

Static Pressure Head SPH10

SPH10 static pressure head provides an effective elimination of pressure variations in the barometer caused by the wind. SPH10 is easy to clean and maintain. You can integrate SPH10 with a Vaisala barometer or any other barometer.

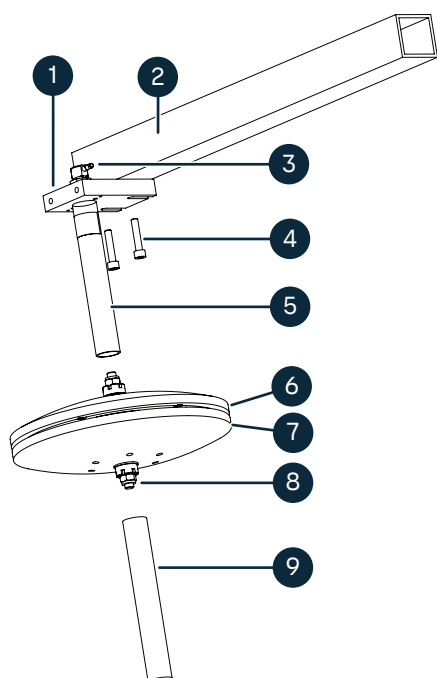
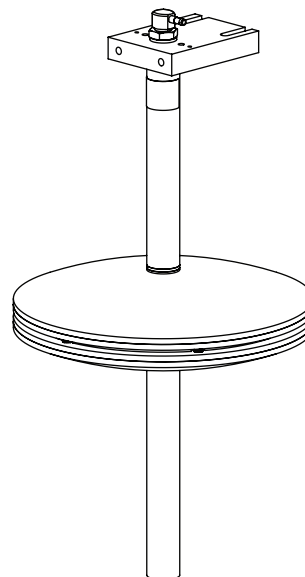


Figure 1 SPH10 parts

- 1 Mounting plate
- 2 Pole (not included)
- 3 Threaded nipple and gasket (R1/4 parallel thread)
- 4 Fixing screws and washers
- 5 Upper bar
- 6 Upper plate
- 7 Lower plate
- 8 Threaded sleeve
- 9 Lower bar



Assembling

- ▶ 1. Screw the lower bar to the threaded sleeve of the lower plates (with 6 holes).
- 2. Screw the upper bar with a 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.

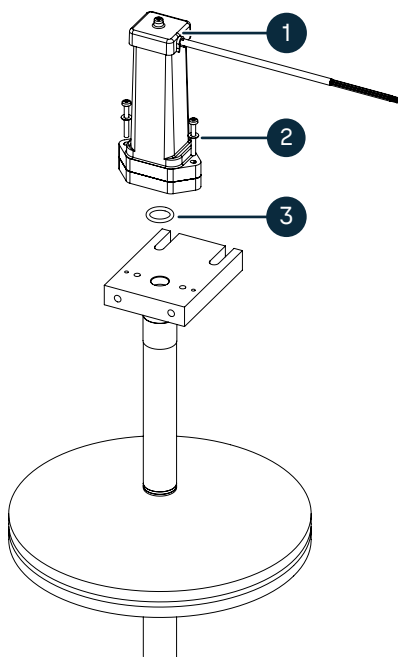


Vaisala recommends mounting the static pressure head at least 1 m (39.37 in) from the vertical pole.

- ▶ 1. Mount the static pressure head to a pole mast with a horizontal support arm, such as Vaisala support arm DKP12SUP1 and a mounting plate with 2 pieces of M6 screws in a distance of 41 mm (1.61 in). You may use any other horizontal pole.

Connecting to PTB210

- ▶ 1. Detach the threaded nipple and the gasket.
- 2. Place the O ring into the barometer groove.

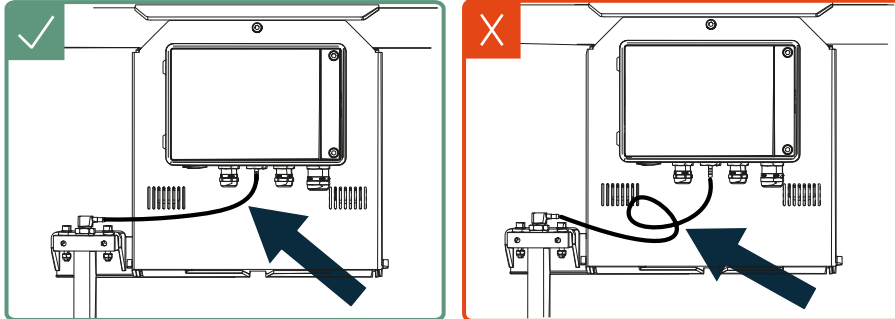


- 1 Barometer PTB210
- 2 Fixing screw and washer (included in PTB210)
- 3 O-ring (included in PTB210)

- 3. Attach PTB210 to SPH10 with 2 fixing screws.

