PRODUCT DESCRIPTION: The CBV flow balancing brass venturi provides highly accurate flow measurement capabilities rated at 600 WOG / CWP @ 250°F. The efficient low loss venturi design provides effective flow balancing with minimal system pressure loss. The CBV includes a standard port ball valve with memory stop, a venturi with an integral union on the inlet side, and a fixed FNPT or SWT on the run-out side. The CBV comes standard with two pressure/temperature ports for instrument readings. The union side incorporates an o-ring for maximum sealing protection. The union connection options include MNPT, FNPT, SWT, and a variety of reductions.

NOTE: If the same size male, female, sweat, or an reducing male tail piece is used, no extra pipe diameter is required.

<table>
<thead>
<tr>
<th>RECOMMENDED FLOW RANGES (GPM)</th>
<th>STANDARD MATERIAL SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Size</td>
</tr>
<tr>
<td>CBV050L</td>
<td>½</td>
</tr>
<tr>
<td>CBV050H</td>
<td>½</td>
</tr>
<tr>
<td>CBV075UL</td>
<td>¾</td>
</tr>
<tr>
<td>CBV075L</td>
<td>¾</td>
</tr>
<tr>
<td>CBV075H</td>
<td>¾</td>
</tr>
<tr>
<td>CBV100</td>
<td>1</td>
</tr>
<tr>
<td>CBV125</td>
<td>1¼</td>
</tr>
<tr>
<td>CBV150</td>
<td>1½</td>
</tr>
<tr>
<td>CBV200</td>
<td>2</td>
</tr>
</tbody>
</table>

Specification information is provided to assist and is given without obligation or warranty. The Company reserves the right to make changes in design, materials, and/or specifications without notice or liability.

PRODUCT SPECIFICATIONS:

- Devices shall have a 15° regain chamber for optimal pressure regain and minimal permanent pressure drop
- Venturi tube shall be independent of the throttling valve
- Venturi tube shall include proper pipe diameters for optimal accuracy
- Valve shall be designed with memory stop to limit flow once balanced
- The Model CBV shall have an accuracy rating of:
  - ±1% between 10" W.C. and 70" W.C.
  - ±3% between 5" W.C. and 150" W.C.
  - ±5% less than 5" W.C. and over 150" W.C.
**PRO Hydronic Specialties**

**CBV Series Dimensions**

**Combination Ball Valve/Venturi**

---

| Model   | Size | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| CBV050L | ¾   | 4.5 | 4.9 | 3.5 | 1.3 | 1.5 | 2.1 | 2.0 | 0.8 | 3.3 | 1.1 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| CBV050H | ¾   | 4.5 | 4.9 | 3.5 | 1.3 | 1.5 | 2.1 | 2.0 | 0.8 | 3.3 | 3.8 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| CBV075L | ¾   | 4.7 | 5.0 | 3.7 | 1.5 | 2.1 | 2.1 | 1.0 | 3.3 | 2.3 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| CBV075H | ¾   | 4.7 | 5.0 | 3.7 | 1.5 | 2.1 | 2.1 | 1.0 | 3.3 | 8.0 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| CBV100  | 1    | 5.1 | 5.4 | 4.5 | 1.8 | 2.3 | 2.3 | 1.1 | 3.4 | 3.1 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| CBV125  | 1 ½  | 5.6 | 6.0 | 5.5 | 2.1 | 2.4 | 2.4 | 1.4 | 3.6 | 2.5 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| CBV150  | 1 ½  | 7.0 | 7.3 | 5.5 | 2.5 | 2.8 | -   | 1.7 | 3.9 | 31  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| CBV200  | 2    | 7.6 | 8.1 | 5.9 | 2.6 | 3.0 | -   | 2.0 | 4.1 | 87  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

**Note:** All dimensions, weights, and materials are subject to minor variations. Consult with factory for confirmation of dimensions, weights, and material specifications.

* CBV075UL Tailpiece size is ¼"

** Cv = Estimated with Union connection same as inlet, no reductions.

---

Form Number: SUBCBV2
Revision 2 - 4/2012

PRO Hydronic Specialties, L.L.C.
2306 Sherwin St.
Garland, TX 75041
Phone: 972-271-8801
Fax: 972-271-8802

---

Sweat size listed is nominal and will differ from the actual, measurable size.
Combination Ball Valve/Venturi

MODEL DESIGNATION
CBV - Combo Ball Valve/Venturi

LINE SIZE
1 - ½"
2 - ¾"
3 - 1"
4 - 1½"
5 - 1½"
6 - 2"

BETA RATIO
L - LOW
H - HIGH
Beta ratios are only used for ½" - ¾" sizes.

END CONNECTIONS
F - FPT
S - SWT

TAIL PIECE SIZE
1 - ½"
2 - ¾"
3 - 1"
4 - 1½"
5 - 1½"
6 - 2"

TAIL PIECE CONNECTION
F - FPT
S - SWT
M - MPT

OPTIONS separate w/ comma
XP - Extended PT Port
XH - Extended Handle
XM - Extended Handle w/ Memory Stop

JOB NAME:

CUSTOMER:

ENGINEER:

REF/PO#:

DATE:

CONTRACTOR:

SUBMITTED BY:

DATE:

PART # (See table above)

TAGGING/JOB INFORMATION

GPM

QUANTITY

PRO Hydronic Specialties, L.L.C.
www.prohydronicspecialties.com