

SYST PS

Pressure sensor

General

The pressure sensor should be used together with the Conductor W4 for measuring the pressure in a final product or in a duct connecting to a product. The measured pressure is used together with the specified C-factor and the required flow for setting the motorised damper (SA1, SA2 or EA where SA= Supply air, EA = extract air) to the correct position.

This means that no traditional commissioning for the product need be carried out.

Description

The pressure sensor enclosed in a capsule contains a temperature-compensated differential pressure sensor, a function selector switch and two equivalent modular connections for bus communication.

The pressure sensors are delivered without tubes and cable.

Operation

The pressure sensor obtains its identity and bus address depending on the position in which the function selector switch is set. The pressure sensor transmits its present pressure reading via bus. Addressing: SA1=3, SA2=6, EA=4

Indicating LEDs

- LD1 A steady green glow indicates 24 V DC supplied to the circuit card.
- LD2 A flashing yellow glow indicates communication in progress.

Installation

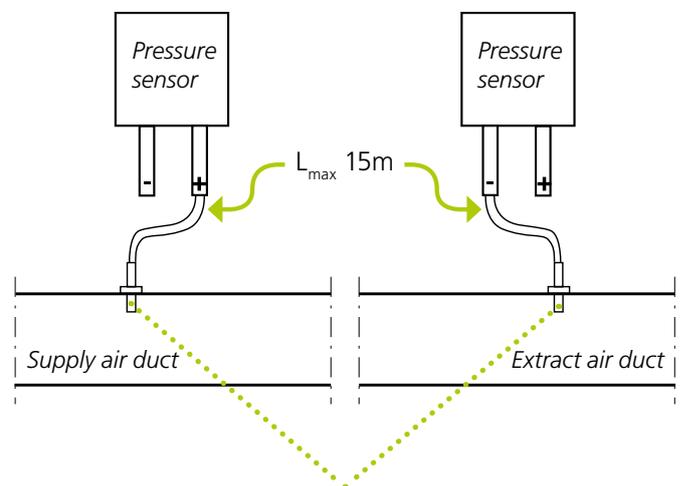
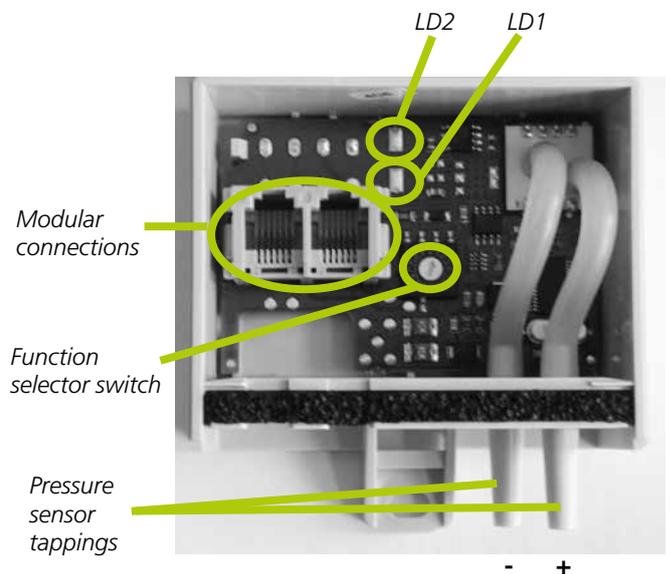
Install the pressure sensor at a suitable location, preferably directly inside the pressure cubicle in the PARASOL, for example. If a type EXC extract air terminal is used, place the pressure sensor at a distance of about 3 x the duct diameter behind the air terminal.

Connect the supply air to the tapping marked (+) and the extract air to the tapping marked (-).

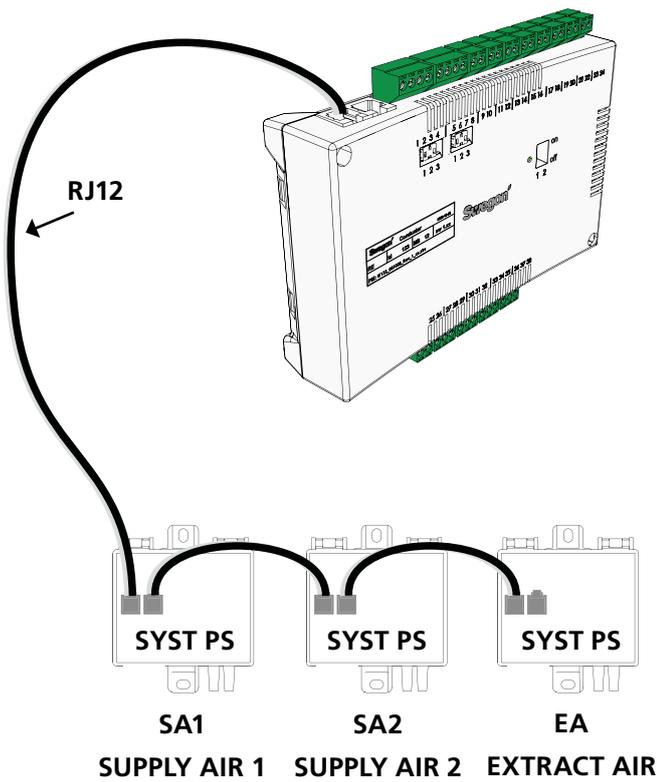
Its operation is not affected by the position in which you install it, however in view of its enclosure class, it should not be installed with pressure connections/pressure sensor tappings facing upward.

