

G1.5 Gauge



The G1.5 crack monitor is a precision instrument designed to monitor and track the evolution of crack openings. It stands out due to its **carbon construction** and a **high resolution of 0.02 mm**.

Carbon offers two key advantages:

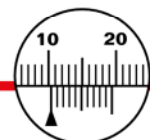
1. A **very low thermal expansion coefficient** (3.5×10^{-6}), eliminating the impact of temperature variation on measurement
2. A **corrosion-resistant material**, ensuring long-term durability

Thanks to its design, the G1.5 crack gauge is reusable. Its 0.02 mm resolution allows for highly accurate tracking of structural movement. Measurement is read using a **vernier scale**, a method common to all gauges in the G1 range.

The device consists of two carbon rulers that slide within Nylon PA12 clips, a polyamide known for its excellent dimensional stability and high resistance to weathering. Markings are made using pad printing and are UV-resistant.

A dedicated application, available at <https://saugnac.app>, is provided to record and manage measurements.

The G1.5 crack monitor is designed, manufactured, and assembled in France.



Technical Specifications

Resolution	0,02 mm
Dimensions	260 x 40 mm
Ruler material	Carbon
Clip material	Nylon PA12
Measurement range	Approx. 45 mm
Weight	25 g
Thermal expansion coefficient	$3,5 \cdot 10^{-5}$

Mounting

The G1.5 crack monitor is supplied with impacts anchors for mechanical fastening. The gauge features two Ø 4 mm holes for installation. The mounting is performed through the body of the gauge, with the anchor's collar positioned over the gauge. The installation process is explained in the included instruction manual.



Reading the G1.5 Crack Monitor

Measurement reading is based on the same vernier principle used across all G1 series gauges:

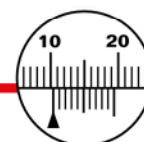
- The upper scale, graduated from 0 to 100 mm, represents the main measurement scale
- The lower scale is the vernier



The tool, the measurement, the know-how and the service too

SAUGNAC GAUGES

Phone: +33(0)9 62 07 18 68 – www.saugnac-gauges.com – info@saugnac-gauges.com



SAUGNAC®

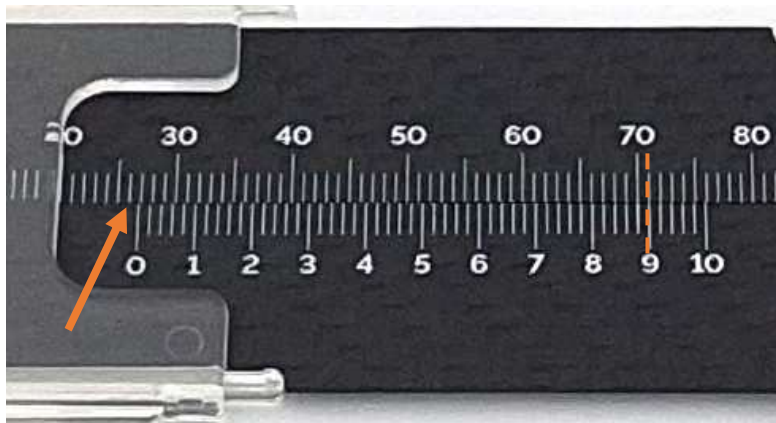
The expert's brand

The millimetric division to the left of the zero indicates the full millimeters. In this example, the reading shows 26 mm.

Next, find the vernier line that aligns with any line on the main scale. You can use the provided magnifier for more precision.

Here, vernier mark 9 aligns with a mark on the main scale.

This means 0.90 mm must be added.



Reading: 26.90 mm

Note: each vernier division equals 0.02 mm.

Measurement Tracking with the Saugnac App

The Saugnac web application, completely free and without any limitations, is accessible from both PC and smartphone via <https://saugnac.app/>.

It allows you to record measurements and associate photos, making it easier to track data collected with the G1.5 crack gauge.

The app also enables archiving of previous measurements, allowing you to reuse the gauge on another site for a new monitoring cycle.

