Model TR	Totalizing/Reset Register	Technical Brief

GENERAL

The TR register is a mechanical register, immune to electrical interference and power outages, designed for use with Badger's OP, Turbo, and Disc meters. It has an 8-digit non re-settable and a large, four-digit re-settable mechanical totalizer. The complete assembly is housed in a sealed, glass-filled polycarbonate housing (NEMA 4X). The absence of electrical components allow its use in hazardous locations.

OPERATION

As liquid flows through the meter, the mechanical motion of the flow meter measuring element is transmitted to the register via a magnetically coupled intermediate gear train. Gear trains and "change gears" within the TR register further convert this motion to the mechanical totalizers. Selection of specific gear train/change gear combinations allow the display of totalized flow in any standard engineering unit of measure (i.e., gallons, liters).

Multiplier labels are attached to the dial face plate adjacent to the two totalizers. The value of these multipliers depend on the type and size of the flow meter. To get the correct reading from the totalizers, you must multiply the totalizer reading by this multiplier factor. The table on the next page lists the multipliers for the various meters that can be used with the TR register.

EXAMPLE: If your TR register is mounted on a 2" Turbo meter, and it is calibrated for gallons, the multiplier would be 10. A " X 10" label would be attached below the right hand digit of the re-settable totalizer, and a "0" label would be attached to the right of the non re-settable totalizer. In this example, you can read the flow through the 2" Turbo meter to the nearest 10 gallons. (You can estimate readings to the nearest gallon if you observe the gradations on the right most number wheel of the re-settable totalizer.

APPLICATIONS

The TR register and its associated flow meter are generally used in manual batching systems. The operator first sets the re-settable totalizer to zero with the reset knob. After activating a pump or opening a valve to start flow in the system, the operator observes the 4 digit re-settable totalizer, and stops flow when the desired quantity is indicated.

FEATURES

● **Easy to view four-digit, re-settable totalizer**

● **Non re-settable totalizer has eight digits for inventory control**

● **Mechanical operation (no electrical components) for use in hazardous environments**

● **Easy access to internal change gears for in line re-calibration**

● **Corrosion-resistant and waterproof NEMA 4 X sealed enclosure for indoor/outdoor operation**

● **Choice of measurement units: U.S. or Imperial gallons, pounds, liters, kilograms, cubic feet or cubic meters**

BadgerMeter, Inc.
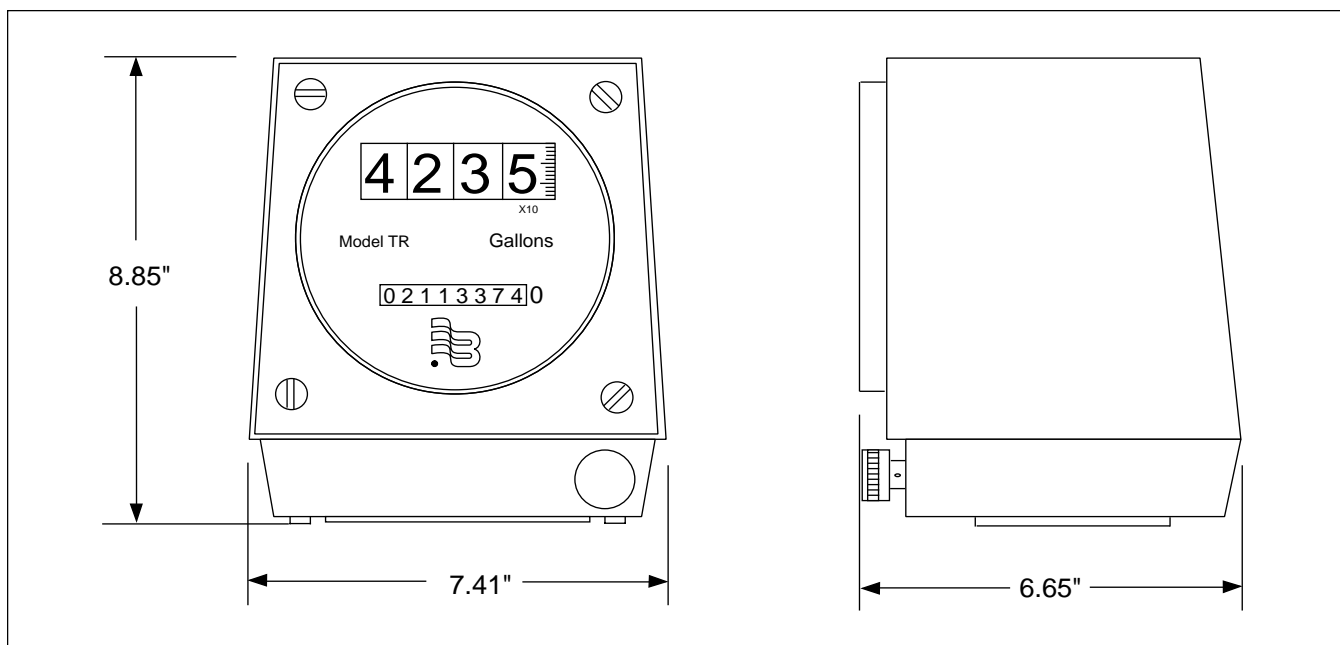
UNIT OF MEASURE	TOTALIZER RESOLUTION & DIAL MULTIPLIER						
	RCDL DISC METERS			OP METERS	TURBO METERS		
	Model						
	25, 35 & 40	70, 120	170	1" & 2"	2" & 3"	4"	6"
U.S. & Imperial Gallon	1	10	10	1	10	100	100
Liter	10	10	100	1	100	100	N.A.
M3	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1
Cu. Ft.	0.1	1	1	0.1	1	10	10
Kilogram	10	10	100	1	100	100	1000
Pound	10	100	100	10	100	1000	1000

SPECIFICATIONS

Housing: Glass-filled polycarbonate, NEMA 4X

Bezel: Clear polycarbonate

Gears: Brass or nylon

Spindles: 303 stainless steel

Maximum Fluid Temperature: 250° F (121° C)

Register Size: 7 1/2" wide, 8 7/8" high, 6 5/8" deep (191 x 225 x 168 mm)

Dial Size: 5 3/4" (146 mm)

Net Weight: 5 1/4 pounds (2.38 kg)

Batch Counter: Four-digit, re-settable, 5/8" Digits

Inventory Totalizer: Eight-digit, non re-settable

Drive: Mechanical coupling to meter adapter

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