

**GAS MIXERS** www.wittgas.com

# MG 50/100-2ME /-3ME



## MG 50/100-2ME /-3ME EEx



Gas mixing systems for 2 or 3 defined gases, designed for a variety of industrial applications with high flows and fluctuating gas mixture production requirements.

Capacity range from 0 to approx. 161 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 (100 to 250 litres depending on gas mixing capacity).

#### **Easy operation**

- a proportional mixing valve (-2ME) or three single mixing valves (-3ME), each with a control knob and %-scale, provide infinitely variable mixture settings
- gas mixture withdrawal possible from zero to the maximum flow capacity

## High process reliability

- independent of pressure fluctuations in the gas supply
- intermittent gas mixture withdrawal possible
- lockable transparent door for protection of settings
- · splash-proof and robust stainless steel housing

#### **Options**

- for flammable gases available as EEx-version with separate control cabinet
- without electrical equipment as MP-version
- monitoring of the gas supply by means of pressure switches; too low an inlet pressure triggers an optical alarm (audible optional) and switches a potential free contact (e.g. to shutdown machinery to avoid quality problems)
- integrated gas analysis for the monitoring/control and documentation of the gas mixture production
- · gas mixer mounted on gas mixture buffer tank for a more convenient installation

Other models, options and accessories available on request.

Please identify the individual gases at the time of enquiring!

Product Information

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MG 50/100-2ME /-3ME; MG 50/100-2ME /-3ME EEx **Type** 

all technical gases (excluding toxic or corrosive gases) Gases

0-25% or 0-100% Mixing range

**Pressure settings** see tables

Inlet pressure differential

between the gases max. 3 bar

Mixture output (air) see tables

**Setting accuracy** ±1% abs. (scale 0-25%), ±2% abs. (scale 0-100%)

Mixing precision better than ±1% abs.

Gas connections MG 50

inlets

G 1/2 RH with cone, soldering nipple for pipe OD 15 mm outlet at mixer G 1/2 RH with cone, soldering nipple for pipe OD 15 mm

WITTFIX-Pipe Couplers for pipe OD 22x1.5 mm outlet at receiver

Gas connections MG 100

inlets outlet at mixer outlet at receiver G 1 RH with cone, soldering nipple for pipe OD 22 mm G 1 RH with cone, soldering nipple for pipe OD 22 mm WITTFIX-Pipe Couplers for pipe OD 22x1.5 mm

stainless steel, splash proof (not EEx-version) Housing

Weight MG 50 approx. 35 kg (-2ME), approx. 50 kg (-3ME) without receiver Weight MG 100 approx. 50 kg (-2ME), approx. 65 kg (-3ME) without receiver

**Dimensions (HxWxD)** 

mixer approx. 330 x 485 x 500 mm (12.99 x 19.09 x 19.68 inch)

(without connections and receiver)

approx. 212 x 198 x 160 mm (8.35 x 7.79 x 6.30 inch) separate control cabinet (EEx)

(without connections)

Voltage 230 V AC, 110 V AC or 24 V DC

**Power consumption** 230 V AC, 0.07 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 50 (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	9.5	10.5		
		4	21	-	-	-	-	-	-	-	-	-		
		5	27	24	-	-	-	-	-	-	-	-		
min.	inlet	6	32	32	28	-	-	-	-	-	-	-		
pres	sure	7	37	37	36	31	-	-	-	-	-	-		
in ba	arg	8	43	43	43	40	33	-	-	-	-	-		
(max		9	48	48	48	47	43	36	-	-	-	-		
20 b	ar)	10	54	54	54	53	51	46	38	-	-	-		
		11	59	59	59	59	58	55	49	40	-	-		
		12	65	65	65	65	64	62	59	52	42	-		
		13	70	70	70	70	70	69	67	62	55	44		

Flow MG 1	,		,		n to ail parg (ma		iver pre	ssure 0	.5 bar h	nigher)
		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
	4	37	-	-	-	-	-	-	-	-
	5	53	45	-	-	-	-	-	-	-
min, inlet	6	67	62	49	-	-	-	-	-	-
pressure	7	80	77	69	53	-	-	-	-	-
in barg	8	93	91	86	75	60	-	-	-	-
(max.	9	106	105	100	93	82	63	-	-	-
20 bar)	10	119	118	115	109	101	87	68	-	-
	11	133	132	130	126	119	108	93	72	-
	12	147	146	144	142	137	128	116	98	75
	13	161	160	158	156	152	147	137	123	104

B01/B1 subject to change