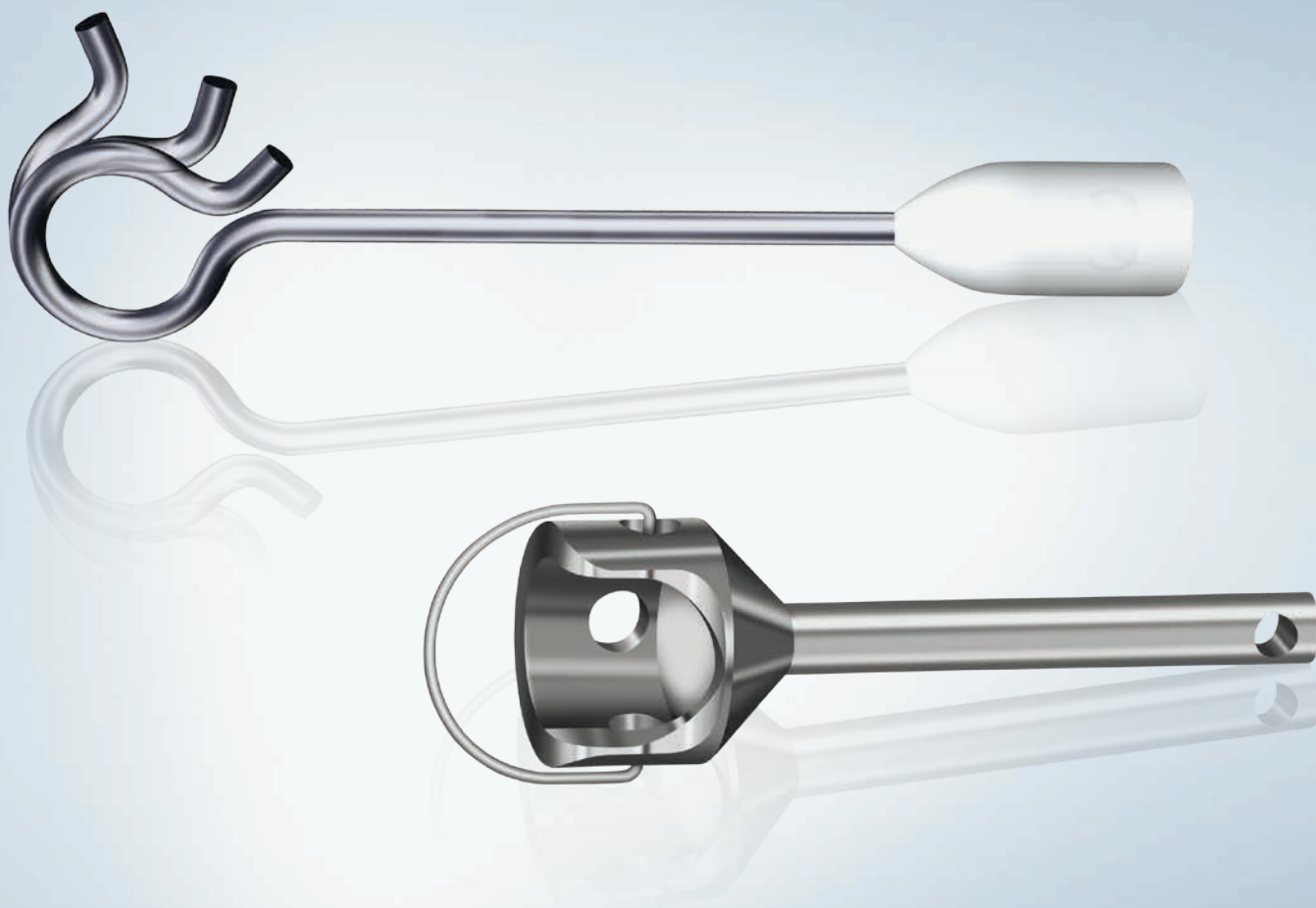


## STAPES PROSTHESES IMPLANTS

Reference guide



# STAPES PROSTHESES ALLOYS AND MATERIALS

## **Fluoroplastics**

Fluoroplastics are polymers composed of carbon and fluorine atoms. They come from a variety of different resins and are used in a wide range of industrial, medical, and home applications. Teflon is the brand name of one of the more popular varieties of fluoroplastic. Fluoroplastics are highly regarded by otologists for their inertness, smoothness of texture, and biocompatibility. Fluoroplastic parts are molded, machined from rods, or formed from tubing and sheeting.

