



molstic-S™ Supply Only Platform 1/4 in. and 1/2 in.

P/Ns 401876 and 401877

Installation Sheet

The 1/4 in. and 1/2 in. supply only molstic-S platforms, P/N 401876 and 401877, provide inlet gas pressure regulation to either the Device Under Test (DUT) or the downstream molstic-S mounting systems. They are used to control the pressure supplied to an upstream DUT, or to adjust the flow rate through the system while calibrating a downstream DUT.



High pressure gases are potentially hazardous. Energy stored in these gases can be released unexpectedly and with extreme force. High pressure systems should be assembled and operated only by personnel who have been instructed in proper safety practices.

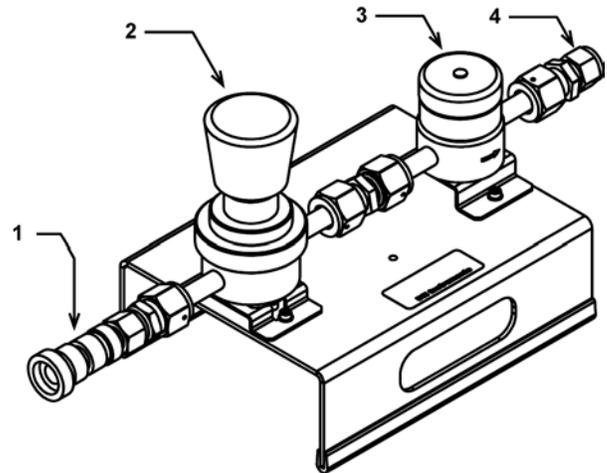


Figure 2 1/2 in. Supply Only molstic-S

1. Quick connect adaptor (includes stem with 1/2 in. SWG - not shown)
2. Pressure reducing regulator
3. Flow metering/shut-off valve
4. Outlet adaptor, 1/2 in. tube x 1/2 in. male VCR

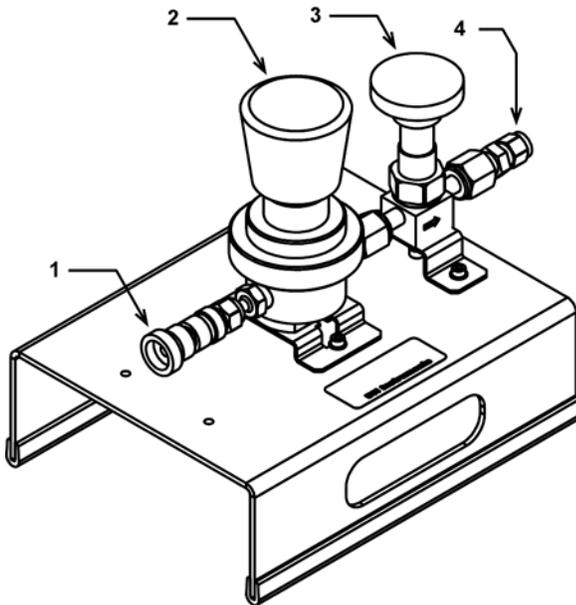


Figure 1 1/4 in. Supply Only molstic-S

1. Quick connect adaptor (includes stem with 1/4 in. SWG - not shown)
2. Pressure reducing regulator
3. Flow metering/shut-off valve
4. Outlet adaptor, 1/4 in. tube x 1/4 in. male VCR

OPERATION OF SUPPLY ONLY MOLSTIC-S

1. Set regulator outlet pressure to minimum.

Rotate the knob of the pressure reducing regulator in the counterclockwise direction until the spring force of the diaphragm is relieved. Insure that the shut-off valve is in the closed position.



Be sure that the molstic-S supply only platform shut-off valve is closed prior to connecting the quick connect stem to the quick connect body (located on the inlet side of the regulator).

2. Connect the gas supply.

Connect the gas supply to the quick connect stem (either 1/4 in. or 1/2 in. tube). The gas supply pressure should not exceed 1.7 MPa (250 psig). Insert the stem into the quick connect body.

3. Connect the outlet of the supply only platform to either the DUT or the inlet of the molstic-S.

- ④ The outlet pressure of the pressure reducing regulator is controlled by adjusting the position of the control knob. Rotating the knob clockwise raises the outlet pressure. Counterclockwise rotation, coupled with venting of the downstream side of the regulator plumbing, lowers the outlet pressure.
- ⑤ Make final adjustments of control pressure in the direction of increasing pressure in order to obtain the most accurate and stable set point.

INSTALLATION OF THE PRESSURE REDUCING REGULATOR ONTO MOLSTIC-S PLATFORM

The pressure reducing regulator can be removed from the supply only molstic-S platform and mounted onto the molstic-S platform. Use the following procedure to install the pressure reducing regulator onto the molstic-S platform:

- ① Disconnect the gas supply from the supply only platform and vent any residual pressure.
- ② Using a pair of properly sized open-end wrenches loosen the VCR® swivel nut on the downstream side of the VCR double male union between the regulator and the flow control/shut-off valve. Leave the double male union assembled to the regulator.
- ③ Using the proper size hex wrench, remove and retain the socket head cap screws, washers, and nut plate that mount the regulator and its bracket to the supply only molstic-S platform, along with the VCR double male union. Do not disassemble the bracket from the regulator.
- ④ Using a pair of properly sized wrenches remove the VCR x tube adaptor on the inlet end of the molstic-S, remove the VCR gasket and discard. Retain the adaptor for future use.
- ⑤ Place a new VCR gasket (P/N 102183 for 1/4 in. or 102923 for 1/2 in.) securely against the sealing surface inside the female VCR swivel nut of the molstic-S inlet fitting.
- ⑥ Place the regulator with its bracket on top of the molstic-S platform.

- ⑦ Align the regulator's male VCR fitting with the mating female swivel nut and thread the nut onto the fitting.
- ⑧ Tighten the female nut finger-tight.
- ⑨ Hold male body stationary with a backup wrench. Tighten the female nut 1/8 turn past finger-tight.



Over-tightening will damage the sealing beads and possibly cause system leakage. Do not re-use VCR gaskets.

- ⑩ Place the flat side of the 60 mm nut plate under the molstic-S platform. Align it with the holes in the platform and the regulator bracket. Hold it in place.
- ⑪ Thread the socket head cap screws through the regulator bracket and tighten securely into the nut plate.

ACCESSORIES INCLUDED WITH THE SUPPLY ONLY MOLSTIC-S SHIPMENT

The following accessories are included in the supply only molstic-S shipment:

P/N 401941

1/4 in. Supply Only molstic-S Accessory Kit

DESCRIPTION	QTY	PART NO.
Gasket, VCR, 1/4 in.	2	102183
O-ring, VCR face seal, 1/4 in.	2	102070
Tubing, 1/4 in. PFA, 50 cm	1	101450-Z
Quick connect stem, 1/4 in.	1	102458

P/N 401949

1/2 in. Supply Only molstic-S Accessory Kit

DESCRIPTION	QTY	PART NO.
Gasket, VCR, 1/2 in.	2	102923
O-ring, VCR face seal, 1/2 in.	2	102912
Tubing, 1/2 in. PFA, 50 cm	1	103227-Z
Quick connect stem, 1/2 in.	1	103235

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