Hydrogenations with the new bpc 2
precise, reproducible, reliable, safe

• dosing of (hydrogen) gas at 1 – 140 bar
• control mode:
  – constant reaction pressure
  – constant flow rate
• continuous measuring of H2 uptake
• gas consumption in mol, ml
• accuracy > 99%
• flowrates 0 – 225 litres n / min
• functional for:
  – H2 (Hydrogen)
  – C2H4 (Ethylene)
  – CO2 (Carbon dioxide)
  – CO (Carbon monoxide)
  – C3H6 (Propylene – soon)
  – O2 (Oxygen – soon)

Facts and figures
• unique volumetric gas dosing system
• proven technology
• turnkey solution – plug and play
• multiple built in safety features
• easy operation
The new bpc 2 and Büchi pressure reactors – the ultimate solution for hydrogenation

Built on the experience and the outstanding performance of the first generation hydrogenation system, the bpc 2 offers unmatched reproducibility, proven accuracy, an intuitive interface, and operates at the highest level of safety.

Features
- reactor (reaction) pressure kept stable during entire experiment
- extremely precise with accurate reproducibility using our unique volumetric dosing
- continuous logging of consumed gas (to PC, USB memory stick)
- touch-screen operation, data display
- various internal safety interlocks
- automatic switch-off in event of leakage
- no need for on-site calibration
- sequence program, automation

Easy operation
1. purging with inert / active gas
2. set regulated pressure > delivery pressure
3. set delivery pressure and start

Simple installation
- 2 lines-in (Gas-supply)
- 1 line-out to reactor
- 1 vent line
Setup and options

Setup

**bpp 2 controller**
- touch-screen operation
- USB data memory port
- RS232 port
  (for optional bls software)
- Ethernet

**bpp 2 dosing unit**
- volumetric gas dosing unit (VD*)
- pressure control devices
- safety interlock valves

Options

- measure/display of temperature, pressure, stirrer speed, alarm functions
- Sequence program (venting valve included): Example for system preparation before run:
  1. N2 purging
  2. Leak Test
  3. H2 purging
- bls software for bpp 2 remote control and data storage from and to PC

Easy and safe operation – valuable information

**Numeric Data display**

**Continuos logging of H2 uptake**

**Setting of leak test parameters**

**Data storage to USB memory stick**
The Büchi hydrogenation solution

The new bpc 2 is suitable for Büchi pressure reactors of different volumes, pressure ranges and materials.

Applications
- Hydrogenations (catalytic)
- chemical research
- process development
- scale up

Precise over wide ranges of operating pressure and flow rate

<table>
<thead>
<tr>
<th>bpc 2 model</th>
<th>1202</th>
<th>1212</th>
<th>6002</th>
<th>6012</th>
<th>14002</th>
<th>14012</th>
</tr>
</thead>
<tbody>
<tr>
<td>max delivery pressure* bar</td>
<td>12</td>
<td>12</td>
<td>60</td>
<td>60</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>Reservoir volume (Vd) ml</td>
<td>2</td>
<td>12</td>
<td>2</td>
<td>12</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>max regulated pressure bar</td>
<td>35</td>
<td>35</td>
<td>100</td>
<td>100</td>
<td>175</td>
<td>175</td>
</tr>
</tbody>
</table>

Examples of flowrates at max. regulated pressure

<table>
<thead>
<tr>
<th>Flowrate at delivery pressure* L/min bar</th>
<th>0...10</th>
<th>0...55</th>
<th>0...105</th>
<th>0...46</th>
<th>0...225</th>
<th>0...46</th>
<th>0...225</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bar</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
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<tr>
<td>6 bar</td>
<td>6</td>
<td>6</td>
<td>30</td>
<td>70</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 bar</td>
<td>12</td>
<td>12</td>
<td>60</td>
<td>140</td>
<td>140</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

max. supply pressure: 200 bar
* delivery pressure is equal to reaction pressure

Please contact us for the 400 bar delivery pressure version

Dosing unit with controller: HxWxD: 60 x 25 x 48 cm; 26 kg; 110 – 230 V (240 VA)