## **Nitinol**

Nitinol (Nickel-Titanium alloy) is a shape-memory metal alloy that has been used in medical applications for years. Since nitinol “self-fashions” with heat, the crimping maneuver is dramatically simplified.

## **Platinum**

Platinum is a highly corrosive resistant material and a very ductile metal that is well tolerated by the body. Devices made from platinum wire or ribbon can easily be adjusted or crimped by a physician, and will retain their formed shape without “spring-back.”

## **Porous polyethylene**

Porous polyethylene (Plasti-Pore) is formed by sintering many individual polyethylene resin particles. It permits tissue growth into the interconnecting pores of the implant material. The base resin, polyethylene, is known to be a very inert material. The natural white colour is the only one used by Olympus.

## **Stainless steel**

Stainless steel (ASTM F 138, Grade 2) is a special quality implant-grade steel that has long been in use in medical implants. It has a balanced corrosion resistant chemistry and an extremely clean microstructure. Stainless steel parts are machined from rods. Wire made of this material is also used for many other Olympus ENT products.

## **Titan**

Titanium (ASTM F 136) is used in many medical implants. It has excellent corrosion resistance and is well tolerated by tissue. The material is light weight and MRI compatible.

### **Stapes prostheses**

Formerly Gyrus - now Olympus' commitment to stapes prostheses began in 1956 with our introduction of the first commercially available stapes implant. We have maintained our commitment to research and development in response to surgeons' interest in continually improving clinical outcome and products. Working in conjunction with premier global otologic surgeons, we fashion our implants from a broad range of materials: Nitinol, Titanium, Platinum, Stainless steel, Plasti-Pore and Fluoroplastic.



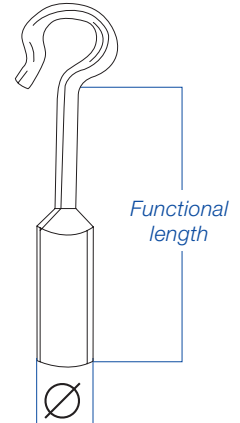
# PISTONS

## Armstrong-Style pistons

### Platinum/Plasti-pore material

Cat. No	Piston diameter	Functional length
EG140760	0.6 mm	3.50 mm
EG140761	0.6 mm	3.75 mm
EG140762	0.6 mm	4.00 mm
EG140763	0.6 mm	4.25 mm
EG140764	0.6 mm	4.50 mm
EG140765	0.6 mm	4.75 mm
EG140766	0.6 mm	5.00 mm

Cat. No	Piston diameter	Functional length
EG140770	0.8 mm	3.50 mm
EG140771	0.8 mm	3.75 mm
EG140772	0.8 mm	4.00 mm
EG140773	0.8 mm	4.25 mm
EG140774	0.8 mm	4.50 mm
EG140775	0.8 mm	4.75 mm
EG140776	0.8 mm	5.00 mm

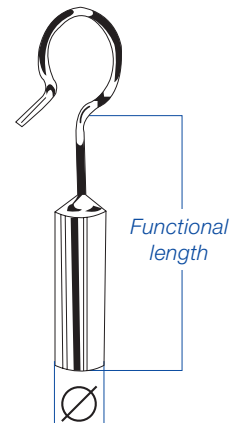


## McGee Shepherd's crook pistons

### Stainless steel

Cat. No	Piston diameter	Functional length
EG140473	0.6 mm	3.50 mm
EG140475	0.6 mm	4.00 mm

Cat. No	Piston diameter	Functional length
EG140481	0.6 mm	5.50 mm

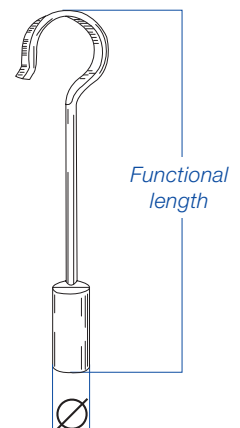


## De La Cruz piston

### Platinum/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG70140730	0.6 mm	3.50 mm
EG70140731	0.6 mm	3.75 mm
EG70140732	0.6 mm	4.00 mm
EG70140733	0.6 mm	4.25 mm

