



ABB Water Meters, Inc.
1100 SW 38th Avenue
Ocala, FL 34473
Telephone (352) 732-4670
Fax (352) 368-1950

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S130 Hot Water Meter, 3/4" Single-Jet M150 Hot Water Meter, 1" & 1 1/2" Multi-Jet *Installation/Start-up Instructions*

INTRODUCTION

The S130 (5UM-20) and M150 (KMM 25/40) Hot Water Meters are inferential meters. They are available with a pulser/register combination, or as a register only unit. Meter construction provides a magnetic coupling between the wetted gear train and the totalizing register. The magnetic coupling is through an o-ring sealed, PPO glass loaded pressure plate.

These Hot Water Meters are ideally suited for in-plant energy audits to monitor hot water consumption by production departments, measurement of water to individual apartments within a multifamily dwelling, and in general for measurement of water up to 195°F.

METER SELECTION

The correct selection of the type and size of a meter is important to insure accurate registration and reliability. Selection should be based upon the actual working conditions such as pressure, permanent load, peak load, minimum accurate registration, temperature, mounting position, etc., rather than only on pipe size. Meters which are undersized in relation to load cause noise, undesirable loss of pressure, and may be subject to premature wear. Alternatively, meters which are oversized may be inaccurate or fail to register a low flow rate.

INSTALLATION

These meters must be installed in a clean pipe line, free from any foreign materials. If it is felt that installation of the meter will loosen scale present in the pipe, or if it is envisioned that foreign matter can get into the meter, the use of a pipe line filter ahead of the meter is indicated.

Install the meter with the direction of flow as indicated by the arrow cast in the meter case. The meter can be installed in horizontal or inclined lines up to 45° with register facing upward. Meter location should allow a minimum of 8" of straight pipe ahead of and 4" of straight pipe after the meter.

WIRING OF PULSER

The pulser is integral to the meter. The transmitting element in the pulser is a dry contact reed switch, SPST, n/o with a 4 watt non-inductive rating. Maximum switching voltage is 24 AC/DC voltage, 0.2 amp current maximum, not to exceed 4 watts. Reed

switch closure rate is 1 contact per gallon, with a 60/40 open closed ratio. Pulsar is to be wired in series.

REGISTER ROTATION

This meter does NOT allow for rotation of the register/pulsar register assembly.

FLOW TESTING

The 195°F meters are tested prior to shipment.

This meter has a design accuracy of plus or minus 2 percent.

If the meter reads excessively high, it is probably due to the presence of air in the fluid stream. Air would be registered by the meter as water.

Slow meter readings are usually the result of a mechanical defect or the presence of foreign matter within the meter which is causing frictional loading.

PRESSURE/TEMPERATURE RATINGS

TEMP °F	-20-150	195
MIN PSIG	-	6

“MIN PSIG” is the minimum line pressure required to prevent flashing within the meter body.