



## HD9408PS 50 STATIC PORT FOR BAROMETRIC MEASUREMENTS

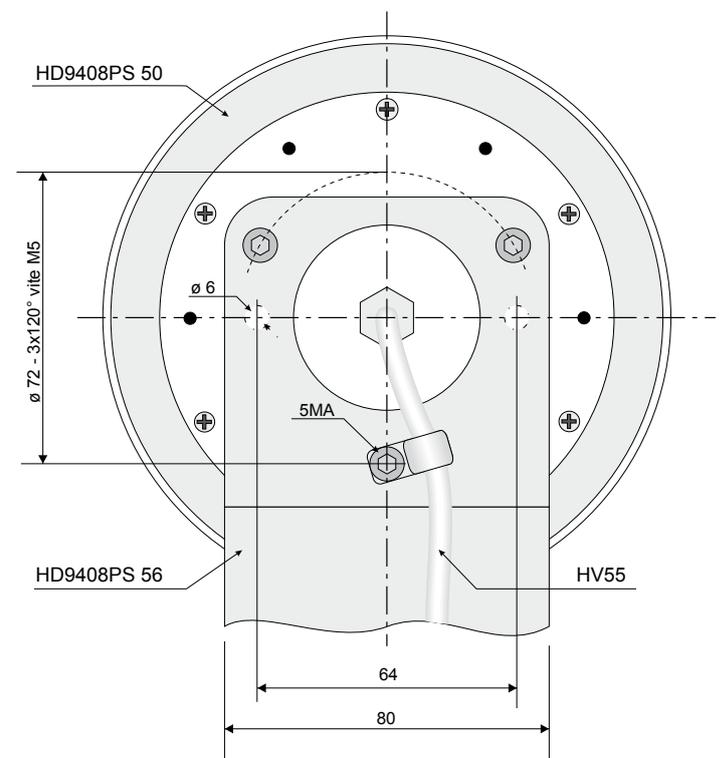
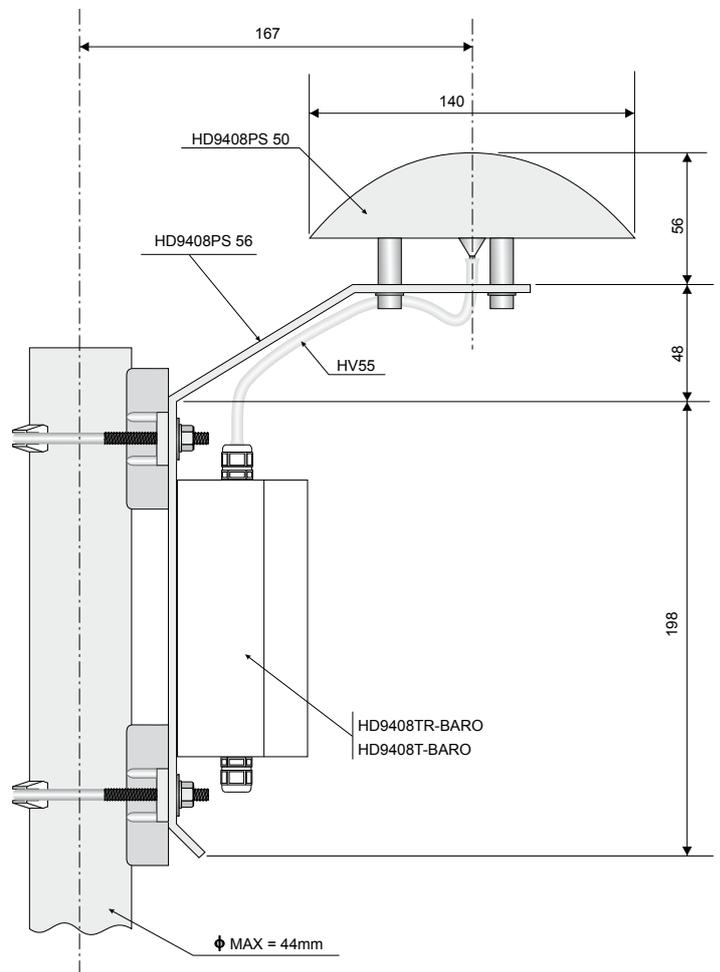
The measurement of the barometric pressure in free field can give incorrect values of hundred pascal fluctuation and wind direction. With the static port for barometric measurements, HD9408PS 50 can minimize these errors because, in addition to act as a filter (brake) against the dynamic pressure of the wind, the barometer can operate correctly even in the presence of snow or ice and comply with the recommendations of the WMO (World Meteorological Organization). The materials used for the construction of the static are UV resistant and can operate in temperatures between -40°C and +80°C.

