

Design

Pressure sensor with four changeable pressure ranges 2, 4, 8, 12 IN/WG (500, 1000,2000,3000 Pa). Selectable dampening, 0.8 and 4 sec.

Installation

Install the ST 300 indoors in a position of your choice using two screws with a max diameter of 3/16 inches. The pressure connection is made with the enclosed (7 feet) plastic hose on the minus connection(3) on the ST 300.

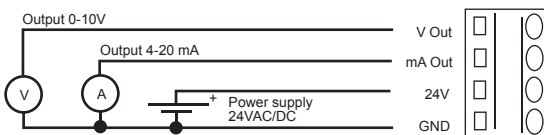
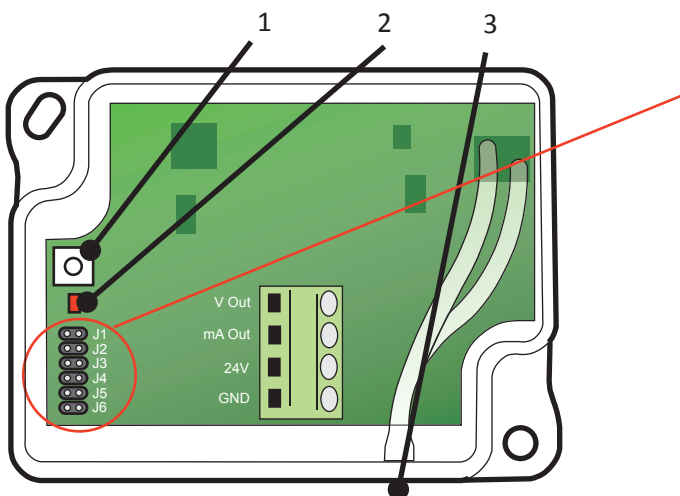
The location of the gauging station must be as close to the fan as possible indoors (at the dirty side when filtering), and be at a distance of at least 5 times the diameter of the air duct from the turbulent components such as bends and dampers.

Setting of measurement range/damping

Select the pressure range using the jumpers on the circuit board as the figure below shows. The measurement range must be as close to the actual value as possible in order to achieve exact regulation.

Resetting

The ST 300 should have been running 1 hour prior to zero adjustment. Disconnect the pressure hose from the minus connection externally. Press the reset button(1) and keep it down until the LED(2) starts to lit. Release the button and the resetting is complete when the LED switches off. Reconnect the hose to the minus(3) side again.



Adjustment

Only **one** extraction source should be open when adjusting. The required air flow is then measured. The frequency converter then regulates according to this set value ensuring an equal flow for all extraction sources.

Technical data

| | |
|------------------------|--|
| Measuring range: | 2 IN/WG (500 Pa), 4 IN/WG (1000 Pa), 8 IN/WG (2000 Pa), 12 IN/WG (3000 Pa) |
| Feed: | 24 VAC/DC |
| Power consumption: | < 1.0 W |
| Overload: | 16 IN/WG (4000 Pa) |
| Output signal: | 0...10 Volt (@ min 1kOhm) or 4-20 mA (@ max 500 Ohm) |
| Ambient temp: | 0...120°F |
| Max measurement error: | ± 1,5 % |
| Time constant: | 0.8 alt 4 seconds |
| Weight: | 0,3 lb |
| El. connection: | max AWG 15/ terminal |
| Cable bushing: | 1pc M16 (enclosed) |

Meet standards

| | |
|-----------------|-------------|
| EMC directive: | 2004/108/EC |
| Rohs directive: | 2002/95/EC |

Enclosure

| | |
|------------|--|
| Material: | ABS/PC |
| Enclosure: | IP54 |
| Dimension: | 3 ^{9/16} x3 ^{3/4} x1 ^{7/16} inches. |

Maintenance

ST 300 should be set to zero once per year.

Delivery setup

The pressure range is 8 IN/WG and the damping 4/sec.

- J1 Not in use
- J2 Pressure range
- J3 Pressure range
- J4 Response time
- J5 Not in use
- J6 Not in use

Setting of pressure range

| (0...500 Pa) 0...2 IN/WG | (0...1000 Pa) 0...4 IN/WG Pa | (0...2000 Pa) 0...8 IN/WG | (0...3000 Pa) 0...12 IN/WG |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------|
| <input checked="" type="radio"/> J2 | <input type="radio"/> J2 | <input checked="" type="radio"/> J2 | <input type="radio"/> J2 |
| <input type="radio"/> J3 | <input checked="" type="radio"/> J3 | <input checked="" type="radio"/> J3 | <input type="radio"/> J3 |

Setting of damping

4/sec is recommended with pressure sensor controlled frequency converter

- 4/Sec
- 0,8/Sec