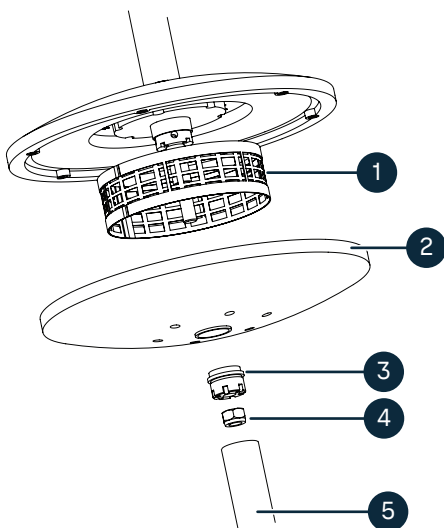
Connecting to other barometers

- ▶ 1. Connect the barometer to the threaded nipple with a flexible, airtight tube with an inner diameter of 4 mm. To prevent condensation water from accumulating in the tube, make sure that the entire length of the tube goes downwards from the barometer to SPH10.



Cleaning SPH10

To clean the wire net, blow pressurized air between the upper and lower plate.



- 1 Protective wire net
- 2 Lower plate
- 3 Threaded sleeve
- 4 Nut
- 5 Lower bar

- ▶ 1. Unscrew the lower bar and detach it.
2. Open the self-locking nut with a 13-mm wrench.
3. Remove the threaded sleeve and take out the lower plate and the protective wire net.
4. Clean the plates and the wire net.
5. Reattach the lower plate, wire net, and the threaded sleeve and screw the nut and the lower bar. To allow water run out, keep the holes of the lower plate open.

Technical data

Table 1 Mechanical specifications

Property	Description/Value
Weight	800 g (1.76 lb)
Materials	Polycarbonate (PC) plastic, offshore aluminum
Mounting	M6×30 DIN912 (2 pcs), M6x20 DIN912 (2 pcs), M6 spring lock washer DIN127 (2 pcs) M6 flat washer DIN125 (2 pcs)
Hose connection	Barbed fitting for 4 mm I.D. hose or Rp1/4 thread (parallel)

Table 2 Operating environment

Property	Description/Value
Operating temperature	-60 ... +80 °C (-76 ... +176 °F)

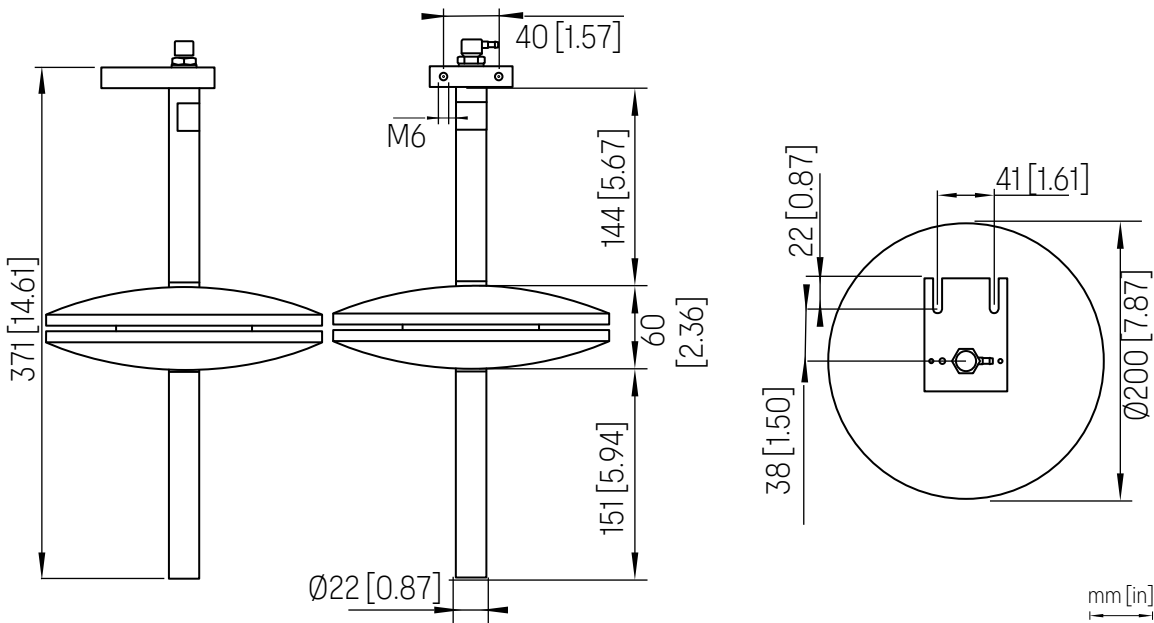


Figure 2 SPH10 dimensions