

Material Specification – 19

MAGNETIC DRIVE TURBINE TYPE FIRE SERVICE WATER METERS

1. GENERAL

Magnetic drive turbine type fire service water meters, 3-inch through 10-inch, shall be manufactured in accordance with AWWA C703 with the following additional requirements or exceptions.

2. SIZES

This Specification covers magnetic drive turbine type fire service water meters in 3-inch through 12-inch nominal diameters.

3. METER DESCRIPTION

Main casings of the meter, internal parts, and strainers shall be designed for easy removal. Strainers, stainless steel mounting bolts, and flange gaskets shall be furnished with each meter. The strainer shall be UL listed or FM approved.

4. METER MAIN CASES/FLANGES

Meter main cases shall be made of CI in accordance with AWWA C703.

Flanges shall be an integral part of the main case and composed of the same material as the case; flanges shall not be removable from the main case and shall not have slotted holes. Flanges shall be machined to a flat surface with a serrated finish in accordance with AWWA C207. A test port shall be supplied on the outlet side of the meter.

5. MAINLINE METER

The mainline meter shall be a turbine type meter that shall be UL listed or FM approved.

6. BYPASS METER

The bypass meter may be the turbine type or the compound type. Ball valves shall be installed directly upstream of the meter and downstream of the bypass meter check valve.

7. REGISTERS/REGISTER BOXES

Meter registers and register boxes shall be in accordance with [MS-15](#).

8. METER NUMBERS

The Denver Water meter number shall be plainly stamped or engraved on the meter main case; it shall be heat stamped in a contrasting color on the plastic register caps and attached to the meter in form 39 bar code using a separate tag. Paper or plastic number labels affixed to the register are not acceptable.

9. COATING

Main cases shall have a polymerized coating in accordance with ANSI/AWWA C116.

10. QUALITY CONTROL

The Manufacturer shall submit a written statement that the inspection and all specified tests have been completed and that results comply with the requirements

of these Standards. Components in contact with potable water shall be certified to comply with NSF/ANSI 61 and NSF/ANSI 372, and a copy of the certification shall be provided to Denver Water, if requested.

11. DOCUMENTATION

The meter shall have a firmly attached tag that documents the Manufacturer’s serial number, the Denver Water meter number, a form 39 bar code representation of the Denver Water meter number, the Manufacturer’s certified test results, and other identifying characteristics such as nominal size, Manufacturer, meter model number, and register type and model.

12. APPROVED MANUFACTURERS AND MODELS

Manufacturers	Models
Badger Meter, Inc.	Fire Series Assembly
Neptune Technology Group	HP Fire Service Turbine Meter

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