

# Analysis instrument for determining the concentration of SO<sub>2</sub> in SF<sub>6</sub> gas

## Model GA25

WIKA data sheet SP 62.04

### SF<sub>6</sub> Aciditor

#### Applications

Measurement of the concentration of SO<sub>2</sub> in SF<sub>6</sub> gas-filled equipment

#### Special features

- Fast test results, measurement duration approx. 2 minutes
- Compact and low weight
- Maintenance-free
- Operation via touchscreen
- Long battery life



Analysis instrument, model GA25

#### Description

The model GA25 analysis instrument is a cost-effective solution for determining the concentration of SO<sub>2</sub> in SF<sub>6</sub> gas-filled equipment. The concentration of SO<sub>2</sub> is an indicator for the presence of decomposition products in SF<sub>6</sub> gas.

#### Easy to use

The advantage of the GA25 over conventional single-use test-tubes lies in the reproducibility of the measured value and the simple operation. The electrochemical sensor can, after a service life of 24 months, be replaced by the operator.

#### Fast and safe

The GA25 was developed for the fast and accurate measurement of SO<sub>2</sub> (Sulphur Dioxide). With its automatic pressure and flow control, the measurement is reproducible and erroneous measurement is thus eliminated. During the measurement, the determined concentration can be read directly from the touchscreen.

#### Environmentally friendly

The test gas can be temporarily collected at the outlet of the GA25 with a gas-recovery bag so that the environmentally-hazardous SF<sub>6</sub> gas does not escape into the surrounding atmosphere.

Once the recovery bag is full, the SF<sub>6</sub> gas can be pumped back into a gas cylinder using a model GTU-10 gas transfer unit and subsequently recycled or, depending on the gas quality, be reused directly.

## Specifications

### Measuring principle

Electrochemical SO<sub>2</sub> sensor

### Measuring range

0 ... 10 ppm<sub>v</sub>

0 ... 20 ppm<sub>v</sub>

0 ... 100 ppm<sub>v</sub>

0 ... 500 ppm<sub>v</sub>

### Accuracy

Measuring range 0 ... 10 ppm<sub>v</sub> ±0.5 ppm<sub>v</sub>

Measuring range 0 ... 20 ppm<sub>v</sub> ±1.0 ppm<sub>v</sub>

Measuring range 0 ... 100 ppm<sub>v</sub> ±3.0 ppm<sub>v</sub>

Measuring range 0 ... 500 ppm<sub>v</sub> ±5.0 ppm<sub>v</sub>

### Resolution

Measuring range 0 ... 10 ppm<sub>v</sub> 0.1 ppm<sub>v</sub>

Measuring range 0 ... 20 ppm<sub>v</sub> 0.1 ppm<sub>v</sub>

Measuring range 0 ... 100 ppm<sub>v</sub> 1.0 ppm<sub>v</sub>

Measuring range 0 ... 500 ppm<sub>v</sub> 1.0 ppm<sub>v</sub>

### Maximum zero-point drift

0.1 ppm<sub>v</sub>

### Long-term stability

< 1 % signal degradation/month (linear)

< 0.5 % at measuring range 0 ... 500 ppm<sub>v</sub>

### Flow rate

20 litres/ hour

### Gas consumption

approx. 0.7 litres per measurement (under atmospheric pressure)

### Inlet pressure

0.5 ... 35 bar (gaseous)

With automatic flow control

### Control panels

Input via touchscreen

The 'Purge' button conducts the contents of the 4-metre-long measuring tube directly to the outlet. This should be carried out before each measurement.

### Display

Touchscreen (240 x 128 pixel)

### Voltage supply

Lithium-ion accumulator for approx. 10 h operating time

Charger: AC 100 ... 265 V, 50/60 Hz

### Permissible temperatures

Storage: -10 ... +60 °C

Operation: 0 ... +50 °C

### Permissible humidity

≤ 90 % r. h. (non-condensing)

### Dimensions

W x H x D: 280 x 140 x 300 mm





### Weight

approx. 6 kg

### Service life of the SO<sub>2</sub> sensor

2 years after installation

## Accessories

	Designation	Order no.
	Adapter, measuring hose to DN 8	14017515
	Adapter, measuring hose to DN 20	14013758
	Gas recovery bag, model GA45 For specifications see data sheet SP 62.08	14013015
	Inlet pressure control unit for gas analysis instruments Model GA05	14050089

## Ordering information

Model / Measuring range / Accessories

© 2013 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.  
The specifications given in this document represent the state of engineering at the time of publishing.  
We reserve the right to make modifications to the specifications and materials.



**WIKAI Alexander Wiegand SE & Co. KG**  
Alexander-Wiegand-Straße 30  
63911 Klingenberg/Germany  
Tel. (+49) 9372/132-0  
Fax (+49) 9372/132-406  
E-mail [info@wika.de](mailto:info@wika.de)  
[www.wika.de](http://www.wika.de)