Confirm part is present and contacted even on as-cast surfaces!

Plungers stay retracted during part loading while air flow travels through the work support. Hydraulic pressure advances the plunger exerting only spring force as it makes contact with the part. This closes the integral air valve to indicate part is present and contacted. Hydraulic pressure then automatically sequences, “freezing” the plunger.

- Available in 8.9 kN or 17.8 kN capacity.
- Order with four bolt base or cartridge only.
- Once support is locked, air sensing positively confirms both contact and part present.
- Use Vektek’s Air Sensing Control Kit 45-0824-00 for easy setup.
- Four bolt base is compatible with Vektek In The Port Flow Control and In The Port Sequence Valves.
- Uses Vektek’s BHC technology to guard against corrosion.
- O-Ring face seal design makes machining cavities easier.
- Max air operating pressure is 1 bar.

Standard G-Series porting and alternate O-Ring manifold face seal is located in the base of the support for bolt down installation. The base can be removed for direct cartridge mounting.

### Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Support Capacity (kN)*</th>
<th>Mounting Style***</th>
<th>Contact Force (N)</th>
<th>Stroke (mm)</th>
<th>Base Dimensions (mm)</th>
<th>Retracted Height (mm)</th>
<th>Working Oil Capacity (cm³)**</th>
<th>Port X Depth for Optional In-Port Valves****</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-0706-10-PS</td>
<td>8.9</td>
<td>Cartridge Base/Manifold</td>
<td>4.4-26.7</td>
<td>6.5</td>
<td>N/A</td>
<td>N/A</td>
<td>57.8</td>
<td>N/A G1/8 x 15.16</td>
</tr>
<tr>
<td>41-0806-20-PS</td>
<td>8.9</td>
<td>Cartridge Base/Manifold</td>
<td>37 x 36 x 36</td>
<td>74.8</td>
<td>N/A</td>
<td>77.2</td>
<td>3.3</td>
<td>N/A G1/8 x 15.16</td>
</tr>
<tr>
<td>41-0708-10-PS</td>
<td>17.8</td>
<td>Cartridge Base/Manifold</td>
<td>13.5-44.5</td>
<td>6.5</td>
<td>N/A</td>
<td>94.2</td>
<td>0.8</td>
<td>N/A G1/8 x 15.16</td>
</tr>
<tr>
<td>41-0808-20-PS</td>
<td>17.8</td>
<td>Cartridge Base/Manifold</td>
<td>37 x 44 x 44</td>
<td>77.2</td>
<td>N/A</td>
<td>3.3</td>
<td>0.8</td>
<td>N/A G1/8 x 15.16</td>
</tr>
</tbody>
</table>

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* Support capacities are listed at 350 Bar maximum pressure. Support capacities for other pressures are shown in the fluid advance High Capacity and Part Present Sensing load capacity chart.

** Restock flow rate to a maximum of 2.13 l/min.

*** For cartridge mount models, see cavity dimensions drawings in this catalog section.

**** For complete dimensions, see fluid advance work supports (Section B)

NOTE: The maximum system back-pressure a fluid advance work support can overcome is 0.7 bar (0.07 MPa). Returning back-pressure greater than 0.7 bar (0.07 MPa) may cause slow or failed retraction.
Work Supports
Part Present Sensing, High Capacity, Fluid Advance

For proper sealing, the mating surface must be flat within 0.08 mm with a maximum surface roughness of 1.6 μm Rₐ.

