

# KM 100-2MEM+, KM 100-3MEM+



Electronic gas mixing system with motor driven mixing valve for various technical applications. A further innovation founded on the basis of our well proven mixing valve technology.

## Benefits

- fast mixing adjustment < 3 sec. by simultaneous adjustment of mixing valves
- control by PC, PLC of machine, etc.
  - remote control
  - easy documentation of parameter settings to meet quality management requirements
  - only one control unit for an infinite number of mixing systems
  - monitoring of parameters and valve positions possible at any time
  - current position is readable on display
- mixture settings in steps of 0.1%
- high mixing accuracy
- simple to operate via touch-screen (after activation)
- gas mixers can be linked to PC or PLC (e.g. CAN-Bus option)
- due to the real zero flow it is possible at mixers with 3 gas mixtures to mix 2 gas mixtures
- independent of pressure fluctuations in the gas supply
- independent of packaging speeds and sizes of packages (packaging industry)
- integrated monitoring of gas supply for higher process safety. Low pressures trigger an alarm and a potential free contact (e.g. to shut down machinery and avoid quality problems)
- perfect hygiene due to splash-proof housing with smooth, easy to clean surfaces of brushed stainless steel
- inlet pressure failures are displayed

**Note:** Features depend on the type of the control system used.

## Options

- continual monitoring and documentation of gas mixtures by optional gas analyser
- pre-assembly of mixer on receiver for easier on-site installation
- audible alarm
- visual alarm (flash light)

**Attention:** These mixers require a receiver with sufficient volume (according to output from 10 to 100 Litre)

**The individual gases must be identified at the time of enquiring!**

Technical DataOverleaf



# KM 100-2MEM+, KM 100-3MEM+

| Technical Data                                |   |              |                     |
|---|---|--------------|---------------------|
| Type  | KM 100-2MEM+ /-3MEM+  |              |                     |
| Gases   | all technical gases<br>(excluding toxic and corrosive gases also mixtures of fuel gas with air, O <sub>2</sub> or N <sub>2</sub> O)   |              |                     |
| Mixing range                                  | 0 – 100%  |              |                     |
| Gas inlet pressures                           | max. 20 bar   |              |                     |
| Gas outlet pressure                           | max. 10 bar   |              |                     |
| Inlet pressure differential between the gases | max. 3 bar  |              |                     |
| Mixture output (air)                          | see table   |              |                     |
| Setting accuracy                              | ±0.1% abs.  |              |                     |
| Mixing precision                              | better than ±1% abs.  |              |                     |
| Gas connections                               | Inlets: G ½ with cone<br>Outlet: G ½ with cone  |              |                     |
| Interfaces                                    | selectable, see table   |              |                     |
|   |   | digital      | analog              |
|   |   | RS232        | 4-20 mA      0-10 V |
|   | Touchscreen activation  | option       | -      -            |
|   | Converter for USB   | upon request | -      -            |
|   | Converter for Ethernet  | upon request | -      -            |
| Display                                       | 240 x 128 pixels for display and adjustment (option) of the nominal position  |              |                     |
| Housing                                       | stainless steel, splash proof   |              |                     |
| Weight  | approx. 22 kg   |              |                     |
| Dimensions (HxWxD)                            | approx. 226 x 325 x 400 mm (8.90 x 12.80 x 15.75 inches)  |              |                     |
| Voltage                                       | 24 V DC (optional 230 V AC, 110 V AC)   |              |                     |
| Power consumption                             | max. 2 A  |              |                     |
| Approvals                                     | Company certified according to ISO 9001 and ISO 22000<br>CE-marked according to: - EMC 2014/30/EU<br>- Low Voltage Directive 2014/35/EU<br>- PED 2014/68/EU<br>for food-grade gases according to: - Regulation (EC) No 1935/2004<br>Cleaned for Oxygen Service according to: - EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems |              |                     |

**Flow (in NI/min) in relation to air**  
**min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)**

| min. inlet pressure in barg<br>(max. 20 bar) | Flow (in NI/min) in relation to air |     |     |     |     |     |     |     |     |      |
|--|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|
|  | 1.5                                 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 |
| 4  | 162                                 | -   | -   | -   | -   | -   | -   | -   | -   | -    |
| 5  | 209                                 | 191 | -   | -   | -   | -   | -   | -   | -   | -    |
| 6  | 251                                 | 247 | 217 | -   | -   | -   | -   | -   | -   | -    |
| 7  | 293                                 | 293 | 280 | 240 | -   | -   | -   | -   | -   | -    |
| 8  | 335                                 | 355 | 332 | 310 | 261 | -   | -   | -   | -   | -    |
| 9  | 376                                 | 376 | 376 | 367 | 337 | 280 | -   | -   | -   | -    |
| 10   | 418                                 | 418 | 418 | 416 | 399 | 362 | 298 | -   | -   | -    |
| 11   | 460                                 | 460 | 460 | 460 | 452 | 428 | 385 | 315 | -   | -    |
| 12   | 502                                 | 502 | 502 | 502 | 500 | 486 | 456 | 407 | 332 | -    |
| 13   | 544                                 | 544 | 544 | 544 | 544 | 537 | 517 | 482 | 428 | 347  |

Rev. II\_022017\_KM 100-2MEM+\_3MEM+\_engl. subject to technical alterations

