



-2M+

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

- 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.

- mixture settings in steps of 0.1%
- high mixing accuracy
- simple to operate via touch-screen
- 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

Options

- continual monitoring and documentation of gas mixtures by optional gas analyser
- audible alarm
- visual alarm (flash light)

Please identify the individual gases at the time of enquiring!

GAS MIXER KM 100-M+



Type	KM 100-2M+ /-3M+
Gases	N ₂ , CO ₂ , O ₂ not for flammable gases!
Mixing range	0 – 100%
Pressure settings	see table
Inlet pressure differential between the gases	max. 3 bar
Mixture output (CO ₂)	see table min. mixture output = 1/5 of the max. mixture output
Setting accuracy	±0.1% abs.
Mixing precision	better than ±1% abs.
Gas connections	
Inlets	G 1/2 with cone
Outlet	G 1/2 with cone
Interfaces	selectable see table

Analogue	4-20 mA or 0-10 V
Ethernet	yes
CanBus	yes
OPC UA	yes
Module box RS232	optional
Module box Profinet	optional

Display	240 x 128 pixels for display and adjustment (option) of the nominal position
Housing	stainless steel, splash proof
Weight	approx. 22 kg (-2M+), approx. 30 kg (-3M+)
Dimensions (HxWxD)	approx. 226 x 325 x 400 mm (8.90 x 12.80 x 15.75 inches) (-2M+ without connections) approx. 330 x 485 x 500 mm (12.99 x 19.09 x 19.69 inches) (-3M+ without connections)
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 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 (in NI/min) in relation to CO ₂		outlet pressure in barg											
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
min. inlet pressure in barg (max. 13 bar)	2	70	—	—	—	—	—	—	—	—	—	—	—
	3	—	86	—	—	—	—	—	—	—	—	—	—
	4	—	—	100	—	—	—	—	—	—	—	—	—
	5	—	—	—	110	—	—	—	—	—	—	—	—
	6	—	—	—	—	120	—	—	—	—	—	—	—
	7	—	—	—	—	—	130	—	—	—	—	—	—
	8	—	—	—	—	—	—	140	—	—	—	—	—
	9	—	—	—	—	—	—	—	150	—	—	—	—
	10	—	—	—	—	—	—	—	—	157	—	—	—
	11	—	—	—	—	—	—	—	—	—	165	—	—
	12	—	—	—	—	—	—	—	—	—	—	173	—
	13	—	—	—	—	—	—	—	—	—	—	—	179