

# DATASHEET W-102A

---

## CEM Evaporator W-102A

3-Way Mixing Valve and Evaporator



---

### 3-way Mixing Valve and Evaporator

Bronkhorst® model W-102A CEM 3-way Mixing Valve and Evaporator is suited for precise vapor flow delivery, composed by mixing up to 30 g/h H<sub>2</sub>O (32 g/h IPA) with max. 4 l<sub>n</sub>/min of carrier gas at operating pressures between vacuum and 100 bar. The temperature controlled mixing device is used in combination with a (thermal or Coriolis) liquid flow meter and an MFC for carrier gas, together forming a Controlled Evaporation and Mixing (CEM) System.

## Technical specifications

### Measurement / control system

|                          |                      |
|--------------------------|----------------------|
| Max. heating temperature | 200 °C               |
| Heater capacity          | 10 W                 |
| Max. Kv-value            | $6,6 \times 10^{-2}$ |

### Mechanical parts

|                         |   |
|-------------------------|---|
| Material (wetted parts) | Stainless steel 316L or comparable  |
| Pressure rating (PN)    | 100 bar a   |
| Max. $\Delta P$         | 5 ... 40 bar<br>(depends on Kv-value; contact your distributor for details)   |
| Process connections     | Gas and liquid inlet: compression type or face seal couplings;<br>Vapour outlet: 1/8" tube (other options on request);<br>Purge connection: 1/8" OD or 1/8" face seal |
| Seals                   | Metal-to-metal  |
| Protection class        | IP40  |
| Plunger                 | Kalrez®; other on request   |
| Connector               | Amphenol 6-pin male   |

### Electrical properties

|                        |  |
|------------------------|--|
| Power supply           | Mixing valve: +15...24 Vdc +/-10%;<br>Heater: 44 Vac |
| Max. power consumption | Mixing valve: 4 W (max.);<br>Heater: 150 W (nominal) |

### Electrical connection

### Control valve options

### External actuator options to be connected to the controller

### Ex-proof specifications

### Approvals / certificates

Technical specifications subject to change without notice.

For dimensional drawings and hook-up diagrams please visit the [product page](#) on our [website](#)

## Recommended accessories



### E-8000 SERIES

#### Digital Readout / Control Systems

Bright, wide angle, 1.8" display (TFT technology)

User friendly operation, menu driven with 4 push buttons

## Related products



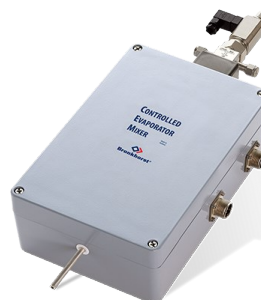
**CEM EVAPORATOR W-101A**

Max. 2 g/h liquid;  
Max. 4 l/min gas  
Pressure rating 100 bar  
Very stable vapor flow  
Flexible gas/liquid ratio



**CEM EVAPORATOR W-202A**

Max. 120 g/h liquid;  
Max. 10 l/min gas  
Pressure rating 100 bar  
Very stable vapor flow  
Flexible gas/liquid ratio



**CEM EVAPORATOR W-303B**

Max. 1200 g/h liquid;  
Max. 100 l/min gas  
Pressure rating 100 bar  
Very stable vapor flow  
Flexible gas/liquid ratio