

AUTO-RESET DEMAND REGENERATION SYSTEM

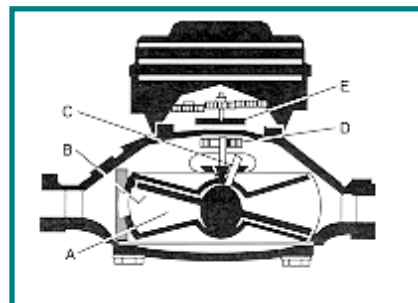
A demand regeneration system can be created by using components supplied by Badger Meter. The system consists of three components; the meter, the transmitter (AR/t), and the controller (AR/e). The meter can be either a disc or turbine type. The softener is installed with a turbine or disc meter in the service line. The meter rotates causing the transmitter to send pulses equivalent to a fixed amount of water. The AR/e receives these pulses. They are deducted from the preset batch amount until the counter reaches zero- at which point the AR/e energizes a relay, which sends a pulse to the circuitry on the valve. The signal from the AR/e initiates regeneration and the cycle timer on the valve causes the softener to go through the cycles of regeneration, providing the necessary process signal. In automatic mode, the counter resets as soon as the batch is complete; in manual mode, the counter resets when the stop command is received. The AR/e can be used with meters ranging from ½ to 6 inches in size, with flow capacities from ¼ to 2000 gpm. It can be mounted up to 1000 feet from the transmitter.

Auto-Reset

Part No.	Type	Normal Flow -GPM	Max. Cont. Flow -GPM	Shipping Weight pounds
720123	1" Disc	3-50	36	30
720124	1 ½" Disc	5-100	83	55
720125	2" Disc	8-160	120	85
720126	2" Turbo	8-160	160	30
720127	3" Turbo	10-350	350	40
720128	4" Turbo	25-1000	1000	75
-	6" Turbo	40-2000	2000	125

METERS

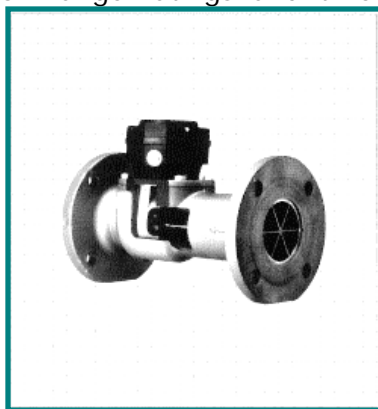
Nutating Disc Meter. Liquid flowing through the meter chamber (A) causes a disc (B) to nutate or wobble. This motion, in turn, results in the rotation of a spindle (C) and drive magnet (D). Rotation is transmitted through the wall of the meter to a second magnet (E), which operates the transmitter.



FEATURES

- Rugged, bronze housing
- Accuracy: ± 1.5% over full range
- Repeatability, ± 0.5%
- Leak-proof magnetic drive
- Positive displacement accuracy
- Four (4) disc materials
- Wide range of accessories
- 250°F option

Turbine Meters. The Badger Meter Turbine is available in line sizes of 2", 3", 4", and 6" with a choice of flange ratings and three different body materials including stainless steel. Its' unique straight through flow profile and ceramic bearing design optimize performance. This is a volumetric liquid flow meter, which works on the time proven principle of a rotor turning at an angular velocity proportional to the fluid velocity. The meter has straightening vanes and a nose cone in the inlet side, which minimize upstream turbulence and direct the flow to the rotor. Electronic pickups generate signals from the rotor magnet. This is translated to 4-20mA and or open collector-transistor pulse outputs. Mechanical pickups and electromechanical outputs are available.



Features

- Ceramic Bearings
- Simple In-Line Serviceability
- Accuracy: ± 1.5% over full range
- Repeatability, ± 0.25%
- Low Pressure Loss

