





Gas mixing systems for 2 or 3 defined gases, designed for a variety of industrial applications, particularly for all areas with sharply fluctuating mixed gas extraction quantities.

Capacity range from 0 to approx. 544 NI/min. For the exact pressure and flow capacity ratios, please see the technical data overleaf.

Note:

System only works with sufficient buffer volume (20 to 100 litres depending on gas mixing capacity).

Easy operation

- a proportional mixing valve (-2ME) or three single mixing valves (-3ME), each with a control knob and %-scale, provide infinitely variable mixture settings
- gas mixture withdrawal possible from zero to the maximum flow capacity

High process reliability

- independent of pressure fluctuations in the gas supply
- intermittent gas mixture withdrawal possible
- lockable transparent door for protection of settings
- splash-proof and robust stainless steel housing

Options

- for flammable gases available as Ex-version with separate control cabinet
- 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.
- integrated gas analysis for the monitoring/control and documentation of the gas mixture production
- gas mixer mounted on gas mixture buffer tank for a more convenient installation

Other models, options and accessories available upon request.

Please identify the individual gases at the time of enquiring!

GAS MIXER KM 20/30/60/100-ME



Type KM 20/30/60/100-2ME /-3ME; KM 20/30/60/100-2ME /-3ME Ex

Gases all technical gases (excluding toxic and corrosive gases

also mixtures of fuel gas with air, O₂ or N₂O)

G 3/8 RH with cone, soldering nipple for pipe OD 10 mm

G 3/8 RH with cone, soldering nipple for pipe OD 10 mm

G 3/8 LH with cone, soldering nipple for pipe OD 10 mm

approx. 18 kg (-2ME), approx. 26 kg (-3ME) without receiver

0-25% (KM 60/100-ME only) or 0-100% Mixing range by selection of suitable mixing range

the accuracy corresponds to ISO 14175

WITT-Pipe Couplers for pipe OD 12 mm

stainless steel, splash proof (not Ex-version)

Pressure settings see tables

Inlet pressure differential max. 3 bar between the gases

Setting accuracy ±1% abs. (scale 0-25%), ±2% abs. (scale 0-100%)

see tables

Mixing precision better than ±1% abs.

Gas connections

Mixture output (air)

inlets outlet at mixer outlet at receiver for fuel gas connection

and outlet at mixer Housing

Dimensions (HxWxD)

mixer

Weight

approx. 225 x 325 x 345 mm (8.86 x 12.79 x 13.58 inches) (without connections and receiver)

approx. 280 x 302 x 158 mm (11.02 x 11.89 x 6.22 inches) separate control cabinet (Ex)

(without connections)

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

Power consumption 230 V AC, 0.07 A

Approvals Company certified according to ISO 9001

CE-marked according to:

- EMC 2014/30/EU

- Low Voltage Directive 2014/35/EU

- PED 2014/68/EU

- ATEX 114 Directive 2014/34/EU

| FI | ow KM 2 | 0 (in | NI/m | in) in | relatio | on to a | air | | | | | | | | |
|------|--|--------------|------|--------|---------|---------|-----|-----|-----|-----|-----|------|--|--|--|
| | min. receiver pressure in barg (max. receiver pressure 0.5 bar higher) | | | | | | | | | | | | | | |
| | | | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 | | | |
| | | | 21 | - | - | - | - | - | - | - | - | - | | | |
| | min. inlet | | 27 | 25 | - | - | - | - | - | - | - | - | | | |
| | | | 33 | 32 | 28 | - | - | - | - | - | - | - | | | |
| 1000 | | | 38 | 38 | 37 | 31 | - | - | - | - | - | - | | | |
| | essure | | 44 | 44 | 44 | 41 | 34 | - | - | - | - | - | | | |
| | barg nax. | | 50 | 50 | 50 | 48 | 44 | 37 | - | - | - | - | | | |
| , |) bar) | 10 | 55 | 55 | 55 | 55 | 53 | 48 | 39 | - | - | - | | | |
| | , | 11 | 61 | 61 | 61 | 61 | 60 | 56 | 51 | 41 | - | - | | | |
| | | 12 | 66 | 66 | 66 | 66 | 66 | 64 | 60 | 54 | 44 | - | | | |
| | | 13 | 72 | 72 | 72 | 72 | 72 | 71 | 68 | 64 | 56 | 46 | | | |

