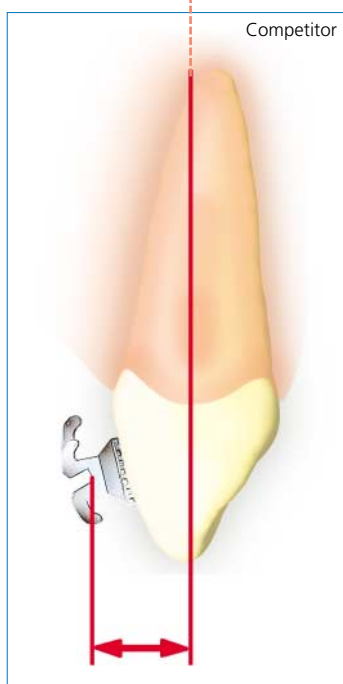
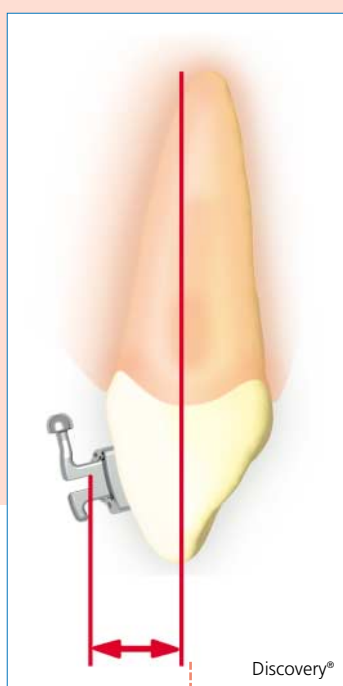