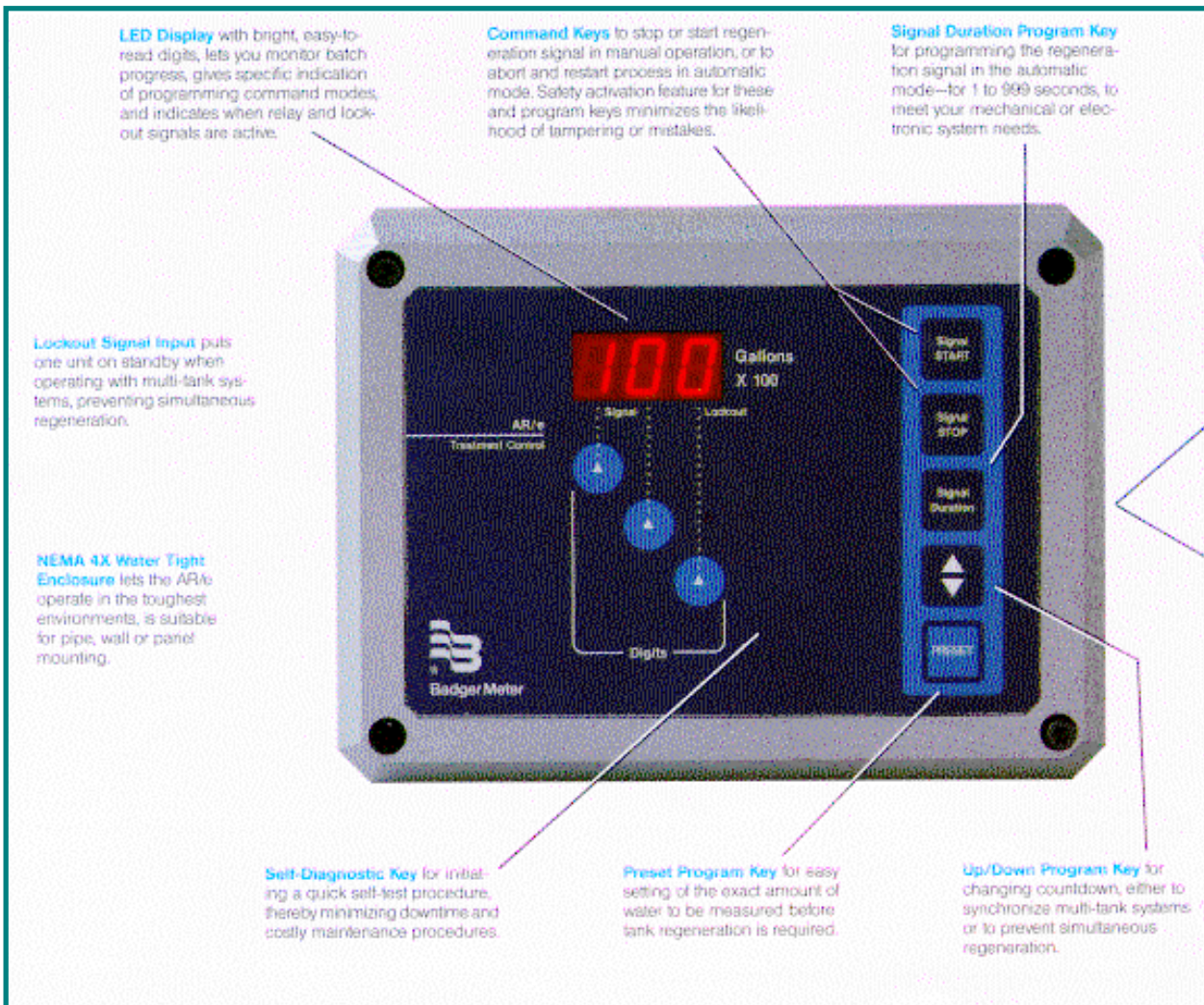
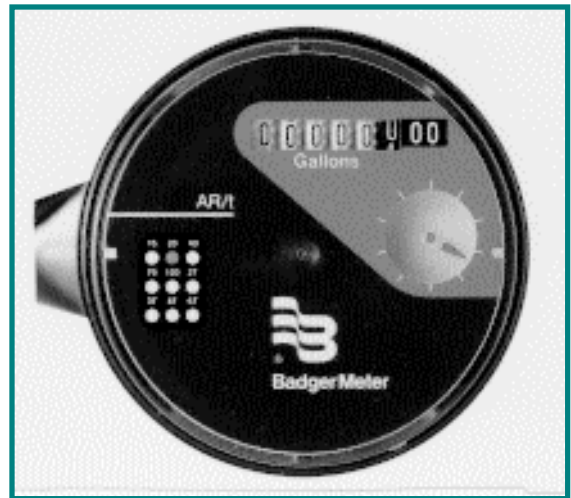
CAT450.2

TRANSMITTER

The AR/t Pulse Transmitter mounts on either Disc or Turbo meter. Six digit inventory totalizer keeps a permanent record of the amount of water used during any given time period.

CONTROLLER ▼

The AR/e electronic controller is designed to work with any Badger Disc or Turbo meter from ½" to 6". In design and construction, the AR/e is a fitting partner to Badger water meters-world famous for unmatched accuracy, convenience and durability. For twin alternating units add a Regeneration Selector Switch, part number 720091.



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