

Applications

- For gaseous and liquid, non-aggressive, non-high viscosity and non-crystallizing media
- For high measurement accuracy
- Precision measurement in laboratories
- Checking of operating gauges

Special features

- High measurement accuracy (accuracy class 0.6)
- Very good price / performance ratio



Fine measuring gauge

Description

RIEGLER fine measuring gauges are specifically designed for measuring pressures with high accuracy. The measuring element is a metallic tube closed at one end and bent in a circular or spiral shape. For pressure ranges up to max. 60 bar the tube is formed with an oval cross-section and bent in the shape of a C (circular spring or C-Spring).

For higher pressure ranges, the tube is wound several times to form a helical spring. The oval form is created by the cross-sectional tapering during the winding process. When both variants are pressurized, the preformed tube attempts to resume its initial position – the stretched tube. This creates a path because of the radius increase, which is converted into a circular motion via a pointer mechanism.

Technical Data**Nominal size in mm**

160

Accuracy class (EN 837-1/6)

0,6

Scale ranges (EN 837-1/5)

-1 ... 0 bar to -1 ... 1,5 bar

0 ... 0,6 bar to 0 ... 400 bar

Adjustment medium

≤ 40 bar: Air

> 40 bar: Water

Pressure resilience

Dormant load: full scale value

Dynamic resilience: 0,9 x full scale value

Permissible temperature

Medium: Tmax = +60 °C

Environment: Tmin = -20 °C

Tmax = +60 °C

Temperature influence

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

For temperature increase approximately: ± 0,4 %/10 K,

For temperature decrease approximately ± 0,4 %/10 K

from the respective full scale value

Ingress protection per IEC / EN 60529

IP 54

Process connection

Brass, radial at the bottom

G1/2B – AF22 (EN 837-1/7.3)

Measuring element

Tubular spring

≤ 60 bar circular spring, Copper alloy

> 60 bar helical coil spring, stainless steel 316 Ti/316 L

Pointer mechanism

Brass / Nickel silver

Dial

Aluminium, white

Black scale

Pointer

Cutter pointer aluminum, black

Case

Stainless steel 304

Bayonet ring

Stainless steel 304

Window

Plastic (PMMA)

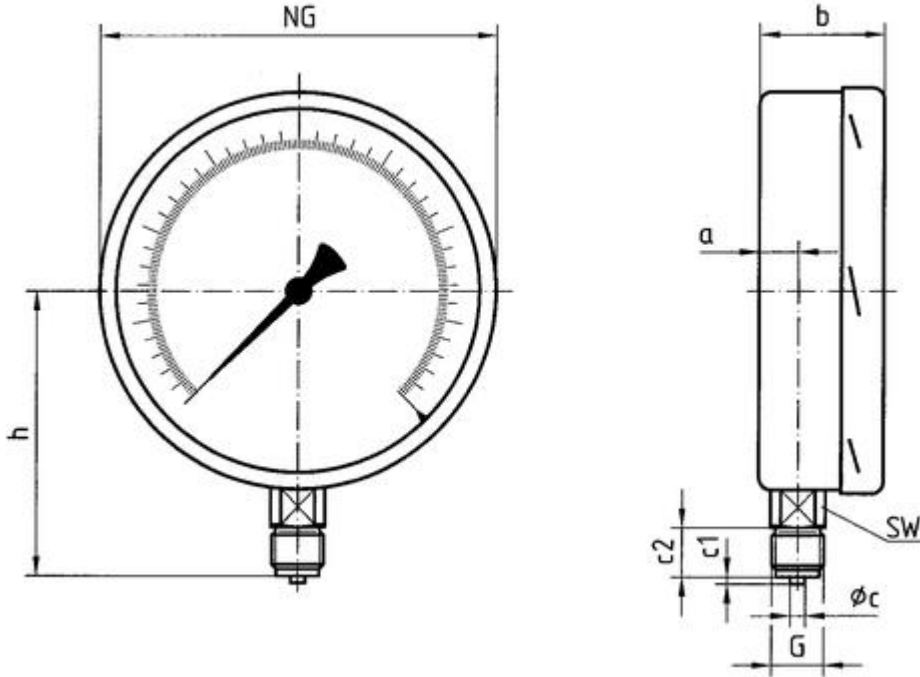
Approvals

EU Declaration of Conformity:

Pressure Equipment Directive, PS >200 bar; Module A,

Pressure-accessory

Dimensions in mm



NG	Dimensions in mm								Weight in kg
	a	b	ϕ_c	c1	c2	G	h	SW	
160	17,5	50	6	3	20	G ½ B	116	22	1,05