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November 16, 2007

U.S. Nuclear Regulatory Commission  
 Document Control Desk

99900061

Washington, D.C. 20555-0001

Attention: Document Control Desk



Subject: Piston Check Cv Information

**Note:** Similar Notifications will be sent to each utility on the original distribution list, see March 7 letter.

Gentlemen,

As advised in our March 7 2007 letter CV tests were performed on three valve models, other than piston check, using similar waterway profile. Ten tests were conducted on various sizes of globe, needle and stop check valves. We concluded that, with one exception, all these valves based on the 60° Y-pattern design are affected (i.e. CV values are lower than those previously published) as documented in the table below. The exception is the 2NPS globe valve.

	Cv Value Y pattern 60", 1690/2680 Class Valves, 160 Schedule pipe				
Valve Size NPS	Current Catalogue value	Globe Valve (XXX-9076Z-ZZZZ)	Needle Valve (XXX-9096Z-ZZZZ)	Piston Check (XXX-9036W-ZZZZ)	Stop Check (XXX-8086Z-ZZZZ)
0.5	7	2.9	3	2.1	2.1
0.75	8	5	4.9	4.3	4.3
1	12	9.8	11.1	8.4	8.4
1.5	25	20	18	20*	20
2	60	60	52	45	45

 Estimated (conservatively, based on similarity )  
 Measured

A typical Velan figure number looks like XXX-YYYYY-ZZZZ, where the first three characters represent the connection type and size while the last 4 characters indicate body material and trim; they have no influence on the test results and therefore are not identified in the above table. The middle group designates the valve pressure class and model; please refer to the explanatory chart from our catalogue offered on page 2.

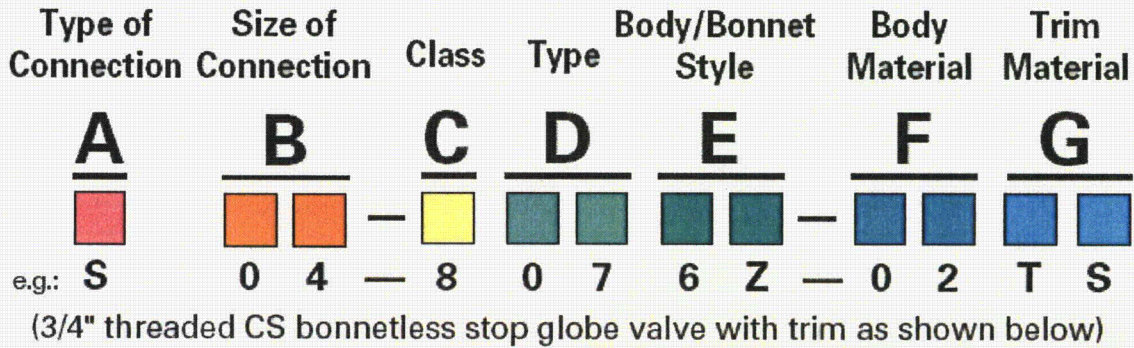
For conservative reasons the test was performed on the 1690 / 2680 pressure class valves which have the same waterway dimensions. These results cover also pressure classes 1500 and 2500.

In actual applications the CV will exhibit minor improvements from the values above for pressure classes up to and including 900 due to lower interference introduced by the connecting piping.

\*This is actually the case for the 1.5 NPS piston check valve on the original letter, which was tested based on 900 class piping.

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**C CLASS**

2 - 600 5 - 4500 8 - 1690  
 3 - 1500 7 - 900 9 - 2680  
 4 - 2500

**D TYPE**

01 - Flow Control  
 03 - Piston Check  
 07 - Stop Globe  
 08 - Stop Check  
 09 - Needle

**E BODY/BONNET STYLE**

6S - Y-Pattern Bellows Sealed  
 6W - Y-Pattern Welded Bonnet  
 6Z - Y-Pattern  
 7Z - Y-Pattern 45° two-piece

We do not have sufficient information concerning the specific system and function applicable to these valves and therefore we cannot assess whether a substantial safety hazard exists as a result of a lower actual flow coefficient. A great number of these valves have been in service for many years now and no adverse effects have been reported to date, such as reduced flow, increased pressure loss, etc.

Nevertheless, we request that you review the individual applications for these valves. Should you run across any situation where the lower Cv will impact significantly the safe operation of the plant, please contact Velan Valve Corp. and we will work with you to find a solution.

CV Information in our catalogues and active project drawings will be revised to reflect the new values.

We trust this meets with your acceptance. Should additional information be required please feel free to contact the undersigned.

Sincerely yours,

Velan Inc.



Victor Apostolescu, Eng.  
 Vice President Quality Assurance