

# Gas Density Switch (GDS) Model 851.52.063 HS

WIKA Data Sheet SP 60.30

## Applications

- Gas density monitoring of closed SF<sub>6</sub> tanks
- For outdoor use
- For high voltage switchgear

## Special features

- Density switch with reference chamber and gas compensation.
- Micro switch inside the reference chamber; without influence of atmospheric pressure change and altitude; no recalibration necessary



Gas Density Switch, model 851.52.063 HS

## Description

### Working ranges

Permissible filling pressure:

11.0 bar<sub>abs.</sub> / 20 °C

Maximum pressure of reference chamber:

7.5 bar<sub>abs.</sub> / 20 °C

Minimum pressure of reference chamber:

4.0 bar<sub>abs.</sub> / 20 °C

### Permissible temperature ranges

Ambient: -40 ... +80 °C (gas phase)

Storage: -40 ... +80 °C

### Alarm contacts / Contact rating

Up to four micro switches, to make or break as ordered, switching points non adjustable and secured

Contact rating: 5 A / 250 V AC, 50 Hz

### Switching distance

Maximum switching point distance: 1.6 bar

Minimum switching point distance: 0.1 bar

Switching hysteresis: typical 0.1 bar, Switching point setting as per specification

### Switching accuracy of reference contact

at 20 °C: 60 mbar

at -20 ... +60 °C: 80 mbar

### High-voltage test

2 kV, 50 Hz, 1 s (wiring versus case)

### Electrical connection

Cable box with cable gland M20 x 1.5

Connection cross-section max. 2.5 mm<sup>2</sup>

### Process connection

Stainless steel, bottom, per EN 837, G 1/2 B (male), 27 mm flats

### Pressure element

Stainless steel, welded

Gas tight: leakage rate  $\leq 1 \cdot 10^{-8}$  mbar · l / s

Test method: spectrometry of helium mass

### Ingress protection

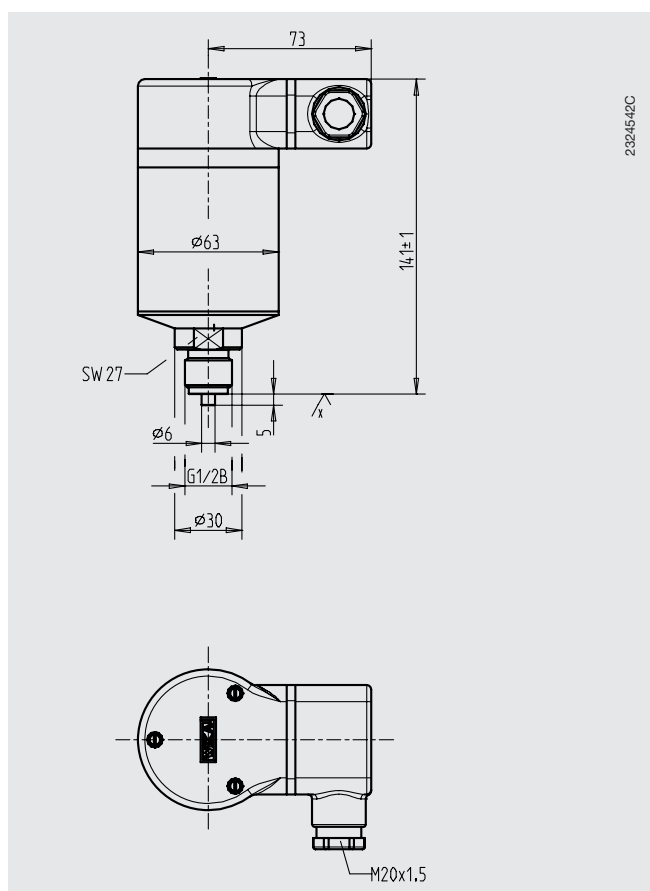
IP 65 per EN 60 529 / IEC 529

### Weight

approx. 1.0 kg

## Dimensions in mm

### Standard version



### Ordering information

Model / Alarm contacts switching point, function and working direction / Options

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

### Case (reference chamber)

Stainless steel, welded with process connection, via glas bushing to electric connection box

Filling: SF<sub>6</sub> gas

Gas tight: leakage rate  $\leq 1 \cdot 10^{-8}$  mbar · l / s

Test method: spectrometry of helium mass

The reference chamber pressure is defined by the lowest switching point

## Options

- Compensation of gas mixtures
- Electrical connection with plug
- Other process connection
- Permissible ambient temperature -50 ... +80 °C
- Micro switches with higher contact rating

