



To Whom It May Concern:

Attached is the information on checking accuracy. This includes minimum equipment requirements and a test bench schematic. It also includes our recommended accuracy check procedure for various models. Our philosophy is to check the backflow test kit for accuracy as it is used in the field which is with the pointer moving downscale. It is also our philosophy that you should check the test kit at the critical pressures and for backflow prevention assemblies the pass/fail pressures are 5 PSID, 2 PSID and 1 PSID. For this reason, we recommend the minimum accuracy check points of 5, 2 and 1 PSI downscale. The Factory calibration for new test kits conforms to ASSE Standard 1064 Performance Requirements for Backflow Prevention Assembly Field Test Kits with test points at 14, 7, 5, 2 and 1 PSID and this number of test points exceeds the recommendations of ASME B40.100 Pressure Gauges and Gauge Attachments for gauges the accuracy of backflow test kits. Both ASSE 1064 and ASME B40.100 are ANSI National Standards. Lastly we have included a sample of an accuracy cert that you may want to model your form after.

We do not manufacture Calibration Standards or the equipment in our test stands. We purchase Calibration Standards (test instruments) from other companies and have them certified for accuracy by those companies so that we have independent certificates stating that the instruments we use are accurate and traceable to NIST. The tubing, regulators, pressure indicators, metering input and vent needle valves are commercially available. Pressure sources are commonly compressed air or bottled Nitrogen and you want to regulate that pressure down so you don't damage your Calibration Standard. The minimum recommended instrument would be something like an Ashcroft model 45-1082-AS-02B 0-15 PSI, 0.25% accurate which is over 5 times more accurate than the backflow test kit. A 0-15 PSI, 0.25% accurate test gauge from Ametek US Gauge, Ashcroft or Wika would be fine for checking and certifying the accuracy of backflow test kits. All of the above-mentioned instruments exceed the minimum recommendations of ASME B40.100 for calibration standards suitable for checking the accuracy of backflow prevention test kits. There are other suitable instruments and as long as their error tolerance is +/- 0.05 PSI or less, they would be suitable.

You can start by checking the accuracy and certifying test kits. Any that you find out of tolerance can be sent back to us for service or to the nearest service center. A list of authorized service centers can be found at www.backflowtestkits.com.

Please contact me should you have any questions.

Best regards,

Mike Lueck
President