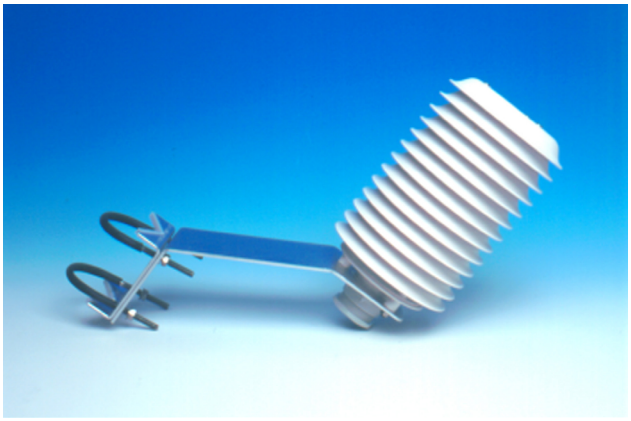

WSS x WB

Features

- **Naturally aspirated**
- **Simple mounting**
- **Minimum airflow restriction**
- **Maximum protection from solar radiation and precipitation**
- **Versions to suit most probes**
- **To be assemblied on wall or on mast**

Naturally Aspirated Sensor Shields

These sensor shields are produced using modern injection moulding techniques with stabilised plastic.

Designed for the easy mounting of probes and sensors, they are fitted with a silicon seal to eliminate water-trap possibilities.

The designs are of a multi-plate construction; the plate profiles are shaped to allow the minimum restriction of airflow while providing the necessary shielding from solar radiation and precipitation.

The sensor is mounted through the lower plates and secured by the gland clamp.

The top plates provide extra protection against temperature rise from direct solar.

The shields are supplied complete with mounting bracket and clamps and will fit to vertical or horizontal masts up to 2” in diameter.
At present five sizes of shield are offered. The WSS xNB versions have bracket for wall mounting and the WSS x WB versions have bracket and 2 clamps for mast mounting.

Materials

UV stabilised thermoplastic	Shield plates
Glass filled nylon	Gland
Stainless steel	Studs, screws, mounting clamps, nuts and washers.
Anodised alloy	Mounting brackets and support
Silicon rubber	Seal

Temperature Errors Due To Radiation On Sensor Shields

All sensor shields produce an error due to temperature rise during high solar radiation; the error is reduced with higher wind speeds which provide ventilation.

The figures given below are based on a radiation intensity of 1000 W/m^2 ; typical errors for the specified wind speeds would be:

0.4°C @ 3 m/s
0.65°C @ 2 m/s
1.4°C @ 1 m/s or slower.

These results have been verified independently in the field.

Due to the design of the shield plates, the sensor is not seen by reflected long wave radiation off the ground; other shields of more open design allow the sensor to be seen by the ground and can perform poorly under these conditions, for example when there is snow cover on the ground.

Sensor Shield *with* Bracket for Wall Mounting and 2 Clamps for Mast Mounting							
Order Code	**Overall height (mm)**	**Diameter (mm)**	**Plate spacing (mm)**	**Top plates**	**Lower plates**	**Probe max dia. (mm)**	**Probe min dia. (mm)**
WSS 1NB	**220**	120	11	3	10	**25,4**	18
WSS 3NB	**160**	120	11	3	5	**25,4**	18
WSS 4NB	**295**	120	11	3	15	**25,4**	18
WSS 4NB/25	**295**	12	11	3	15	**17**	9
WSS 5NB	**140**	120	11	3	5	**6,5**	3
WSS 5NB/25	**140**	120	11	3	5	**17**	9
WSS 6NB	**220**	120	11	3	10	**6,5**	3
WSS 6NB/25	**220**	120	11	3	10	**17**	9
WSS 7NB	**140**	120	11	2	4	**25,4**	18

Sensor Shield *without* Bracket for Wall Mounting and Clamps for Mast Mounting							
Order Code	**Overall height (mm)**	**Diameter (mm)**	**Plate spacing (mm)**	**Top plates**	**Lower plates**	**Probe max dia. (mm)**	**Probe min dia. (mm)**
WSS 1NB	**220**	120	11	3	10	**25,4**	18
WSS 3NB	**160**	120	11	3	5	**25,4**	18
WSS 4NB	**295**	120	11	3	15	**25,4**	18
WSS 4NB/25	**295**	12	11	3	15	**17**	9
WSS 5NB	**140**	120	11	3	5	**6,5**	3
WSS 5NB/25	**140**	120	11	3	5	**17**	9
WSS 6NB	**220**	120	11	3	10	**6,5**	3
WSS 6NB/25	**220**	120	11	3	10	**17**	9
WSS 7NB	**140**	120	11	2	4	**25,4**	18