

## Pro-BRT AccuNeedle



**Patent pending**

### **Needle protrusion measurement in HDR prostate brachytherapy**

In HDR brachytherapy, the protruding length of each needle has to be measured accurately, because dwell-position planning is derived from it.

The **Pro-BRT AccuNeedle** addresses the limitations of measuring with a metal ruler: awkward body positioning, limited visibility, the risk of misreading densely placed needles, and difficulty holding a stable measurement.

The device uses a sliding plunger, a certified millimetre scale and a reading window in the housing, so the value is retained and read after the device has been removed from the needle.

## Product details:

- Intended for measurement of needle protrusion during HDR prostate brachytherapy (afterloading).
- Addresses measurement errors caused by ergonomics, limited lighting, or closely spaced needles.
- A sliding plunger indicates protrusion length, so no reading is taken by leaning over a ruler.
- The final reading can be taken after removing the device from the needle without losing the setting.
- Made from disinfectant-resistant materials; there is no patient contact, so no sterilization is required.

## Technical data (can be modified to customer specifications):

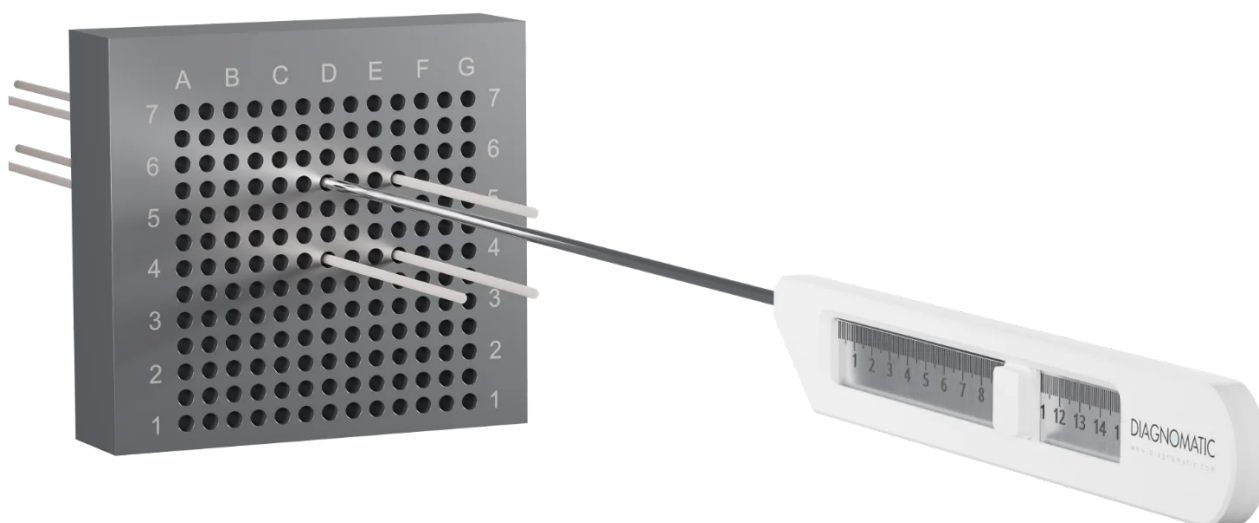
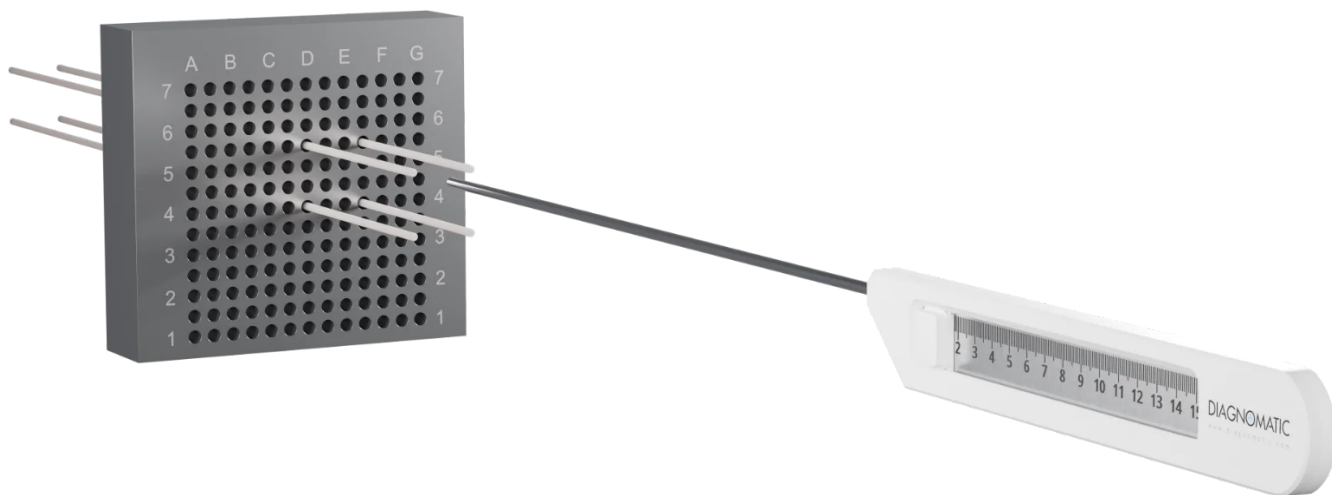
- **Device type:** manual measurement tool for HDR brachytherapy needles
- **Measurement range:** according to the engraved millimeter scale
- **Accuracy:**  $\pm 1$  mm
- **Construction:**
  - thin guide tube
  - sliding plunger with a measurement marker
  - reading window in the upper housing
  - measuring scale in the housing
- **Materials:** chemically resistant, easy to disinfect
- **Intended use:** HDR prostate brachytherapy systems (afterloading Ir-192)
- **Data handling:** measured values can be transferred to treatment-planning systems

