



## Mixing systems for 2 gases especially for high pressures and large flow rates for the continuous generation of laser assist cutting gases.

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 upon request.**

# GAS MIXER MG 100-M HD ERC+



<b>Type</b>	MG 100-2M 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 min. mixture output = 1/5 of the max. mixture output
<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 – approx. 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		outlet pressure in barg												
		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	–	–	

MH4 - B01/3F - subject to change