**DISCOVERY**<sup>®</sup> Brackets  
created from the sum of experience

# Reasons for an even more effective treatment with

# DISCOVERY<sup>®</sup> Brackets



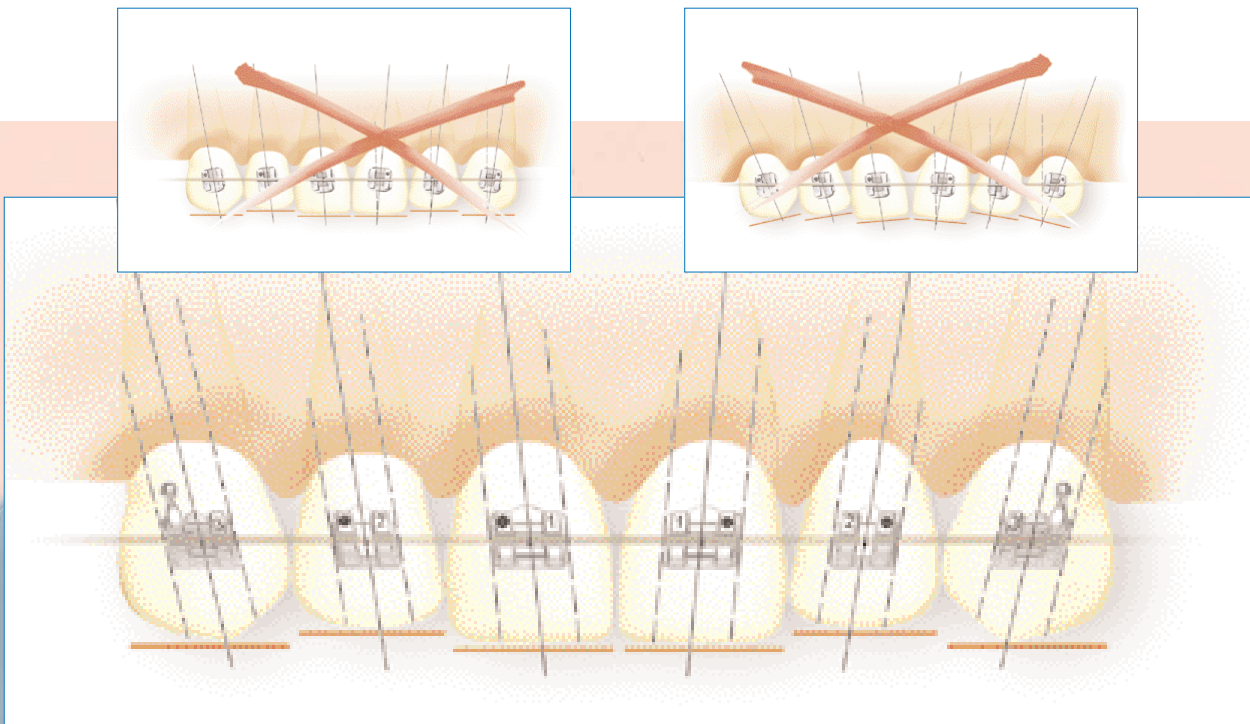
## Lowest IN/OUT values

### Optimum treatment time and results

Today, DISCOVERY<sup>®</sup> brackets have the lowest IN/OUT values, thereby assuring the optimum treatment period and results. The low IN/OUT is achieved by the integration of the laser cut bonding base into the bracket. The mesh base, which is normally brazed into position, is no longer required, thus reducing the height and thickness of the bracket.

The low IN/OUT values bring the point of pressure up to 0.4 mm closer to the crown axis, thus increasing the effectiveness of the treatment. The low IN/OUT values also make possible an ideal adaptation to the IN/OUT values of the Ortho-Cast<sup>™</sup> buccal tubes.

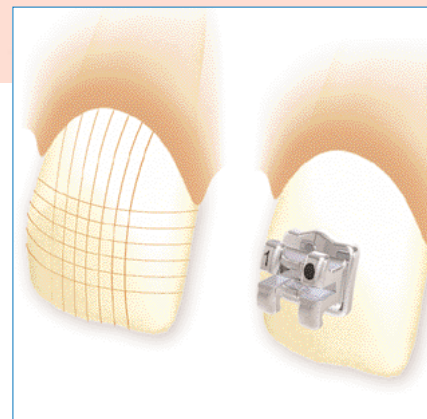
First order bends are considerably reduced due to the IN/OUT values of the straight arch system. The depth and form of the slot for cuspid brackets make it easier to control rotation. In addition, the smooth transition of IN/OUT values of the bicuspid brackets to the buccal tubes, plus the distal offset of the buccal tubes, prevent undesired rotation. The DISCOVERY<sup>®</sup> brackets and Ortho-Cast<sup>™</sup> buccal tubes, in conjunction with our Ideal Arch Form wires, ensure optimum occlusion.



## 3D-CAD bracket base

### Optimal fit

The design of the DISCOVERY® bracket base was developed using modern CAD (Computer Aided Design) technology. The base has a unique compound contoured design, which matches the anatomy of the teeth for perfect fit, and also reduces rocking.



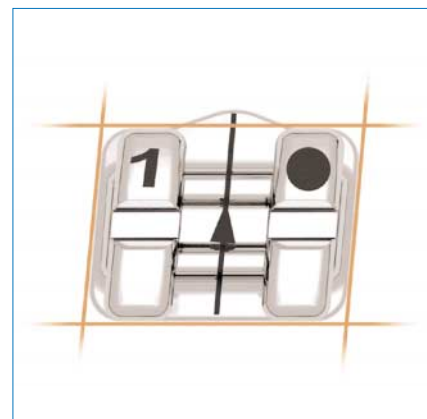
## Rhomboid design

(angulated brackets)

### Easy placement of brackets

Ensures quick and accurate positioning on the teeth by the following methods:

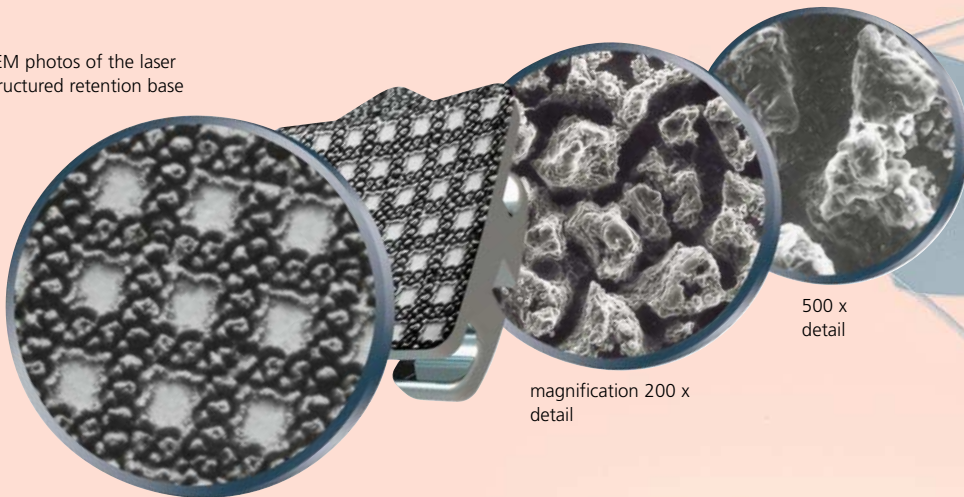
- the mesio-distal bracket tie-wings are aligned with the long axis of the clinical crown and/or
- the bracket base and the horizontal bracket tie-wings are aligned with the incisal edge.



