

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



MG 50-2ME GB



MG 50-3ME Ex

**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).

## Benefits

### 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

**Other models, options and accessories available upon request.**

## Options

- for flammable gases available as Ex-version with separate control cabinet
- without electrical equipment as MP-version
- alarm module NXT+: integrated inlet pressure monitoring with digital display for pressure (with analog pressure transmitters) plus optical alarm, adjustable alarm limits, obligation of acknowledgement, protection of alarms, interfaces for controlling external alarms etc.
- 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

**Please identify the individual gases at the time of enquiring!**

**Technical data overleaf**

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

Technical Data	
Type	MG 50/100-2ME /-3ME; MG 50/100-2ME /-3ME Ex
Gases	all technical gases (excluding toxic or corrosive gases)
Mixing range	0-25% or 0-100% by selection of suitable mixing range the accuracy corresponds to ISO 14175
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 ½ RH with cone, soldering nipple for pipe OD 15 mm outlet at mixer: G ½ RH with cone, soldering nipple for pipe OD 15 mm outlet at receiver: WITTFIX-Pipe Couplers for pipe OD 22x1.5 mm
Gas connections MG 100	inlets: G 1 RH with cone, soldering nipple for pipe OD 22 mm outlet at mixer: G 1 RH with cone, soldering nipple for pipe OD 22 mm outlet at receiver: WITTFIX-Pipe Couplers for pipe OD 22x1.5 mm
Housing	stainless steel, splash proof (not Ex-version)
Weight	MG 50 approx. 35 kg (-2ME), approx. 50 kg (-3ME) without receiver 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 inches) (without connections and receiver) separate control cabinet (Ex) approx. 212 x 198 x 160 mm (8.35 x 7.79 x 6.30 inches) (without connections)
Voltage	230 V AC, 110 V AC or 24 V DC
Power consumption	230 V AC, 0.07 A
Approval	Company certified according to ISO 9001 CE-marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU - PED 2014/68/EU - ATEX 95 Directive 2014/34/EU Cleaned for Oxygen Service according to: - EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems

Flow MG 50 (in Nm <sup>3</sup> /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
min. inlet pressure in barg (max. 20 bar)	4	21	-	-	-	-	-	-	-	-	-
	5	27	24	-	-	-	-	-	-	-	-
	6	32	32	28	-	-	-	-	-	-	-
	7	37	37	36	31	-	-	-	-	-	-
	8	43	43	43	40	33	-	-	-	-	-
	9	48	48	48	47	43	36	-	-	-	-
	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 100 (in Nm <sup>3</sup> /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
min. inlet pressure in barg (max. 20 bar)	4	37	-	-	-	-	-	-	-	-
	5	53	45	-	-	-	-	-	-	-
	6	67	62	49	-	-	-	-	-	-
	7	80	77	69	53	-	-	-	-	-
	8	93	91	86	75	60	-	-	-	-
	9	106	105	100	93	82	63	-	-	-
	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

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