GAS MIXER MG 50/100-ME

Gas mixing systems for 2 or 3 defined gases, designed for a variety of industrial applications with high flows and fluctuating gas mixture production requirements.

Capacity range from 0 to approx. 161 Nm³/h. For the exact pressure and flow capacity ratios, please see the technical data overleaf.

Note:
System only works with sufficient buffer volume (100 to 250 litres depending on gas mixing capacity).

Easy operation
- a proportional mixing valve (-2ME) or three single mixing valves (-3ME), each with a control knob and %-scale, provide infinitely variable mixture settings
- gas mixture withdrawal possible from zero to the maximum flow capacity

High process reliability
- independent of pressure fluctuations in the gas supply
- intermittent gas mixture withdrawal possible
- lockable transparent door for protection of settings
- splash-proof and robust stainless steel housing

Options
- for flammable gases available as Ex-version with separate control cabinet
- without electrical equipment as MP-version
- alarm module AM3: integrated inlet pressure monitoring with digital display for pressure (with analog pressure transmitters) plus optical alarm, adjustable alarm limits, obligation of acknowledgement, protection of alarms, interfaces for controlling external alarms etc.
- integrated gas analysis for the monitoring/control and documentation of the gas mixture production
- gas mixer mounted on gas mixture buffer tank for a more convenient installation

Other models, options and accessories available upon request.

Please identify the individual gases at the time of enquiring!
GAS MIXER MG 50/100-ME

Type
MG 50/100-2ME /-3ME; MG 50/100-2ME /-3ME Ex

Gases
all technical gases (excluding toxic or corrosive gases)

Mixing range
0-25% or 0-100%
by selection of suitable mixing range
the accuracy corresponds to ISO 14175

Pressure settings
see tables

Inlet pressure differential
between the gases
max. 3 bar

Mixture output (air)
see tables

Setting accuracy
±1% abs. (scale 0-25%), ±2% abs. (scale 0-100%)

Mixing precision
better than ±1% abs.

Gas connections MG 50
inlets
G 1/2 RH with cone, soldering nipple for pipe OD 15 mm
outlet at mixer
G 1/2 RH with cone, soldering nipple for pipe OD 15 mm
outlet at receiver
WITTFIX-Pipe Couplers for pipe OD 22x1.5 mm

Gas connections MG 100
inlets
G 1 RH with cone, soldering nipple for pipe OD 22 mm
outlet at mixer
G 1 RH with cone, soldering nipple for pipe OD 22 mm
outlet at receiver
WITTFIX-Pipe Couplers for pipe OD 22x1.5 mm

Housing
stainless steel, splash proof (not Ex-version)

Weight MG 50
approx. 35 kg (-2ME), approx. 50 kg (-3ME) without receiver

Weight MG 100
approx. 38 kg (-2ME), approx. 53 kg (-3ME) without receiver

Dimensions (HxWxD)
mixer
approx. 330 x 485 x 500 mm (12.99 x 19.09 x 19.68 inches)
(without connections and receiver)

separate control cabinet (Ex)
approx. 212 x 198 x 160 mm (8.35 x 7.79 x 6.30 inches)
(without connections)

Voltage
230 V AC, 110 V AC or 24 V DC

Power consumption
230 V AC, 0.07 A

Approvals
Company certified according to ISO 9001
CE-marked according to:
- EMC 2014/30/EU
- Low Voltage Directive 2014/35/EU
- PED 2014/68/EU
- ATEX 114 Directive 2014/34/EU

Cleaned for Oxygen Service according to:
- EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems

<table>
<thead>
<tr>
<th>Flow MG 50 (in Nm³/h) in relation to air</th>
<th>min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td>8</td>
<td>43</td>
</tr>
<tr>
<td>9</td>
<td>48</td>
</tr>
<tr>
<td>10</td>
<td>54</td>
</tr>
<tr>
<td>11</td>
<td>59</td>
</tr>
<tr>
<td>12</td>
<td>65</td>
</tr>
<tr>
<td>13</td>
<td>70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flow MG 100 (in Nm³/h) in relation to air</th>
<th>min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>4</td>
<td>97</td>
</tr>
<tr>
<td>5</td>
<td>93</td>
</tr>
<tr>
<td>6</td>
<td>80</td>
</tr>
<tr>
<td>7</td>
<td>93</td>
</tr>
<tr>
<td>8</td>
<td>106</td>
</tr>
<tr>
<td>9</td>
<td>119</td>
</tr>
<tr>
<td>10</td>
<td>133</td>
</tr>
<tr>
<td>11</td>
<td>147</td>
</tr>
<tr>
<td>12</td>
<td>161</td>
</tr>
<tr>
<td>13</td>
<td>177</td>
</tr>
</tbody>
</table>