





-2M -3M

Gas mixing systems for 2 or 3 defined gases especially for flow packing machines or other continuous packaging processes in the food industry.

Capacity range up to approx. 718 SCFH. For the exact pressure and flow capacity ratios, please see the technical data overleaf.

Easy operation

- a proportional mixing valve (-2) or three single mixing valves (-3), each with a control knob and %-scale, provide infinitely variable mixture settings
- the flow of the gas mixture is controlled by a metering valve combined with a flow meter

Constant quality

- independent of pressure fluctuations in the gas supply
- independent of packing speed (in permitted range)

High process reliability

- 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.
- lockable transparent door for protection of settings

Maximum hygiene

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

Other models, options and accessories available on request.

Please identify the individual gases at the time of enquiring!

GAS MIXER KM 100/200-M



Type KM 100/200-2M; KM 100/200-3M

Gases N₂, CO₂, O₃

not for flammable gases!

Mixing range0-100%Pressure settingssee tables

Inlet pressure differential

between the gases max. 43.5 psiMixture output (CO₂) see tables

min. mixture output = 1/5 of the max. mixture output

Setting accuracy $\pm 2\%$ abs. (scale 0 - 100%) Mixing precision better than $\pm 1\%$ abs.

Gas connections

inlets G 3/8 RH with cone, hose nipple 8 mm outlet G 3/8 RH with cone, hose nipple 8 mm

Housing stainless steel, splash proof

Weight approx. 37.5 lb (-2), approx. 55.1 lb (-3)

Dimensions (HxWxD) approx. 8.7 x 12.8 x 13.6 inches (without connections)

Voltage 230 V AC, 110 V AC or 24 V DC

Power consumption 230 V AC, 0.02 A

110 V AC, 0.04 A 24 V DC, 0.06 A

Approvals Company certified according to ISO 9001 and ISO 22000

CE-marked according to:

- Electromagnetic compatibility Directive 2014/30/EU

Low Voltage Directive 2014/35/EU for food-grade gases according to:
Regulation (EC) No 1935/2004

Designed for Oxygen Service in accordance with EIGA 13/20 and CGA G-4.4:

Oxygen Pipeline and Piping Systems

Cleaned for Oxygen Service in accordance with EIGA 33/18 and CGA G-4.1:

Cleaning of Equipment for Oxygen Service

| Flow KM 100 (in | SCFH) | in relatior | to CO ₂ | | | | | | | | | | | |
|---|-------|-------------------------|--------------------|------|------|------|------|------|------|---|------|------|------|--|
| | | outlet pressure in PSIG | | | | | | | | | | | | |
| | | 7.2 | 14.5 | 21.8 | 29.0 | 36.3 | 43.5 | 50.8 | 58.0 | 65.3 | 72.5 | 79.8 | 87.0 | |
| min. inlet pressure in psig (max. 189.5 PSI) | 29.0 | 148 | - | _ | - | - | _ | - | _ | | No | ote: | | |
| | 43.5 | _ | 182 | _ | - | - | _ | - | _ | Reduced mixture output in case of higher outlet pressures | | | | |
| | 58.0 | _ | _ | 212 | - | _ | _ | _ | _ | | | | | |
| | 72.5 | _ | - | - | 233 | - | - | - | - | - | - | - | - | |
| | 87.0 | _ | - | - | - | 254 | - | - | - | - | - | - | - | |
| | 101.5 | _ | - | - | - | - | 275 | - | - | - | _ | - | - | |
| | 116.0 | _ | - | - | - | - | - | 297 | - | _ | - | - | - | |
| | 130.5 | _ | _ | - | _ | - | - | _ | 318 | _ | _ | - | _ | |
| | 145.0 | _ | - | - | - | - | - | - | - | 333 | - | - | - | |
| | 159.5 | _ | - | - | - | - | - | - | - | _ | 350 | - | - | |
| | 174.0 | _ | - | - | - | - | - | - | - | _ | - | 367 | _ | |
| | 188.5 | | | | | | | | | _ | _ | | 379 | |

| Flow KM 200 (in | SCFH) | in relatior | to CO ₂ | | | | | | | | | | |
|---|-------|-------------------------|--------------------|------|------|------|------|------|------|--------------------------------|------|------|------|
| | | outlet pressure in PSIG | | | | | | | | | | | |
| | | 7.2 | 14.5 | 21.8 | 29.0 | 36.3 | 43.5 | 50.8 | 58.0 | 65.3 | 72.5 | 79.8 | 87.0 |
| | 29.0 | 246 | - | - | - | _ | - | _ | _ | | No | ote: | |
| | 43.5 | _ | 295 | - | _ | - | - | - | - | Reduced mixture output in case | | | |
| | 58.0 | _ | - | 356 | _ | - | - | - | - | of higher outlet pressures | | | |
| | 72.5 | _ | - | - | 417 | - | - | - | - | _ | _ | _ | _ |
| inlet pressure in psig (max. 189.5 PSI) | 87.0 | _ | - | - | _ | 458 | - | - | - | _ | _ | _ | _ |
| | 101.5 | _ | - | - | _ | - | 528 | - | - | _ | _ | _ | _ |
| | 116.0 | _ | _ | _ | _ | _ | _ | 564 | - | _ | _ | _ | _ |
| | 130.5 | _ | - | - | _ | - | - | - | 600 | _ | _ | _ | _ |
| | 145.0 | _ | _ | _ | _ | _ | _ | _ | - | 629 | _ | _ | _ |
| | 159.5 | _ | - | - | _ | - | - | - | - | _ | 661 | _ | _ |
| | 174.0 | _ | - | _ | _ | _ | _ | - | _ | _ | _ | 691 | _ |
| | 188.5 | _ | _ | _ | _ | _ | _ | _ | | _ | - | _ | 718 |