FLUKE®
Calibration

PK-PPC-BG-DVU Dual Volume Unit and Interconnections Kit

P/N 3070389

The maximum working pressure of the DVU is 2 MPa (300 psi). Do not use the DVU in a pressure system that can potentially experience pressures greater than the maximum working pressure.

⚠Warning

To prevent personal injury, only assemble and operate high-pressure systems if you know the correct safety procedures. High-pressure liquids and gases are hazardous and the energy from them can be released without warning.

Note

This kit is intended for use with either the PPC BG15k or 7250LP low pressure controller/calibrators. Due to its flexibility in usage, there will be extra fittings not used during installation. On the 7250LP, the test(+) port is labeled TEST, while the test(-) port is labeled REFERENCE.

Interconnections Kit, P/N 3070389, includes:

DESCRIPTION	QTY	FIGURE CALLOUT	PART NO.
Dual Volume Unit (DVU)	1	N/A	3119872
Tubing, PFA, 1/4 in. x 480 cm	1	1	3232378
Adaptor, 1/4 in. tube x O-seal 1/8 in. NPT M	2	2	3140484
Adaptor, 1/4 in. tube x 1/4 in. NPT M	4	3	3134427
Union, 4P	2	4	3135104
Tee, 1/4 in. tube	2	5	3134453
Adaptor, 1/4 in. tube x 1/4 in. NPT F	2	6	3134430

To Install the Dual Volume Unit (DVU)

Identify a location for the DVU™ that minimizes the length of tubing between the DVU connections and the pressure controller TEST(+) and TEST(-) ports. The PPC BG15K and the DVU are designed to stack one on top of the other. The DVU may be rack mounted using the rack mount kit (P/N 3338072). Recommended configurations are for the PPC and DVU to be stacked directly one on top of the other, or with their rear panels face to face. When used with the 7250LP, the DVU should be placed on top of the 7250LP.

To Connect the DVU and PPC BG15K or 7250LP

Note

You will be making and connecting two identical assemblies, one for the TEST(+) port and one for the TEST(-) port.

1. a) For use with a PPC BG15K: Install the ¼ in. tube x O-seal 1/8 in. NPT M (2) into the PPC BG15K TEST(+) and TEST(-) ports.

   b) For use with a 7250LP: Install the ¼ in. tube x ¼ in. NPT M (3) into the 7250LP TEST and REFERENCE ports using Teflon tape as a sealer.

2. Install a union (4) into the adaptors that were installed into the pressure controller in step 1.

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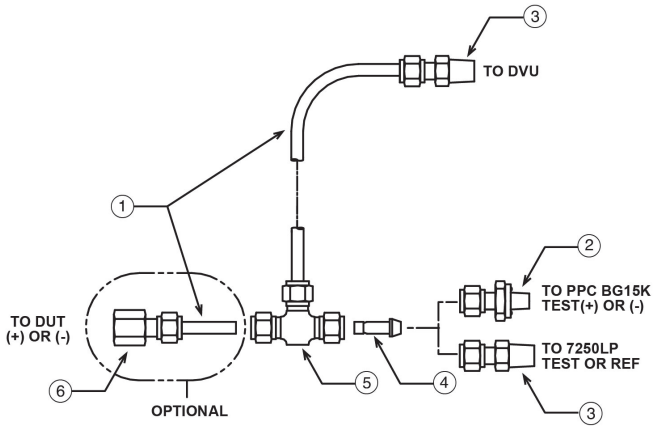

Figure 1: Interconnections Kit

3. Install a ¼ in. tube tee (5) onto each of the union/adaptor assemblies that were just installed in the pressure controller ports in steps 1 and 2. Orient the tee with consideration for the connection to the DVU (Figure 1 shows the DVU stacked on top of the pressure controller).
4. Install the ¼ in. tube x ¼ in NPT M (3) adaptors into the two ports of the DVU using Teflon tape as a sealer.
5. Cut lengths of PFA tubing as needed to connect the ¼ in. tube tee to the adaptors on the DVU. Take care that the cut is at a right angle to the tube and only cut the length needed.
6. The Device Under Test (DUT) should be connected to the previously unused ¼ in. tube tee connection. For a DUT with ¼ in. NPT male connections, cut a small length of PFA tubing to use as a union between the ¼ in. tube tee (5) and the ¼ in. tube x ¼ in. NPT F adaptor (6).