Recordall® Cold Water Bronze Disc Meter	Size 5/8 x 3/4" (DN 15mm)	Technical Brief

DESCRIPTION

APPLICATIONS: For use in measurement of potable cold water in residential, commercial and industrial services where flow is in one direction only.

OPERATION: Water flows through the meter's strainer and into the measuring chamber where it causes the disc to nutate. The disc, which moves freely, nutates on its own ball, guided by a thrust roller. A drive magnet transmits the motion of the disc to a follower magnet located within the permanently sealed register. The follower magnet is connected to the register gear train. The gear train reduces the disc nutations into volume totalization units displayed on the register dial face.

OPERATING PERFORMANCE: The Badger Recordall Disc meters meet or exceed registration accuracy for the low flow rates (95%), normal operating flow rates (100 ± 1.5%), and maximum continuous operation flow rates as specifically stated by AWWA Standard C700.

CONSTRUCTION: Badger Recordall Disc meter construction, which complies with ANSI/AWWA standard C700, consists of three basic components: meter housing, measuring chamber, and permanently sealed register. The water meter is bronze with externally-threaded spuds. A corrosion-resistant thermoplastic material is used for the measuring chamber.

To simplify maintenance, the register, measuring chamber, and strainer can be replaced without removing the meter housing from the installation. No change gears are required for accuracy calibration. Interchangeability of parts among like-sized meters also minimizes spare parts inventory investment.

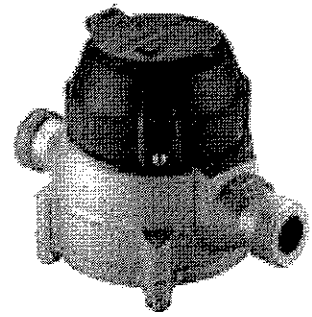
MAGNETIC DRIVE: Direct magnetic drive, through the use of high-strength magnets, provides positive, reliable and dependable register coupling for straight-reading, remote or automatic meter reading options.

SEALED REGISTER: The standard register consists of a straight-reading odometer-type totalization display, 360° test circle with center sweep hand and flow finder to detect leaks. Register gearing consists of self-lubricating thermoplastic gears to minimize friction and provides long life. Permanently sealed; dirt, moisture, tampering and lens fogging problems are eliminated. Multi-position register simplifies meter installation and reading. Generator-type remote reading and automatic meter reading systems are available for all Recordall Disc meters. (See back of sheet for additional information.) All reading options are removable from the meter without disrupting water service.

TAMPER-PROOF FEATURES: Customer removal of the register to obtain free water can be prevented when the optional tamper detection seal wire screw or TORX® tamper resistant seal screw is added to the meter. Both can be installed at the meter site or at the factory.

MAINTENANCE: Badger Recordall Disc meters are designed and manufactured to provide long-term service with minimal maintenance. When maintenance is required, it can be performed easily either at the meter installation or at any other convenient location. As an alternative to repair by the utility, Badger offers various maintenance and meter component exchange programs to fit the needs of the utility.

CONNECTIONS: Tailpieces/Unions for installations of meters on various pipe types and sizes, including misaligned pipes, are available as an option.



Model 25

SPECIFICATIONS

Typical Operating Range (100% ± 1.5%)	1/2 - 25 GPM (.11 to 5.7 m³/hr)
Low Flow (Min. 98.5%)	1/4 GPM (.057 m³/hr)
Maximum Continuous Operation	15 GPM (3.4 m³/hr)
Pressure Loss at Maximum Continuous Operation	2.8 PSI at 15 GPM (0.19 bar at 3.4 m³/hr)
Maximum Operating Temperature	80°F (26°C)
Maximum Operating Pressure	150 PSI (10 bar)
Measuring Element	Nutating disc, positive displacement
Register Type	Straight reading, permanently sealed magnetic drive standard. Remote reading or Automatic Meter Reading units optional.
Register Capacity	10,000,000 Gallons, 1,000,000 Cubic Feet, 100,000 m³. 6 odometer wheels.
Meter Connections	Available in bronze and thermoplastic to fit 3/4" (DN 15mm) spud thread bore diameter sizes. See table below.

METER SPUD AND CONNECTION SIZES

Size Designation x	"L" Laying Length	"B" Bore Dia.	Coupling Nut and Spud Thread	Tailpiece Pipe Thread (NPT)
5/8" x 3/4" x	7½"	5/8", 3/4"	1" (3/4")	3/4"

MATERIALS

Meter Housing	Cast Bronze
Housing Bottom Plates	Bronze, Cast Iron, Thermoplastic
Measuring Chamber	Thermoplastic
Disc	Thermoplastic
Trim	Stainless Steel, Bronze
Strainer	Thermoplastic
Disc Spindle	Stainless Steel
Magnet	Ceramic
Magnet Spindle	Stainless Steel
Register Lid and Shroud	Thermoplastic, Bronze
Generator Housing	Thermoplastic

