

# TEMPERATURE

## BAPI OSA TEMPERATURE SENSORS BA/OSA SERIES



### DESCRIPTION

The **BA Series OSA Sensors** are designed specifically for HVAC systems. The probes are available in a variety of easy-to-mount installation types, and they come in thermistor and RTD sensors. The BA probe sensors are compatible with every BAS system in use today.

### FEATURES

- $\pm 0.36^{\circ}\text{F}$  ( $\pm 0.2^{\circ}\text{C}$ ) thermistor accuracy
- $\pm 0.27^{\circ}\text{F}$  ( $\pm 0.15^{\circ}\text{C}$ ) or  $\pm 0.54^{\circ}\text{F}$  ( $\pm 0.3^{\circ}\text{C}$ ) RTD
- Lifetime limited sensor warranty
- Wide selection of mounting styles



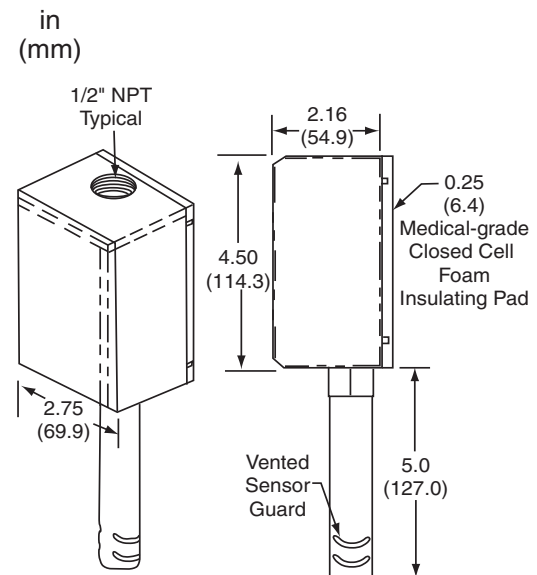
BA/\*-O-EUO



### SPECIFICATIONS

|                            |                                                                                |
|----------------------------|--------------------------------------------------------------------------------|
| <b>Accuracy</b>            |                                                                                |
| Thermistor                 | $\pm 0.36^{\circ}\text{F}$ ( $0.2^{\circ}\text{C}$ )                           |
| RTD (.385)                 | $\pm 0.27^{\circ}\text{F}$ ( $\pm 0.15^{\circ}\text{C}$ )                      |
| RTD (.375)                 | $\pm 0.54^{\circ}\text{F}$ ( $\pm 0.30^{\circ}\text{C}$ )                      |
| <b>Sensor types</b>        |                                                                                |
| Thermistor                 | 10 k $\Omega$ ; Type 2, 10 k $\Omega$ ; Type 3                                 |
| RTD                        | 100 $\Omega$ , 385 curve; 1000 $\Omega$ , 385 curve; 1000 $\Omega$ , 375 curve |
| <b>Temperature range</b>   |                                                                                |
| Stability                  | -40° to 185°F (-40° to 85°C)                                                   |
| Thermistor                 | <1.8°F (0.1°C) over five years                                                 |
| RTD                        | < $\pm 0.1^{\circ}\text{C}$ drift                                              |
| <b>Heat dissipation</b>    |                                                                                |
| Thermistor                 | 2.7 mW/°C (power needed to raise the temperature by 1°C)                       |
| Connections                | 22 AWG wire-etched Teflon leads                                                |
| <b>Enclosure Materials</b> |                                                                                |
| WP                         | NEMA 3R, cast aluminum                                                         |
| BB                         | NEMA 4, UV resistant plastic, UL94V-0                                          |
| JB                         | Standard steel junction box                                                    |
| <b>Agency approvals</b>    |                                                                                |
| Warranty                   | CE, RoHS<br>Lifetime (Sensor)                                                  |

### DIMENSIONS



(WP) OSA Probe

### ORDERING INFORMATION

| MODEL | DESCRIPTION                                         |
|-------|-----------------------------------------------------|
| BA/   | Probe temperature sensor                            |
|       | <b>REQUIRED SENSOR TYPE</b>                         |
| 10K2  | 10,000 $\Omega$ thermistor @ 77°F (25°C), Type 2    |
| 10K3  | 10,000 $\Omega$ thermistor @ 77°F (25°C), Type 3    |
| 100   | 100 $\Omega$ RTD @ 32°F (0°C), 385 curve            |
| 1K8   | 1000 $\Omega$ RTD @ 32°F (0°C), 385 curve           |
| 1K7   | 1000 $\Omega$ RTD @ 32°F (0°C), 375 curve           |
|       | <b>REQUIRED PROBE TYPE AND LENGTH</b>               |
| O     | OSA probe 5" long                                   |
|       | <b>REQUIRED MOUNTING ENCLOSURE (JB is standard)</b> |
| JB    | 2" x 4" handy box with 1/2" knockouts               |
| EUO   | Weathertight IP66 UV-rated enclosure                |
| WP    | NEMA 3R weatherproof enclosure                      |
| BB    | NEMA 4 weatherproof, UV resistant plastic           |

Example: BA/10K3-O-BB BAPI 5" OSA 10,000 $\Omega$  thermistor sensor with NEMA 4 weatherproof enclosure

**NOTE:** Call Kele for additional temperature sensor options.