

INSTALLATION AND MAINTENANCE GUIDE

Static Pressure Head SPH10



- 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 is 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

Visualization in 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 OTHER BAROMETERS

Connect the barometer to the threaded nipple (Figure 1) by using a flexible, airtight tube with an inner diameter of 4 mm. To prevent condence water accumulation in the tube, make sure the entire length of the tube goes downwards from the barometer to SPH10.

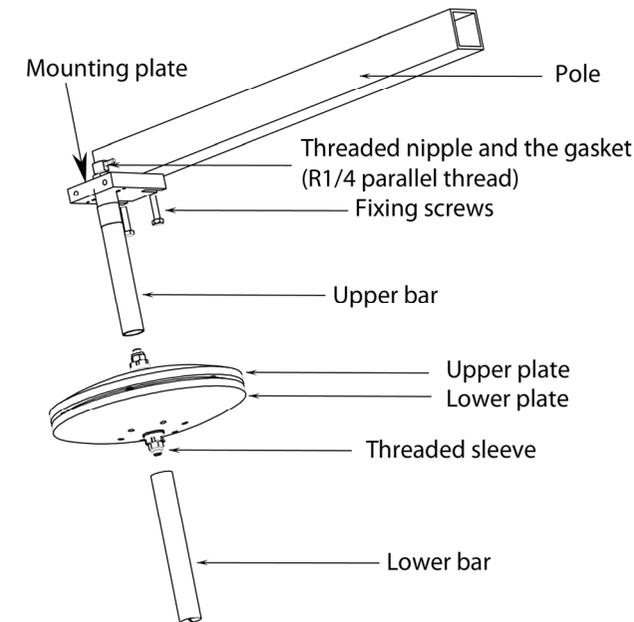


Figure 1 SPH10 Static Pressure Head

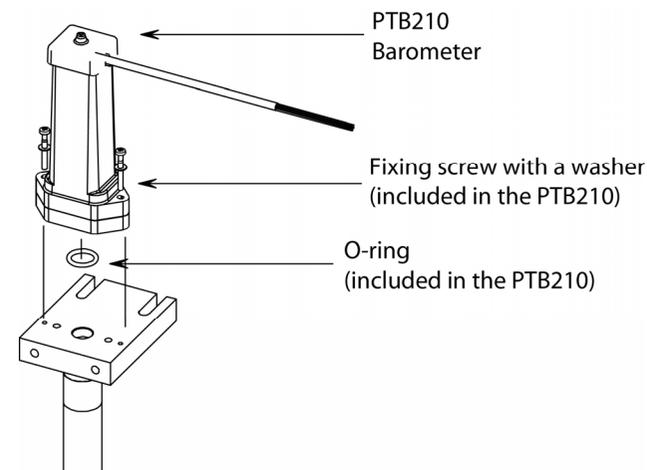


Figure 2 PTB210 Barometer Connection



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) |

WARRANTY

Visit our Internet pages for standard warranty terms and conditions: www.vaisala.com/warranty.

Please observe that any such warranty may not be valid in case of damage due to normal wear and tear, exceptional operating conditions, negligent handling or installation, or unauthorized modifications. Please see the applicable supply contract or Conditions of Sale for details of the warranty for each product.

TECHNICAL SUPPORT AND PRODUCT RETURNS

For technical questions, contact the Vaisala technical support by e-mail at helpdesk@vaisala.com.

If the product must be returned for service, see www.vaisala.com/returns.

For contact information of Vaisala Service Centers, see www.vaisala.com/servicecenters.

MAINTENANCE

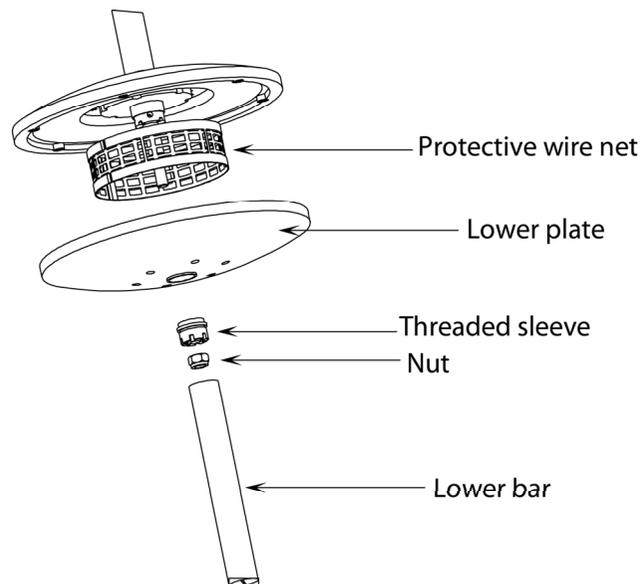


Figure 3 Detaching the Lower Plate for Cleaning

Cleaning the SPH10 is done by detaching the lower bar and the lower plate. The barometer can be in place while cleaning the plates. 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

All dimensions in mm.

