

# TECHNICAL INFORMATION



## vent-captor Type 3205.30

The vent-captor type 3205.30 is an air flow meter for industrial applications. The small, self-contained vent-captor is completely epoxy resin encapsulated and operates with high accuracy and repeatability even under changing working conditions. The vent-captor can be integrated into measurement and control systems without additional components.

The newly developed operating principle for the measurement of air flow, based on the calorimetric principle, provides a wide measurement range over a large quantity. The measurement range is continuously adjustable from 1 to 30 m/s. To achieve the best signal resolution 4 different units are available.

The response time is very short, even at low flow, so that this analog vent-captor is ideally suited for quick control loops.

The maintenance-free air flow meter is simple to install with the supplied mounting flange. The stainless steel housed vent-captor type 3205.30 is most suitable for use under pressure conditions. Its output signal directly refers to mass flow.



- compact air flow meter
- easy to install
- sensor for all measurement and control applications
- no moving parts
- linear current output 4-20 mA
- 4 measurement ranges up to
- 0-5 m/s, 0-10 m/s, 0-20 m/s, 0-30 m/s, continually adjustable

### Sensing data:

|                            |   |
|----------------------------|---|
| Medium                     | gaseous   |
| Measurement range          | continually adjustable up to 5 m/s, 10 m/s, 20 m/s, 30 m/s, see graph |
| Adjustment characteristics | logarithmic to flow speed   |
| Linearity deviation        | < 5 % best fitting slope  |
| Repeatability tolerance    | < 3%  |
| Temperature drift          | < 0,3 % / K   |
| Pressure                   | max. 10 bar   |

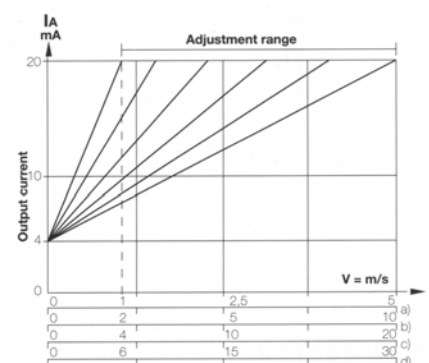
All data related to air

### Electrical data:

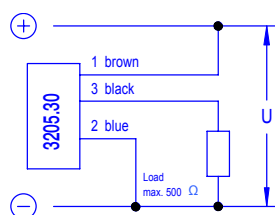
|                   |  |
|-------------------|--|
| Voltage supply    | 24 V DC $\pm$ 30%                        |
| Power consumption | approx. 800 mW – 1.3 W (max. flow speed) |
| Output current    | 4 to 20 mA                               |
| Resistive load    | 0 - 500 Ohm                              |

#### Measurement range adjustment:

The measurement range of the air flow meter is adjustable with a small screwdriver turning a potentiometer. A green LED signalizes operation within the adjusted measurement range. If flow exceeds the measurement range LED turns off



### Connection Diagram



**weber**

Sensors GmbH Strohdreich 32 D-25377 Kollmar Tel.:+49 4128-591 Fax:-593

Member of the captor Group

e-Mail: info@captor.de • www.captor.de

REV: AA / 12.05.05  
sgd.: Wip./ Wil

Page 1 / 2

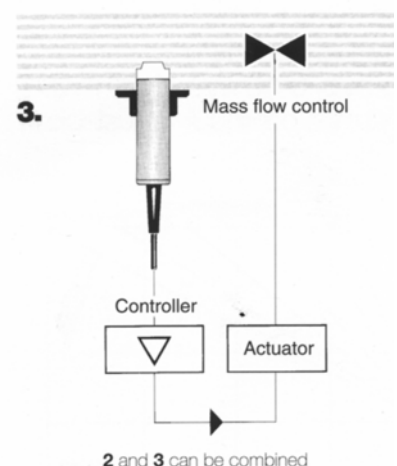
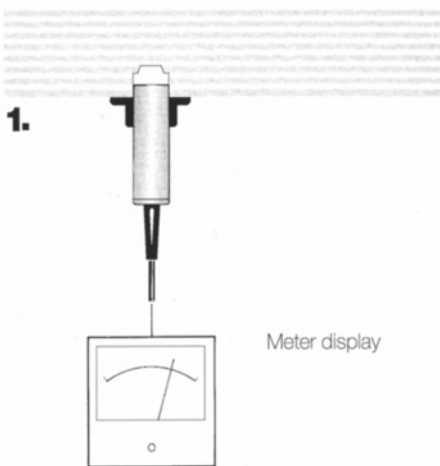
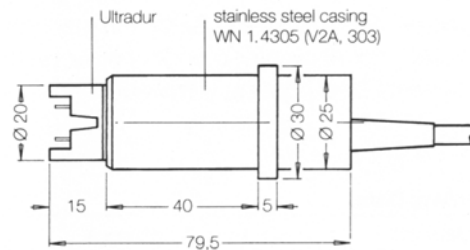
# TECHNICAL INFORMATION



## vent-captor Type 3205.30

### Mechanical Data:

|                       |   |                                       |
|-----------------------|---|---------------------------------------|
| Material              | Sensor probe  | Housing                               |
|                       | Ceramic with overglaze                              | Ultradur and stainless steel (1.4305) |
| Medium temperature    | -20 °C to +70 °C (-4°F to +160°F)                   |                                       |
| Ambient temperature   | -20 °C to +70 °C (-4°F to +160°F)                   |                                       |
| Elektrical connection | 2 m moulded oilflex cable / 3 x 0.5 mm <sup>2</sup> |                                       |
| Protection standard   | IP 64   |                                       |
| Mass                  | approx. 200g without nut                            |                                       |
| Mounting              | union nut G1A SW37 DIN 259 ISO228                   |                                       |



**weber**

Sensors GmbH Strohdreich 32 D-25377 Kollmar Tel.:+49 4128-591 Fax:-593

Member of the captor Group

Member of the captor Group

REV: AA / 12.05.05  
sgd.: Wip./ Wil

Page 2 / 2