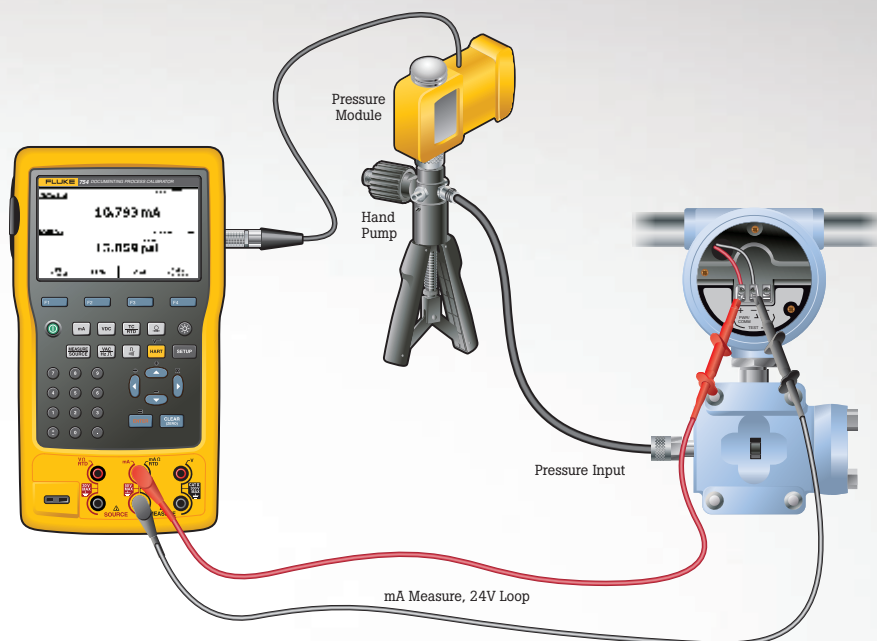


TECH TIPS

Sometimes it is necessary to trim the input sensor of the transmitter more than once. It is critical that the pressure module be zeroed before test and adjustment. For best Badadjustment success:

- After pressing Fetch for the pressure measurement, select the trim button quickly before the pressure measurement changes.
- Give the measured **mA** and pressure time to settle for best measurement results.
- Always de-bug the pressure test setup for leaks in the shop before going to the field, including installing the pressure module connection adapter to the hand pump.
- If the full scale value of the transmitter is less than 25 % of the full scale of the pressure module, select a lower range pressure module for best results.
- If performing higher pressure calibrations with a hydraulic pump, use the correct fluid such as mineral oil or de-ionized water. Standard tap water will leave deposits in the pump and cause erratic operation, leaks or difficulty priming.
- If the pass/fail accuracy is set at the limits for the transmitter, adjust the transmitter if the errors are greater than 25 % of limits.
- If the errors are less than 25 % of limits, it might be best to not adjust the transmitter as adjusting might make it less accurate.



To perform the test:

- STEP 1** Isolate the transmitter from the process being measured and its loop wiring. If measuring the mA signal across the transmitter test diode leave the wires intact, but note this method does not give the best mA measurement accuracy.
- STEP 2** Connect the mA measurement jacks of the 754 to the transmitter.
- STEP 3** Connect the pressure module cable to the 754 and connect the transmitter test hose from the hand pump to the transmitter.
- STEP 4** Press the HART button on the calibrator to see the configuration of the transmitter.
- STEP 5** Press HART again and the calibrator will offer the correct measure/source combination for the test. If documenting the calibration press As-Found, input the test tolerance and follow the prompts. If the measured mA signal at the test points is found within tolerance the test is complete. If not, adjustment is required.
- STEP 6** Select adjust and trim the transmitter's pressure zero, mA output signal and input sensor.
- STEP 7** After adjustment select As-Left, document the condition of the transmitter after adjustment and if the test passes, it is complete.

Additional resources

For more in depth information about this application check out these videos and application notes from Fluke.



See the smart pressure calibration video at:
www.fluke.com/pressurevideo



HART Smart Transmitter calibration application note at:
www.fluke.com/smarttranappnote