



FS7

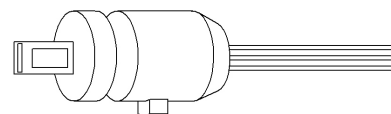
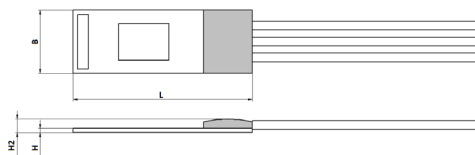
Thermal Mass Flow Sensor

Optimal for various gas flow applications up to 150 °C

Benefits & Characteristics

- Easy adaptation in various applications and housings
- Simple signal processing
- Simple calibration
- Stable platinum technology
- Excellent reproducibility
- Excellent long-term stability
- Symmetrical heater design and heightened sensitivity
- Customer-specific sensor available upon request

Illustration¹⁾



1) For actual size, see dimensions

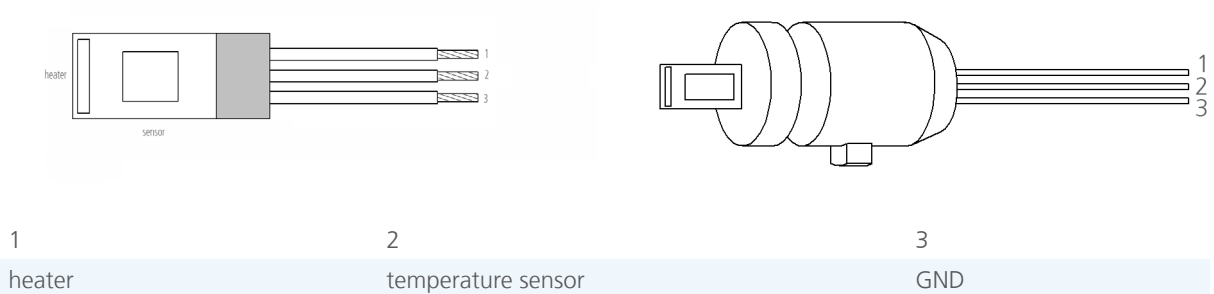
Technical Data

| | |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Dimensions (L x W x H / H2 in mm):* | 6.9 x 2.4 x 0.20 / 0.60 Ø 6.0 (±0.1) mm, L _H = 14 (±0.2) mm (complete dimensions in application note) |
| Operating measuring range: | 0 m/s to 100 m/s |
| Response sensitivity: | 0.01 m/s |
| Accuracy: | < 3 % of the measured value (dependent on the electronics and calibration) |
| Response time t ₆₃ : | ~200 ms (jump from 0 to 10000 sccm) |
| Operating temperature range:* | -20 °C to +150 °C |
| Temperature sensitivity: | < 0.1 %/K (dependent on the electronics) |
| Connection:* | 3 pins, AWG 30/7, stranded wire, insulated with PTFE |
| Heater:* | R _H (0 °C) = 45 Ω ± 1 % |
| Reference element:* | R _S (0 °C) = 1200 Ω ± 1 % |
| Voltage range (nominal):* | 2 V to 5 V (at Δ T = 30 K (0 m/s ≤ v _{gas} ≤ 100 m/s)) |
| Maximum heater voltage:* | 3 V (at 0 m/s) |
| Alternative construction:* | Moulded plastic housing |

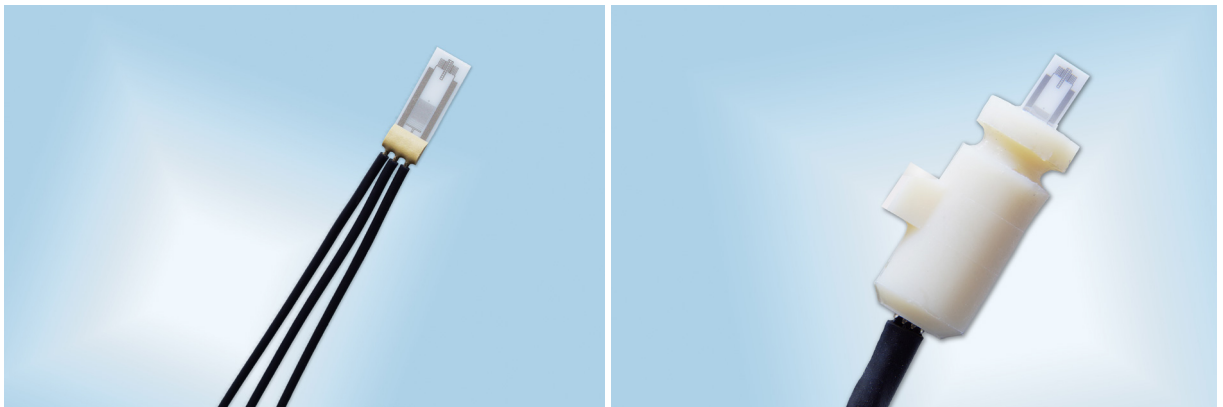
* Customer-specific alternatives available



Pin Assignment



Product images



Order Information - Stranded wire, AWG 30/7, PTFE insulated

| Dimension (L x W x H in mm) | Without plastic housing | With plastic housing |
|-----------------------------------|-------------------------|----------------------|
| 6.9 x 2.4 x 0.20 | FS7.0.1L.195 | |
| Order code | 103705 | |
| Former order code | 050.00216 | |
| Ø 6.0 (±0.1) mm, L = 14 (±0.2) mm | | FS7.A.1L.195 |
| Order code | | 103706 |
| Former order code | | 050.00217 |

Additional Electronics

| | |
|---------|-------------------|
| | Document name: |
| Module: | DFFS_FSL_Module_E |

Additional Documents

| | |
|-------------------|----------------|
| | Document name: |
| Application Note: | AFFS7_E |



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