



دقیقا تجهیز

Tel: 02188981020  
Website: [www.d-tajhiz.com](http://www.d-tajhiz.com)  
Email: [info@d-tajhiz.com](mailto:info@d-tajhiz.com)

MRU – Competence in gas analysis. For over 35 years.

## DF 252

Continuous gas velocity –  
Measurements of flue gas  
and air streamings

**Flow rate measurement using the  
dynamic pressure measurement principle**



## DF 252

# Continuous measurement of flow velocity of flue gas and air streamings

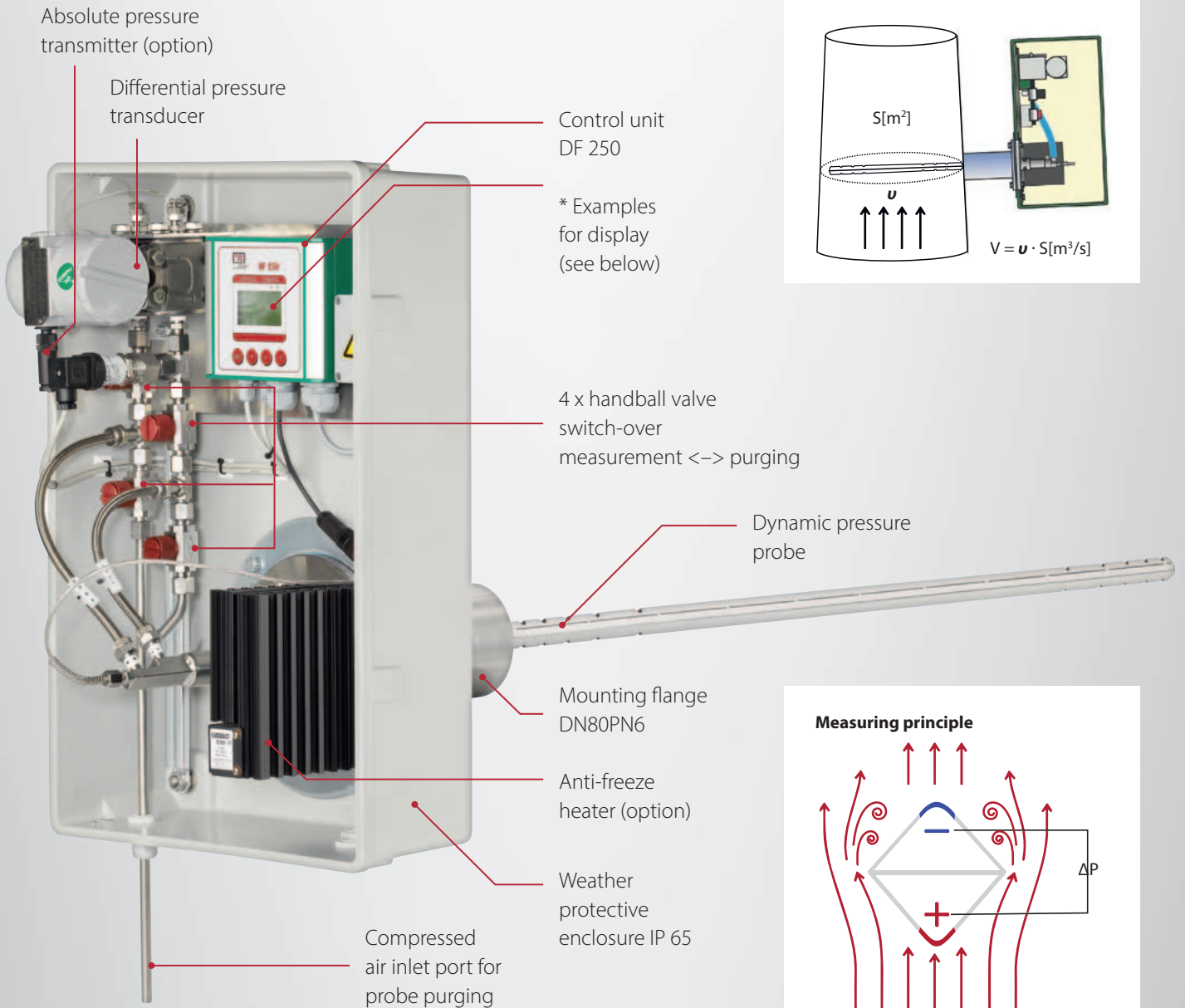
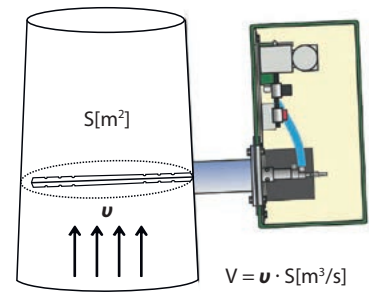
For the operation of a facility with streaming gases (e.g. flue gas, air, etc.) the continuous registration of the exhaust gas velocity respectively the flow as well as the temperature are often of substantial importance. In case of continuous emission measurements the mass of pollutants has to be disclosed 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:

