



**Badger Meter**

# Portable Small Meter Tester

Model PSMT

## DESCRIPTION

The Model PSMT Portable Meter Tester is designed for field testing of meters 1/2" to 1". Tests may be performed without removing the meter from service using a hose connection downstream of the meter. Additionally, adapters are provided for testing meters that have been removed from service.

Through routine testing of meters in service, change-out programs may be developed to aid in ensuring that the installed base of meters is providing accurate measurement to maximize revenue. Additionally, the PSMT may be used to demonstrate meter accuracy during customer inspections.

## Construction

The PSMT is a self-contained portable test meter with all control valves, hose connections, fittings, and pressure gauges permanently installed in a rugged, weatherproof plastic portable case. The case is built to MIL-C-4150J specifications for long service life in harsh field conditions. The case may be closed and locked while the tester is in service in the event long-term evaluations are needed.

Accessories included with the tester allow various testing connections for a variety of meter sizes:

- A 2" pressure gauge
- Two 3/4" x 39" reinforced flexible hoses
- Fittings for connection to 1/2", 5/8", 3/4" and 1" meters
- A test ring to allow starting all tests at zero
- Complete operating instructions laminated to the case cover

## Internal Piping

All internal fittings are soldered brass or copper, except plastic tubing for pressure gauge. Connection to the test meter is made using standard meter connection fittings. The 2" pressure gauge provides visual indication of water system pressure. The inlet control valve is a quick acting one-quarter turn ball valve installed upstream of the meter for accurate test starts and stops. The outlet globe valve—located downstream from the meter—allows reliable flow rate adjustment.

## Field Connections

External connection to the tester is made using standard 3/4" male hose connections located on the exterior of the case. Two 3/4" x 39" rugged reinforced flexible hoses are provided for field connection of the PSMT.



## SPECIFICATIONS

<b>Operating Range</b>	0.25... 25 gpm (1.0...95 lpm)
<b>Overall Accuracy</b>	100% ± 1.5%
<b>Maximum Operating Temperature</b>	105° F (40° C)
<b>Maximum Operating Pressure</b>	100 psi (6.3 bar)
<b>Register Type</b>	Sealed magnetic drive
<b>Units of Measure</b>	Gallons, cubic feet or cubic meters
<b>Test Resolution</b>	0.1 gallons, 0.01 cubic feet, 0.01 cubic meters using a register test ring
<b>Meter Size Test Capacity</b>	1/2", 5/8", 5/8" x 3/4", 3/4" and 1"
<b>Connections</b>	3/4" x 39" reinforced flexible hose

## MATERIALS

<b>Meter</b>	Nutating disc engineering thermoplastic
<b>Case</b>	Weatherproof, high-impact structural copolymer
<b>Overall Size</b>	18-1/2" x 14-1/16" x 6-1/16" (470 mm x 357 mm x 154 mm)
<b>Total Weight</b>	10 lb (4.5 kg)

## Making Water Visible®

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