

# TEST REPORT

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**Report Number:** 1707-12001-002

**Report Issued:** August 10, 2012

**Project No.:** 20461

**Client:** Watermiser Manufacturing Company  
1106 Second Street, Suite # 637  
Encinitas, CA 92024

**Contact:** Mr. Ken Margulis

**Source of Samples:** The samples were sent by Watermiser Manufacturing Company and received by IAPMO R&T Lab in good condition on May 23, 2012 and July 19, 2012.

**Date of Testing:** June 11, 2012 through August 2, 2012

**Sample Description:** 303 stainless steel faucet flow control valves

Models: FCVSS Series: 0.5 GPM, 0.75 GPM and 1.0 GPM

**Note:** The faucet flow control valves are intended to be sold and used in pair, so they were tested in pair.

**Scope of Testing:** The purpose of the testing was to determine if the samples tested of the 303 stainless steel faucet flow control valves met the applicable requirements of ASME A112.18.1-2011/CSA B125.1-11 (with Updated No. 1 dated November 2011), entitled, "Plumbing Supply Fittings".

**Conclusion:** The samples tested of the 303 stainless steel faucet flow control valves, FCVSS Series as listed above, from Watermiser Manufacturing Company **COMPLIED** with the applicable requirements of ASME A112.18.1-2011/CSA B125.1-11 (with Updated No. 1 dated November 2011).

By our signatures below we certify that all the testing and sample preparation for this report was performed under continuous, direct supervision of IAPMO R&T Lab, unless otherwise stated.

Tested by,

A handwritten signature in black ink, appearing to read "Simon Hadi".

Simon Hadi, Test Technician

Reviewed by,

A handwritten signature in black ink, appearing to read "Andy Ho".

Andy Ho, Manager, Fitting Testing

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**Primary Standard:** ASME A112.18.1-2011/CSA B125.1-11, clauses tested / evaluated:

4.1	Supply Fittings	4.2	Servicing
4.4	Threaded Connections	4.9	Toxicity
5.1	General	5.3	Pressure and Temperature
5.4	Flow Rate	5.7	Resistance to Installation Loading
6.0	Markings		

Clauses of ASME A112.18.1-2011/CSA B125.1-11 not listed above were considered not applicable to subject product.

**Test Results:** All tests and evaluations were conducted per the written procedures specified in the standard.

ASME A112.18.1-2011/CSA B125.1-11

4.1 Supply Fittings

4.1.1 Rated Pressure – COMPLIED

4.1.1.1 The faucet flow control valves were designed for a rated pressure of 100 psi.

4.1.1.2 The faucet flow control valves were designed to function at a supply pressure between 20 psi and 125 psi.

4.1.2 Rated Temperatures – COMPLIED

The faucet flow control valves were designed for rated supply temperatures from 40 °F to 160 °F.

4.2 Servicing – COMPLIED

The faucet flow control valves were designed so that the replacement of wearing parts could be accomplished without removing the fittings from the supply system, without removing the piping from the body, without disturbing the finished wall, and by using standard tools or manufacturer provided tools.

4.4 Threaded Connections – COMPLIED

4.4.6 The dimensions of the 3/8” supply compression connection were compatible with SAE J512.

4.9 Toxicity

4.9.1 NSF/ANSI 61-9 – COMPLIED

The faucet flow control valves were tested to NSF/ANSI 61-9 under IAPMO R&T Lab report # 1707-12003.

4.9.2 Metal Alloys – COMPLIED

Metal alloys in contact with potable water contained less than 8% lead as required.

Finding: The stainless steel body contained 0.009% lead. No solder and flux were used.

5.1 General – FOLLOWED

Before testing, specimens were conditioned at ambient laboratory conditions for not less than 12 h. All applicable tests were conducted in accordance with Table B.1 of this standard.

5.3 Pressure and Temperature

5.3.1 Static and Dynamic Seals – COMPLIED

The seals of the faucet flow control valves did not leak or otherwise fail when tested in accordance with Clauses 5.3.1.2 to 5.3.1.4 of the standard. The test pressure was applied at 20 psi and 125 psi for 5 minutes each with the outlet blocked.

5.3.2 Burst Pressure – COMPLIED

The faucet flow control valves withstood a hydrostatic burst pressure of 500 psi for 1 minute without any failure when tested in accordance with Clause 5.3.2.3 (for line fittings). The pressure was applied to the inlet with the outlet blocked.

5.4 Flow Rate – COMPLIED

5.4.1 The faucet flow control valves met the maximum allowable flow rate requirement of 2.2 gpm (at 60 psi) as specified in Table 1, at the temperature and flowing pressure specified in Clause 5.4.2.3.

Finding:

Flow Version	Measured Flow Rate at 20 psi <i>(For Reference Only)</i>	Measured Flow Rate at 60 psi
0.5 gpm	0.68 gpm	1.04 gpm
0.75 gpm	0.95 gpm	1.54 gpm
1.0 gpm	1.21 gpm	1.96 gpm

**Note:** *The flow rate test was conducted in pair.*

5.7 Resistance to Installation Loading

5.7.2 Thread Torque Strength – COMPLIED

5.7.2.1 NOT APPLICABLE – The supply connections were not a NPT thread.

5.7.2.2 The threaded connections intended to seal water did not crack, strip, or leak when tested in accordance with Clause 5.3.1.3 with the threaded connection tightened to (a) the torque required to affect the seal; and (b) 150% of the torque required by Item (a).

5.7.2.3 The threaded supply connections complied with Clause 5.3.2.

## 6.0 Markings

### 6.1 General – COMPLIED (*Per manufacturer’s provided labeling photo*)

6.1.1 The faucet flow control valves will be permanently marked with the manufacturer’s name “Watermiser” on the UL 969 certified label. The marking can be visible after installation.

### 6.3 Packaging – **NOT EVALUATED**

6.3.1 The packaging shall be marked with the manufacturer’s name and model number.

Finding: No formal production packaging was received for evaluation.

### **Photograph of Sample Tested:**



FCVSS Series