

## Air flow measuring transducer



### GSMU 1020 B5 GSMU 1020 C5

#### Properties

- 3 measuring ranges integrated in each device
- selection between 2 different response times
- high accuracy
- almost independent of flow direction
- shock resistant
- resistant to pollution

#### Application

- air conditioning and ventilation technology
  - process and environmental technology
- Measuring principle: no moving parts. Hot-film anemometer principle.

#### Specification

##### Measuring range flow:

GSMU 1020.: 0...10 m/s, 0...15 m/s and 0...20 m/s  
Measuring range can be set by means of jumper.

**Output signal:** 0 - 10 Volt (Iout < 1.0 mA) or  
4 - 20 mA (Ri < 450 Ohm)

Measuring range can be set by means of jumper.

**Measuring accuracy:** (at 20 °C, 45 %RH, 1013 hPa)

GSMU 1020: 0 ... 10 m/s: ± 0,2 m/s ± 3 % of measured value  
0 ... 15 m/s: ± 0,2 m/s ± 3 % of measured value  
0 ... 20 m/s: ± 0,2 m/s ± 4 % of measured value

**Response time:** T<sub>90</sub> (at 10 m/s): typ. 4 s or 0.2 s

Response time can be set by means of jumper.

**Dependency on flow direction:** < 3 % of measured value at  $\Delta\alpha < 10^\circ$

**Voltage supply:** AC / DC ±20%, max. 150 mA

**max. load:** 500 Ohm

**Connection:** screw-type terminals up to 1.5 mm<sup>2</sup>

**Operating temperature:** -10 ... +50 °C

**Storage temperature:** -20 ... +60 °C

**Housing:** 80 x 80 x 35 mm (H x W x D)

**Material:** ABS

**Protection rating:** IP65 (electronic box)

**Sensor tube:** length = 200 mm (+18 mm for sensor head), Ø 12 mm

GSMU...B5: sensor tube permanently connected to housing

GSMU...C5: sensor tube connected to housing via cable (approx. 1 m long)

*Other tube or cable lengths upon request.*

**EMC:** Conforming to  acc. to DIN EN 50081-1 and DIN EN 50082-2

#### Accessories

**GNG 24/150** power supply: 24 Vdc, 150 mA

**GNT 0520** mains transformer: 230V~ to 24V~,  
with mounting clamp and screw-type terminals.  
Dimensions approx. 62 x 56 x 32.5 mm

## Miniature Air Velocity Transmitter



### GSMU 575

#### Properties

The transmitter is for measuring air velocity. The measurement method is based on the hot-film anemometer principle, for that purpose, a special thin-film sensor element has been developed. An accurate and reliable determination of the air velocity depends on the correct positioning of the sensor probe in the air stream. Accurate measurements are only possible if the sensor probe is installed where there is no turbulence.

#### Application

- heating, ventilating
- air conditioning technology
- supply air control of ovens

#### Specification

**Working range** 0...20m/s

other upon request

**Output signal** 0...10V (max. 1mA)

**Accuracy Velocity** at 20°C / 45%RH, 1013hPa, at 1...20m/s  
1...20m/s: ±(0,4m/s + 6% of measuring value)

**Response time** bei 10m/s t<sub>90</sub> typ. 4s

**Power supply** 19...29V DC

**Power consumption** max. 70mA bei 20m/s

**Temperature range** working temperature: -20...60°C

storage temperature: -30...60°C

**Connection** 0,5 m cabel, PVC 3x0,25mm<sup>2</sup>, wire end ferrule

**Electromagnetic Compatibility** EN61326-1

EN61326-2-3

**Housing** polycarbonate, Lenght: 120 mm, Ø 12 mm

**Protection class** IP20 (measuring head), IP40 (housing)

#### Accessories

**GNG 24/150** power supply: 24 Vdc, 150 mA