

# Von Frey Hairs

Cat. No. 37450-275

## General

Von Frey hairs (named after the German physiologist Max von Frey, 1852–1932) were originally produced from animal and human hairs of different diameter; nowadays they are nylon monofilaments; the diameter determines the resistance of the monofilament to bending. A filament is placed perpendicularly to the skin with slowly increasing force until it bends, thereby determining the amount of force applied.

The **Aesthesio**<sup>®</sup> set of 20 monofilaments is based on the Semmes Weinstein monofilament set, **but now features retractable filaments** to protect the filament and allow the evaluator to carry a few around in a pocket.

The set of monofilaments provides an approximately logarithmic scale of actual force, and a linear scale of perceived intensity.

They have a long history of effective use in clinical settings, and can be used to diagnose pathologies of hyper- or hypo-aesthesia.

Subsets within the set of 20 probes distinguish pathologies on different parts of the body (foot, hand, lip, cheek, etc.).

Individual filaments are also sold separately individually.

Hypersensitivity

Touch Threshold

Semmes Weinstein  
Von Frey Filaments  
for Touch  
Assessment



## Main Features

- 20 Filament Kit
- Graded Series of Nylon Monofilament, color-coded
- Rotating sleeve protects precision filament while in closed position

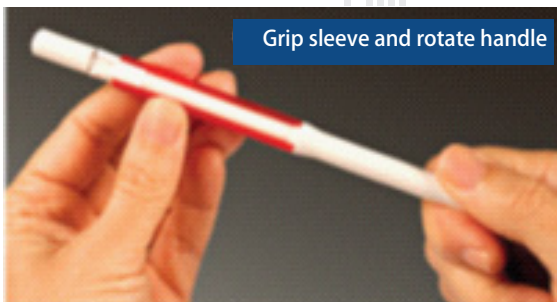
Von Frey Filaments have a long history of effective use in clinical settings, and can be used to diagnose pathologies of hyper- or hypo-aesthesia.

The operating principle remains the same: when the tip of a fiber of given length and diameter is pressed against the skin at right angles, the force of application increases as long as the researcher continues to advance the probe, until the fiber bends. After the fiber bends, continued advance creates more bend, but not more force of application.

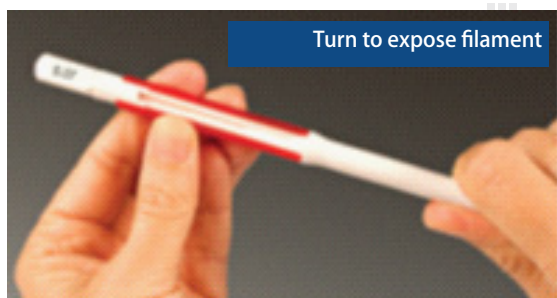
**This principle makes it possible for the researcher using a hand held probe to apply a reproducible force, within a wide tolerance, to the skin surface.**

Rodents exhibit a paw withdrawal reflex when the paw is unexpectedly touched. The Touch Test™ Sensory Evaluator can be used on the Plantar surfaces of the foot of a rat or mouse, and the animal will indicate sensation by pulling back its paw.

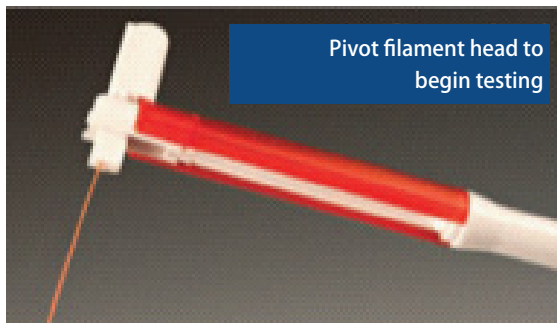
**Replacement filaments available.** Subsets within the set of 20 probes distinguish pathologies on different parts of the body (foot, hand, lip, cheek, etc.). **Rotating sleeve** protects precision filament while in closed position.



Grip sleeve and rotate handle



Turn to expose filament



Pivot filament head to begin testing

## Accessories

For easy and quick stimulation of the plantar surface with Von Frey filaments, we offer a 90x38cm **perforated metal platform**, cat. 37450-005. Laser-cut perforations form a mesh-like open grid of square holes ~5X5 mm; intervening metal grid is ~1mm wide, comfortable to the animal and easy to view the target area of the paw.

The shelf is coated with a polymer resin that is easy to clean and which will not be spoiled by fluids or waste materials. Mount the shelf on the wall.

In alternative we offer a **shelf with 40 or 80cm legs**, 37450-045 & 37450-085 respectively, which can be completed with our standard animal enclosure 37000-006; the latter is the **modular enclosure**, used with our Plantar Test & Dynamic Plantar Aesthesiometer, in which the 3 spaces can be further divided by partitions into 2 or 4, thus lodging up to 12 rats or mice.



You might also consider the **complete stimulation base** 37450-278, including supporting columns, shelf, and animal enclosure.

## Ordering Information

**37450-275** **Aesthesio®** Sensory Evaluator, Kit of 20 Von Frey filaments in a carrying case

### Physical

Weight	0.4 Kg
Shipping Weight	0.9 Kg
Packing	24x22x5cm

### Options

<b>37450-005</b>	Large Perforated Metal Platform (testing shelf) for plantar stimulation
<b>37450-045</b>	Platform 37450-005, with 40cm legs
<b>37450-085</b>	Platform 37450-005, with 80cm legs
<b>37000-006</b>	Multiple-configuration animal-enclosure, from 3 to 12 spaces
<b>37450-277</b>	Set of 20 VonFrey Filaments 37450-275 & complete base assembly 37450-278
<b>37450-278</b>	Base Assembly for plantar stimulation, incl. supporting columns, perforated metal sheet and multiple-configuration animal-enclosure, from 3 to 12 spaces