

We was about the environment

CONTINUOUS GAS VELOCITY MEASUREMENTS OF FLUE GAS AND AIR STREAMINGS



DF 252



Flow rate measurement using the dynamic pressure measurement principle











DF 252

Continuous measurement of flow velocity of flue gas and air streamings

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For the operation of a facility with streaming gases (e.g. flue gas, air, etc.) the continuous registration of the exhaust gas velocity respectively the flow as well as the temperature are often of substantial importance.

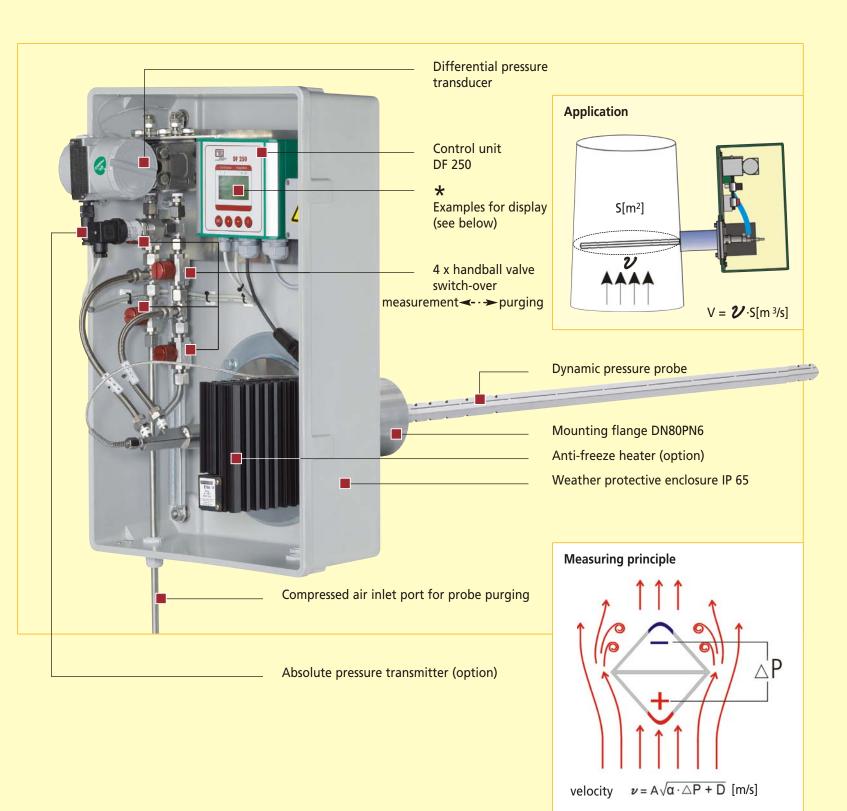
In case of continuous emission measurements the mass of pollutants has to be disclosed additionally (mass flow [kg/h]).

The flow measuring device DF 252 is a measuring system for the continuous registration of gas-, air velocity and temperature of gas flows in pipelines.

Moreover it is possible to display the flow in operational or norm state. The use of the back-pressure and Pt100-measuring principle guarantees a device simply to install and handle with the smallest possible influence of the velocity profile.

Advantages of the system:

- Compact system of probe and control device, therefore easy installation
- On-site diagnosis of the facility's state due to a graphical display with high resolution showing on-line diagram
- Display of flow in norm state (i.n.) or operating state (i.o.) possible
- Display options in mbar, m/s, m³/h i.o. or m³/h i.n. as well as °C
- Display of absolute pressure in mbar optionally possible
- Simple installation with DN80PN6 flange for welding
- Low maintenance, handball valves for probe back-purging



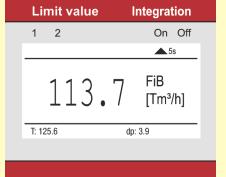
* Examples for display

Graphic mode Text mode

Limit value	Integration
1 2	On Off
	▲ 2s
30	
	1min_
v: 12.9	T: 125.7

Limit valu	Integration		
1 2		On	Off
		2	s
12.	3	v [m/s]	
T: 125.6		dp: 3.9	

Text mode



Technical specifications

Enclosure Compact device, control unit is integrated with the probe (no extra control panel necessary, Anti-freeze heater (option)		
Protection class	IP 65 (fibre glass enclosure)	
Dimensions	(H x W x D) 440 x 640 x 1.040 mm (incl. probe 500 mm)	
Weight	approx. 25 kg	
Probe	Dynamic pressure probe with integrated Pt100 thermistor Optionally available: absolute pressure transmitter up to 2.000 mm length	
Flange	DN80PN6	
Control unit	4 keys for parameterisation and operation Dot-Matrix-display with on-line line diagram	
Measuring ranges	Velocity: 3 30 m/s Flow i.o.: 01.000 Tm³/h Flow i.n.: 01.000 Tm³/h (1 Tm³/h = 1.000 m³/h, 1.000 Tm³/h = 1.000.000 m³/h) Differential pressure: 0 5 mbar Temperature: 0 300/600 °C Abs. pressure (optional) 800 1.200 mbar	
Media temperature	ax. 280 °C (higher temperatures on request) n. +5 °K above dewpoint	
Ambient temperature	-20 +50 °C	
Flow velocity	from approx. 3 30 m/s	
Analogue signals 3 x 4 20 mA (it can be chosen between: velocity, flow, differential pressure, temperature optionally absolute pressure		
Digital signals failure, limit value 1 and 2, relay contacts potential free		
Power supply	110 VAC, 230 VAC / 50 60 Hz, 15 W, 500 W with anti-freeze heater	

Dealer:



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