Cat. No	Piston diameter	Functional length
EG70140734	0.6 mm	4.50 mm
EG70140735	0.6 mm	4.75 mm
EG70140736	0.6 mm	5.00 mm



### Stainless steel/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG70140726	0.6 mm	3.75 mm
EG70140727	0.6 mm	4.00 mm
EG70140728	0.6 mm	4.25 mm

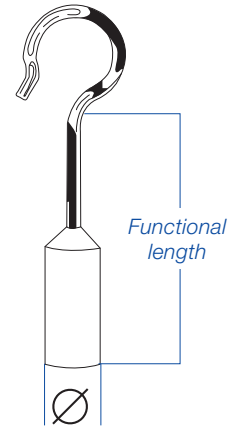
Cat. No	Piston diameter	Functional length
EG70140729	0.6 mm	4.50 mm
EG70140737	0.6 mm	4.75 mm

## Richards platinum fluoroplastic pistons

### Platinum/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG141812	0.4 mm	3.50 mm
EG141813	0.4 mm	3.75 mm
EG141814	0.4 mm	4.00 mm
EG141815	0.4 mm	4.25 mm
EG141816	0.4 mm	4.50 mm
EG141817	0.4 mm	4.75 mm
EG141818	0.4 mm	5.00 mm
EG140813	0.5 mm	3.75 mm
EG140814	0.5 mm	4.00 mm
EG140815	0.5 mm	4.25 mm
EG140816	0.5 mm	4.50 mm
EG140817	0.5 mm	4.75 mm
EG140818	0.5 mm	5.00 mm
EG140781	0.6 mm	3.50 mm

Cat. No	Piston diameter	Functional length
EG140782	0.6 mm	3.75 mm
EG140783	0.6 mm	4.00 mm
EG140784	0.6 mm	4.25 mm
EG140785	0.6 mm	4.50 mm
EG140786	0.6 mm	4.75 mm
EG140787	0.6 mm	5.00 mm
EG140790	0.8 mm	3.50 mm
EG140791	0.8 mm	3.75 mm
EG140792	0.8 mm	4.00 mm
EG140793	0.8 mm	4.25 mm
EG140794	0.8 mm	4.50 mm
EG140795	0.8 mm	4.75 mm
EG140796	0.8 mm	5.00 mm

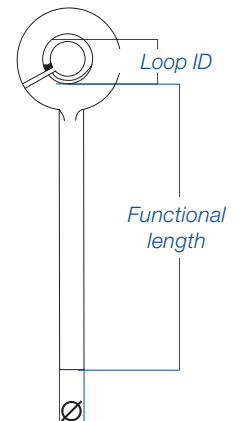


## Cawthorne piston

### Fluoroplastic

Cat. No	Piston diameter	Loop ID	Functional length
EG140262	0.3 mm	0.8 mm	3.50 mm
EG140264	0.3 mm	0.8 mm	4.00 mm
EG140265	0.3 mm	0.8 mm	4.25 mm
EG140266	0.3 mm	0.8 mm	4.50 mm

Cat. No	Piston diameter	Loop ID	Functional length
EG140268	0.3 mm	0.8 mm	5.00 mm
EG140270	0.3 mm	0.8 mm	5.50 mm
EG140272	0.3 mm	0.8 mm	6.00 mm



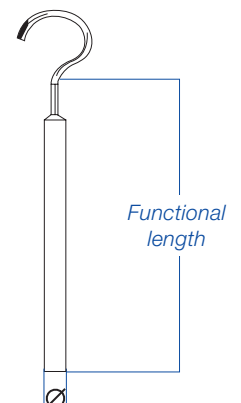
## Fisch-type piston

### Platinum/Fluoroplastic A

Cat. No	Piston diameter	Functional length
EG140443	0.4 mm	6.00 mm

### Stainless steel/Fluoroplastic B

Cat. No	Piston diameter	Functional length
EG140444	0.4 mm	6.00 mm



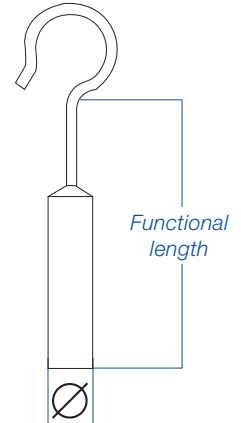
# PISTONS

## Mass eye and ear piston

### Fluoroplastic/Platin

Cat. No	Piston diameter	Functional length
EG70140799	0.6 mm	4.00 mm
EG70140801	0.6 mm	4.25 mm

