



SUPERELASTIC NITINOL

STAPES-PROSTHESES

- **NEW GENERATION** of self crimping Nitinol Pistons
- Platinum/PTFE-Prostheses
- Titanium-Prostheses



The piston's hook is usually made of titanium, platinum, PTFE or thermo-reactive nitinol. These types of pistons need an additional closing step to fix the hook around the incus. This is either done by crimping or heating, dependent on the material.

The new generation pistons have a hook manufactured from *Superelastic Nitinol* which makes the procedure simpler and quicker an account that the pistons

- are self crimping
- do not need an additional closing step
- do not need applied heat

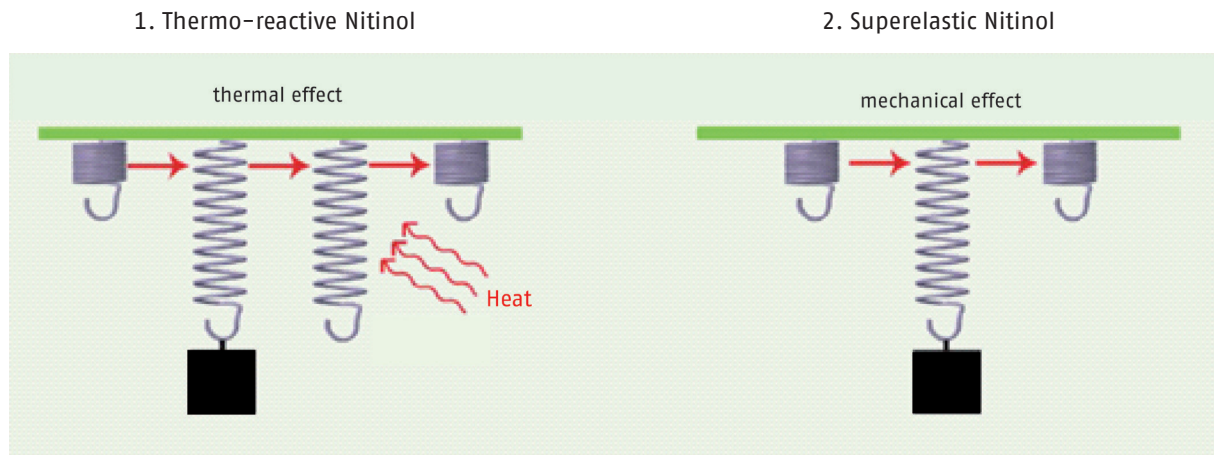
The *Superelastic Nitinol* piston delivers excellent results and is safe for the patient due to

- easy handling
- minimum force needed for insertion
- optimal pressure distribution on the incus
- shape maintenance



Material

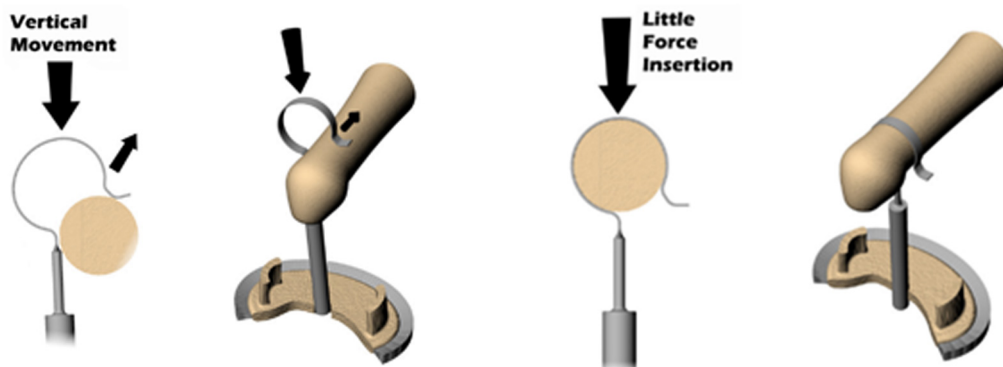
Nitinol is an alloy of nickel (Ni) and titanium (Ti). There are two types of nitinol: The shape of thermo-reactive nitinol can only be changed permanently by changing temperature. In contrast the superelastic nitinol will spring back to its original shape after being bent. This is the material the hook of our new generation nitinol pistons is manufactured from.



Handling

The easy fit design of the piston makes the handling simple:

- Insertion requires only minimum pressure, which avoids damage to the incus.
- The equal pressure distribution ensures an optimal fit.





Prof. Dr. med. Serena Preyer
Head of ENT in Deaconess Hospital Karlsruhe, Germany

Preyer incus fork

Art.-No. 10-670-00



Incus fork for size determination

The average diameter of the incus is 0.7mm, but the exact diameter can vary from patient to patient. For this reason an incus fork with 0.7mm diameter was specially developed in collaboration with Prof. Serena Preyer, to ascertain the proper size of piston. The size of the piston is determined by simply placing the incus fork over the incus.

