



innovative  
Sensor  
Technology

## FDS.A



Flow range from 0 to 100 m/s, -20 °C to +150 °C

Gas flow sensor with decoupled heater and temperature elements. Hotmelt housing dimensions and element resistances identical with FS7. Compatible with iST`s Flow demo board.

- long-term stable and robust thermal flow sensor
- easy to integrate

**Product Name:** FDS.A.1L.195

**Measured medium:** Gas Flow

**Flow direction:** One direction (anemometric)

**Operating temperature range:** -20 °C to +150 °C

**Chip size/dimensions:** ø6 x 14 mm housing 4 x 2.4 (chips outside housing)

**Connection type:** Cu/Ag-stranded wires AWG 30/7, PTFE insulated, 2x red for heater, 2x black for temperature

**Wire dimensions:** 195 mm long (from housing edge), 5 mm stripped

**Flow range full bridge mode:** 0 to 100 m/s

**Flow range CTA mode:** 0/ms to 100 m/s

**Response time t63:** ~200 ms (jump from 0 to 10000 sccm)

**Response sensitivity:** 0.01 m/s

**Substrate:** Ceramic

**Product code:** 155846

## Product details

### FDS.A > Details

#### Benefits & Characteristics of the FDS.A gas flow sensor

- Minimized cross-talk for high sensitivity at low flow rates
- Excellent long-term stability with proven thin-film platinum technology
- High reliability with no moving parts
- Suitable for various technical gases and industrial applications
- Easy fluidic and electronic integration
- Simple calibration and excellent reproducibility over a wide dynamic range

#### The FS gas flow sensor family

iST's FS thermal mass flow sensors combine high sensitivity from low flow rates with an wide measuring range and a relatively fast response time. Heating and temperature sensing structures with a protective glas coating are combined on a compact ceramic chip to allow easy assembly into various flow channel geometries. This along with the superior reliability of anemometric gas flow measurement makes iST's FS sensors ideal components for high reliability applications including medical gas flow monitoring, industrial gas dosing systems or continuous filter performance evaluation. Custom adaptations and housing assembly options are available to support industrialized sensor production.

#### Quality

Consistent with the well-known, high-quality standards in Switzerland, iST is certified according to ISO 9001:2015 (quality) and ISO 14001:2015 (environment). Appropriate

processes are part of our daily work. They are regularly audited and extended parallel to the growth of our company.

[> Read more](#)

**The online shop**

| Quantity (pieces) | Price (per piece) |
|-------------------|-------------------|
| 1-9               | CHF 40.69         |
| 10-49             | CHF 28.33         |
| 50-100            | CHF 25.24         |

Sklad: **0**