MG 500/1000-2ME ERC

MG 500-2ME 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. 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 GC100 (local)
  - via Ethernet or analogue input (remotely adjustable)
- user friendly input of data and process parameter by integrated keybord 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 an 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 EEx-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!

Product Information

B9 subject to change

GAS MIXERS

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_2O)
Mixing range	0-100%, 0-25%, (0-10%, 0-5% on request)
Pressure settings	see table System requires a pneumatic pressure at least 7 bar!
Inlet pressure differential between the gases	max. 3 bar
Mixture output (air)	see table
Temperature (gas/enviroment)	0 °C to 45 °C (32 °F to 113 °F)
Setting accuracy	±0,5% abs. (scale 0-5% and 0-10%), ±1% abs. (scale 0-25%), ±2% abs. (scale 0-100%)
Mixing precision	better than ±0.5% abs.
Gas connections MG 500	
inlet / outlet	flange DN50 / PN40 (with filter) soldering nipple DN 32 (without filter)
Gas connections MG 1000	
inlet / outlet	flange DN50 / PN40 (with filter) soldering nipple DN 54 (without filter)
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	
MG 500	approx. 270 kg,
MG 1000	approx. 290 kg
Dimensions (HxWxD)	
MG 500 / MG 1000	approx. 1520 x 1200 x 580 mm (59.84 x 47.24 x 22.83 inch) (without connections)
separate control cabinet (EEx)	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 9001:2000 and ISO 14001 CE-marked according to: - EMC 2004/108/EC - Low Voltage Directive 2006/95/EC - PED 97/23/EC - ATEX 95 Directive 94/9/EC

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

min. inlet pressure in barg (max. 14 / 20 bar)	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
4	215	-	-	-	-	-	-	-
5	277	254	-	-	-	-	-	-
6	333	328	288	-	-	-	-	-
7	388	388	372	318	-	-	-	-
8	444	444	440	411	346	-	-	-
9	499	499	494	487	447	372	-	-
10	555	555	555	552	529	480	396	-
11	610	610	610	610	600	568	511	418

Flow **MG 1000** (in Nm³/h) in relation to air

min. inlet pressure in barg (max. 14 / 20 bar)	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
4	445	-	-	-	-	-	-	-
5	575	527	-	-	-	-	-	-
6	690	680	597	-	-	-	-	-
7	805	805	771	660	-	-	-	-
8	920	920	912	852	717	-	-	-
9	1035	1035	1035	1009	926	771	-	-
10	1150	1150	1150	1144	1096	995	820	-
11	1264	1264	1264	1264	1243	1177	1059	867

Technical Data

B9 subject to change