# Reasons for an even more effective treatment with

# DISCOVERY<sup>®</sup> Brackets

REM photos of the laser structured retention base



magnification 200 x detail

500 x detail

## Patented laser base

### Excellent bonding properties

The unique laser cut bonding bases are adapted to meet the individual bonding needs of each tooth. This is superior to the conventional mesh pad bases. For example, the adhesive force for the bicuspids can be increased to meet their individual needs.

The DISCOVERY<sup>®</sup> brackets with laser cut bases eliminate brazing, increase biocompatibility and improve the IN/OUT values.

Based on clinical tests, DISCOVERY<sup>®</sup> brackets are easy to position and have reliable adhesion to teeth. Bond strength is superior to conventional mesh pad bases.

U.S. Patent No. 5,944,517

EP No. 0327628



## MIM Construction

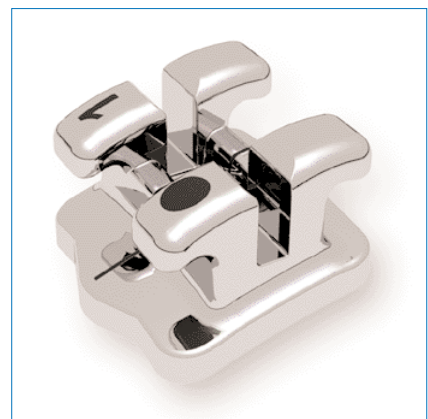
### Perfect mechanical properties

The MIM Construction (Metal Injection Molding) in combination with a special steel increases stiffness and mechanical precision.

### Single piece construction – no solder

### Excellent Biocompatibility

A molybdenum containing steel (AISI 316 L) and the avoidance of brazing increase corrosion resistance over standard brazed steel brackets by a factor of 10. This results in an increase of biocompatibility, along with an increase in strength and rigidity.





Reasons for an even more effective treatment with

**DISCOVERY**<sup>®</sup> Brackets

### Patented Laser Marking System

#### Easy identification

Laser marked Palmer Notation, distal-gingival dot and midline arrow pointing toward the gingival for alignment with the long axis of the crown. Its marking is permanent and non toxic. With its easy system of symbols every bracket is marked clearly and specifically.

### Smooth, rounded bracket lines

#### Easy ligation

A special single piece manufacturing process produces smooth rounded brackets that are more comfortable for the patient to wear. The bracket tie-wings have rounded edges and the wedge design allows for easy ligation.