| Flow KM 30 (in NI/min) in relation to air | | | | | | | | | | | | |
|---|-----|----------|---------|-------|--------|-------|---------|---------|----------|--------|-------|--|
| | mir | ı. recei | ver pre | ssure | n barg | (max. | receive | r press | sure 0.5 | bar hi | gher) | |
| | | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 | |
| | 4 | 40 | - | - | - | - | - | - | - | - | - | |
| | | 52 | 47 | - | - | - | - | - | - | - | - | |
| min. | | 62 | 61 | 54 | - | - | - | - | - | - | - | |
| inlet | | 73 | 73 | 70 | 60 | - | - | - | - | - | - | |
| pressure in barg | | 83 | 83 | 83 | 77 | 65 | - | - | - | - | - | |
| (max. | | 94 | 94 | 94 | 91 | 84 | 70 | - | - | - | - | |
| 20 bar) | 10 | 104 | 104 | 104 | 104 | 99 | 90 | 74 | - | - | - | |
| , | 11 | 115 | 115 | 115 | 115 | 113 | 107 | 96 | 78 | - | - | |
| | 12 | 125 | 125 | 125 | 125 | 125 | 121 | 114 | 101 | 83 | - | |
| | 13 | 136 | 136 | 136 | 136 | 136 | 134 | 129 | 120 | 107 | 86 | |

| F | Flow KM 60 (in NI/min) in relation to air | | | | | | | | | | | | | |
|-------|---|-----|----------|---------|--------|---------|-------|---------|----------|---------|---------|--------|--|--|
| | | mir | n. recei | ver pre | essure | in barg | (max. | receive | er press | sure 0. | 5 bar h | igher) | | |
| | | | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 | | |
| | | 4 | 86 | - | - | - | - | - | - | - | - | - | | |
| | | | 111 | 102 | - | - | - | - | - | - | - | - | | |
| - 111 | min. | | 133 | 131 | 115 | - | - | - | - | - | - | - | | |
| - 111 | inlet | | 155 | 155 | 149 | 127 | - | - | - | - | - | - | | |
| - 113 | oressure n barg | | 178 | 178 | 176 | 165 | 138 | - | - | - | - | - | | |
| - 111 | max. | | 200 | 200 | 200 | 195 | 179 | 149 | - | - | - | - | | |
| - 111 | 20 bar) | 10 | 222 | 222 | 222 | 221 | 212 | 192 | 158 | - | - | - | | |
| | , | 11 | 244 | 244 | 244 | 244 | 240 | 227 | 205 | 167 | - | - | | |
| | | 12 | 266 | 266 | 266 | 266 | 266 | 258 | 242 | 216 | 176 | - | | |
| | | 13 | 289 | 289 | 289 | 290 | 289 | 285 | 275 | 256 | 227 | 184 | | |

| Flow KM 100 (in Nl/min) in relation to air min. receiver pressure in barg (max. receiver pressure 0.5 bar higher) | | | | | | | | | | | | | |
|---|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--|--|
| | | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 | | |
| | | 162 | - | - | - | - | - | - | - | - | - | | |
| | | 209 | 191 | - | - | - | - | - | - | - | - | | |
| min. | | 251 | 247 | 217 | - | - | - | - | - | - | - | | |
| inlet | | 293 | 293 | 280 | 240 | - | - | - | - | - | - | | |
| pressure in barg | | 335 | 355 | 332 | 310 | 261 | - | - | - | - | - | | |
| (max. | | 376 | 376 | 376 | 367 | 337 | 280 | - | - | - | - | | |
| 20 bar) | 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 | | |