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 vapour flow delivery, composed by mixing up to 30 g/h H_2O (32 g/h IPA) with max. 4 I_n /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 ℃
Heater capacity	10 W
Max. Kv-value	6,6 x 10 ⁻²

Mechanical parts

Material (wetted parts)	Stainless steel 316L or comparable
Pressure rating (PN)	100 bar a
Max. ΔP	5 40 bar (depends on Kv-value; contact your distributor for details)
Process connections	Gas and liquid inlet: compression type or face seal couplings; Vapour outlet: 1/8" tube (other options on request); 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: +1524 Vdc +/-10%; Heater: 44 Vac
Max. power consumption	Mixing valve: 4 W (max.); 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 ln/min gas Pressure rating 100 bar Very stable vapour flow Flexible gas/liquid ratio



CEM EVAPORATOR W-202A

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



CEM EVAPORATOR W-303B

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



Bronkhorst High-Tech designs and manufactures innovative instruments and subsystems for low-flow measurement and control for use in laboratories, machinery and industry. Driven by a strong sense of sustainability and with many years of experience, we offer an extensive range of (mass) flow meters and controllers for gases and liquids, based on thermal, Coriolis and ultrasonic measuring principles. Our global sales and service network provides local support in more than 40 countries. Discover Bronkhorst[®]!