

## Applications

- For gaseous, dry and non-aggressive media that do not attack copper alloys
- Gas-, Vacuum-, Environment-, Laboratory-technology, for content measurement and filter monitoring

## Special features

- With zero-point correction
- Optional 10-fold overpressure proof
- Extremely low measuring ranges
- Very good price / performance ratio



Capsule pressure gauge

## Description

RIEGLER capsule pressure gauges, which are suitable for low pressures and used for fine measuring ranges in gas technology are based on the proven capsule spring measuring system. Two concentrically formed membranes are joined at their outer edges by welding or soldering. One membrane has an opening at its center into which the gas to be measured can flow.

The pressure created in the capsule spring causes it to arch outwards. A bell crank mounted opposite to the input opening directs the linear motion to a pointer mechanism and converts it into a circular motion.

## Technical data

**Design**

EN 837-3

**Nominal size in mm**

63, 100

**Accuracy class (EN 837-3/6)**

1,6

**Scale ranges**

NS 63, NS 100

0 ... 40 mbar to 0 ... 250 mbar

(10-fold overloadable, connection position radially down)

NS 100

-160 ... 0 mbar to -60 ... 0 mbar

-25 ... 15 mbar to -40 ... 20 mbar

(Connection position radially down)

0 ... 25 mbar to 0 ... 400 mbar

(Connection position radially down or axially centric)

**Pressure resilience**

Dormant load: full scale value

Dynamic resilience: 0,9 x full scale value

Overload protection: 1,3 x full scale value

**Permissible temperature**Medium:  $T_{max} = +60\text{ °C}$ Environment:  $T_{min} = -20\text{ °C}$  $T_{max} = +60\text{ °C}$ **Temperature influence**

Indication error in case of deviation from the normal temperature +20 °C at the measuring system:

For temperature increase approximately:  $\pm 0,6\text{ \%/10 K}$ ,For temperature decrease approximately:  $\pm 0,6\text{ \%/10 K}$ 

From the respective scale and value

**Ingress protection per IEC / EN 60529**

NS 63: IP 33

NS 100: IP 54

**Process connection**

Brass, radial or axial centric

NS 63 G1/4B – AF14

NS 100 G1/2B – AF22

(EN 837-3/7.3)

**Measuring element**

Capsule spring, Copper-Beryllium alloy

**Gasket**

NBR (Perbunan)

**Pointer**

Aluminium, black

**Window**

Glass

**Case**

Stainless steel 304

**Dial**

Aluminium, white,

Black scale

**Zero point setting**

In front

**Pointer mechanism**

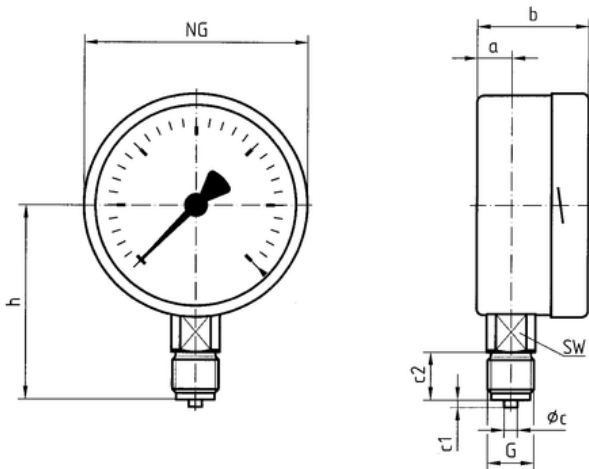
Brass

**Bajonet ring**

Stainless steel 304

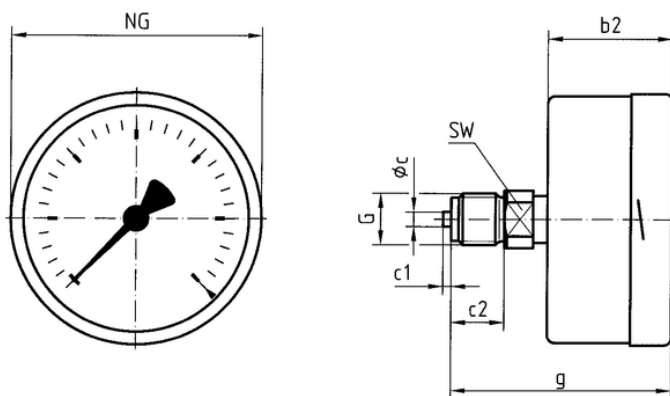
## Dimensions in mm

### Connection radial



NS	Dimensions in mm								Weight in kg
	a	b	$\phi_c$	c <sub>1</sub>	c <sub>2</sub>	G	h	AF	
63	10,8	40	5	2	13	G ¼ B	53	14	0,24
100	15,6	49	6	3	20	G ½ B	86	22	0,60

### Connection axial



NS	Dimensions in mm							Weight in kg
	b <sub>2</sub>	$\phi_c$	c <sub>1</sub>	c <sub>2</sub>	G	g	SW	
100	49	6	3	20	G ½ B	81	22	0,50