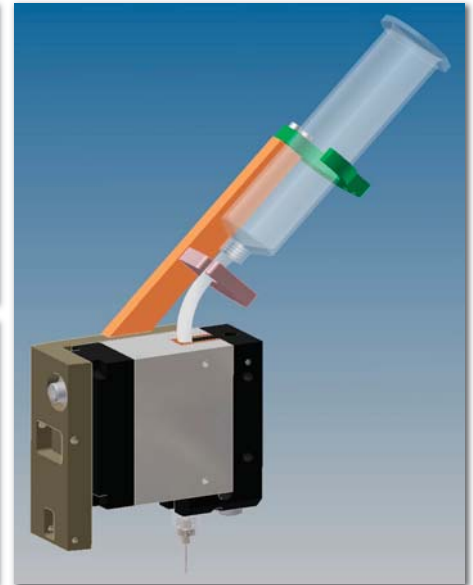


Pinch Tube Valve

Accurate & Repeatable Dispensing with Built-In Suck Back

The pinch tube is an accurate and repeatable dispense method *ideal for materials that are either abrasive, corrosive, or cure quickly*. The valve is adjustable for feed rate and also incorporates an adjustable suck-back for drip-free dispensing of all fluid types and viscosities. The wetted parts of the valve are completely disposable and easily replaced for quick and mess-free clean up.

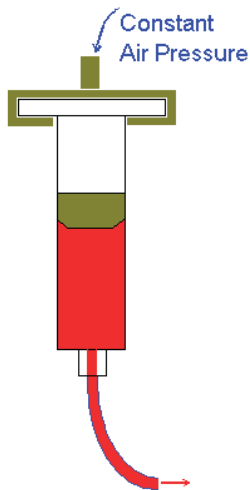
Incorporating the GPD Global® design methodology of toolless operation and a quick release tube holder facilitates valve clean up. The tube holder requires only a single button press to remove it from the valve. Once disconnected from the valve, the tube is easily removed and exchanged with a new one.



Pinch Tube with 30 cc Syringe

Various feed tube materials are available depending on the material being dispensed. The most common tube material is Silicone, but other types, such as UV Resistant or Teflon, are available. Standard disposable Luer-Lok® needles are recommended and come in a variety of configurations to meet your application needs.

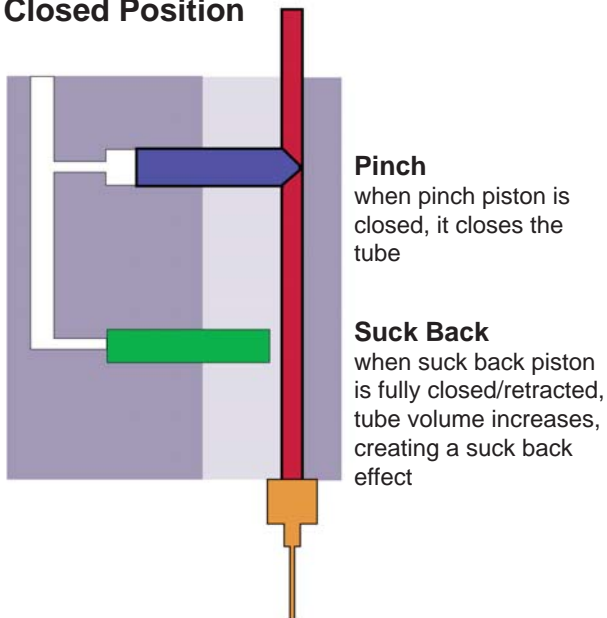
OPERATION



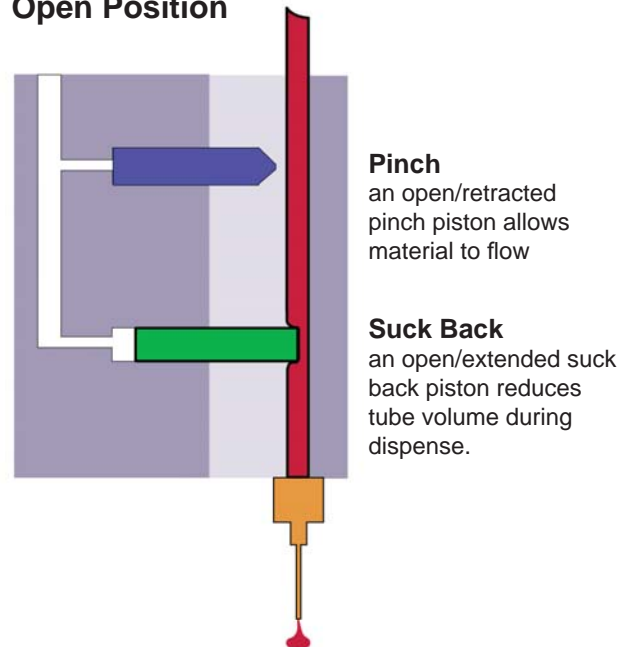
The pinch tube valve provides both positive shutoff and material suck-back. A disposable tube carries the material from the syringe, through the valve, to the needle. Like all valves, the syringe operates under positive air pressure to promote material flow.

When the upper piston (shown in dark blue) is fully extended the valve is closed and no material can flow. When dispensing material the lower piston extends (shown in green), partially compressing the tube. The upper piston then retracts, allowing the material to flow. When dispensing is complete, the upper piston extends, again completely restricting the flow of material. The lower piston then retracts, releasing the tube. As the tube expands, material is sucked back from the dispense needle creating a suck-back effect.

Closed Position



Open Position



Cleaning this valve is very simple, as the tube is the only wetted part. To change out the tube the dispense needle is first removed, the backing plate removed, and then the tube is removed and disposed. A new tube is inserted and the valve reassembled. Pre-assembled tubes are available from GPD. A very long service life can be expected from this valve.