

DATASHEET W-101A

CEM Evaporator W-101A

3-Way Mixing Valve and Evaporator



3-way Mixing Valve and Evaporator

Bronkhorst® model W-101A CEM 3-way Mixing Valve and Evaporator is suited for precise vapour flow delivery, composed by mixing up to 2 g/h liquid with max. 4 l_n/min of carrier gas at operating pressures between vacuum and 100 bar. The temperature controlled mixing device is used in combination with a µ-FLOW 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 |
|-----------------|------|

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|---------------|----------------------|
| 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. 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 |
|-------|----------------|

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|------------------|------|
| Protection class | IP40 |
|------------------|------|

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|---------|---------------------------|
| Plunger | Kalrez®; other on request |
|---------|---------------------------|

| | |
|-----------|---------------------|
| Connector | Amphenol 6-pin male |
|-----------|---------------------|

Electrical properties

| | |
|--------------|--|
| Power supply | Mixing valve: +15...24 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

デジタル表示設定システム

明瞭、広角の1.8" TFTディスプレイ
4つのボタンによるユーザーフレンドリーな操作

Related products



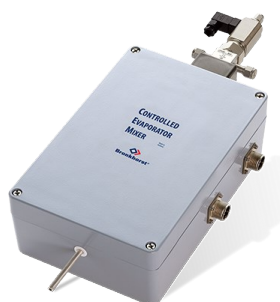
CEM EVAPORATOR W-102A

Max. 30 g/h liquid;
Max. 4 l/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 l/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 l/min gas
Pressure rating 100 bar
Very stable vapour flow
Flexible gas/liquid ratio