PK-mol-4VCR-1/4SWG Adaptor Kit

Installation Instructions

FLUKE Calibration

ADAPTOR KIT, P/N 401821, INCLUDES

QTY	PART NO	DESCRIPTION
4	100247	Nut, 1/4 in. SWG
4	100248	Ferrule, front 1/4 in. SWG
4	100249	Ferrule, rear 1/4 in. SWG
1	101984	Port connector, 1/4 in. tube
4	102070	O-ring, 2-202 Brown Viton
1	102145	Adaptor, 4VCR F x 1/4 in. SWG
2	102454	Gland, 4VCR x 1/4 tube
2	102455	Nut, 4VCR F
2	102821	Nut, 4VCR M
1	102916	Adaptor, 4VCR M x 1/4 in. SWG

This adaptor kit is for making flowpath connections between the 1/4 in. VCR fittings of a molbloc, molstic, or a metering valve kit, and devices with 1/4 in. Swagelok type connections. The kit may be used in combination with other adaptors to connect to devices with fittings such as NPT or AN-type fittings. This kit includes enough adaptors to connect to both the inlet and outlet of one molbloc, or the outlet side of at least two molblocs, molstics or metering valve kits.

INSTRUCTIONS

When Using a molstic (without metering valve kit):

A low or mid flow molstic has a 1/4 in. VCR female outlet fitting. The high flow molstic outlet is normally 1/2 in. VCR, but the molstic comes with an adaptor so that its outlet can also be 1/4 in. VCR female. Use the adaptor kit to connect to a molstic in one of the following ways:

- Use the 4VCR gland with VCR male nut to connect to the molstic's 1/4 in. VCR female outlet fitting.
  A device with a 1/4 in. Swagelok fitting can be connected directly to the tube end of the gland using the 1/4 in. Swagelok nuts and ferrules.

- Connect a device to the molstic using a 1/4 in. tube. First connect the 4VCR M x 1/4 in. SWG adaptor to the molstic outlet fitting. The tube will thread onto the Swagelok end of the adaptor using the 1/4 in. Swagelok nuts and ferrules.

- To reduce the overall length and volume of the adaptors on a low or mid flow molstic, you may replace the molstic's 1/4 in. VCR female union with either the 4VCR F x 1/4 in. SWG adaptor, or the 4VCR gland with a VCR female nut. These two (2) adaptors will connect to either a Swagelok tube, or a Swagelok threaded tip, respectively.

When Adapting from a Metering Valve Kit:

Like the low and mid flow molstics, both the low and mid/hi flow metering valve kits have a 1/4 in. VCR female union at their outlet. Follow the instructions for adapting from the low and mid flow molstic above.

When Connecting to a molbloc (without molstic):

When a molstic is **not** used, this adaptor kit will connect a molbloc with 1/4 in. male VCR fittings directly to devices or tubes with 1/4in. Swagelok fittings. Depending on what will be connected to the molbloc, adapt to both the inlet and outlet of the molbloc in one of the following ways.

- Use both 4VCR glands with both VCR female nuts.

- Use a combination of one (1) VCR gland with VCR female nut and the 4VCR F x 1/4 in. SWG adaptor.

PN 3152612
April 2014
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PROCEDURES FOR MAKING CONNECTIONS

Soft O-Rings

- *Always use the soft Viton O-rings provided for making VCR connections to the molbloc.*

The O-rings supplied for making molbloc and other VCR® connections are:

- Size: 2-202 (Parker Seal Group, O-Ring Division)
- Material: Fluorocarbon rubber (FKM), Viton®

Four (4) O-rings are supplied in this adaptor kit. If frequent fittings changes will be made, replacement O-rings should be purchased. Avoid using a dirty or damaged O-ring.

To Connect *VCR* Fittings:

❶ Place the O-ring securely against the sealing surface inside the female nut.

❷ Insert the male fitting and tighten by hand until resistance is felt when the O-ring begins to compress. When connecting an adaptor directly to the molbloc, hold the molbloc by hand and rotate the female nut.

❸ Turn the nut an additional 1/2 turn beyond the point of resistance. A wrench may be used on the nut if desired, but do not tighten beyond one half turn. If more than one half turn is needed to make a leak free connection, the O-ring may be damaged and should be replaced.

- *Never use wrenches to hold the molbloc body.*

To make original *Swagelok* connections,

❶ Seat the tube fully into the Swagelok fitting and, using fingers, turn the nut until resistance is felt.

❷ Turn the nut 1 1/4 turns beyond this point of resistance with a wrench.

❸ For reconnecting fittings later, return the nut to the point of increasing resistance, then turn slightly more with a wrench.