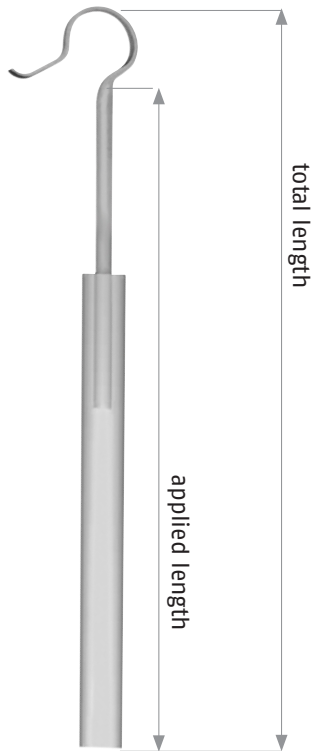


Size range of hook

- M (standard): inner diameter = 0.7mm
- S (small): inner diameter < 0.7mm
- L (large): inner diameter > 0.7mm

Please note that you will find further information and an instruction tutorial/video on our website www.spiggle-theis.com

Stapes Protheses Nitinol/PTFE, 1 piece, sterile



Wire ϕ : 0.2 mm
PTFE shaft ϕ : 0.4 mm

Incus ϕ standard: 0.7 mm

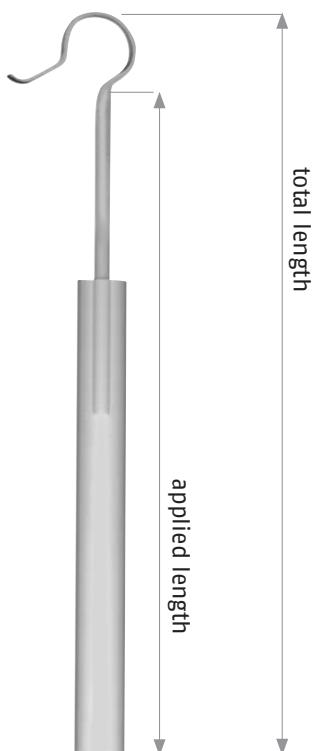
| Art.-No. | Applied length (mm) | Total length (mm) |
|---------------------------|---------------------|-------------------|
| 10740425M | 4.25 | 5.25 |
| 10740450M | 4.50 | 5.50 |
| 10740475M | 4.75 | 5.75 |
| shortenable: 10740600M | 6.00 | 7.00 |

Incus ϕ small: < 0.7 mm

| Art.-No. | Applied length (mm) | Total length (mm) |
|---------------------------|---------------------|-------------------|
| 10740425S | 4.25 | 5.25 |
| 10740450S | 4.50 | 5.50 |
| 10740475S | 4.75 | 5.75 |
| shortenable: 10740600S | 6.00 | 7.00 |

Incus ϕ large: > 0.7 mm

| Art.-No. | Applied length (mm) | Total length (mm) |
|---------------------------|---------------------|-------------------|
| 10740425L | 4.25 | 5.25 |
| 10740450L | 4.50 | 5.50 |
| 10740475L | 4.75 | 5.75 |
| shortenable: 10740600L | 6.00 | 7.00 |



Wire ϕ : 0.2 mm
PTFE shaft ϕ : 0.6 mm

Incus ϕ standard: 0.7 mm

| Art.-No. | Applied length (mm) | Total length (mm) |
|---------------------------|---------------------|-------------------|
| 10760425M | 4.25 | 5.25 |
| 10760450M | 4.50 | 5.50 |
| 10760475M | 4.75 | 5.75 |
| shortenable: 10760600M | 6.00 | 7.00 |

Incus ϕ small: < 0.7 mm

| Art.-No. | Applied length (mm) | Total length (mm) |
|---------------------------|---------------------|-------------------|
| 10760425S | 4.25 | 5.25 |
| 10760450S | 4.50 | 5.50 |
| 10760475S | 4.75 | 5.75 |
| shortenable: 10760600S | 6.00 | 7.00 |

Incus ϕ large: > 0.7 mm

| Art.-No. | Applied length (mm) | Total length (mm) |
|---------------------------|---------------------|-------------------|
| 10760425L | 4.25 | 5.25 |
| 10760450L | 4.50 | 5.50 |
| 10760475L | 4.75 | 5.75 |
| shortenable: 10760600L | 6.00 | 7.00 |



Stapes Protheses Platinum/PTFE, 1 piece, sterile

Special quality characteristics of this stapes piston:

The hook of this prosthesis has four transversal notches. Under soft pressure of a forceps the hook closes equally and grabs perfectly without any reduction of blood flow.



Piston-Diameter 0.4 mm

| Art.-Nr. | Applied length (mm) | Total length (mm) |
|--------------|---------------------|-------------------|
| 10540425 | 4.25 | 5.25 |
| 10540450 | 4.50 | 5.50 |
| 10540475 | 4.75 | 5.75 |
| shortenable: | | |
| 10540600 | 6.00 | 7.00 |
| 10540900 | 9.00 | 10.00 |

Piston-Diameter 0.6 mm

| Art.-Nr. | Applied length (mm) | Total length (mm) |
|--------------|---------------------|-------------------|
| 10560425 | 4.25 | 5.25 |
| 10560450 | 4.50 | 5.50 |
| 10560475 | 4.75 | 5.75 |
| shortenable: | | |
| 10560600 | 6.00 | 7.00 |
| 10560900 | 9.00 | 10.00 |

Stapes Protheses Titanium, 1 piece, sterile

Special quality characteristics of this stapes piston:

Under soft pressure of a forceps the hook closes equally and grabs perfectly without any reduction of blood flow.



Piston-Diameter 0.4 mm

| Art.-Nr. | Applied length (mm) | Total length (mm) |
|--------------|---------------------|-------------------|
| 10640425 | 4.25 | 5.25 |
| 10640450 | 4.50 | 5.50 |
| 10640475 | 4.75 | 5.75 |
| shortenable: | | |
| 10640700 | 7.00 | 8.00 |

Piston-Diameter 0.6 mm

| Art.-Nr. | Applied length (mm) | Total length (mm) |
|--------------|---------------------|-------------------|
| 10660425 | 4.25 | 5.25 |
| 10660450 | 4.50 | 5.50 |
| 10660475 | 4.75 | 5.75 |
| shortenable: | | |
| 10660700 | 7.00 | 8.00 |

Notes



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