



## Sample gas probe GAS 222.31 ANSI CSA

In many applications gas analysis is the key for safe and efficient control of process flows, environmental protection and quality assurance. In extractive gas analysis the location of the gas sampling point is crucial for the reproducibility and accuracy of the analysis results.

The specific filter capacity, corrosion resistance and functional equipment requirements for the probe arise from the composition of the sample gas.

However, operating costs are also an important criterion in the selection, as the sampling points are frequently located at hard to access points in the system. Effective particle filter backwashing options and low maintenance characterise the extensive GAS probe series.

Heated probe with shut-off valve, upstream filter and weather hood

The probe body and the area around the screw connection for the heated sample gas line are completely isolated

Electronic temperature controller up to 395 °F with low/high temperature alarm and display

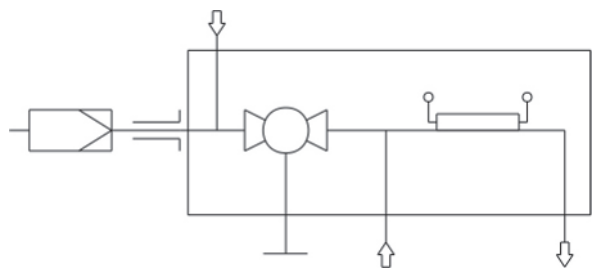
For dust loads up to 200 g/m<sup>3</sup>

This probe is not suitable for use in Ex areas

"CSA C & US" approval only when used with 3" 150lbs. ANSI flange



## Flow Diagram



## Technical Data

## Gas Probe Technical Data

|                                       |   |                                  |
|---------------------------------------|---|----------------------------------|
| Probe operating temperature:          | max. 395 °F   |                                  |
| Ambient temperature with accessories: | <b>Component</b>  | <b>Ambient temperature range</b> |
|                                       | Compressed air valve:   | 14 F < T <sub>amb</sub> < 131 °F |
|                                       | Pneumatic drive:  | 14 F < T <sub>amb</sub> < 131 °F |
| Regulator setting range:              | 122 to 395 °F   |                                  |
| Low/high temperature alarm:           | Alarm adjustable ±5.....30 K from setpoint, factory preset 15 K<br>Max. switching current 1 A |                                  |
| Electrical data:                      | 230 V, 2.0 A, 50/60 Hz<br>115 V, 3.8 A, 50/60 Hz  |                                  |
| IP rating:                            | IP54  |                                  |
| Max. operating pressure:              | 85 psia   |                                  |
| Material:                             | Ball valve 1.4408   |                                  |
| Parts in contact with media:          | Flange: 1.4571<br>Seals: PTFE/graphite/1.4404   |                                  |

## Ordering Instructions

The item number is a code for the configuration of your unit. Please use the following model key:

| 4622231 | 1 | 9 | 9 | 0 | X | X | X | X | X | X | X | X | 9 | X | Product Characteristics                                 |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Flange / approval</b>                                |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0 ANSI 3"-150 lbs <sup>1)</sup>                         |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Power supply sample probe</b>                        |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 115 V   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 230 V   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Calibrating gas connection</b>                       |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0 No calibrating gas connection                         |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 6 mm  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 6 mm + check valve                                    |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 1/4"  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 1/4" + check valve                                    |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Connection heated extension</b>                      |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0 No  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 Yes   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Built-in temperature controller <sup>2)</sup></b>    |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0 No  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 Yes   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Blowback with air reservoir <sup>3)</sup></b>        |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Air reservoir heating</b>                            |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 Yes   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9 No  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Built-in blowback control <sup>2)</sup></b>          |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 Internal controller                                   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9 No  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Compressed air valve / valve voltage information</b> |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0 Manual  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 120 V 60 Hz   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 240 V 60 Hz   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9 None (if no blowback requested)                       |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Pneumatic drive for ball valve</b>                   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0 Manual  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 Monostable pressure-free open                         |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 Monostable pressure-free closed                       |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Limit switch for pneumatic drive</b>                 |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9 No  |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>Control valve for pneumatic drive</b>                |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 3/2-way valve   |
|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9 No control valve                                      |

<sup>1)</sup> Probes with ANSI flange are CSA and C-US approved.

<sup>2)</sup> The electronics can either be equipped with temperature controller for heated extension or blowback control.

<sup>3)</sup> For flammable sample gas, always use inert gas for blowback. Probe blowback prohibited when using explosive gases!

## Options

The base unit becomes functional by adding accessories suitable for the application. Please refer to accessory data sheet no. 461099 for information.

Please also refer to data sheet no. 461000 "GAS 222 Gas Probes" for a general description.

[illegible]