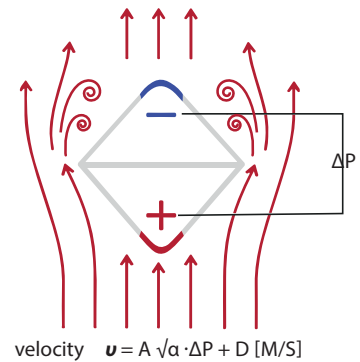
- Compact system of probe and control device, therefore easy installation
- On-site diagnosis of the facility's state due to a graphical display with high resolution showing on-line diagram
- Display of flow in norm state (i.n.) or operating state (i.o.) possible
- Display options in mbar, m/s, m<sup>3</sup>/h i.o. or m<sup>3</sup>/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



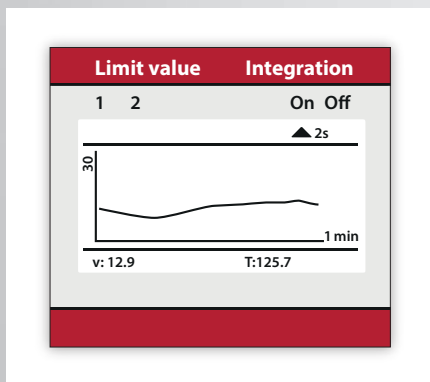
## Application



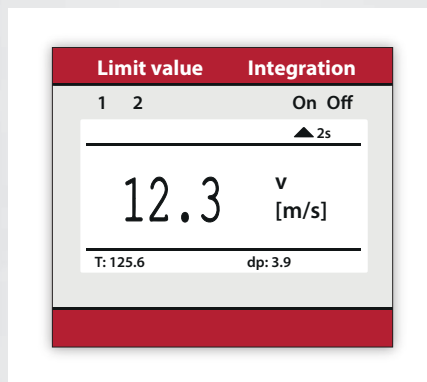
## Measuring principle



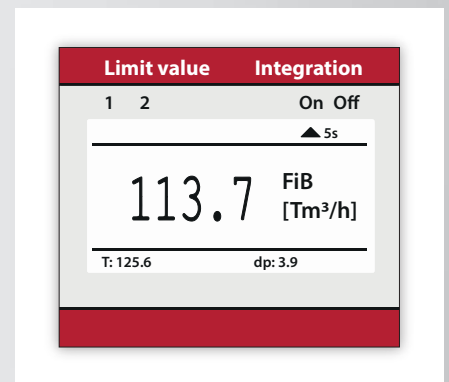
## \* Examples for display



Graphic mode



Text mode



Text mode

# DF 252

## Technical data

<b>Enclosure</b>	Compact device, control unit is integrated with the probe head (no extra control panel necessary, anti-freeze heater (option))	
<b>Protection class</b>	IP 65 (fibre glass enclosure)	
<b>Dimensions (H x W x D)</b>	440 x 640 x 1.040 mm (incl. probe 500 mm)	
<b>Weight</b>	approx. 25 kg	
<b>Probe</b>	Dynamic pressure probe with integrated Pt100 temperature sensor 500 mm up to 2.000 mm length, stainless steel	
<b>Flange</b>	DN80PN6	
<b>Control unit</b>	Dot-Matrix-display with graphic diagram, 4 keys for parameterisation and operation	
<b>Measuring ranges</b>	Velocity	3 ... 30 m/s
	Flow i.o.:	0 ... 1.000 Tm <sup>3</sup> /h
	Flow i.n.:	0 ... 1.000 Tm <sup>3</sup> /h
	(1 Tm <sup>3</sup> /h = 1.000 m <sup>3</sup> /h, 1.000 Tm <sup>3</sup> /h = 1.000.000 m <sup>3</sup> /h)	
	Temperature:	0 ... 300/600 °C
	Differential pressure:	0 ... 10 hPa (mbar)
	Abs. pressure (optional)	800 ... 1.200 hPa (mbar)
<b>Media temperature</b>	max. 280 °C (higher temperatures on request) min. +5 °K above dewpoint	
<b>Ambient temperature</b>	-20 ... +50 °C (heater required for temperature below freezing)	
<b>Flow velocity</b>	from approx. 3 ... 30 m/s	
<b>Analogue signals</b>	3 x 4 ... 20 mA (can be chosen between: velocity, flow rate, differential pressure, temperature or absolute pressure)	
<b>Digital signals</b>	failure, limit value 1 and 2, potential free relay contacts	
<b>Power supply</b>	110 ... 230 VAC / 50 ... 60 Hz, 15 W, 500 W with anti-freeze heater	

Data subject to change without notice. | N-62307GB-RK-0M-1121

**MRU – Competence in gas analysis. For over 35 years.**



**MRU · Messgeraete fuer Rauchgase  
und Umweltschutz GmbH**

Fuchshalde 8 + 12  
74172 Neckarsulm-Obereisesheim  
Phone +49 7132 99620 · Fax +49 7132 996220  
info@mru.de · www.mru.eu

MRU representative:

**دقیقا تجهیز**

Tel: 02188981020

Website: [www.d-tajhiz.com](http://www.d-tajhiz.com)

Email: [info@d-tajhiz.com](mailto:info@d-tajhiz.com)