**General Characteristics**

**General Definition**
Versatile, bidirectional and one-way V-Flow® custom dispensing valve can be optimized for your system to allow for effective and precise flow control and dosing. A wide range of liquid viscosities, gases or even powders can be dispensed on demand. These elastomeric dispensing valves are ideal for effective drip control and dosage dispensing.

**Working Principle**
V-Flow® is designed to activate with either manual or mechanical applied pressure or vacuum between 0.25 to 25+ psi. Air recovery occurs through the same opening. Performance temperature range is from -50°F to 400°F (-45°C to 204°C) with reliable performance.

**Physical Characteristics**
Manufacturing can be held to diameter tolerance of ± 0.08 mm (0.003 inches) and slit length tolerances of 0.08 mm (0.003 inches) maximum. In some cases, even closer tolerances are possible. Optimal dispensing accuracy can be achieved with the right material type and durometer. For this product family the typical hardness is 30 to 40 duro.

**Design and Assembly**

**Design: VA31129 & VA31800**

**CAD Rendering**

**Cross Section View**

**Design: VA31772**

**Mounting Instructions**
Contact Vernay for recommended seat design to ensure proper performance.

**Available Products**

<table>
<thead>
<tr>
<th>Design ID</th>
<th>Product Number</th>
<th>Product Image</th>
<th>Valve Dia</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA31129</td>
<td>V050010300</td>
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<td>0.374</td>
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<td>VA31800</td>
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<td>0.719</td>
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</tbody>
</table>

Slit Type: Cross

**Contact**
Vernay Sales: +1-404-994-2000  
sales@vernay.com  
www.vernay.com
Valve Performance

Performance data listed in the chart below is based on internal lab testing; performance may vary with actual use. It is recommended that all valve designs and materials be tested by you, the customer, under your application and conditions to verify that performance meets your requirements.

This valve family is intended as a starting point in developing your custom valve to meet your specific application requirements. Please contact us for samples or to discuss your unique functional characteristics. We will gladly assist you with valve selection, custom material and design options as well as prototype options.

Available Products

<table>
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<tr>
<th>Design ID</th>
<th>Product Number</th>
<th>Avg Open Pressure (Liquid/Water)</th>
<th>Avg Forward Flow</th>
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<tr>
<td></td>
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<td>mbar</td>
<td>psi</td>
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</tbody>
</table>

DISCLAIMER: Functional performance is measured under laboratory conditions according to Vernay Test Protocols and relates only to the samples tested. Vernay recommends validating fitness for use of the selected parts in their specific application. The test data in this document are not for specification purposes. Media resistance and service temperature range are indicative. Please contact Vernay for specific media and temperature exposures. This is provided for general information purposes only. It is accurate and correct to the best of Vernay’s belief; however, Vernay disclaims any warranties, expressed or implied, as to this information and assumes no obligation or liability therefore. Much of this information is proprietary to Vernay and by providing this information Vernay does not waive or release any patent, copyright, or other proprietary right it may own in this information.

Contact

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