

Gas mixer KM-1000 FLOW



Gas mixing systems for 2 or 3 defined gases, designed for packaging using a protective atmosphere in the food industry. 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 10 up to 500 NL/min for each gas line.

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 settings 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!

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Technical Data	
Type	KM 1000-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
Gas inlet pressures	max. 10 bar
Gas outlet pressure	min. 0.5 bar less than the inlet pressure
Output	O ₂ max. 500 NL/min CO ₂ max. 500 NL/min Ar max. 500 NL/min
Temperatures (gas/environment)	0 – 40 °C (+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. 35 kg
Dimensions (HxWxD)	approx. 325 x 480 x 500 mm (12.80 x 18.90 x 19.69 inch) (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

Mixtures (examples):

	2-gas mixture	Flow range [NL/min]	3-gas mixture	Flow range [NL/min]
Typical mix 1	Ar 82% + CO ₂ 18%	56 bis 609	Ar 70% + CO ₂ 20% + O ₂ 10%	100 bis 714
Typical mix 2	Ar 90% + CO ₂ 10%	100 bis 555	Ar 70% + CO ₂ 28% + O ₂ 2%	500 bis 714
min. possible admixture	Ar 2% + CO ₂ 98%	500 bis 510	-	-
Worst case mix	Ar 98% + CO ₂ 2%	500 bis 510	Ar 88% + CO ₂ 10% + O ₂ 2%	500 bis 568
Best case mix	Ar 50% + CO ₂ 50%	20 bis 1000	Ar 34% + CO ₂ 33% + O ₂ 33%	30 bis 1470