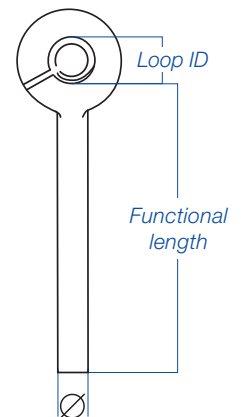
Cat. No	Piston diameter	Functional length
EG70140798	0.6 mm	4.50 mm



## Cause piston

### Fluoroplastic

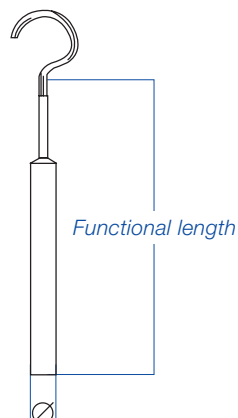
Cat. No	Piston diameter	Loop ID	Functional length
EG140457	0.4 mm	0.6 mm	6.00 mm



## Sanna piston

### Fluoroplastic platinum trimmable to length

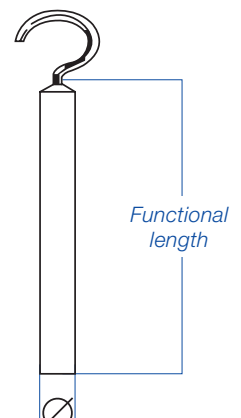
Cat. No	Piston diameter	Functional length
EG70140797	0.5 mm	6.00 mm



## Ronis piston

### Stainless steel/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG140573	0.6 mm	5.00 mm

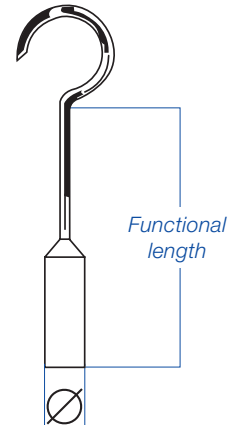


## Scheer pistons

### Stainless Steel/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG140226	0.6 mm	3.33 mm
EG140227	0.6 mm	3.58 mm
EG140228	0.6 mm	3.83 mm

Cat. No	Piston diameter	Functional length
EG140229	0.6 mm	4.08 mm
EG140230	0.6 mm	4.33 mm
EG140231	0.6 mm	4.58 mm

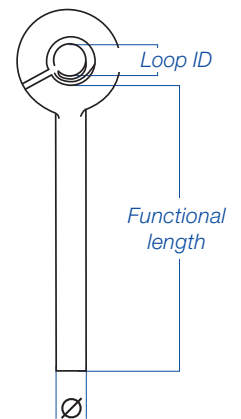


## Fluoroplastic pistons

### Fluoroplastic

Cat. No	Piston diameter	Loop ID	Functional length
EG140074	0.6 mm	0.6 mm	3.50 mm
EG140076	0.6 mm	0.6 mm	4.00 mm
EG140078	0.6 mm	0.6 mm	4.50 mm
EG140080	0.6 mm	0.6 mm	5.00 mm
EG140082	0.6 mm	0.6 mm	6.00 mm

Cat. No	Piston diameter	Loop ID	Functional length
EG140066	0.8 mm	0.6 mm	4.00 mm
EG140068	0.8 mm	0.6 mm	4.50 mm
EG140070	0.8 mm	0.6 mm	5.00 mm
EG140072	0.8 mm	0.6 mm	6.00 mm
EG140456	0.6 mm	0.8 mm	6.00 mm

