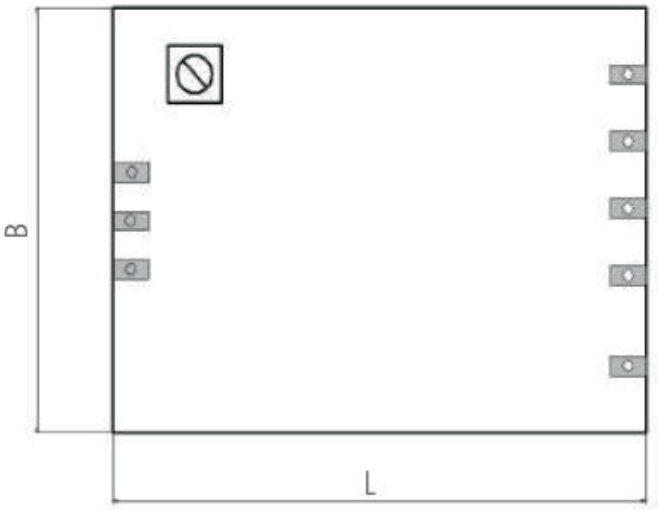
# DATA SHEET

## Flow module
## Optimal for gas flow sensor evaluation

Description

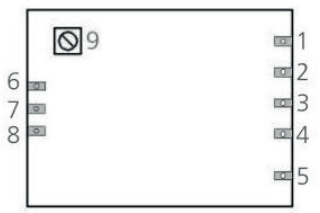



### Technical data

| Flow module 0555 0001 | |
|---|---|
| Operating measuring range | 0...50 m/s |
| Operating temperature range | -40...85 °C |
| Temperature sensitivity | >0,5%/K (dependent on calibration) |
| Acuracy | < 5% of the measured value (dependent on calibration) |
| Connection | Lötpads auf PCB |
| Heater | $R_H$(0°C) = 45 Ω ±1% |
| Reference lement | $R_S$(0°C) = 1200 Ω ±1% |
| Voltage range (nominal) | 5 VDC ±5% (internal main voltage is 10 V) |
| Analog output, non linear | 0 V (2) to 10 V; (operating point at still air = 3,5 V) |
| Warm-up time | <30 s |
| Dimensions | (LxW) 80x30 mm |
| Art.- no. | 0555 0001 |

### Pin assignment

| Pin | Assignment |
|---|---|
| 1 | Flow output |
| 2 + 3 | |
| 4 | GND |
| 5 | $U_{supply}$ + 5 V |
| 6 | Temperature sensor |
| 7 | Heater |
| 8 | GND |
| 9 | Potentiometer |




### Features

- Easy to use plug @ play module (not calibrated)
- Simple CTA (Constant temperature anemometer)
- Simple gain adjustment
- No microprocessor or software influenced signal
- Customer specific sensor available upon request

### Areas of application

- Gaseous measuring media
- Building automation
- Automotive engineering
- Medical engineering
- Device monitoring
- Cooling devices
- Food industry

### Adjustment procedure (if necessary)

1. Power up the module with 5 VDC (min. 200 mA)
2. Connect multimeter to “flow output”
3. Adjust potentiometer for an output signal of about 3.5 V DC at flow = Ø
4. Produce a well-known flow e.g. 10 m/s (with reference, for example a mass flow controller)
5. Measure voltage at output (should be in the range of 5 V DC to 7 V DC)
6. Calculate the voltage difference between 0 m/s and 10 m/s (e.g. 2.8 V DC )
7. The signal is the non linearised output signal > 0 m/s to 10 m/s = 3.5 V DC to 6.3 V DC

The signal then can be offset adjusted and linearised with software on target system like a microcontroller, LabView, MatLab etc.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