### INSTALLATION AND CONNECTION

Installation is simple: it must be installed away from buildings, trees or any other source which can disrupt the flow of wind. To install the bracket is available HD9408PS 56 and three stainless steel screws M5x16 Acc. The connection of the static to the barometer, for example, HD9408T or HD9408TR, is made with a special tube HV55 (internal diameter of 3mm, 6mm outer diameter) and UV resistant to climate changes. Maintenance or cleaning is minimal. The plastic parts are manufactured by BASF LURAN S777K. Clean using non aggressive detergents compatible with the material.

### TECHNICAL SPECIFICATIONS

According to recommendations of the WMO, the deviation allowed measurement of wind speed 20meters/second is equal to 0.3mbar, corresponding to 300 Pascal. The HD9408PS 50 static port for barometric measurements falls within that value. The following tables show the values obtained from the tests performed in the wind tunnel.



Error due to the dynamic pressure	Lower than 0.3mbar @20°C
Working temperature	-40°C... +80°C
Connection pipe (for a tube with inside $\varnothing$ : 3mm, outside $\varnothing$ : 6mm)	$\varnothing$ 3.4 mm
Weight of the static port. - Weight of the static port equipped with the bracket	200 gr, 570 gr
Total weight and static port and bracket	570 gr

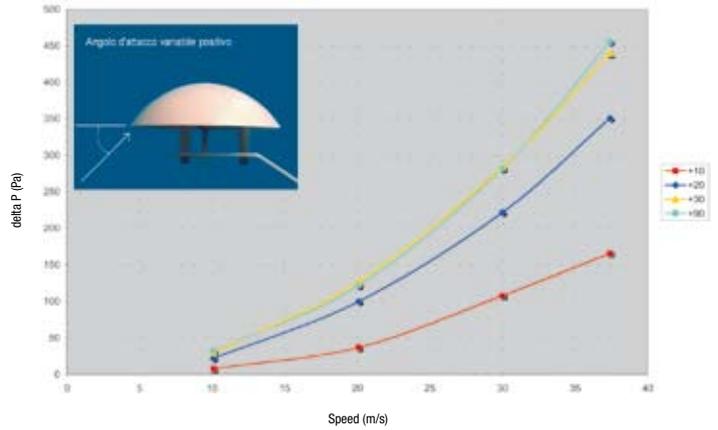
**ORDERING CODE**

- HD9408PS 50K** Kit consists of static port, pole mounting bracket and HV55 tube
- HD9408PS 50** Static port for barometric measurements equipped with the HV55 tube
- HD9408PS 56** Mounting bracket for static port, barometer fastening, pole anchor
- HV55** HV55 UV- and temperature-resistant silicone tube, inside  $\varnothing$  : 3mm, outside  $\varnothing$  : 6mm, L=400mm