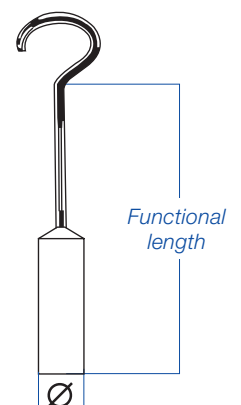


## Schuknecht pistons

### Stainless Steel/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG140120	0.6 mm	3.00 mm
EG140121	0.6 mm	3.25 mm
EG140122	0.6 mm	3.50 mm
EG140123	0.6 mm	3.75 mm
EG140124	0.6 mm	4.00 mm
EG140125	0.6 mm	4.25 mm
EG140126	0.6 mm	4.50 mm
EG140127	0.6 mm	4.75 mm
EG140128	0.6 mm	5.00 mm
EG140129	0.6 mm	5.25 mm
EG140130	0.6 mm	5.50 mm

Cat. No	Piston diameter	Functional length
EG140131	0.6 mm	5.75 mm
EG140102	0.8 mm	3.50 mm
EG140103	0.8 mm	3.75 mm
EG140104	0.8 mm	4.00 mm
EG140105	0.8 mm	4.25 mm
EG140106	0.8 mm	4.50 mm
EG140107	0.8 mm	4.75 mm
EG140108	0.8 mm	5.00 mm
EG140110	0.8 mm	5.50 mm
EG140111	0.8 mm	5.75 mm



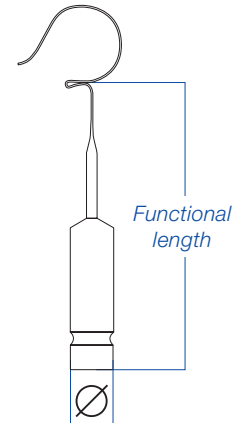
# PISTONS

## Mangham pistons

### Fluoroplastic/Platinum

Cat. No	Piston diameter	Functional length
EG70145953	0.6 mm	5.00 mm
EG70145950	0.6 mm	4.00 mm

Cat. No	Piston diameter	Functional length
EG70145951	0.6 mm	4.25 mm
EG70145952	0.6 mm	4.50 mm

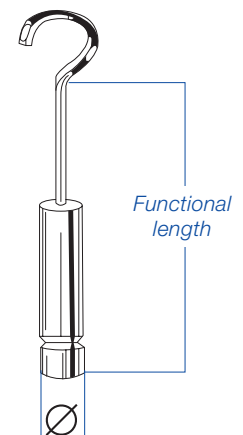


## McGee pistons

### Platin/Stainless steel .5mm hash mark

Cat. No	Piston diameter	Functional length
EG140336	0.5 mm	3.75 mm
EG140337	0.5 mm	4.00 mm
EG140338	0.5 mm	4.25 mm
EG140339	0.5 mm	4.50 mm
EG140340	0.5 mm	4.75 mm
EG140341	0.5 mm	5.00 mm

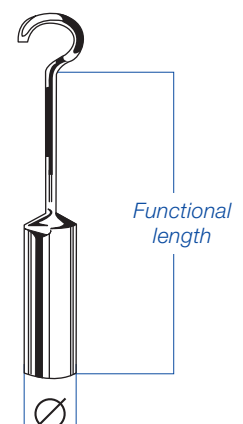
Cat. No	Piston diameter	Functional length
EG140330	0.6 mm	3.75 mm
EG140331	0.6 mm	4.00 mm
EG140332	0.6 mm	4.25 mm
EG140333	0.6 mm	4.50 mm
EG140334	0.6 mm	4.75 mm
EG140335	0.6 mm	5.00 mm



### Stainless steel

Cat. No	Piston diameter	Functional length
EG140161	0.6 mm	3.25 mm
EG140162	0.6 mm	3.50 mm
EG140163	0.6 mm	3.75 mm
EG140164	0.6 mm	4.00 mm
EG140165	0.6 mm	4.25 mm
EG140166	0.6 mm	4.50 mm
EG140167	0.6 mm	4.75 mm
EG140168	0.6 mm	5.00 mm
EG140170	0.6 mm	5.50 mm

Cat. No	Piston diameter	Functional length
EG140143	0.8 mm	3.75 mm
EG140144	0.8 mm	4.00 mm
EG140145	0.8 mm	4.25 mm
EG140146	0.8 mm	4.50 mm
EG140147	0.8 mm	4.75 mm
EG140148	0.8 mm	5.00 mm
EG140149	0.8 mm	5.25 mm
EG140150	0.8 mm	5.50 mm