Cartridge Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>P</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-0806-20-PS</td>
<td>74.8</td>
<td>6.5</td>
<td>23.7</td>
<td>37</td>
<td>5.5</td>
<td>23</td>
<td>14.3</td>
<td>7.1</td>
<td>36</td>
<td>36</td>
<td>27</td>
<td>13.5</td>
<td>27</td>
<td>13.5</td>
<td></td>
</tr>
<tr>
<td>41-0808-20-PS</td>
<td>94.2</td>
<td>6.5</td>
<td>36.1</td>
<td>37</td>
<td>9.3</td>
<td>30</td>
<td>19</td>
<td>9.5</td>
<td>44</td>
<td>44</td>
<td>33</td>
<td>16.5</td>
<td>33</td>
<td>16.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>R</th>
<th>S</th>
<th>T</th>
<th>V</th>
<th>W</th>
<th>X</th>
<th>Y</th>
<th>AA</th>
<th>AB</th>
<th>AC</th>
<th>AD</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-0806-20-PS</td>
<td>4.5</td>
<td>8</td>
<td>28</td>
<td>11</td>
<td>M8</td>
<td>5</td>
<td>G1/8</td>
<td>10.5</td>
<td>7</td>
<td>9</td>
<td>M5</td>
</tr>
<tr>
<td>41-0808-20-PS</td>
<td>5.5</td>
<td>9.5</td>
<td>27</td>
<td>17</td>
<td>M12</td>
<td>6.5</td>
<td>G1/8</td>
<td>10.5</td>
<td>10</td>
<td>13</td>
<td>M5</td>
</tr>
</tbody>
</table>

PART PRESENT SENSING WORK SUPPORT AIR FLOW

Workpiece

POPPET CLOSED & AIR PRESSURE BUILDS

Work Support Advances

Oil Feed Hole

Air Feed Hole

Max. B Valve
Fluid Advance Part Present Sensing Cartridge Mount Cavity Check List

- Confirm capacity of item selected.
- Note the sealing surface finish requirements.
- Minimum depth specification represents the nominal depth of the standard Vektek base dimension.
- Confirm cavity drawing is appropriate for the model number used.
- Note specified thread depth when cutting threads.
- When using a bottoming tap tool, modifications may be required.
- When hand tapping threads, perpendicularity is essential.

### Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>M</th>
<th>V</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-0706-10-PS</td>
<td>57.8</td>
<td>6.5</td>
<td>43.7</td>
<td>6.3</td>
<td>5.5</td>
<td>23</td>
<td>14.3</td>
<td>7.1</td>
<td>23.3</td>
<td>11</td>
<td>M8 x 1.25 x 5</td>
<td></td>
</tr>
<tr>
<td>41-0708-10-PS</td>
<td>77.2</td>
<td>6.5</td>
<td>58.1</td>
<td>8.5</td>
<td>9.3</td>
<td>30</td>
<td>19</td>
<td>9.5</td>
<td>29.7</td>
<td>17</td>
<td>M12 x 1.75 x 6.5</td>
<td></td>
</tr>
</tbody>
</table>

**Work Supports**
Part Present Sensing, High Capacity, Fluid Advance

**Fluid Advance Part Present Sensing Cartridge Mount**

- POPPET OPEN & AIR VENTS UNDER CONTACT BOLT
- INSTALL BOTH O-RINGS
- OIL FEED HOLE
- AIR FEED HOLE
- WORK SUPPORT ADVANCES
- POPPET CLOSED & AIR PRESSURE BUILDS
- PART PRESENT SENSING WORK SUPPORT AIR FLOW

**Patent Pending**
## Work Supports

### Cavity Dimensions

**VEKTEK FLUID ADVANCE PART PRESENT SENSING**

**HIGH CAPACITY CARTRIDGE MOUNT WORK SUPPORT CAVITY DIMENSIONS**

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#### Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>Installation Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-0706-10-PS</td>
<td>M26 x 1.5</td>
<td>9</td>
<td>24.5</td>
<td>13.5</td>
<td>27</td>
<td>5</td>
<td>3.2</td>
<td>2</td>
<td>9.8</td>
<td>50 N·m</td>
</tr>
<tr>
<td>41-0708-10-PS</td>
<td>M35 x 1.5</td>
<td>14.5</td>
<td>33.5</td>
<td>21.5</td>
<td>36</td>
<td>5</td>
<td>4.7</td>
<td>3</td>
<td>12</td>
<td>70 N·m</td>
</tr>
</tbody>
</table>

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![Diagram](image_url)