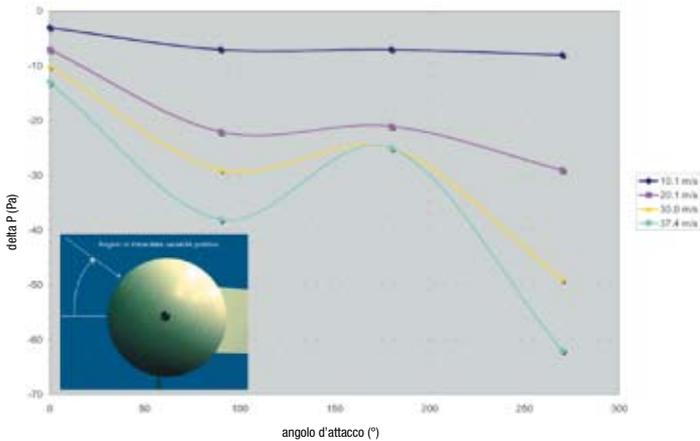
**TESTS MADE IN THE WIND TUNNEL**



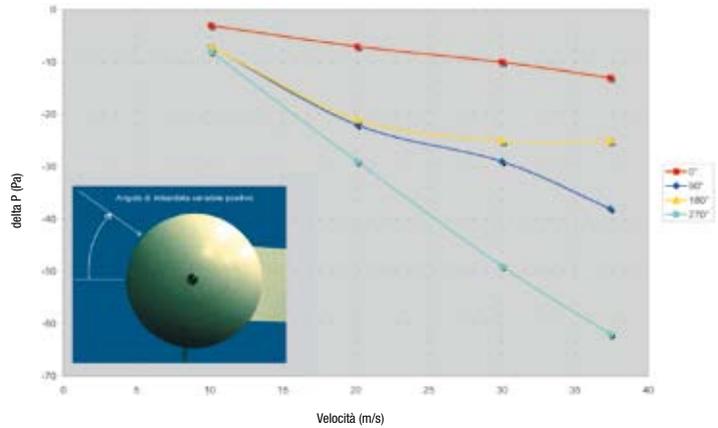
Static port put in front of the wind tunnel



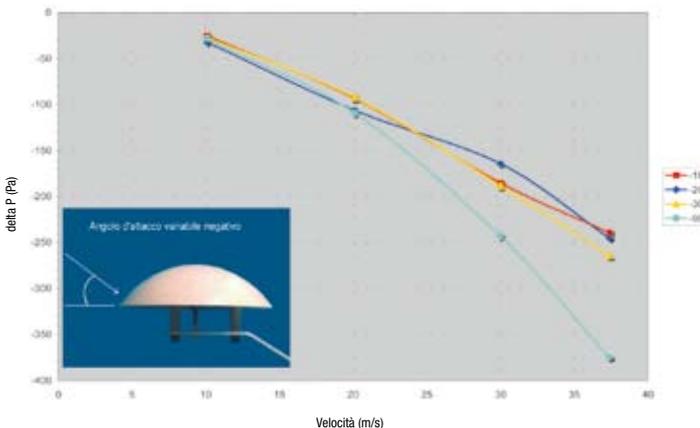
$\Delta P$  according to the yaw angle  $\beta$  (join angle  $\alpha = 0^\circ$ )



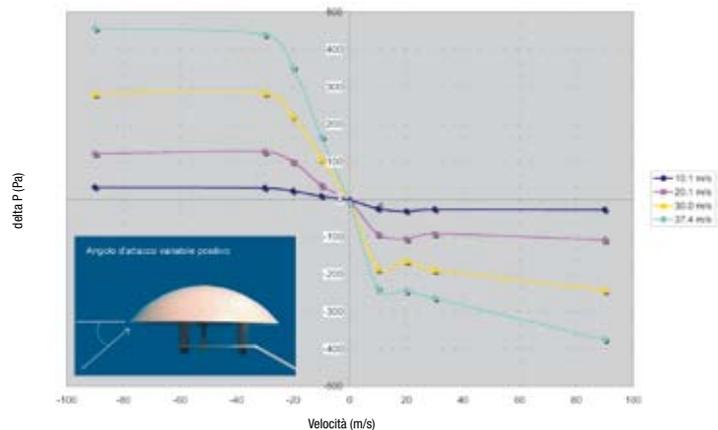
$\Delta P$  according to the join angle  $\alpha$  (yaw angle  $\beta = 0^\circ$ )



$\Delta P$  according to the  $\alpha$  join angle (yaw angle  $\beta = 0^\circ$ )



$\Delta P$  according to the  $\beta$  yaw angle



$\Delta P$  according to the  $\alpha$  join angle

Pressure