

GAS MIXER KM 1000-FLOW MAP

Gas mixing systems for 2 or 3 defined gases, designed for packaging using a protective atmosphere in the food industry.

Applicable for all types of packaging machines; whether vacuum, thermoforming, pillow bags or manually-sealed compartments.

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 packaging quality accompanied by minimization of the gas consumption. This efficient workflow can be ideally realized with MFC.

Capacity range 10 up to 500 NI/min for each gas line. These mixers require a receiver with sufficient volume (min. 10 litres volume), which ensures a constant, accurate mixture when large or very small volumes are needed.

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. auto-stop your machine to avoid quality problems
- lockable transparent door for protection of settings (option)



Picture shows the version with analyser

- independent of pressure fluctuations in the gas supply
- independent of packing speeds
- independent of package sizes

Maximum Hygiene

- splash-proof, robust stainless steel housing
- smooth and easy to clean surface

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-FLOW MAP



Type	KM 1000-FLOW MAP
Gases	N ₂ , CO ₂ , O ₂ others gases and applications see data sheet KM17.2
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 NI/min CO ₂ max. 500 NI/min N ₂ max. 500 NI/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 and DIN EN ISO 22000 CE-marked according to: - EMC 2004/108/EC - Low Voltage Directive 2006/95/EC for food-grade gases according to: - Regulation (EC) No 1935/2004

Mixtures (examples):

	2-gas mixture	Flow range [NI/min]	3-gas mixture	Flow range [NI/min]
Typical mix 1	N ₂ 80% + CO ₂ 20%	50 to 625	N ₂ 70% + CO ₂ 20% + O ₂ 10%	100 to 714
Typical mix 2	N ₂ 60% + CO ₂ 40%	25 to 830	N ₂ 70% + CO ₂ 28% + O ₂ 2%	500 to 714
min. possible admixture	N ₂ 2% + CO ₂ 98%	500 to 510	–	–
Worst case mix	N ₂ 98% + CO ₂ 2%	500 to 510	N ₂ 88% + CO ₂ 10% + O ₂ 2%	500 to 568
Best case mix	N ₂ 50% + CO ₂ 50%	20 to 1000	N ₂ 34% + CO ₂ 33% + O ₂ 33%	30 to 1470