## Needle Length Measurement

**Purpose:** To measure the protruding length of the needle/catheter during prostate brachytherapy.

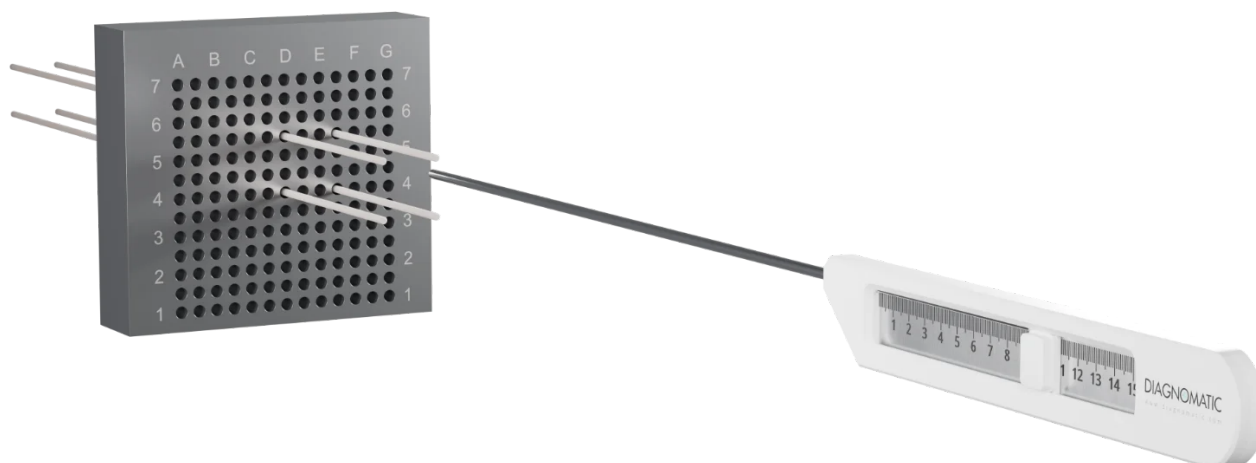
### Position the measuring device

Slide the tip of the measuring device onto the needle and advance it until it rests flush against the surface of the template.



### Remove the measuring device

Carefully remove the measuring device from the needle while maintaining its position setting.



### Read the measurement

Read the protruding needle length directly from the scale window on the device.



### Product features:

- CE marked
- Resistant to disinfectants; no sterilization required
- Handheld design for use at the treatment table
- Certified millimetre scale
- The reading is taken from the scale window rather than by aligning a ruler at the template
- The manual provides detailed guidelines for carrying out each test, results assessment and registration