-931	B090-906	Repair Kit Complete with Register, Cubic Meter
*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

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www.badgermeter.com

The Americas | Badger Meter | 4545 West Brown Deer Rd | PO Box 245036 | Milwaukee, WI 53224-9536 | 800-876-3837 | 414-355-0400
México | Badger Meter de las Americas, S.A. de C.V. | Pedro Luis Ogazón N°32 | Esq. Angelina N°24 | Colonia Guadalupe Inn | CP 01050 | México, DF | México | +52-55-5662-0882
Europe, Eastern Europe Branch Office (for Poland, Latvia, Lithuania, Estonia, Ukraine, Belarus) | Badger Meter Europe | ul. Korfantego 6 | 44-193 Knurów | Poland | +48-32-236-8787
Europe, Middle East and Africa | Badger Meter Europa GmbH | Nürtinger Str 76 | 72639 Neuffen | Germany | +49-7025-9208-0
Europe, Middle East Branch Office | Badger Meter Europe | PO Box 341442 | Dubai Silicon Oasis, Head Quarter Building, Wing C, Office #C209 | Dubai / UAE | +971-4-371 2503
Slovakia | Badger Meter Slovakia s.r.o. | Racianska 109/B | 831 02 Bratislava, Slovakia | +421-2-44 63 83 01
Asia Pacific | Badger Meter | 80 Marine Parade Rd | 21-06 Parkway Parade | Singapore 449269 | +65-63464836
Switzerland | Badger Meter Swiss AG | Mittelholzerstrasse 8 | 3006 Bern | Switzerland | +41-31-932 01 11