GAS MIXER MG 500/1000-ME ERC

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

Capacity range from 0 to approx. 1264 Nm³/h. For the exact pressure and flow capacity ratios, please see the technical data overleaf.

Note:
System only works with sufficient buffer volume (1500 to 2000 litres depending on gas mixing capacity).

Easy operation
- an electro-pneumatic proportional mixing valve provides infinitely variable mixture settings
  - with control unit GC50 (local)
  - via Ethernet or analogue input (remotely adjustable)
- user friendly input of data and process parameter by integrated keyboard or via PC (for example MS-Excel®)
- simple, intuitive operation; no qualified personnel necessary
- customer oriented quality documentation by easy data management and evaluation
- gas mixture withdrawal possible from zero to the maximum flow capacity

High process reliability
- too low inlet pressures and/or temperature triggers an audible/visual alarm and shuts down the mixed gas supply
- lockable transparent door for protection of settings
- independent of pressure fluctuations in the gas supply
- intermittent gas mixture withdrawal possible

Options
- for flammable gases available as Ex-version with separate control cabinet
- monitoring of the gas supply by means of pressure and/or temperature transmitter; too low an inlet pressure and/or temperature triggers a visual alarm (audible optional) and switches a potential free contact (e.g. to shut down machinery to avoid quality problems)
- integrated gas analysis for the monitoring/control and documentation of the gas mixture production
- with heater for mixer and control system
- with separate filter in the inlet

Other models, options and accessories available on request.

Please identify the individual gases at the time of enquiring!
### GAS MIXER MG 500/1000-ME ERC

**Type**
- MG 500/1000-2ME ERC

**Gases**
- all technical gases (excluding toxic and corrosive gases
- also mixtures of fuel gas with air, \(O_2\) or \(N_2\) or \(NO\))

**Mixing range**
- 0–95%, 0–25%, (0–10%, 0–5% on request)
  - by selection of suitable mixing range the accuracy corresponds to ISO 14175

**Pressure settings**
- see table
- System requires a pneumatic pressure at least 7 bar!

**Inlet pressure differential between the gases**
- max. 3 bar

**Temperature (gas/environment)**
- 0 °C to 45 °C (32 °F to 113 °F)

**Setting accuracy**
- \(\pm 0.5\%\) abs. (valve 0–5% and 0-10%),
- \(\pm 1\%\) abs. (valve 0–25%),
- \(\pm 2\%\) abs. (valve 0–95%)

**Mixing precision**
- better than \(\pm 0.5\%\) abs.

**Gas connections (according to gases and mixture)**

<table>
<thead>
<tr>
<th>MG 500</th>
<th>MG 1000</th>
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</thead>
<tbody>
<tr>
<td>flange DN50 / PN40</td>
<td>flange DN80 / PN40</td>
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<td>soldering nipple OD 22</td>
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Please order separately filter at the inlet. Only pipe installation possible!

**Alarm signals**
- one min. / max. threshold value with 2 floating contacts

**Logging**
- analog output 4-20 mA or 0-10 V
- RS 232 with ASCII-output of date, time, measured value
- Ethernet (option WLAN)
- analog output 4-20 mA or 0-10 V

**Housing**
- painted steel

**Weight**
- according to equipment and housing
- approx. 170 kg – approx. 330 kg

**Dimensions (HxWxD)**
- **Housing A**
  - approx. 1205 x 600 x 620 mm (47.44 x 23.62 x 24.41 inch) without connections,
  - at right side and on top
- **Housing B**
  - approx. 1520 x 1200 x 580 mm (59.84 x 47.24 x 22.83 inch) without connections,
  - at left side
- separate control cabinet (Ex)
  - approx. 380 x 600 x 210 mm (14.96 x 23.62 x 8.27 inch) without connections

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

**Power consumption**
- 230 V AC, 1.545 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

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### Flow

**Flow MG 500** (in Nm³/h) in relation to air

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<tr>
<th>min. inlet pressure in barg (max. 14 / 20 bar)</th>
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<th>2.5</th>
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**Flow MG 1000** (in Nm³/h) in relation to air

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