

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 | N ₂ , CO ₂ , O ₂ not for flammable gases! | | | |
| 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 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 CE-marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU - PED 2014/68/EU for food-grade gases according to: - Regulation (EC) No 1935/2004 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 (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 |

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