

## Infrared leak detector with changed indication Model GA16

WIKA data sheet SP 62.12

### Applications

- Leak path identification in SF<sub>6</sub>-filled equipment
- Tightness test

### Special features

Infrared leak-detection technology offers many advantages:

- Indicates concentration in ppm<sub>v</sub>, or leak rate in g/y, cc/s
- Detects small SF<sub>6</sub> gas concentrations down to 3 ppm<sub>v</sub>
- Fast response time
- Detects SF<sub>6</sub> gas only
  - Unaffected by moisture
  - Unaffected by wind
- Easy operation



Infrared leak detector with changed indication  
model GA16

### Description

This instrument is used to assure leak-tightness of SF<sub>6</sub>-filled compartments. It can be used to find leakages on aged equipment on-site or do quality inspection after manufacturing.

SF<sub>6</sub>-IR-Leak is the perfect tool to identify the location and magnitude of leaks so that appropriate repairs can be made. It was specifically developed to be easy to use and quickly pinpoint even the smallest SF<sub>6</sub> leaks through the use of the physical working principle of infrared leak detection technology.

To find leaks the sensor is moved across the outside of the tank. As the SF<sub>6</sub> level increases, the beeping of the instrument becomes faster. In the tip a replaceable particle filter prevents the sensor from contamination. If the ambient SF<sub>6</sub> level is higher than 0 ppm<sub>v</sub>, the reading can manually be set to display zero.

### Functionality

The console is carried via a shoulder strap while the sensor gun is handheld. Both the sensor and handheld portions of the unit have a digital display to show the actual SF<sub>6</sub> level. A suction pump inside the console generates a flow from the tip of the handheld through the IR-sensor.

## Additional features

### Measurement principle

Dual wavelength non-dispersive Infrared Spectrometer (NDIR)

### Sensor sensitivity

- 1 ppm<sub>v</sub>
- No cross sensitivities to other gases
- Moisture: unaffected from 0-100 % relative humidity (non-condensating)

### Range

0 ...2,000 ppm<sub>v</sub>

### Detectable leak rate (calculated)

3.43 g/year equiv. to  $1.81 \times 10^{-5}$  mbar\*L/s (or atm\*cc/s)

### Detection limit

3 ppm<sub>v</sub>

### Accuracy

- ± 2 ppm<sub>v</sub> < 50 ppm<sub>v</sub>
- ± 5 ppm<sub>v</sub> between 50 ... < 100 ppm<sub>v</sub>
- ± 2 % max. of range between 100 ... < 2,000 ppm<sub>v</sub>

### Repeatability

< 0.3 %

### Response Time T90

<1 sec

### Unit

ppm<sub>v</sub>, g/y, cc/s

### Supply

- Lithium-Ion battery with 8 hours capacity
- Rechargeable 100-265 V AC 50/60Hz

### Alarm

Audio and visual. Factory audio settings are at 30, 100, and 1000 ppm<sub>v</sub> (other set points possible at the time of order)

### Temperature

Storage: -10 ... 60 °C  
Operating: 0 ... 45 °C

### Dimensions

Console: 285 x 195 x 80 mm (11.2 x 7.7 x 3.2 in)  
Hand-gun: 210 x 110 x 90 mm (8.3 x 4.3 x 3.5 in)

### Weight

Console: 2.5 kg (5.5 lbs)  
Hand-gun: 0.5 kg (1.1 lbs)

### Calibration

Every 2 years

## Ordering information

Model

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