

# Gas cylinder scale

## Model WSGC-01

WIKA data sheet PE 87.19

### Applications

- Level measurement of liquid gases in gas cabinets and gas distribution systems
- Level measurement in chemical delivery systems
- Industrial weight measurement

### Special features

- High ingress protection, IP67, for processes with high condensation
- Front panel provide quick zero setting and calibration functions
- Meets the highest EMC requirements
- Measuring ranges 0 ... 20 kg to 0 ... 200 kg, covering a wide range
- Customized solutions based on customer's gas cylinder size are available



Gas cylinder scale, model WSGC-01

### Description

The model WSGC-01 gas cylinder weighing module has been designed for indoor and outdoor use in gas cabinets or gas containers.

Due to its high ingress protection of IP67, there is no concern with using the gas cylinder scale for gas cylinders with heavy condensation.

The robust and compact design features high accuracy and temperature stability, meeting the requirements of the semiconductor industry.

The gas cylinder weighing module meets the highest overload and EMC requirements in order to ensure safe, error-free and accurate operation.

## Measuring ranges

### Optional versions

0 ... 20 kg

0 ... 50 kg

0 ... 100 kg

0 ... 150 kg

0 ... 200 kg

Other measuring ranges on request.

## Safety overload

150%

## Output signal

4...20mA, 2-wire

### Load

$\leq (\text{supply voltage} - 10 \text{ V}) / 0.02$

## Voltage supply

### Supply voltage

DC 14 ... 30 V

### Max. output current

$\leq 35 \text{ mA}$

## Accuracy specifications

### Analogue signal accuracy

$\leq 0.15\%$  of span (other accuracies available)

### Long-term stability (per month)

$\leq 0.04\%$  of span (at reference conditions)

### Temperature coefficients in rated temperature range

Mean temperature coefficient of zero point:

$\leq \pm 0.1\%$  of span / 10 K

Mean temperature coefficient of measuring range:

$\leq \pm 0.1\%$  of span / 10 K

## Reference conditions (per IEC 61298-1)

Temperatures: 15 ... 25°C

Air pressure: 950 ... 105 Kpa

Humidity: 45 ... 75% RH

Nominal position: Level

Power supply: DC 24 V

Load: see "Output signals"

## Operating conditions

### Free fall

Resistant to impact of 90 kg from a height of 10 cm

### IP ingress protection

IP 67 (IEC 60529)

### Ex marking

#### Optional versions

Option 1	Without Ex approvals
Option 2	Ex ia IIC T4/T5 Ga

### Permissible temperature ranges

Ambient temperature: -20 ... +60 °C (T4)

-20 ... +50 °C (T5)

Storage temperature: -20 ... +70°C

Operating temperature: -20 ... +70°C

## Material

### Sensor

Aluminium alloy

### Case

Stainless steel

## Safety-related maximum values

$U_i = 28 \text{ V}$

$I_i = 93 \text{ mA}$

$P_i = 666 \text{ mW}$

## Electrical connection

Connection type: Cable outlet, other electrical outlets available

Cable length: 6 m

## Electrical safety

Short-circuit resistance: S+ vs. U-

Reverse polarity protection: U+ vs. U-

Insulation voltage: DC 500 V

## Wiring requirements

Red (U+ / S+)

Black (U- / S-)

Yellow and green Shield

## CE conformity

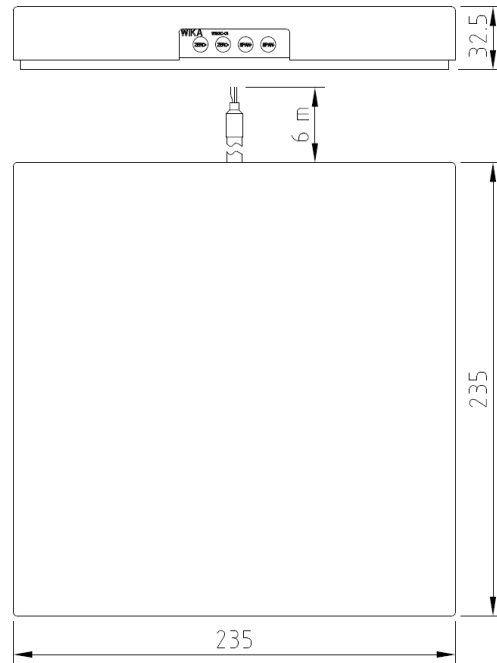
### EMC directive

2004 / 108 / EC, EN 61326 Emission (Group 1 Class B) and interference immunity (industrial applications)

### Ex Directive

Ex ia IIC T4 / T5 Ga per GB / T 3836.1 - 2021

## Dimensions in mm



Customizable sizes are available, please consult factory

