

VMK - ENDONEEDLE

For Endodontic and Periodontic rinsing

The VMK-EndoNeedle is a very thin sterile needle (28G (0.35mm.)*1") with a smooth tip. This needle fits on any standard Luer / Luer Lock syringe. The main objective is to bring the endodontic irrigating solution easily and deeper into the root canal while cleaning and shaping in order to remove pulpal remnants or debris of the canals more easily.

- ✱ **Flexible:** The VMK-EndoNeedle follows any canal curvatures perfectly.
- ✱ **Rebound effect:** introducing an irrigation solution into the canal under a certain pressure will push pulpal debris upward to the canal tip.
- ✱ **Rounded tip:** no obstruction of the needle; the needle does not prick into the canal.



1. DEFINITIONS

To clean a root canal perfectly until the apex, dentists will use a VMK-EndoNeedle. A good endodontic needle should meet the following requirements:

1. There should be a perfect balance between volume and thickness (or flexibility) of the VMK-EndoNeedle;
2. Through its flexibility the VMK-EndoNeedle should adapt itself to each type of canal;
3. The VMK-EndoNeedle should be able to irrigate a canal completely, including the periodontal pockets.



2. EXTERNAL DIAMETER

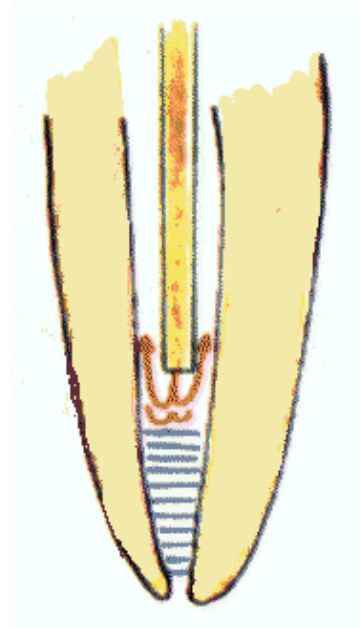
The external diameter of the VMK-EndoNeedle is 0.35mm. There are three reasons why precisely this diameter has been chosen (these reasons define also the advantages of the VMK-EndoNeedle):

1. the VMK-EndoNeedle never reaches the Apex where the apical opening is about 0.20mm to 0.30mm;
2. the VMK-EndoNeedle is a flexible 28G needle;
3. the VMK-EndoNeedle reaches far enough into the canal in order to obtain a perfectly cleaned canal, even the Apex will be cleaned.

3. INTERNAL DIAMETER

The internal diameter of the VMK-EndoNeedle is between 0.17mm and 0.19mm. There are three reasons why precisely this diameter has been chosen (these reasons define also the advantages of the VMK-EndoNeedle):

1. The dentist is able to “flush” liquid through the VMK-EndoNeedle, but only with a certain pressure. This pressure creates a hydraulic effect. Pulpal debris is removed and pushed upwards the root canal. This is the so-called **REBOUND-EFFECT**.
2. *The dentist will withdraw the needle by 1mm when he feels resistance (could be the Apex at the end). By “flushing” the liquid into the root canal, the Apex will be cleaned too.*
3. While the VMK-EndoNeedle is big enough, it never will stick into the canal and the needle will never will be obstructed by pulpal debris.



4. TIP OF THE VMK-ENDONEEDLE

The rounded tip of the VMK-EndoNeedle also allows irrigating the periodontal pockets and removal of pulpal debris from that area.

The rounded tip allows inserting the VMK-EndoNeedle into the canal smoothly and easily.

5. ENDO-SYRINGE - **STERILE**

This syringe has been developed with a fourth element. This eliminates the risk of being able to remove the piston from its body.

Also the VMK-EndoNeedle will be screwed onto the syringe. During the irrigation procedure, the VMK-EndoNeedle cannot be detached from the syringe.



Code	Description	
99 010	Box of 100 needles	28G * 1" (0,35mm * 25mm)
27 002	Box of 100 syringes	2,5 Ml. Luer Lock
27 006	Box of 100 syringes	5 Ml. Luer Lock