



-2ME GB



-3ME Ex

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 NXT+: 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, O ₂ or N ₂ O) |
| Mixing range | 0-25% (KM 60/100-ME only) or 0-100% by selection of suitable mixing range the accuracy corresponds to ISO 14175 |
| Pressure settings | see tables |
| Inlet pressure differential between the gases | max. 3 bar |
| Mixture output (air) | see tables |
| Setting accuracy | ±1% abs. (scale 0-25%), ±2% abs. (scale 0-100%) |
| Mixing precision | better than ±1% abs. |
| Gas connections | |
| inlets | G 3/8 RH with cone, soldering nipple for pipe OD 10 mm |
| outlet at mixer | G 3/8 RH with cone, soldering nipple for pipe OD 10 mm |
| outlet at receiver | WITT-Pipe Couplers for pipe OD 12 mm |
| for fuel gas connection and outlet at mixer | G 3/8 LH with cone, soldering nipple for pipe OD 10 mm |
| Housing | stainless steel, splash proof (not Ex-version) |
| Weight | approx. 18 kg (-2ME), approx. 26 kg (-3ME) without receiver |
| Dimensions (HxWxD) | |
| mixer | approx. 225 x 325 x 345 mm (8.86 x 12.79 x 13.58 inches) (without connections and receiver) |
| separate control cabinet (Ex) | approx. 212 x 198 x 160 mm (8.35 x 7.79 x 6.30 inches) (without connections) |
| Voltage | 230 V AC, 110 V AC or 24 V DC |
| Power consumption | 230 V AC, 0.07 A |
| Approvals | Company certified according to ISO 9001 CE-marked according to: - EMC 2004/108/EC - Low Voltage Directive 2006/95/EC - PED 97/23/EC - ATEX 95 Directive 94/9/EC |

| | | 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 |
| min. inlet pressure in barg (max. 20 bar) | 4 | 21 | - | - | - | - | - | - | - | - | - |
| | 5 | 27 | 25 | - | - | - | - | - | - | - | - |
| | 6 | 33 | 32 | 28 | - | - | - | - | - | - | - |
| | 7 | 38 | 38 | 37 | 31 | - | - | - | - | - | - |
| | 8 | 44 | 44 | 44 | 41 | 34 | - | - | - | - | - |
| | 9 | 50 | 50 | 50 | 48 | 44 | 37 | - | - | - | - |
| | 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 |

| | | 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 |
| min. inlet pressure in barg (max. 20 bar) | 4 | 40 | - | - | - | - | - | - | - | - | - |
| | 5 | 52 | 47 | - | - | - | - | - | - | - | - |
| | 6 | 62 | 61 | 54 | - | - | - | - | - | - | - |
| | 7 | 73 | 73 | 70 | 60 | - | - | - | - | - | - |
| | 8 | 83 | 83 | 83 | 77 | 65 | - | - | - | - | - |
| | 9 | 94 | 94 | 94 | 91 | 84 | 70 | - | - | - | - |
| | 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 |

| | | 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 |
| min. inlet pressure in barg (max. 20 bar) | 4 | 86 | - | - | - | - | - | - | - | - | - |
| | 5 | 111 | 102 | - | - | - | - | - | - | - | - |
| | 6 | 133 | 131 | 115 | - | - | - | - | - | - | - |
| | 7 | 155 | 155 | 149 | 127 | - | - | - | - | - | - |
| | 8 | 178 | 178 | 176 | 165 | 138 | - | - | - | - | - |
| | 9 | 200 | 200 | 200 | 195 | 179 | 149 | - | - | - | - |
| | 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 |

| | | 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 |
| min. inlet pressure in barg (max. 20 bar) | 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 |

KM7 - D01/15 subject to change