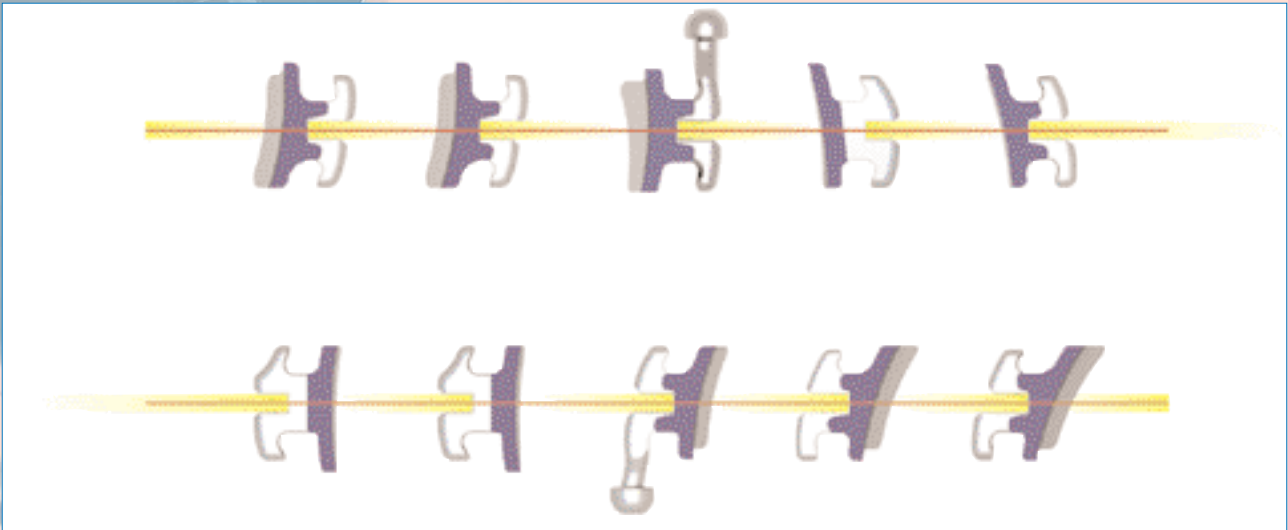
U.S. Patents No. 5,238,402

No. 5,326,259

EP

No. 0327628





## Gingival Offset Brackets

(mandible)

### Prevents bond failure

The occlusally extended bonding base and the gingivally offset bracket profile prevent bond failure due to contact with the antagonist tooth.

### Torque in the base

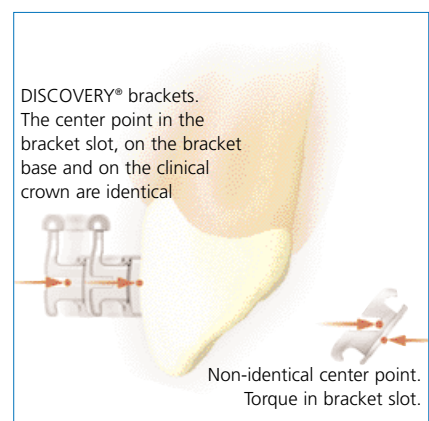
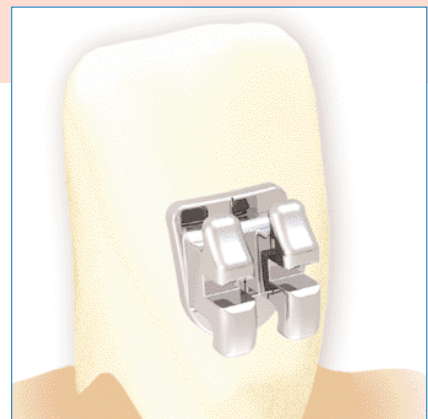
#### Reliable forces

The center of the bracket slot and the center of the bracket base, as well as the center of the long axis clinical crown are all on the same plane, allowing optimal transfer of forces and level slot line up for fast and accurate movement of teeth, with less first and second order wire bendings resulting in less chairtime.

### Perfect angulation

#### Reliable results

No compromises in accuracy for the straight arch system. A guarantee for consistently good treatment results.



DISCOVERY® brackets.  
The center point in the  
bracket slot, on the bracket  
base and on the clinical  
crown are identical

Non-identical center point.  
Torque in bracket slot.

# Reasons for an even more effective treatment with

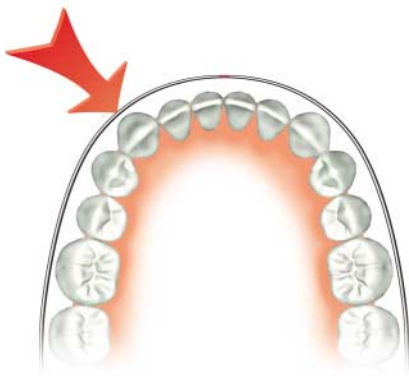
# DISCOVERY<sup>®</sup> Brackets



## Low friction

**Better sliding mechanics and higher efficiency.**

Friction from wires in the slot of DISCOVERY<sup>®</sup> brackets has been substantially improved due to the alloy used, slot design and special surface treatment. (Study: Prof. Dr. Kusy, University of North Carolina)



## DISCOVERY<sup>®</sup> Brackets and DENTAURUM Wires – The perfect combination

### Maximized therapy

The Ideal Arch form for upper and lower arches was developed through intensive collaboration with orthodontic scientists. For more detailed information, please refer to our Wire Brochure or Orthodontic Catalogue.



