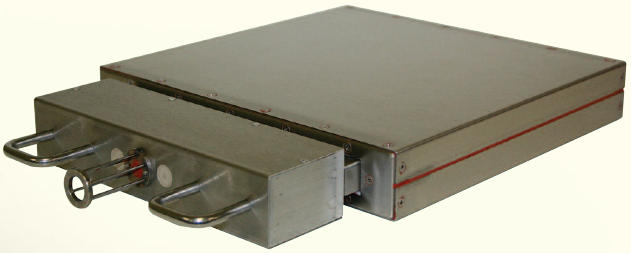
Humidity Sensor Dwell Time
(Time vs. Temperature)

The length of time the Humidity Sensor can be in a heated process is dependent on process temperature and airflow. Because the Humidity Sensor Head remains outside of the standard thermal barrier, a larger thermal barrier will not increase the Dwell Time. The following table serves as a guide for using the Humidity Sensor in a heated process with all Standard Thermal Barriers (see section on Thermal Barriers).

Humidity Sensor Specific Thermal Barriers allow the Humidity Sensor Head to be protected. These Thermal Barriers must be used if increased Dwell Times are required.



Dwell Time Reference using Standard Thermal Barriers

Time @ Temperature	Airflow
15min @ 175°C (350°F)	≤ 2.5mps (500fpm)
12.5min @ 205°C (400°F)	
10min @ 230°C (450°F)	
8min @ 260°C (500°F)	

HUTHB125

HUTHB100

Dwell Time Reference using Humidity Sensor Specific Thermal Barriers

Thermal Barrier	Time @ Temperature	Airflow
HUTHB100	18min @ 205°C (400°F)	≤ 2.5mps (500fpm)
HUTHB125	22min @ 205°C (400°F)	≤ 2.5mps (500fpm)

Humidity Sensor Specific Thermal Barriers:

HUTHB100: H = 100.0mm (3.9") x W = 32.5cm (12.8") x L = 39.1cm (15.4")

HUTHB125: H = 125.0mm (4.9") x W = 32.5cm (12.8") x L = 39.1cm (15.4")

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