



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

Note:

System only works with sufficient buffer volume (100 to 250 litres depending on gas mixing capacity).

- 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.

Easy operation

- a proportional mixing valve provide infinitely variable mixture settings
- gas mixture withdrawal possible from zero to the maximum flow capacity

Options

- gas mixer mounted on gas mixture buffer tank for a more convenient installation

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.

GAS MIXER MG 50/100-ME PVDÜ HD



Type	MG 50/100-2ME PVDÜ HD
Gases	Standard Oxygen and Nitrogen
Mixing range	0-25%, 0-10%, 0-5%
Pressure settings	
Inlet pressure	max. 40 bar
Receiver	max. 29 bar
Inlet pressure differential between the gases	max. 3 bar
Mixture output (air)	see tables
Setting accuracy	±1% abs.
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
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
Weight MG 50	approx. 35 kg without receiver
Weight MG 100	approx. 38 kg without receiver
Dimensions (HxWxD)	
mixer	approx. 330 x 485 x 500 mm (without connections and receiver)
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 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

GAS MIXER MG 50/100-ME PVDÜ HD

Flow **MG 50 HD** (in Nm³/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)	17.5	48	29	—	—	—	—	—	—	≤ 20 [m/s]	—	—
	18.5	62	49	29	—	—	—	—	—	> 20 [m/s]	—	—
	19.5	73	64	51	30	—	—	—	—	—	—	—
	20.5	83	75	66	52	31	—	—	—	—	—	—
	21.5	92	86	78	68	54	32	—	—	—	—	—
	22.5	100	95	88	80	69	55	33	—	—	—	—
	23.5	107	103	97	91	82	71	56	33	—	—	—
	24.5	114	110	106	100	93	84	73	58	34	—	—
	25.5	121	118	114	109	103	95	86	74	59	35	—
	26.5	127	124	121	117	112	105	98	88	76	60	35
	28.0	133	131	128	125	120	115	108	100	90	78	61
	29.0	138	137	135	132	128	123	117	110	102	92	79
	30.0	144	143	141	138	135	131	126	120	113	104	94
	31.0	149	148	147	145	142	139	134	129	123	115	106

Flow **MG 100 HD** (in Nm³/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	—	—	—	—	—	—	—	≤ 20 [m/s]	—	—
	18	136	109	—	—	—	—	—	—	> 20 [m/s]	—	—
	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