



MG 2000-2ME 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. 2 180 Nm³/h.
For the exact pressure and flow capacity ratios, please see the technical data overleaf.

Note:

System only works with sufficient buffer volume (3 000 to 4 000 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 2000-ME ERC+



| | | |
|--|---|--------------------|
| Type | MG 2000-2ME ERC+ | |
| Gases | all technical gases (excluding toxic and corrosive gases also mixtures of fuel gas with air, O ₂ or N ₂ O) | |
| Mixing range | 0–95%, 0–25%, (0–10%, 0–5% upon request) by selection of suitable mixing range the accuracy corresponds to ISO 14175 | |
| Pressure settings | see table | |
| Inlet pressure differential between the gases | max. 3 bar | |
| Mixture output (air) | see table | |
| Temperature (gas/environment) | 0 °C to 45 °C (32 °F to 113 °F) | |
| Setting accuracy | ±0.5% abs. (valve 0–5% and 0–10%), ±1% abs. (valve 0–25%), ±2% abs. (valve 0–95%) | |
| Mixing precision | better than ±0.5% abs. | |
| Gas connections (according to gases and mixture) | inlet | outlet |
| | flange DN80 / PN40 (carrier gas) | flange DN80 / PN40 |
| | flange DN50 / PN40 soldering nipple OD 54 (admix gas) soldering nipple OD 35 soldering nipple OD 22 | |
| | 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 | |
| Interfaces | 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. 460 kg – approx. 600 kg | |
| Dimensions (HxWxD) | | |
| Housing | approx. 1 500 x 1 400 x 650 mm (59.06 x 55.12 x 25.59 inches) without connections, at left side | |
| separate control cabinet (Ex) | approx. 380 x 600 x 210 mm (14.96 x 23.62 x 8.27 inches) 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 and ISO 22000 CE-marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU - PED 2014/68/EU - ATEX 114 Directive 2014/34/EU for food-grade gases according to: - Regulation (EC) No 1935/2004 | |

Flow **MG 2000** (in Nm³/h) in relation to air

| | min. receiver pressure in barg (max. receiver pressure 0.5 bar higher) | | | | | | | | |
|--|---|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | |
| min. inlet pressure in barg (max. 14 / 20 bar) | 4 | 760 | – | – | – | – | – | – | – |
| | 5 | 990 | 910 | – | – | – | – | – | – |
| | 6 | 1 190 | 1 170 | 1 030 | – | – | – | – | – |
| | 7 | 1 390 | 1 390 | 1 330 | 1 140 | – | – | – | – |
| | 8 | 1 580 | 1 580 | 1 570 | 1 470 | 1 240 | – | – | – |
| | 9 | 1 780 | 1 780 | 1 780 | 1 740 | 1 590 | 1 300 | – | – |
| | 10 | 1 980 | 1 980 | 1 980 | 1 970 | 1 890 | 1 710 | 1 410 | – |
| | 11 | 2 180 | 2 180 | 2 180 | 2 140 | 2 140 | 2 030 | 1 820 | 1 490 |