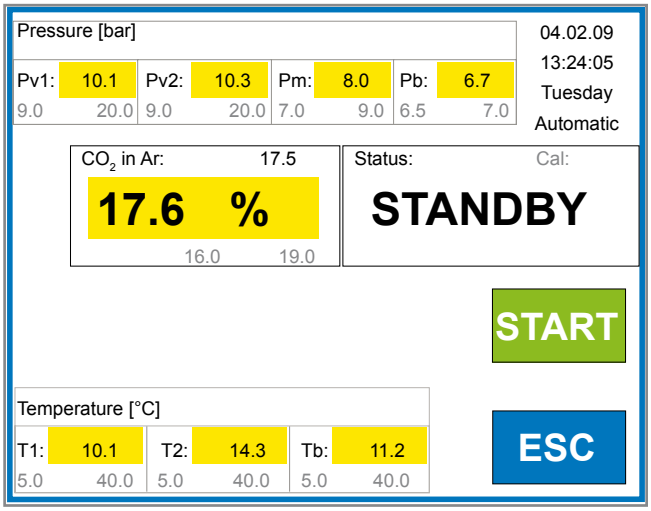
MG 500/1000-2ME ERC

Picture with mixer in housing B



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 Nm^3/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).

Benefits

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

Technical data overleaf

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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 upon request.

Please identify the individual gases at the time of enquiring!

Technical Data

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	0–95%, 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	
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**
MG 500	flange DN50 / PN40 soldering nipple OD 54 soldering nipple OD 35 soldering nipple OD 22	flange DN50 / PN40 soldering nipple OD 54 soldering nipple OD 42
MG 1000	flange DN80 / PN40 flange DN50 / PN40 soldering nipple OD 54 soldering nipple OD 35 soldering nipple OD 22	flange DN80 / PN40 flange DN50 / PN40 soldering nipple OD 54
	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	

Technical data continuing

MG 500/1000-2ME ERC

Technical Data

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. 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 oder 24 V DC
Power consumption	230 V AC, 1.545 A
Approvals	Company certified according to ISO 9001 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. receiver pressure in barg, (max. receiver pressure 0.5 bar higher))

min. inlet pressure in barg (max. 14 / 20 bar)	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. receiver pressure in barg, (max. receiver pressure 0.5 bar higher)

min. inlet pressure in barg (max. 14 / 20 bar)	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

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