

GAS MIXER KM 1000/1500-FLOW



Gas mixing systems for 2 or 3 defined gases, designed for a variety of industrial applications.

The KM-FLOW uses electronic mass flow controllers (MFC) instead of conventional proportional valves for mixing gases.

Combined with an analyser results a maximization of the quality accompanied by minimization of the gas consumption. This efficient workflow can be ideally realized with MFC.

Capacity range 53 up to 1 059 SCFH for each gas line.
Ensures a constant, accurate mixture when large or very small volumes are needed.



Picture shows the version with analyser

Benefits

- simple to operate via Touch-Screen
- freely programmable gas mixtures can be selected at the press of a button or by bar code scanner
- simplified analysis of results by digital data bus
- optimized gas consumption helps to reduce costs, cause user definable gas quantity for each different product (only in combination with an analyser)
- low maintenance
- easy to read display
- data transfer via USB port
- administration of product names for individual positioning
- measured data storage
- user level with different access authorisation
- up to 3 mixers cascable. One unit with display and others as black-box realized

High Process Reliability

- data log
- permanent control of the O₂-concentration
- electronic control of the sample gas, alarm signals are given if the set limits are exceeded and a potential free contact operates to e.g. to shut down machinery to avoid quality problems

- lockable transparent door for protection of settings (option)
- independent of pressure fluctuations in the gas supply

Options

- software GASCONTROL CENTER for recording of results (see separate data sheet)
- integrated data logger
- measuring results data transfer via Ethernet
- bar code scanner for product names selection

Other models, options and accessories available on request.

Please identify the individual gases at the time of enquiring!

GAS MIXER KM 1000/1500-FLOW



Type	KM 1000-2 FLOW, KM 1500-3 FLOW
Gases	Ar, CO ₂ , O ₂ others gases and applications see data sheet KM17.1
Accuracy	±1.5% of current value plus ±0.3% of final value
Repeatability	±0.1% of final value by selection of suitable mixing range the accuracy corresponds to ISO 14175
Gas inlet pressures	max. 145 PSI
Gas outlet pressure	min. 7 PSI less than the inlet pressure
Output	O ₂ max. 1 059 SCFH CO ₂ max. 1 059 SCFH Ar max. 1 059 SCFH
Temperatures (gas/environment)	+32°F to +104°F
Gas connections	G 1/2 with cone seat, WITTFIX OD 10 mm
Alarm contacts	2 potential free contacts for min. and max. settings O ₂
Interfaces	USB by memory stick for product data RJ45 Ethernet FTP-Server for product data, flow values, software update
Housing	stainless steel, splash proof (with door)
Weight	approx. 1 235 oz
Dimensions (HxWxD)	approx. 12.80 x 18.90 x 19.69 inches (without connections and door)
Voltage	230 V AC, 110 V AC, 24 V DC
Power consumption	230 V AC / 1.0 A
Approvals	Company certified according to ISO 9001 CE-marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU Cleaned for Oxygen Service according to: - EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems

Flow (in SCFH) in relation to CO₂ and 1 gas line

		outlet pressure in PSIG								
		14.5	29.0	43.5	58.0	72.5	87.0	101.5	116.0	130.5
min. inlet pressure in PSIG (max. 145 PSI)	29.0	720	—	—	—	—	—	—	—	—
	43.5	1017	795	—	—	—	—	—	—	—
	58.0	1059	1059	922	—	—	—	—	—	—
	72.5	1059	1059	1059	1049	—	—	—	—	—
	87.0	1059	1059	1059	1059	1059	—	—	—	—
	101.5	1059	1059	1059	1059	1059	1059	—	—	—
	116.0	1059	1059	1059	1059	1059	1059	1059	—	—
	130.5	1059	1059	1059	1059	1059	1059	1059	1059	—
	145.0	1059	1059	1059	1059	1059	1059	1059	1059	1059

Flow (in SCFH) in relation to O₂ and 1 gas line

		outlet pressure in PSIG								
		14.5	29.0	43.5	58.0	72.5	87.0	101.5	116.0	130.5
min. inlet pressure in PSIG (max. 145 PSI)	29.0	606	—	—	—	—	—	—	—	—
	43.5	879	763	—	—	—	—	—	—	—
	58.0	1059	1006	837	—	—	—	—	—	—
	72.5	1059	1059	1059	922	—	—	—	—	—
	87.0	1059	1059	1059	1059	953	—	—	—	—
	101.5	1059	1059	1059	1059	1059	1049	—	—	—
	116.0	1059	1059	1059	1059	1059	1059	1059	—	—
	130.5	1059	1059	1059	1059	1059	1059	1059	1059	—
	145.0	1059	1059	1059	1059	1059	1059	1059	1059	1059

Flow (in SCFH) in relation to 50% CO₂/ 50% O₂ and 2 gas lines

		outlet pressure in PSIG								
		14.5	29.0	43.5	58.0	72.5	87.0	101.5	116.0	130.5
min. inlet pressure in PSIG (max. 145 PSI)	29.0	1237	—	—	—	—	—	—	—	—
	43.5	1856	1290	—	—	—	—	—	—	—
	58.0	2119	2119	1640	—	—	—	—	—	—
	72.5	2119	2119	2119	1797	—	—	—	—	—
	87.0	2119	2119	2119	2119	2055	—	—	—	—
	101.5	2119	2119	2119	2119	2119	2119	—	—	—
	116.0	2119	2119	2119	2119	2119	2119	2119	—	—
	130.5	2119	2119	2119	2119	2119	2119	2119	2119	—
	145.0	2119	2119	2119	2119	2119	2119	2119	2119	2119