

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 °CEnvironment: T_{min} = -20 °CT_{max} = +60 °C

Temperature influence

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

For temperature increase approximately: ± 0,6 %/10 K,

For temperature decrease approximately: ± 0,6 %/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

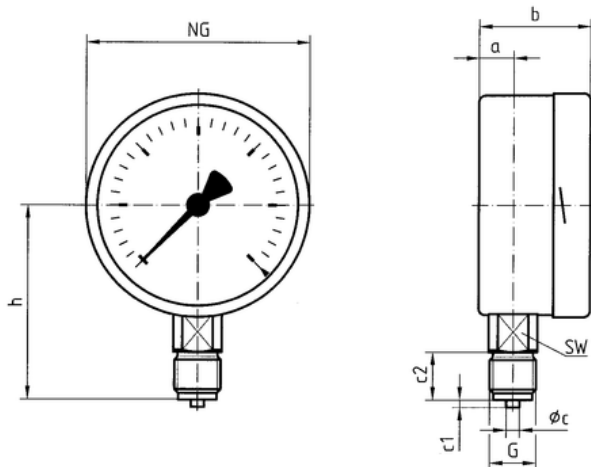
Brass

Bajonet ring

Stainless steel 304

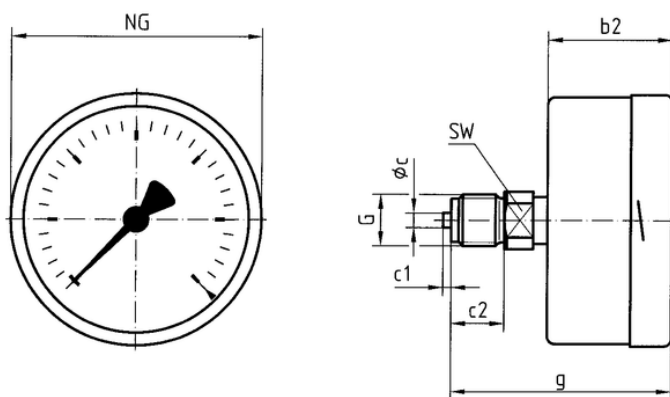
Dimensions in mm

Connection radial



NS	Dimensions in mm								Weight in kg
	a	b	ϕ_c	c ₁	c ₂	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 ₂	ϕ_c	c ₁	c ₂	G	g	SW	
100	49	6	3	20	G ½ B	81	22	0,50