# Fixed Orifice Flow Control Restrictor Valves

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PRODUCTS COMPANY

Fixed Orifice Controls provide free flow in one direction and restricted (metered) flow in the reverse direction. They are standard Kep-O-seal<sup>®</sup> or Kepsēl<sup>®</sup> check valves equipped with a calibrated orifice drilled through the valve poppet nose. Kepner's bubble-tight Flexible Seal Seat<sup>™</sup> ensures that the reverse flow is precisely controlled by confining it to the calibrated orifice. Such valves are often used in charging lines for cylinders, containers, or accumulators where it is desired to rapidly charge and then bleed back the charged fluid at a pre-determined rate. These valves can handle many other applications.



#### **Features and Benefits**

- Generous flow passages allow full free-flow with minimal pressure drop
- Metered reverse flow
- Tamperproof internal orifice
- Rugged and dependable

#### **Valve Specifications**

- Fixed Orifice Flow Control Restrictor sizes and specifications are the same as those shown for the standard Kep-O-seal<sup>®</sup> or Kepsēl<sup>®</sup> check valves, except for cracking pressure and internal leakage which obviously do not apply.
- The valve orifice is drilled to customer's specifications within standard tolerances.

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Consult Factory or Distributor for more help. Customer/user is solely responsible to select products suitable for their specific application requirements and to ensure proper installation, operation and maintenance of these products. Improper selection or use of products can cause personal injury or property damage. All sales are subject to Kepner Products Company Standard Terms and Conditions of Sale. Designs are subject to change without notice.

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**ANSI Symbol** 

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### Flow Control Restrictor Valve Application



Control Restrictor Valve

Differential gas pressure across the inline flow control restrictor valve causes gas to flow through the check valve portion of the valve causing the piston in the single acting cylinder to move to the right. As the pressure is reduced, flow through the restrictor portion of the control valve continues allowing thepiston in the cylinder to move to the left at a predetermined rate based on the size of the restrictor orifice and the piston spring force. The piston retracts (moves to the left) until it returns to the original position.

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