# GAS MIXER MG 500/1000-ME ERC+





Picture with mixer in housing A (left) and housing B (right)

MG 500-2ME ERC+ with analyzer

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<sup>3</sup>/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+

all technical gases (excluding toxic and corrosive gases Gases

> also mixtures of fuel gas with air, O<sub>2</sub> or N<sub>2</sub>O) 0-95%, 0-25%, (0-10%, 0-5% on request)

by selection of suitable mixing range the accuracy corresponds to ISO 14175

see table

**Pressure settings** Inlet pressure differential

between the gases Mixture output (air) max. 3 bar see table

**Temperature** 

Mixing range

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

Setting accuracy ±0.5% abs. (valve 0-5% and 0-10%),

±1% abs. (valve 0-25%), ±2% abs. (valve 0-95%)

better than ±0.5% abs. Mixing precision

Gas connections inlet outlet (according to gases and mixture)

flange DN50 / PN40 (carrier gas) flange DN50 / PN40 MG 500 soldering nipple OD 54 soldering nipple OD 54

> soldering nipple OD 35 (admix gas) soldering nipple OD 22

flange DN80 / PN40 flange DN80 / PN40 MG 1000 (carrier gas) flange DN50 / PN40 flange DN50 / PN40

soldering nipple OD 54 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

RS 232 with ASCII-output of date, time, measured value **Interfaces** 

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,

approx. 380 x 600 x 210 mm (14.96 x 23.62 x 8.27 inch) without connections separate control cabinet (Ex)

Voltage

230 V AC, 110 V AC or 24 V DC

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

Company certified according to ISO 9001 and ISO 22000 **Approvals** 

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

Flov	w <b>MG 500</b>	(in Nn	n³/h) in	relation	on to a	ir							
	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			
			215	-	-	-	-	-	-	-			
min			277	254	-	-	-	-	-	-			
inle	t pres-		333	328	288	-	-	-	-	-			
sure	e in barg		388	388	372	318	-	-	-	-			
(ma			444	444	440	411	346	-	-	-			
14 /	20 bar)		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)										
		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5		
		445	-	-	-	-	-	-	-		
min.		575	527	-	-	-	-	-	-		
inlet pres-		690	680	597	-	-	-	-	-		
sure in barg		805	805	771	660	-	-	-	-		
(max.		920	920	912	852	717	-	-	-		
14 / 20 bar)		1035	1035	1035	1009	926	771	-	-		
	10	1150	1150	1150	1144	1096	995	820	-		
	11	1264	1264	1264	1264	1243	1177	1059	867		

soldering nipple OD 42