



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. 5 686 SCFH.
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 Ex-version with separate control cabinet
- without electrical equipment as MP-version
- alarm module AM3: 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

Other models, options and accessories available upon request.

Please identify the individual gases at the time of enquiring!

GAS MIXER MG 50/100-ME



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. 44 PSI
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 0.59 inches
outlet at mixer	G 1/2 RH with cone, soldering nipple for pipe OD 0.59 inches
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 0.87 inches
outlet at mixer	G 1 RH with cone, soldering nipple for pipe OD 0.87 inches
outlet at receiver	WITTFIX-Pipe Couplers for pipe OD 22x1.5 mm
Housing	stainless steel, splash proof (not Ex-version)
Weight MG 50	approx. 1 235 oz (-2ME), approx. 1 764 oz (-3ME) without receiver
Weight MG 100	approx. 1 340 oz (-2ME), approx. 1 870 oz (-3ME) without receiver
Dimensions (HxWxD)	
mixer	approx. 12.99 x 19.09 x 19.68 inches (without connections and receiver)
separate control cabinet (Ex)	approx. 11.02 x 11.89 x 6.22 inches (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 and ISO 22000 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 Designed for Oxygen Service in accordance with EIGA 13/20, CGA G-4.4 and AIGA 021/20: Oxygen Pipeline and Piping Systems Cleaned for Oxygen Service in accordance with EIGA 33/18, CGA G-4.1 and AIGA 012/19: Cleaning of Equipment for Oxygen Service

Flow MG 50 (in SCFH) in relation to air		min. receiver pressure in barg (max. receiver pressure 7 PSI higher)											
		22	36	51	65	80	94	109	123	138	152		
min. inlet pressure in PSIG (max. 290 PSI)	58	742	-	-	-	-	-	-	-	-	-		
	73	953	848	-	-	-	-	-	-	-	-		
	87	1130	1130	989	-	-	-	-	-	-	-		
	102	1307	1307	1271	1095	-	-	-	-	-	-		
	116	1519	1519	1519	1413	1165	-	-	-	-	-		
	131	1695	1695	1695	1660	1519	1271	-	-	-	-		
	145	1907	1907	1907	1872	1801	1624	1342	-	-	-		
	160	2084	2084	2084	2048	1942	1730	1413	-	-	-		
	174	2295	2295	2295	2295	2260	2190	2084	1836	1483	-		
	189	2472	2472	2472	2472	2472	2437	2366	2190	1942	1554		

Flow MG 100 (in SCFH) in relation to air		min. receiver pressure in barg (max. receiver pressure 7 PSI higher)											
		22	36	51	65	80	94	109	123	138			
min. inlet pressure in PSIG (max. 290 PSI)	58	1307	-	-	-	-	-	-	-	-			
	73	1872	1589	-	-	-	-	-	-	-			
	87	2366	2190	1730	-	-	-	-	-	-			
	102	2825	2719	2437	1872	-	-	-	-	-			
	116	3284	3214	3037	2649	2119	-	-	-	-			
	131	3743	3708	3531	3284	2896	2225	-	-	-			
	145	4202	4167	4061	3849	3567	3072	2401	-	-			
	160	4697	4662	4591	4450	4202	3814	3284	2543	-			
	174	5191	5156	5085	5015	4838	4520	4097	3461	2649			
	189	5686	5650	5580	5509	5368	5191	4838	4344	3673			