


MG 50-3 ECO Ex

Capacity range from 0 to approx. $167 \mathrm{Nm}^{3} / \mathrm{h}$. For the exact pressure and flow capacity ratios, please see the technical data overleaf.

## Note:

System only works with sufficient buffer volume ( 100 to 250 litres depending on gas mixing capacity).

## Benefits

- easy operation; no special skills required
- protection of fixed mixing ratio
- filter in the gas inlets protect the mixer against dirt contamination
- non-return valves prevent dangerous reverse gas flow in the gas supply
- gas mixture withdrawal possible from zero to the maximum flow capacity
- compact design
- low maintenance

High process reliability

- independent of pressure fluctuations in the gas supply
- 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.
- 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!

| Type | MG 50/100-2 ECO; MG 50/100-2 ECO Ex |
| :---: | :---: |
| Gases | all technical gases (excluding toxic or corrosive gases) |
| Mixing range | 0-100\% |
| Pressure setting | see tables |
| Inlet pressure differential between the gases | max. 3 bar |
| Mixture output (air) | see tables |
| Mixing precision | better than $\pm 1 \%$ abs . |
| Gas connections MG 50 inlets outlet at mixer outlet at receiver | G $1 / 2$ RH with cone, soldering nipple for pipe OD 15 mm G 1/2 RH with cone, soldering nipple for pipe OD 15 mm WITTFIX-Pipe Couplers for pipe OD $22 \times 1.5 \mathrm{~mm}$ |
| Gas connections MG 100 <br> inlets <br> outlet at mixer outlet at receiver | G 1 RH with cone, soldering nipple for pipe OD 22 mm G 1 RH with cone, soldering nipple for pipe OD 22 mm WITTFIX-Pipe Couplers for pipe OD $22 \times 1.5 \mathrm{~mm}$ |
| Housing | stainless steel |
| Weight MG 50 Weight MG 100 | approx. 20 kg without receiver approx. 27 kg without receiver |
| ```Dimensions (HxWxD) mixer MG 50 mixer MG 100 separate control cabinet (Ex)``` | approx. $245 \times 380 \times 285 \mathrm{~mm}$ ( $9.65 \times 14.96 \times 11.22$ inch) <br> (without connections and receiver) <br> approx. $245 \times 530 \times 335 \mathrm{~mm}(9.65 \times 20.87 \times 13.19$ inch $)$ <br> (without connections and receiver) <br> approx. $212 \times 198 \times 160 \mathrm{~mm}(8.35 \times 7.79 \times 6.29$ inch $)$ <br> (without connections) |
| Voltage | 230 V AC, 110 V AC or 24 V DC |
| Power consumption | $230 \mathrm{~V} \mathrm{AC}, 0.07 \mathrm{~A}$ |
| Approvals | Company certified according to ISO 9001 CE-marked according to: <br> - EMC 2004/108/EC <br> - Low Voltage Directive 2006/95/EC <br> - PED 97/23/EC <br> - ATEX 95 Directive 94/9/EC |


| Flow MG 50 (in $\mathrm{Nm}^{3} / \mathrm{h}$ ) in relation to air min. receiver pressure in barg (max. receiver pressure 0.5 bar higher) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| min. inlet pressure in barg (max. 20 bar) |  | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 | 10.5 |
|  | 4 | 21 | - | - | - | - | - | - | - | - |  |
|  | 5 | 27 | 24 |  |  | - | - | - | - | - |  |
|  | 6 | 32 | 32 | 28 |  | - | - | - | - | - |  |
|  | 7 | 37 | 37 | 36 | 31 | - | - | - | - | - | - |
|  | 8 | 43 | 43 | 43 | 40 | 33 | - | - | - | - | - |
|  | 9 | 48 | 48 | 48 | 47 | 43 | 36 | - | - | - | - |
|  | 10 | 54 | 54 | 54 | 53 | 51 | 46 | 38 | - | - | - |
|  | 11 | 59 | 59 | 59 | 59 | 58 | 55 | 49 | 40 | - | - |
|  | 12 | 65 | 65 | 65 | 65 | 64 | 62 | 59 | 52 | 42 | - |
|  | 13 | 70 | 70 | 70 | 70 | 70 | 69 | 67 | 62 | 55 | 44 |


| Flow MG 100 (in Nm $3 / \mathrm{h}$ ) in relation to air min. receiver pressure in barg (max. receiver pressure 0.5 bar higher) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| min. inlet pressure in barg (max. 20 bar) |  | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 |
|  | 4 | 47 | - | - |  | - | - | - | - |  |
|  | 5 | 64 | 58 |  |  | - | - | - | - |  |
|  | 6 | 78 | 75 | 68 |  | - | - | - | - |  |
|  | 7 | 94 | 93 | 88 | 76 | - | - | - | - | - |
|  | 8 | 108 | 107 | 105 | 98 | 84 | - | - | - | - |
|  | 9 | 124 | 122 | 121 | 118 | 108 | 90 | - | - | - |
|  | 10 | 138 | 138 | 136 | 134 | 128 | 116 | 97 | - | - |
|  | 11 | 152 | 152 | 152 | 149 | 145 | 136 | 124 | 102 | - |
|  | 12 | 167 | 167 | 167 | 167 | 164 | 158 | 149 | 133 | 112 |