Connect the pressure sensor electrically from the Conductor controller to an optional internal EIA-485 bus port on the control circuit card. Whichever pressure sensor port you decide to use is of no importance. The reason why there are two ports is to make it possible to connect several pressure sensors in series.

The communication cable contains conductors for voltage feed and signal transmission.



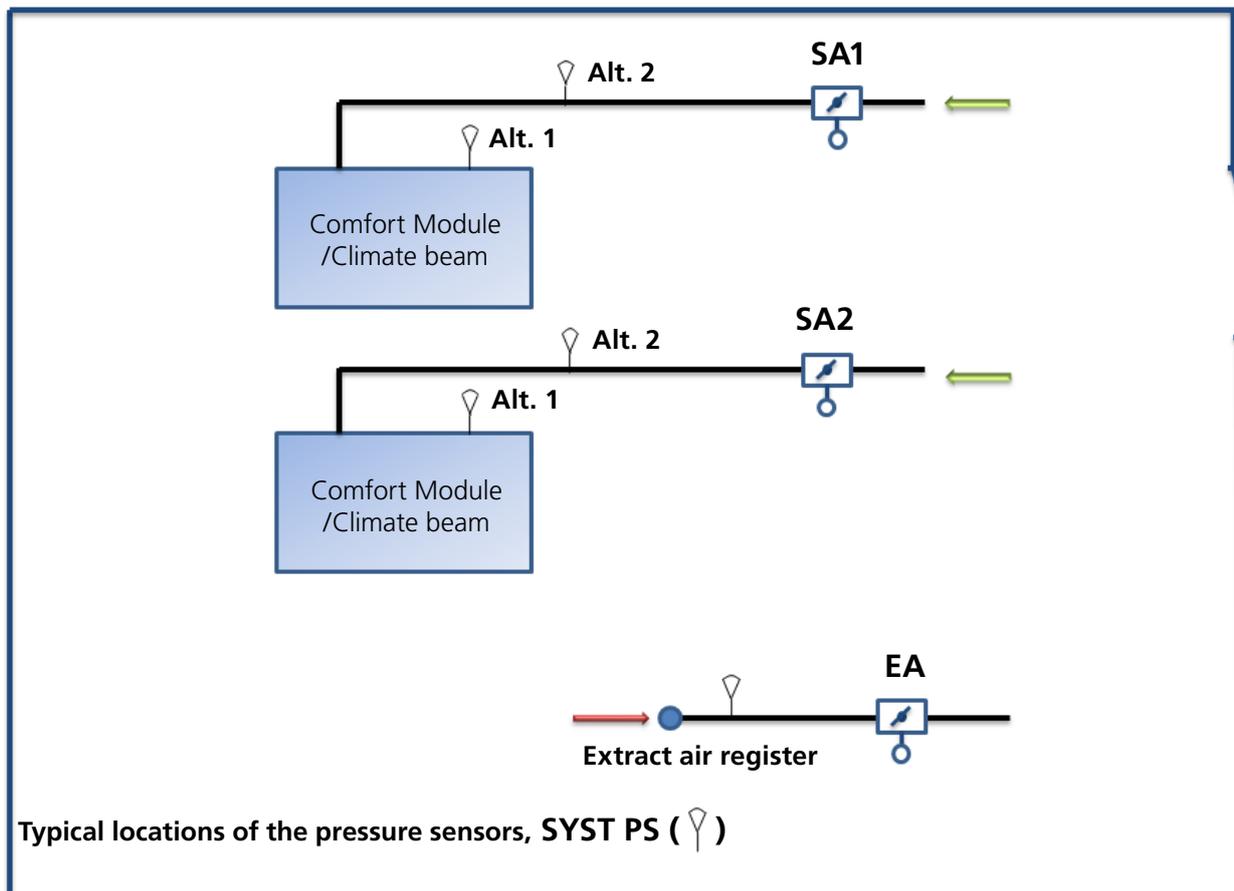
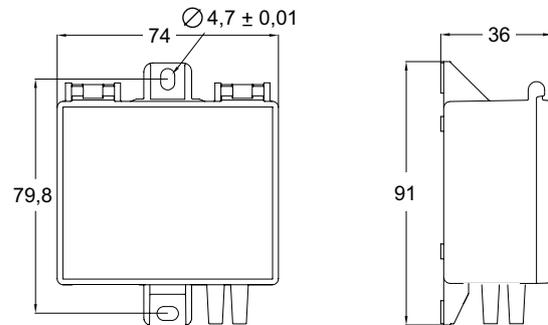
N.B.! In some cases you might need to cut the measurement tappings to shorten them. They should not protrude more than 10 mm from the inner wall inside the duct.



Data

Connection port	2 x RJ 12 6/6
Voltage feed (Via modular contact)	24V DC
Ambient temp. temporary	-30 °C — 50 °C, 10 — 95 % RH
Ambient temp. normal	-20 °C — 40 °C, 10 — 95 % RH
Range of measurement	0 — 2000 Pa
Accuracy of measurement	> 350 Pa: +/- 3 %, < 350 Pa: +/- 10 Pa
Linearity	< +/- 1% full scale
Enclosure class	IP 54 to EN 60529
CE-approved to	EN 61000-6-2, EN 61000-6-3

Dimensions



Typical locations of the pressure sensors, SYST PS ()