

**1/2" - 2" THREADED ECCENTRIC PLUG VALVE
Val-Matic® Specification**

1 Scope

- 1.1 This specification covers the design, manufacture, and testing of 1/2 in. (15 mm) through 2 in. (50 mm) Cast Iron Eccentric Plug Valves suitable for water or wastewater service with pressures up to 175 psig (1200 kPa).
- 1.2 Plug Valves shall be quarter-turn, non-lubricated, eccentric type with resilient faced plug.

2 Standards, Approvals and Verification

- 2.1 The valves shall be certified to be Lead-Free in accordance with NSF/ANSI 61, Annex G.
- 2.2 Manufacturer shall have a quality management system that is certified to ISO 9001 by an accredited, certifying body.

3 Connections

- 3.1 The valve shall have threaded NPT full size inlets. The connection shall be hexagonal for a wrench connection.

4 Design

- 4.1 Port areas of not less than 100% of pipe area.
- 4.2 The valve seat shall be a machined seating surface.
- 4.3 Shaft seals shall consist of V-type lip seal in a fixed gland with a resilient o-ring spring.
- 4.4 Permanently lubricated, radial shaft bearings shall be supplied in the upper and lower bearing journals. A thrust bearing shall be provided in the upper journal area.
- 4.5 The body shall have 1/8" NPT upstream and downstream pressure ports.

5 Materials

- 5.1 The valve body and cover shall be constructed of ASTM A126 Class B cast iron for working pressures up to 175 psig (1200 kPa). The words "SEAT END" shall be cast on the exterior of the body seat end.
- 5.2 The plug shall be of one-piece construction and made of ASTM A126 Class B cast iron with a resilient facing per ASTM D2000-BG and ANSI/AWWA C517 requirements.
- 5.3 Radial shaft bearings shall be constructed of self-lubricating type 316 stainless steel. The top thrust bearing shall be Teflon.

6 Actuators

- 6.1 The valve shall be equipped with a handlever with dial indicator and open memory stop.
- 6.2 The plug shaft shall extend through the lever and contain flats for wrench operation, or power actuation.

7 Manufacture

- 7.1 Manufacturer shall demonstrate a minimum of five (5) years experience in the manufacture of plug valves. When requested, the manufacturer shall provide test certificates, dimensional drawings, parts list drawings, and operation and maintenance manuals.
- 7.2 The exterior of the valve shall be coated with a universal alkyd primer.
- 7.3 The valves shall be marked with the Manufacturer, Size, and Cold Working Pressure (CWP) on a corrosion resistant nameplate.
- 7.4 Eccentric Plug Valves shall be Series #5800RTL as manufactured by Val-Matic® Valve & Mfg. Corporation, Elmhurst, IL. USA or approved equal.

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ECCENTRIC THREADED PLUG VALVE SPECIFICATION

DATE 6-7-06

VAL-MATIC® VALVE AND MANUFACTURING CORP.

DRWG. NO.
VM-5800RTL-S