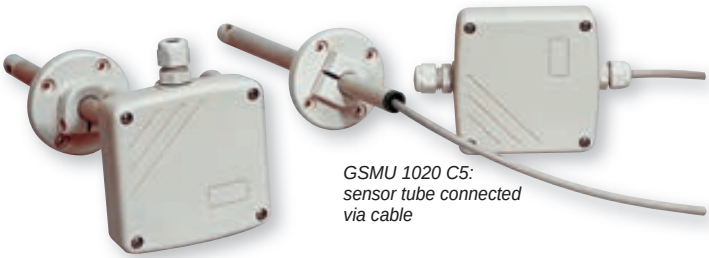
Air flow measuring transducer



GSMU 1020 C5:
sensor tube connected via cable

GSMU 1020 B5:
sensor tube permanently connected

GSMU 1020 B5

Air flow measuring transducer

GSMU 1020 C5

Air flow measuring transducer

General:

- 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) Output signal can be set by means of jumper.
Measuring accuracy: (at 20 °C, 45 % RH, 1013 hPa)	
	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_{90} (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°
Voltage supply:	24 V AC / DC ±20 %, max. 150 mA
max. load:	500 Ohm
Connection:	screw-type terminals up to 1.5 mm²
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.
Electromagnetic Compatibility (EMC):	Conforming to CE acc. to DIN EN 50081-1 and DIN EN 50082-2

Accessories and spare parts:

GNG 24/150
power supply: 24 VDC, 150 mA

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

Miniature Air Velocity Transmitter

GSMU 575

Miniature Air Velocity Transmitter

General:

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 ... 20 m/s other upon request
Output signal:	0 ... 10 V (max. 1 mA)
Accuracy:	at 20 °C / 45 % RH, 1013 hPa, at 1 ... 20 m/s ±(0.4 m/s + 6 % of measured value)
Response time: (at 10 m/s T_{90})	typ. 4 s
Power supply:	19 ... 29 V DC
Power consumption:	max. 70 mA
Temperature range:	working temperature: -20 … 60 °C storage temperature: -30 … 60 °C
Connection:	0.5 m cabel, PVC 3 x 0.25 mm², wire end ferrule
Electromagnetic Compatibility (EMC):	EN61326-1 EN61326-2-3
Housing:	Polycarbonate, length: 120 mm, Ø 12 mm
Protection class:	IP20 (measuring head), IP40 (housing)

Accessories and spare parts:

GNG 24/150
power supply: 24 VDC, 150 mA