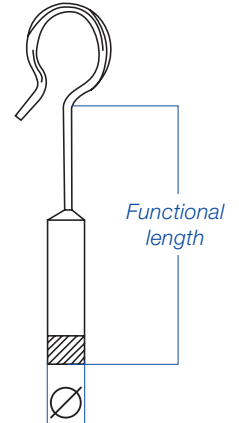


## Touma modified Shepherd's crook pistons

### Stainless steel/glass beaded hash mask

Cat. No	Piston diameter	Functional length
EG70145902	0.4 mm	4.25 mm
EG70145900	0.4 mm	3.75 mm

Cat. No	Piston diameter	Functional length
EG70145901	0.4 mm	4.00 mm

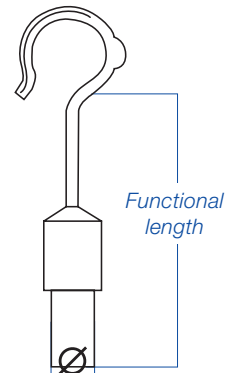


## Velegrakis pistons

### Fluoroplastic/platinum

Cat. No	Corpis dual upper	Diameters lower	Functional length
EG70140391	0.8 mm	0.6 mm	4.00 mm
EG70140392	0.8 mm	0.6 mm	4.25 mm

Cat. No	Corpis dual upper	Diameters lower	Functional length
EG70140393	0.8 mm	0.6 mm	4.50 mm
EG70140394	0.8 mm	0.6 mm	4.75 mm



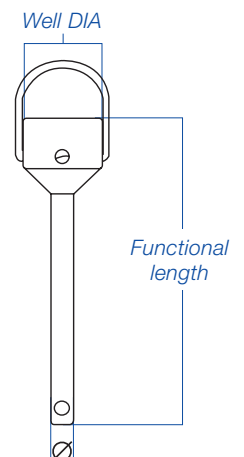
## CUP PISTONS

### Classic stapes prostheses

#### Titanium

Cat. No	Piston diameter	Functional length	Well diameter
EG70142141	0.4 mm	4.00 mm	1.0 mm
EG70142142	0.4 mm	4.00 mm	0.9 mm
EG70142143	0.6 mm	4.00 mm	1.0 mm
EG70142144	0.6 mm	4.00 mm	0.9 mm
EG70142145	0.4 mm	4.50 mm	1.0 mm
EG70142146	0.4 mm	4.50 mm	0.9 mm
EG70142147	0.6 mm	4.50 mm	1.0 mm

Cat. No	Piston diameter	Functional length	Well diameter
EG70142148	0.6 mm	4.25 mm	0.9 mm
EG70142149	0.6 mm	4.50 mm	0.9 mm
EG70142150	0.4 mm	5.00 mm	1.0 mm
EG70142151	0.4 mm	5.00 mm	0.9 mm
EG70142152	0.6 mm	5.00 mm	1.0 mm
EG70142153	0.6 mm	5.00 mm	0.9 mm



**Piston diameter:**  
Narrow: 0.4 mm

Standard: 0.6 mm

**Well diameter:**  
Standard: 0.9 mm

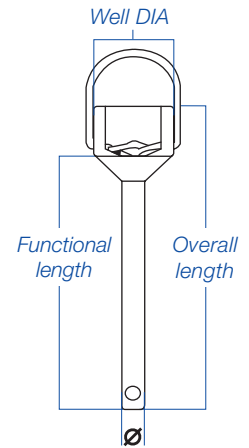
Large: 1.0 mm

# CUP PISTONS

## Lippy modified stapes prostheses

### Titan

Cat. No	Piston diameter	Functional length	Overall length	Well diameter
<b>EG70142154</b>	0.4 mm	3.65 mm	4.50 mm	1.0 mm
<b>EG70142155</b>	0.4 mm	4.15 mm	5.00 mm	1.0 mm
<b>EG70142156</b>	0.4 mm	4.65 mm	5.50 mm	1.0 mm
<b>EG70142157</b>	0.4 mm	5.15 mm	6.00 mm	1.0 mm

