



Thermal mass flowmeter  
Precise and dynamic  
gas measurement with  
Sensyflow

Power and productivity  
for a better world™



# Sensyflow

## Your best solution



### Information at a glance

The transmitter with backlight graphic display offers numerous status and diagnostic functions, numeric and graphic display and a time-saving Easy Set-up menu.

### Self aligning

The unique centering pin mounted on the pipe component takes care of locating the sensor in the pipe. Identical mounting position, even after removing the sensor for maintenance.

### Flexible

Due to the wide range of available pipe components, Sensyflow FMT400 and FMT500 are easily adapted to your preferred process connections. Optional flow straightener can also significantly reduce the required straight inlet pipework length.

### Cost-saving

Due to the negligible pressure drop across the flowmeter, (typically 1 mbar) no additional energy usage is incurred by the measurement. Furthermore the ABB Sensyflow thermal mass flow technique provides the best accuracy in the market.

### Precise measurement

The stainless steel cage protects the sensor from damage and provides a stable flow profile as well as precise repeatable measuring results.

### Sensitive

The unique sensor construction consists of two glass coated platinum resistors, giving an extremely fast response time (< 0.5 s). High measurement sensitivity means that even the lowest gas flows are detected.

# Your benefits

- **Highest accuracy**  
< 1% of measuring value  
Calibration on DAkkS test facility
- **Outstanding repeatability**  
< 0.2% of the measuring value
- **Wide measuring range**  
Turn down ratio up to 1:150
- **Negligible pressure loss**  
Max. 3 mbar, hence no additional energy is incurred
- **Low cost of ownership**  
Maintenance free, no wear, no moving parts
- **Shortest response time**  
 $T_{63} < 0.5 \text{ s}$
- **For pipes from DN25 to DN3000**  
Applicable also for rectangular ducts with weld-on adapter
- **The measuring principle**  
This measurement method directly determines the gas mass flow. The standard volume flow rate can be displayed without additional pressure and temperature compensation.



# Sensyflow

## FMT400-VTS, FMT400-VTCS, FMT200-D

The experts for process and hygienic applications. The transmitter directly delivers an electrically isolated 4...20 mA output signal.

### FMT400-VTS

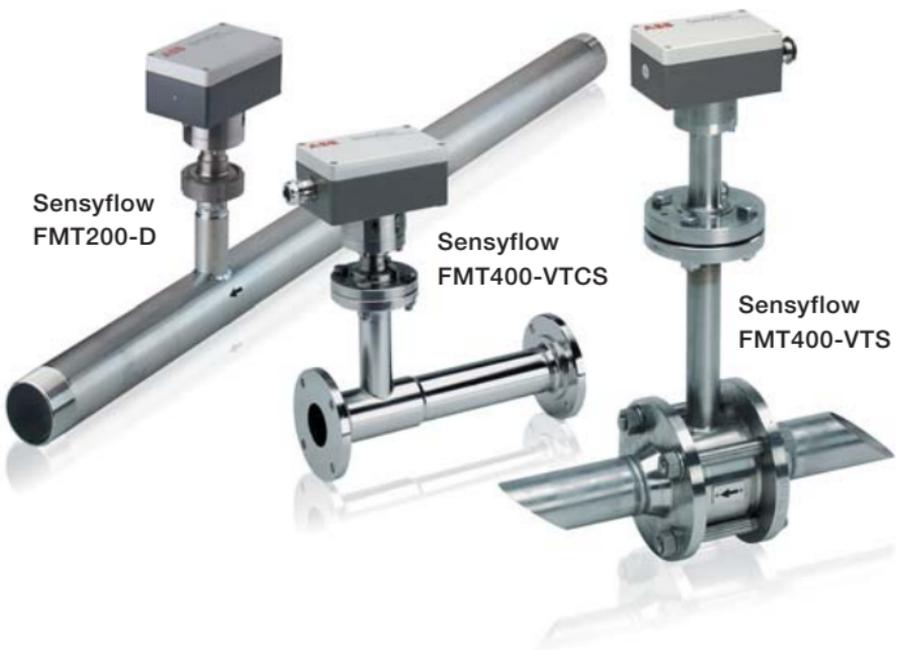
- Robust and variable design for process engineering
- Affordable solution for measuring vitalisation air and natural gas production
- Certificates: ATEX zone 2/22, GOST, DVGW

### FMT400

- Hygienic version for the food and beverage industry, pharmaceuticals
- Suitable for CIP and SIP, certified by TU Weihenstephan

### FMT200-D

- For basic compressed air applications



# Sensyflow FMT500-IG

For all technical gases. Intelligent sensor with digital signal processing combined with years of application experience in various process applications.

## FMT500-IG

- Easy Set-up menu for user-friendly commissioning
- Various alarm and limit value functions, status and diagnostic signals
- Gas temperature measurement
- The flowmeter provides the measuring signals either as analog/HART or PROFIBUS signals (depending on the version)
- Certificates: ATEX/GOST for zone 0, FM/CSA, DVGW



# Sensyflow

## FMT200-ECO2

Pneumatic, paint robot control,  
compressed air systems,  
machines for gas dosing and burner  
control.

### FMT200-ECO2

- Compact and arbitrary mounting
- Response time < 25 ms
- Highly modular process connections
- Variety of output signals
- Ex version for Zone 2 and Zone 22
- PC application software available

Sensyflow  
FMT200-ECO2



# Sensyflow FMT700-P

Reference class mass flowmeter  
for test benches.

## FMT700-P

- Maximum accuracy: < 1% of rdg
- Extremely short response time:  $T_{63} \approx 12$  ms
- Huge turn-down ratio: 1:40
- Analog and serial interface
- User-friendly handling
- Perfect quick fit pipe setup
- Wide range of mounting accessories



# Contact us

To find your local ABB contact visit:

**[www.abb.com/contacts](http://www.abb.com/contacts)**

For more product information visit:

**[www.abb.com](http://www.abb.com)**

**Note:**

Copyright© 2013 ABB

All rights reserved

LU/SENSYFLOW\_FMT-EN Rev. A 12.2013

Power and productivity  
for a better world™

