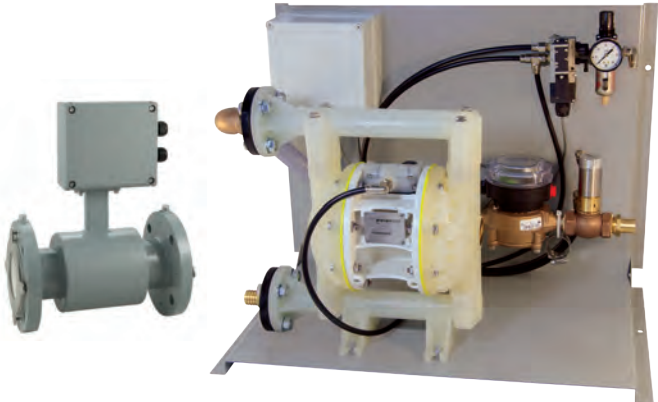


# Concrete Meter Overview



**Precision Measurement for Ready-Mix and Concrete Batch Plants.**



# Batch Control and Dispensing Systems

## Every Drop Counts.

Measure and precisely control the amount of water and chemical additives used in the production of concrete with Badger Meter water measurement, batch control and dispensing systems. Engineered and built to deliver precision accuracy over a long service life, our concrete products withstand the day-to-day demands of the most rigorous concrete applications. We offer turbine, positive displacement and electromagnetic meters along with a complete range of electronic batch controllers and dispensing systems. With a large product inventory ready for immediate shipment and a knowledgeable technical support team, we strive to help plants maximize production time. Our products can be found in thousands of ready-mix and concrete batch plants worldwide.



# Batching System Components

## Measure Rite® Truck Meter

Measure temper and slump-rack water with the Measure Rite Truck Meter. The meter is also suitable for adding water for front and rear discharge mixers or for use on mixers with fleet management systems. The unit is user-friendly with single button operation for zero reset and calibration. Four models are available to address the most rugged applications: MR1 (standard), MR1-R (remote display), MR1-P (pulse output) and MR1-B (battery operated). The MR1, MR1-R and MR1-P are truck mounted and resist vibration to allow for accurate tracking of all add-water by the driver. Calibration is in pounds for compliance with ALDOT procedures. The MR1-B provides accurate tracking of temper and slump-rack water without requiring an external power supply. Power source options include truck wiring or an internal battery. With a rugged meter body and electronics housing, the truck meter can withstand direct hose-spray washdown, resists damage caused by air slug flow, and can be blown dry. Sizes range from 3/4 to 2 inches for flow rates up to 200 gallons per minute.



## Measure Rite Sight Tube Dispenser

Visually monitor liquids batching into the concrete mix with the Measure Rite Sight Tube Dispenser. This provides a view of chemicals and water going into the concrete mix. Available in half-foot increments with a one-foot minimum, the sight tube is made of corrosion-resistant, clear and rigid PVC pipe. It has a graduated scale to allow the operator to verify the amount of fluid going into the mix. The rugged tube assembly handles high-pressure applications, large quantities in admixture dispensing and concrete truck applications. The unit is also quick and easy to replace in the field.



## Truck Mounted Meters

- ALDOT compliant
- Vibration resistant
- Easy to use



# Batching System Components

## CB-30 Batch Controller

Boost accuracy and durability with the CB-30 batch controller. Ideal for use in concrete plants and other process management applications using single point batch control, the CB-30 allows the operator to quickly set and run an exact batch. The batch controller includes a preset wash amount and valve overrun compensation, and allows for manual operation to override preset values. CE approved and RoHS compliant, the controller can be mounted on the flow meter, on a wall or in an instrumentation panel. Its rugged aluminum front panel or optional enclosure provides NEMA 4X (watertight and corrosion proof) protection. With a four-digit display and measurements in liters and gallons, the backlight intensity can be adjusted to 20, 40, 60 or 80 percent reducing eye-strain and improving readability. In addition, its front panel scaling function allows for fast recalibration; and device memory preserves all programmed information during power failure. The batch controller is compatible with the Badger Meter industrial turbo meter, the M7600 electromagnetic meter or any scaled or unscaled pulse output meter.



## Electronic Scalable Transmitters: Models PFT-1E and PFT-4E

Add scaling capabilities to any preset counter or process controller with the PFT-1E and PFT-4E electronic pulse transmitters. Designed for totalizing, rate calculation or batching, these electronic transmitters can be scaled to almost any pulse rate, allowing recalibration by resetting the scale factor with four rotary switches. The transmitters are equipped with an LED indicator for visual pulse detection, optically isolated outputs to prevent false counts due to line noise and solid-state circuitry for long life. The sensor can withstand fluid temperatures up to 250 degrees Fahrenheit. Its rugged, high-impact-resistant housing provides NEMA 4X (watertight and corrosion proof) protection. Use the PFT-1E with disc meters and the PFT-4E with industrial turbo meters.