## Discovery®

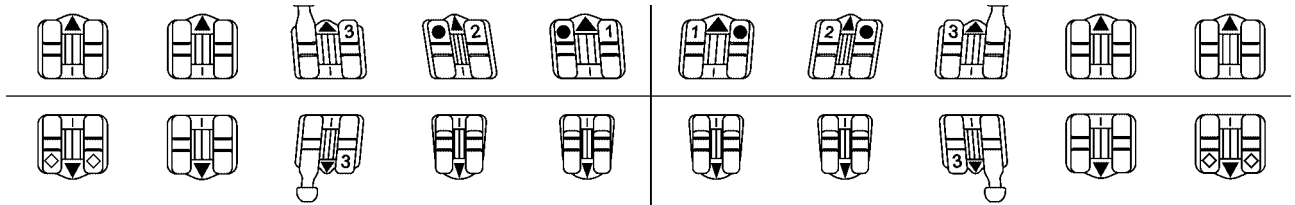
Slot: 0.46 x 0.76 mm / 18 x 30 · Cuspid brackets with button hooks

## Ricketts® Universal 18 / Assortments

Ricketts® is a registered trademark of Rocky Mountain Orthodontics/ U.S.A.

<b>Torque</b>	0°	0°	+ 7°	+ 14°	+ 22°	+ 22°	+ 14°	+ 7°	0°	0°
<b>Angulation</b>	0°	0°	+ 5°	+ 8°	+ 5°	+ 5°	+ 8°	+ 5°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	3.2 mm	3.0 mm	3.6 mm	3.6 mm	3.0 mm	3.2 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-136-00</b>	<b>790-136-00</b>	<b>790-134-00</b>	<b>790-132-00</b>	<b>790-130-00</b>	<b>790-131-00</b>	<b>790-133-00</b>	<b>790-135-00</b>	<b>790-136-00</b>	<b>790-136-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

CE 0483



<b>Torque</b>	- 14°	0°	+ 7°	0°	0°	0°	0°	+ 7°	0°	- 14°
<b>Angulation</b>	0°	0°	+ 5°	0°	0°	0°	0°	+ 5°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	2.9 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.9 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-140-00</b>	<b>790-136-00</b>	<b>790-138-00</b>	<b>790-137-00</b>	<b>790-137-00</b>	<b>790-137-00</b>	<b>790-137-00</b>	<b>790-139-00</b>	<b>790-136-00</b>	<b>790-140-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

### Assortments:

1 Case	20 Brackets	<b>891-188-00</b>
10 Cases	200 Brackets	<b>891-189-00</b>
50 Cases	1,000 Brackets	<b>891-196-00</b>

Dentaurum's version of Ricketts® is not claimed to be a duplication of any other, nor does Dentaurum imply that it is endorsed in any way by Dr. Ricketts.

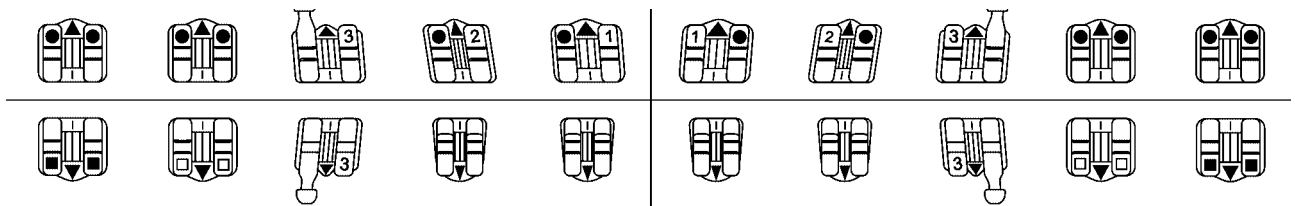
## Discovery®

Slot: 0.46 x 0.76 mm / 18 x 30 · Cuspid brackets with button hooks

## Hilgers 18 / Assortments

<b>Torque</b>	- 7°	- 7°	+ 7°	+ 14°	+ 22°	+ 22°	+ 14°	+ 7°	- 7°	- 7°
<b>Angulation</b>	0°	0°	+ 5°	+ 8°	+ 5°	+ 5°	+ 8°	+ 5°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	3.2 mm	3.0 mm	3.6 mm	3.6 mm	3.0 mm	3.2 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-106-00</b>	<b>790-106-00</b>	<b>790-134-00</b>	<b>790-132-00</b>	<b>790-130-00</b>	<b>790-131-00</b>	<b>790-133-00</b>	<b>790-135-00</b>	<b>790-106-00</b>	<b>790-106-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

CE 0483



<b>Torque</b>	- 17°	- 11°	+ 7°	- 1°	- 1°	- 1°	- 1°	+ 7°	- 11°	- 17°
<b>Angulation</b>	0°	0°	+ 5°	0°	0°	0°	0°	+ 5°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	1.3 mm	1.3 mm	1.3 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	2.9 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.9 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-110-00</b>	<b>790-128-00</b>	<b>790-138-00</b>	<b>790-107-00</b>	<b>790-107-00</b>	<b>790-107-00</b>	<b>790-107-00</b>	<b>790-139-00</b>	<b>790-128-00</b>	<b>790-110-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

### Assortments:

1 Case	20 Brackets	<b>891-261-00</b>
10 Cases	200 Brackets	<b>891-262-00</b>
50 Cases	1,000 Brackets	<b>891-263-00</b>

Dentaurum's version of Hilgers is not claimed to be a duplication of any other, nor does Dentaurum imply that it is endorsed in any way by Dr. Hilgers.