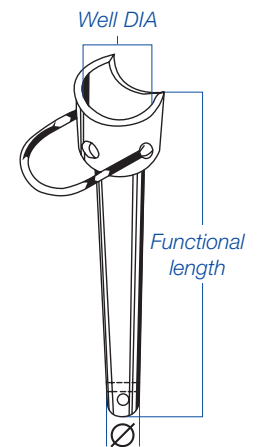


## Richards bucket handle prostheses

### Titanium

Cat. No	Piston diameter	Functional length	Well diameter
<b>EG70142158</b>	0.4 mm	3.50 mm	1.0 mm
<b>EG70142159</b>	0.4 mm	4.00 mm	1.0 mm
<b>EG70142160</b>	0.4 mm	4.25 mm	1.0 mm
<b>EG70142161</b>	0.4 mm	4.50 mm	1.0 mm
<b>EG70142162</b>	0.4 mm	5.00 mm	1.0 mm

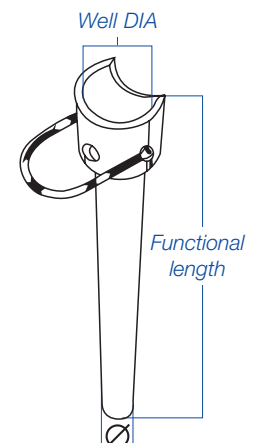
Cat. No	Piston diameter	Functional length	Well diameter
<b>EG70142163</b>	0.6 mm	3.50 mm	1.0 mm
<b>EG70142164</b>	0.6 mm	4.00 mm	1.0 mm
<b>EG70142165</b>	0.6 mm	4.25 mm	1.0 mm
<b>EG70142166</b>	0.6 mm	4.50 mm	1.0 mm
<b>EG70142167</b>	0.6 mm	5.00 mm	1.0 mm



### Fluoroplastic

Cat. No	Piston diameter	Functional length	Well diameter
<b>EG142148</b>	0.4 mm	3.50 mm	1.0 mm
<b>EG142150</b>	0.4 mm	4.00 mm	1.0 mm
<b>EG142152</b>	0.4 mm	4.50 mm	1.0 mm
<b>EG142154</b>	0.4 mm	5.00 mm	1.0 mm

Cat. No	Piston diameter	Functional length	Well diameter
<b>EG142132</b>	0.6 mm	3.50 mm	1.0 mm
<b>EG142134</b>	0.6 mm	4.00 mm	1.0 mm
<b>EG142136</b>	0.6 mm	4.50 mm	1.0 mm
<b>EG142138</b>	0.6 mm	5.00 mm	1.0 mm



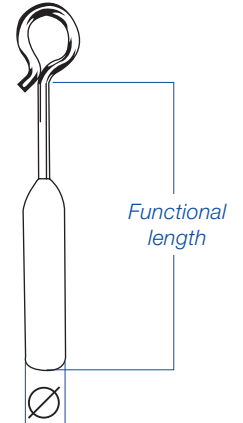
# SMART NITINOL TECHNOLOGIES PISTONS

## SMart pistons

### Nitinol/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG70145920	0.5 mm	3.75 mm
EG70145921	0.5 mm	4.00 mm
EG70145922	0.5 mm	4.25 mm
EG70145923	0.5 mm	4.50 mm
EG70145924	0.5 mm	4.75 mm
EG70145925	0.6 mm	3.75 mm
EG70145926	0.6 mm	4.00 mm
EG70145927	0.6 mm	4.25 mm

Cat. No	Piston diameter	Functional length
EG70145928	0.6 mm	4.50 mm
EG70145929	0.6 mm	4.75 mm
EG70145930	0.8 mm	3.75 mm
EG70145931	0.8 mm	4.00 mm
EG70145932	0.8 mm	4.25 mm
EG70145933	0.8 mm	4.50 mm
EG70145934	0.8 mm	4.75 mm

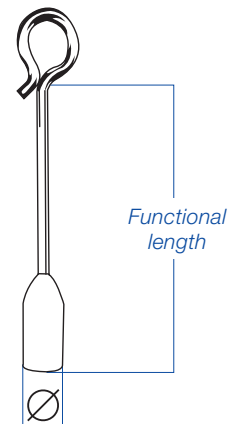


## SMart De La Cruz pistons

### Nitinol/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG70142056	0.6 mm	4.00 mm
EG70142057	0.6 mm	4.25 mm

Cat. No	Piston diameter	Functional length
EG70142058	0.6 mm	4.50 mm
EG70142059	0.6 mm	4.75 mm

