MG5 - 101/3C subject to change

GAS MIXER MG 500/1000-ME ERC+





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

MG 500-2ME ERC+ with analyser

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+



MG 500/1000-2ME ERC+ Type

Gases all technical gases (excluding toxic and corrosive gases

also mixtures of fuel gas with air, O₂ or N₂O)

0-95%, 0-25%, (0-10%, 0-5% on request) Mixing range

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

flange DN50 / PN40

soldering nipple OD 54

soldering nipple OD 42

soldering nipple OD 54

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)

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

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

Mixing precision better than ±0.5% abs.

outlet Gas connections inlet

(according to gases and mixing range) flange DN50 / PN40

MG 500

soldering nipple OD 54

soldering nipple OD 35 (admix gas)

soldering nipple OD 22

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

flange DN50 / PN40

soldering nipple OD 54

soldering nipple OD 35 soldering nipple OD 22

Please order separately filter at the inlet. Only pipe installation possible!

(carrier gas)

(admix gas)

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. 1 205 x 600 x 620 mm (47.44 x 23.62 x 24.41 inches) 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 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

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

552 529 480 396

- ATEX 114 Directive 2014/34/EU for food-grade gases according to: - Regulation (EC) No 1935/2004

> 511 418

Flow MG 500	(in Nn	n³/h) in	relation	on to a	ir				
			(ma			ressure sure 0.5	in barg bar hig	her)	
		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5
		215	-	-	-	-	-	-	-
min.		277	254	-	-	-	-	-	-
inlet pres-		333	328	288	-	-	-	-	-
sure in barg		388	388	372	318	-	-	-	-
(max.		444	444	440	411	346	-	-	-
14 / 20 bar)		499	499	494	487	447	372	-	-

555 555

610

610 600 568

555

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	