



## Gas mixing systems for 2 defined gases, for laser cutting gas mixtures with high flows and fluctuating gas mixture production requirements.

Capacity range up to approx. 438 Nm<sup>3</sup>/h.

### 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

### High process reliability

- too low inlet pressures 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

### Options

- monitoring of the gas supply by means of temperature transmitter; too low an inlet temperature triggers a visual alarm (audible optional) and switches a potential free contact (e.g. to shut down machinery to avoid quality problems)

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

# GAS MIXER MG 100-ME HD ERC+



<b>Type</b>	MG 100-2ME HD ERC+
<b>Gases</b>	Standard Oxygen and Nitrogen
<b>Mixing range</b>	1-25%
<b>Pressure settings</b>	Inlet pressure max. 40 bar
<b>Inlet pressure differential between the gases</b>	max. 3 bar
<b>Mixture output (air)</b>	438 Nm <sup>3</sup> /h
<b>Temperature (gas/environment)</b>	0 °C to 45 °C
<b>Setting accuracy</b>	±0.5% abs. (valve 0-5% and 0-10%), ±1% abs. (valve 0-25%)
<b>Mixing precision</b>	better than ±0.5% abs.
<b>Gas connections</b>	
<b>inlets</b>	G 1 RH with cone, soldering nipple for pipe OD 22 mm
<b>outlet</b>	G 1 RH with cone, soldering nipple for pipe OD 22 mm
<b>Housing</b>	Steel, powder coated, IP43
<b>Weight</b>	according to equipment and housing approx. 80 kg – ca. 100 kg
<b>Dimensions (HxWxD)</b>	approx. 1220 x 600 x 515 mm (without connections)
<b>Voltage</b>	230 V AC, 110 V AC or 24 V DC
<b>Power consumption</b>	230 V AC, 0.02 A 110 V AC, 0.04 A 24 V DC, 0.06 A
<b>Approvals</b>	Company certified according to ISO 9001 CE-marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU - PED 2014/68/EU  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 <b>MG 100 HD</b> (in Nm <sup>3</sup> /h) in relation to air		min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)										
		14.5	15.5	16.5	17.5	18.5	19.5	20.5	21.5	22.5	23.5	24.5
min. inlet pressure in barg (max. 40 bar)	17	106	–	–	–	–	–	–	–	–	–	–
	18	136	109	–	–	–	–	–	–	–	–	–
	19	161	141	112	–	–	–	–	–	–	–	–
	20	183	167	145	115	–	–	–	–	–	–	–
	21	202	189	172	149	119	–	–	–	–	–	–
	22	220	209	195	176	153	122	–	–	–	–	–
	23	236	227	215	200	181	157	124	–	–	–	–
	24	252	244	234	221	205	186	161	127	–	–	–
	25	266	260	251	240	227	211	190	164	130	–	–
	26	280	274	267	258	247	233	216	195	168	133	–
	27	293	289	283	275	265	253	238	221	199	172	136
	28	305	302	297	291	282	272	259	244	225	203	175
	29	317	315	311	306	298	289	278	265	249	230	207
	30	329	327	324	320	314	306	296	285	271	254	235
	31	340	339	337	333	328	322	313	303	291	277	260
	32	351	351	349	346	342	337	329	320	310	297	282
	33	362	362	361	359	356	351	345	337	328	316	303
	34	373	373	373	371	369	365	359	353	344	334	323
	35	384	384	384	383	381	378	373	368	360	352	341
	36	395	395	395	394	393	391	387	382	376	368	359
	37	406	406	406	406	405	403	400	396	390	384	375
38	417	417	417	417	416	415	413	409	405	399	391	
39	427	427	427	427	427	427	425	422	418	413	407	
40	438	438	438	438	438	438	437	435	432	427	421	

MH3 - B01/3F - subject to change