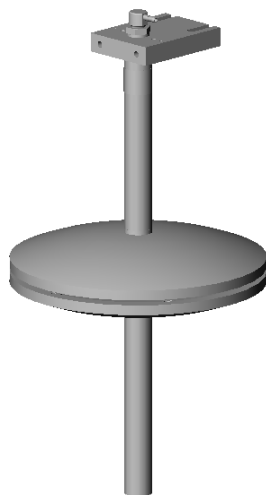


## Installation and Maintenance

### SPH10 Static Pressure Head



- Eliminates effectively wind disturbances from pressure measurements
- Adaptable to many barometers, directly to Vaisala PTB210
- Durable and easy to clean

#### INTRODUCTION

Vaisala model SPH10 Pressure Head provides an effective elimination of pressure variations in the barometer due to the wind. The SPH10 is easy to clean and maintain. It can be integrated directly with the Vaisala PTB210 barometer. To other barometers the SPH10 can be connected with pressure tubing.

#### ASSEMBLING

1. Screw the lower bar to the threaded sleeve of the lower plates (with 6 holes)
2. Screw the upper bar (with mounting plate) to the threaded sleeve of the upper plates

#### MOUNTING

Select an open location, preferably a place higher than the surroundings, with no buildings or trees nearby. Attach the SPH10 to a horizontal pole using a mounting plate. A suitable pole is Vaisala sensor mast, type DKP12. However, any other horizontal pole with two screws (M6) in a distance of 41 mm can be used.

NOTE! The recommended distance of the SPH10 from the vertical pole should be at least 1.5 m.

1. Loosen the two fixing screws of the pole and fix the SPH10 into the pole as indicated in Figure 1.
2. Attach the SPH10 by tightening the screws. (The pressure Head is removed by loosening the two screws).

#### CONNECTION TO THE VAISALA PTB210 (see figure 2)

1. Detach the threaded nipple and the gasket (see figure 1).
2. Place the O-ring into the barometer groove.
3. Attach the PTB210 to the SPH10 with two fixing screws.

#### CONNECTION TO THE OTHER BAROMETERS

Connect the barometer to the threaded nipple (figure 1) by using a plastic tube with an inner diameter of 4 mm.

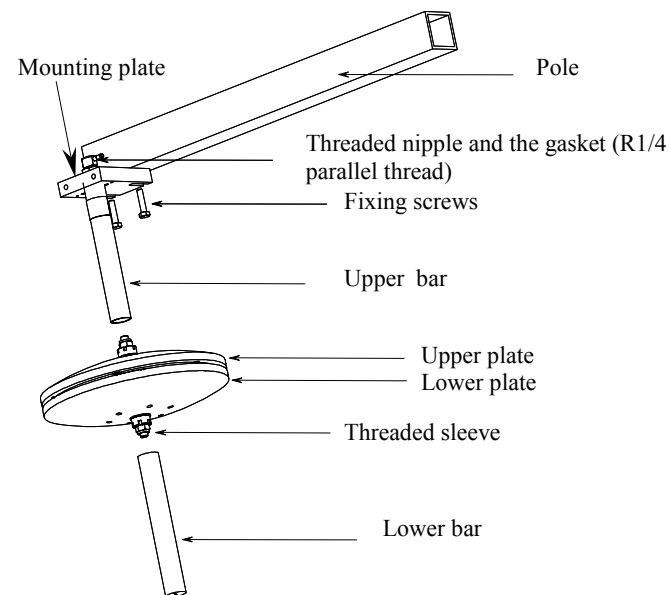


Figure 1. SPH10 Static Pressure Head.

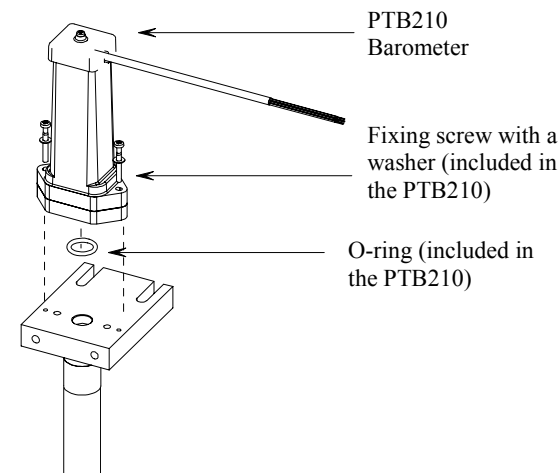


Figure 2. PTB210 barometer connection.

TECHNICAL DATA	
Property	Description / value
Materials	
Plates	Polycarbonate
Bars	Offshore Aluminium
Mounting	with 2 bolts (M6 x minimum 20 mm)
Weight	800 g
Hose connection	barbed fitting for 4 mm I.D. hose or Rp1/4 thread (parallel)
Operating conditions	-60°C...+ 80°C

**GUARANTEE**  
 Vaisala issues a guarantee for the material and workmanship of this product under normal operating conditions for one (1) year from the date of delivery. Exceptional operating conditions, damage due to careless handling and misapplication will void the guarantee.

**Vaisala SSD Service Centres**

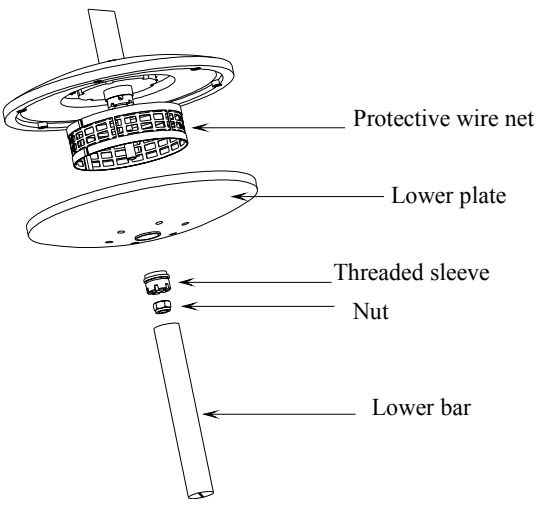
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**MAINTENANCE**



*Figure 3. Detaching the lower plate for cleaning.*

Cleaning the SPH10 is done by detaching the lower bar and the lower plate. The barometer can be in place while cleaning the plates. Please, follow the instructions below:

1. Unscrew the lower bar and detach it.
2. Open the self-locking nut with a 13 mm spanner.
3. Remove the threaded sleeve and take out the lower plate and the protective wire net.
4. Clean the plates.
5. Replace the lower plate, the protective wire net and the threaded sleeve, screw back the nut and the lower bar.

Keep the holes of the lower plate open to allow the water run out.

**DIMENSIONS (in mm)**