Close Proximity/Automatic Meter Reading Systems

CLOSE PROXIMITY

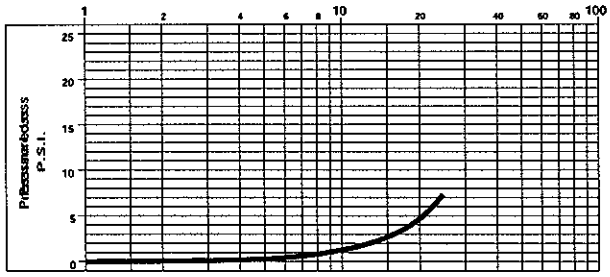
Using the DIALOG® Close Proximity Meter Reading System, Recordall Disc meters in remote, pit and vault settings can be read using a hand held data collector. This eliminates the need to enter confined space. The meter reading can be collected where it is most convenient for the meter reader. The foundation of Badger's meter reading products is the Recordall Transmitter Register (RTR®). This converts the mechanical action of the meter into a digital signal. The hand held data collector, through a reading wand, collects the meter reading through the use of short range radio frequency (RF).

AMR

The TRACE® radio frequency system or the ACCESSplus® telephone system easily integrate with all Recordall Disc meters. Both technologies provide an efficient meter data retrieval and information management system. The TRACE Transponder and ACCESSplus Remote Module connects to the Recordall Transmitter Register (RTR) assembly. Complete systems, including hardware and software, are available to provide a wide range of meter reading information.

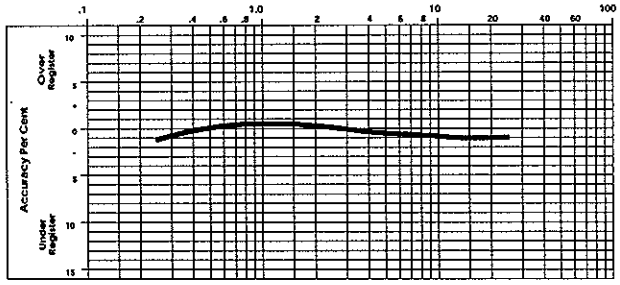
PRESSURE LOSS CHART

Rate of Flow, in Gallons per Minute



ACCURACY CHART

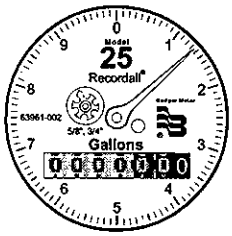
Rate of Flow, in Gallons per Minute

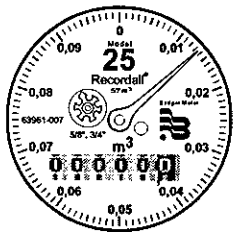


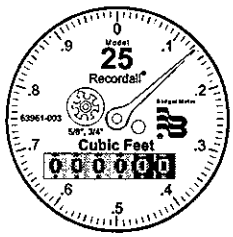
METER SIZE	METER MODEL	A LAYING LENGTH	B HEIGHT REG./RTR	C HEIGHT GEN.	D CENTERLINE BASE	WIDTH	APPROX. SHIPPING WEIGHT
5/8 x 3/4" (15mm)	25	7 1/2" (190mm)	4 15/16" (125mm)	6 5/16" (160mm)	1 11/16" (42mm)	4 1/4" (108mm)	4 1/2 lb. (2.0kg)

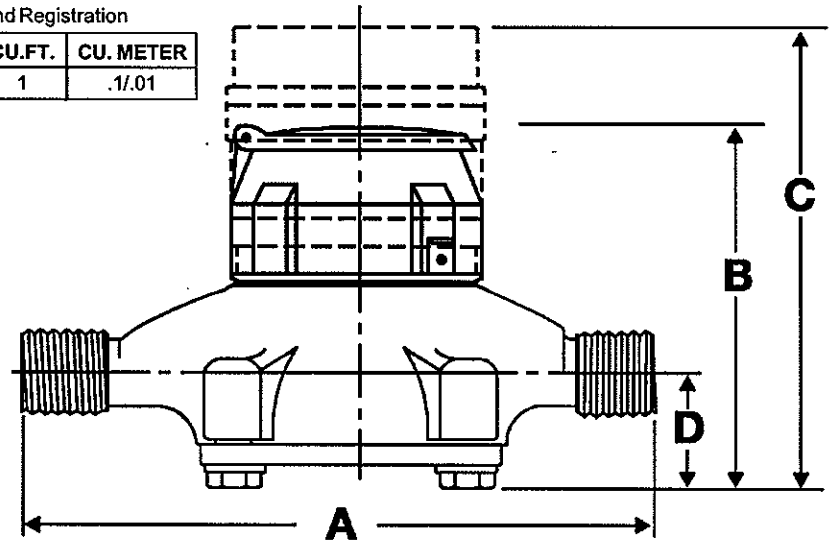
Sweep Hand Registration

MODEL	GALLON	CU.FT.	CU. METER
M25	10	1	.1/.01









Please see our website at
www.badgermeter.com
for specific contacts.

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 bid obligation exists.

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