## Batch Controllers

- CE approved and RoHS compliant
- NEMA 4X protection
- Fully compatible with Badger Meter industrial turbo and electromagnetic meters

# Batching System Components

## Electronic Unscaled Pulse Transmitters: Models PFT-2E and PFT-3E

Improve performance over mechanical transmitters by adding unscaled pulse outputs with the PFT-2E and PFT-3E electronic transmitters. Models PFT-2E and PFT-3E are protected with a rugged, high-impact-resistant NEMA 4X (watertight and corrosion proof) housing. All models can withstand fluid temperatures up to 250 degrees Fahrenheit and have solid-state components for a long life. Designed for turbo and disc meters, these transmitters interface with the CB-30 controller and other devices with similar operating characteristics.

## Recordall® Disc Meter

Obtain high accuracy and repeatability with the positive displacement Recordall Disc Meter. Efficient and cost effective, the disc meter seldom requires maintenance. All parts are designed and built for the most rugged applications, providing for a long life. Housing choices include rugged bronze or thermoplastic, ideal for applications with high temperatures, high pH chemicals and potential abrasives. Sizes include 1/2 to 2 inches for flow up to 170 gallons per minute and a maximum operating pressure of 150 pounds per square inch. The meter is compatible with a complete line of accessories including totalizers, electromechanical and electronic transmitters, rate of flow indicators and batch/process controllers.



## Electronic Transmitters

- Designed for use with turbine or disc meters
- Scalable and unscaled pulse models available
- Protected with rugged NEMA 4X housings



# Water Metering and Batching System Control

## ModMAG® M7600

For excellent accuracy and repeatability in batching applications, choose the M7600 mag meter. With an accuracy of  $\pm 0.50$  percent of rate and a repeatability of  $\pm 0.1$  percent, the M7600 is ideal for clean, cold, hot and reclaimed water batching in ready-mix, precast, prestress and block plants. Its solid-state relay and open collector output easily connect to the CB-30 batch controller or your existing plant control system. The open flow design with long-life corrosion-resistant liner (PTFE) keeps maintenance to a minimum for many years of trouble-free operation. Since there are no moving parts, the meter is suited for wash-out applications and helps eliminate “water hammer” damage and pressure loss. Sizes range from 1/2 to 4 inches with standard turbo meter lay lengths on 2, 3 and 4 inch sizes. This unit is also available as a meter/valve assembly.

## Turbo Water Batching Systems

Get accurate and dependable service in all types of batch plant environments with turbo meter systems by Badger Meter. Pair our industrial turbo meter with an unscaled pulse transmitter or electronic scalable transmitter and a solenoid-controlled air-operated butterfly valve to create a reliable water batching system. The industrial turbo meters offer long lasting ceramic bearings, low pressure loss and easy field calibration. The meters are compact and easy to service without removing the meter from the line. Available sizes include 2, 3, 4 and 6 inch. The PFT-4E transmitter offers fast calibration using rotary switches. The solution is ideal for retrofits to existing systems or connection to the CB-30 batch controller.



## M7600 Mag Meter

- Accuracy
- Repeatability
- Durability

# Chemical Admix Dispensing and Control Systems

## Dispensing Systems

Designed to dispense admixtures directly into concrete, dispenser systems by Badger Meter are accurate, reliable and easy to operate. Able to operate with electric or air supply, these systems can interface with batch plant panels or be used with semi-automatic controllers.

Dispensing systems are available with manual, semi-automatic or computer interface with 1, 2, 3 or 4-product dispensers. Consult the factory for custom designs with additional dispensers.

## Dispenser Controllers

### AC-151

Designed to provide control for a single unit or direct feed dispensing system, the AC-151 provides manual and automatic operation modes, front panel zero indication, fill complete, discharge, and overflow indicators. Special features include discharge hold, remote operation, time delay discharge, time discharge, and batching in ounces per 100/wt. This rugged controller is housed in an NEMA 4X enclosure.

### AC-154

Accurately control up to four admixes using the AC-154 controller. The AC-154 can be set for automatic or manual operation in three batch pre-set modes including total ounces, ounces per cwt or ounces per cubic yard. Features include visual LED indication of the zero point, fill, fill complete, discharge, overflow, and discharge hold. Four safety features include overflow protection, no-start on zero indication, no-flow/meter fail-safe, and shut-off on batch error. Specify either U.S. or metric standards.

### DP-10

Designed to interface with single or dual zero probe admix dispenser systems with automated concrete batch panels, the DP-10 provides a common terminal strip for wiring connections to both the dispenser and the control system. The amplifier plugs into an 11-pin relay base mounted circuit board, allowing for quick and easy field service and replacement without any wiring changes. This rugged controller is housed in an NEMA 4X enclosure.

## Batch Controllers

- Automated and remote operation available
- Protected with rugged NEMA 4X housings



## Control. Manage. Optimize.

Trademarks appearing in this document are the property of their respective entities. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. © 2016 Badger Meter, Inc. All rights reserved.

[www.badgermeter.com](http://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, Middle East and Africa | Badger Meter Europa GmbH** | Nurtinger 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  
**Czech Republic | Badger Meter Czech Republic s.r.o.** | Mařikova 2082/26 | 621 00 Brno, Czech Republic | +420-5-41420411  
**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  
**China | Badger Meter** | 7-1202 | 99 Hangzhong Road | Minhang District | Shanghai | China 201101 | +86-21-5763 5412  
**Switzerland | Badger Meter Swiss AG** | Mittelholzerstrasse 8 | 3006 Bern | Switzerland | +41-31-932 01 11