

## Product Note, PN 419, Rev 2 3571 & 4571 Two Step Diaphragm Valve

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The series 3571 and 4571 are normally closed (NC) pneumatically actuated diaphragm valves with two operation modes — metered and fully open. The actuator has separate actuation ports, one for each mode. Metered flow rate is preset at the factory but also may be adjusted in the field. The full flow mode (fully open) always takes the valve fully open and will override the metered flow mode. The valves are available in the AP, AZ and AK series. Other than the actuator itself, all parts are common with other valves.

The two step operation can be used wherever two flow rates are needed. One application is soft venting of vacuum chambers to minimize turbulence. Rapid filling of chambers can cause particles to dislodge and circulate in the chamber. Slowly pressurizing the chamber initially minimizes the particle disturbance. The new valve replaces a typical installation of two valves in parallel, one with a restrictive orifice to limit flow and one without. The single valve reduces the cost, minimizes plumbing and requires less space.

## **Specifications**

Operating pressure: 125 psig

Pneumatic valve Normally closed (NC)

Actuation pressure: 70 to 110 psig Flow capacity: 3571 Cv 0.29

4571 Cv 0.5

Metered flow<sup>1</sup>: 3571 10 to 200 slpm at 80 psig N2

4571 10 to 350 slpm at 80 psig N2

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<sup>&</sup>lt;sup>1</sup> Please refer to data sheet for metered flow range tolerance.