

## Measuring devices

# **FTC130**









#### Transmitter for extractive gas analysis

Precise analysis of (quasi-) binary gas mixtures

- Easily operated using RS232 interface
- Analysis by means of thermal conductivity for up to 16 (quasi-) binary mixtures in one device, easy adaption to a new measurement task
- Output current 4-20mA, potential free
- With covered push-buttons for calibration in the field



### **FTC160**







### Transmitter for non-extractive gas analysis

Precise analysis of (quasi-) binary gas mixtures

- For direct attachment to a tank or line (M30x1,5), the process gas diffuses in the detector
- Easily operated using RS232 interface
- Analysis by means of thermal conductivity for up to 16 (quasi-) binary mixtures in one device, easy adaption to a new measurement task
- Output current 4-20mA, potential free



# Measurement components and ranges ...

#### Measurement components and ranges for FTC400, FTC300, FTC160 and FTC130

Note: All measuring ranges are given in Vol.%

| Measurement<br>Component | Carrier Gas           | Basic Range | Smallest Range | Smallest Range<br>with suppressed<br>Zero Point | Multi Gas<br>Mode MGM |
|--------------------------|-----------------------|-------------|----------------|---|-----------------------|
| H <sub>2</sub>           | N <sub>2</sub> or air | 0% - 100%   | 0% - 0.5%      | 98% - 100%                                      | Yes                   |
| $O_2$                    | N <sub>2</sub>        | 0% - 100%   | 0% - 15%       | 85% - 100%                                      | Yes                   |
| Не                       | N <sub>2</sub> or air | 0% - 100%   | 0% - 0.8%      | 97% - 100%                                      | Yes                   |
| CO <sub>2</sub>          | N <sub>2</sub> or air | 0% - 100%   | 0% - 3%        | 96% - 100%                                      | Yes                   |
| $N_2$                    | Ar                    | 0% - 100%   | 0% - 3%        | 97% - 100%                                      | Yes                   |
| $O_2$                    | Ar                    | 0% - 100%   | 0% - 2%        | 97% - 100%                                      | Yes                   |
| H <sub>2</sub>           | Ar                    | 0% - 100%   | 0% - 0.4%      | 99% - 100%                                      | Yes                   |
| He                       | Ar                    | 0% - 100%   | 0% - 0.5%      | 98% - 100%                                      | Yes                   |
| CO <sub>2</sub>          | Ar                    | 0% - 60%    | 0% - 10%       | -   | Yes                   |
| Ar                       | CO <sub>2</sub>       | 40% - 100%  | -              | 80% - 100%                                      | Yes                   |
| CH <sub>4</sub>          | N <sub>2</sub> or air | 0% - 100%   | 0% - 2%        | 96% - 100%                                      | Yes                   |
| CH <sub>4</sub>          | Ar                    | 0% - 100%   | 0% - 1.5%      | 97% - 100%                                      | Yes                   |
| Ar                       | O <sub>2</sub>        | 0% - 100%   | 0% - 3%        | 96% - 100%                                      | Yes                   |
| $N_2$                    | . H₂                  | 0% - 100%   | 0% - 2%        | 99.5% - 100%                                    | Yes                   |
| 02                       | CO <sub>2</sub>       | 0% - 100%   | 0% - 3%        | 96% - 100%                                      | Yes                   |
| H <sub>2</sub>           | He                    | 20% - 100%  | 20% - 40%      | 85% - 100%                                      |                       |
| H <sub>2</sub>           | CH <sub>4</sub>       | 0% - 100%   | 0% - 0.5%      | 98% - 100%                                      |                       |
| H <sub>2</sub>           | CO <sub>2</sub>       | 0% - 100%   | 0% - 0.5%      | 98% - 100%                                      |                       |
| SF <sub>6</sub>          | N <sub>2</sub> or air | 0% - 100%   | 0% - 2%        | 96% - 100%                                      |                       |
| NO <sub>2</sub>          | N <sub>2</sub> or air | 0% - 100%   | 0% - 5%        | 96% - 100%                                      |                       |
| H <sub>2</sub>           | O <sub>2</sub>        | 0% - 100%   | 0% - 4%        | 97% - 100%                                      |                       |
| Ar                       | Xe                    | 0% - 100%   | 0% - 3%        | 99% - 100%                                      |                       |
| Ne                       | Ar                    | 0% - 100%   | 0% - 1.5%      | 99% - 100%                                      |                       |
| Kr                       | Ar                    | 0% - 100%   | 0% - 2%        | 96% - 100%                                      |                       |
| R125                     | N <sub>2</sub> or air | 0% - 100%   | 0% - 4%        | 98% - 100%                                      |                       |

Table 1

#### Measurement components and measuring ranges for FTC300HT (High Temperature)

| Measurement<br>Component      | Carrier Gas    | Basic Range | Smallest Range | Smallest Range<br>with suppressed<br>Zero Point | Multi Gas<br>Mode MGM |
|-------------------------------|----------------|-------------|----------------|---|-----------------------|
| CO <sub>2</sub>               | Ar             | 0% - 100%   | 0% - 8%        | 70% - 100%                                      | Yes                   |
| NH <sub>3</sub>               | N <sub>2</sub> | 0% - 70%    | 0% - 3%        | 55% - 70%                                       | Yes                   |
| C <sub>2</sub> H <sub>4</sub> | N <sub>2</sub> | 0% - 100%   | 0% - 10%       | 60% - 100%                                      | Yes                   |
| H <sub>2</sub> O              | N <sub>2</sub> | 0% - 20%    | 0% - 4%        | 16% - 20%                                       |                       |

Table 2

In addition all measurement and carrier gases given in table 1 are also available