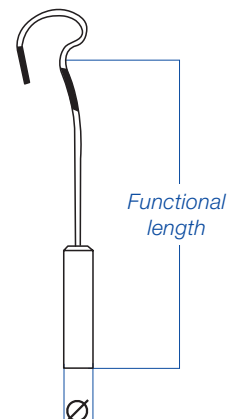


## SMart malleus to footplate pistons

### Nitinol/Fluoroplastic

Cat. No	Piston diameter	Functional length
EG70142037	0.6 mm	5.50 mm
EG70142038	0.6 mm	6.00 mm

Cat. No	Piston diameter	Functional length
EG70142039	0.6 mm	6.50 mm



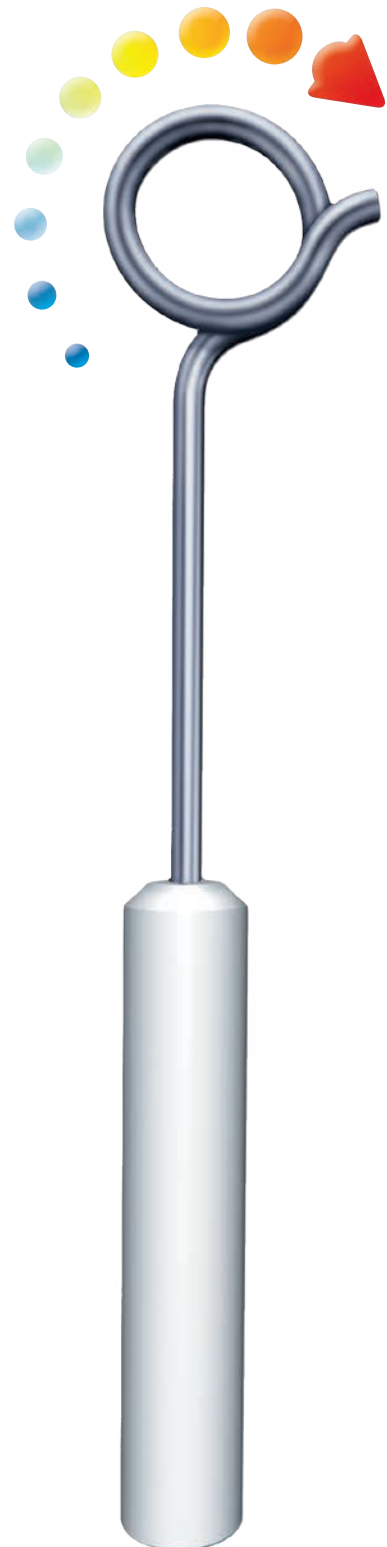
# STAPES IMPLANTS

## SMart piston heating device

For use with SMart malleus to footplate pistons

### Nitinol/Fluoroplastic

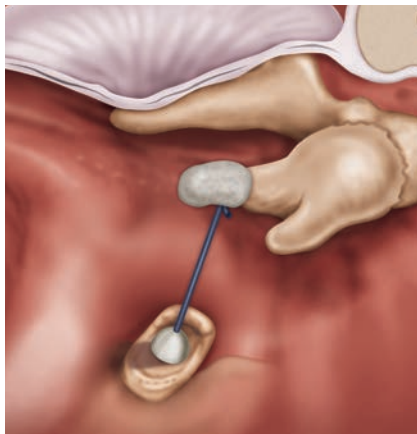
Cat. No	Description	Unit per box
EG70131012	SMart thermal handle with AA battery	1
EG70131013	SMart thermal tip and drape	6 each



## Otomimix

### Nitinol/Fluoroplastic

Cat. No	Description	Unit per box
EG70143266	Otomimix – 2 gram	1
EG130725	Rosen needle – sharp	1
EG130725	Rosen needle – dull	1



**SMart piston technology uses Nitinol – a heat activated shape-memory metal alloy**

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.

**OLYMPUS**

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