# Roth 18 / Assortments

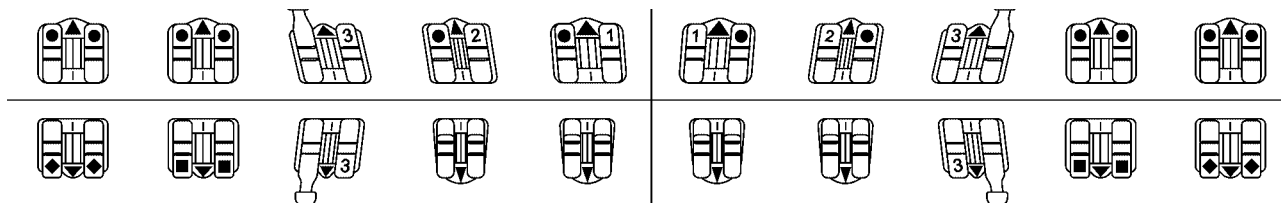
Dentaurum's version of ROTH is not claimed to be a duplication of any other, nor does Dentaurum imply that it is endorsed in any way by Dr. ROTH.

## Discovery®

Slot: 0.46 x 0.76 mm / 18 x 30 · Cuspid brackets with button hooks

Torque	- 7°	- 7°	- 2°	+ 8°	+ 12°	+ 12°	+ 8°	- 2°	- 7°	- 7°
Angulation	0°	0°	+ 13°	+ 9°	+ 5°	+ 5°	+ 9°	+ 13°	0°	0°
In/Out	0.7 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
Width	3.2 mm	3.2 mm	3.2 mm	3.0 mm	3.6 mm	3.6 mm	3.0 mm	3.2 mm	3.2 mm	3.2 mm
Order-No.	790-106-00	790-106-00	790-104-00	790-102-00	790-100-00	790-101-00	790-103-00	790-105-00	790-106-00	790-106-00
Quantity	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

CE 0483



Torque	- 22°	- 17°	- 11°	- 1°	- 1°	- 1°	- 1°	- 11°	- 17°	- 22°
Angulation	0°	0°	+ 7°	0°	0°	0°	0°	+ 7°	0°	0°
In/Out	0.7 mm	0.7 mm	0.7 mm	1.3 mm	1.3 mm	1.3 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
Width	3.2 mm	3.2 mm	2.9 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.9 mm	3.2 mm	3.2 mm
Order-No.	790-111-00	790-110-00	790-108-00	790-107-00	790-107-00	790-107-00	790-107-00	790-109-00	790-110-00	790-111-00
Quantity	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

### Assortments:

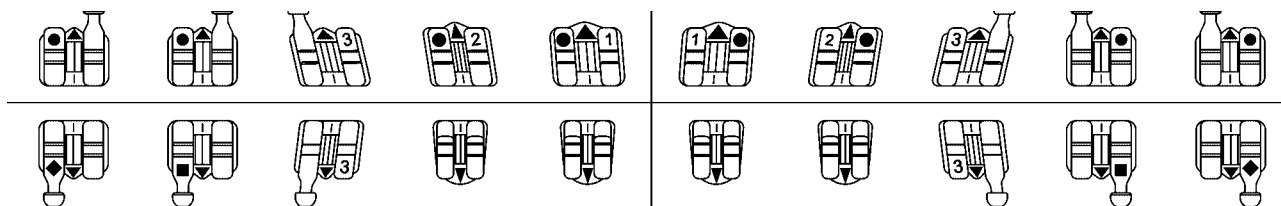
1 Case	20 Brackets	<b>891-180-00</b>
10 Cases	200 Brackets	<b>891-181-00</b>
50 Cases	1,000 Brackets	<b>891-182-00</b>

## Discovery®

Slot: 0.46 x 0.76 mm / 18 x 30 · Cuspid and bicuspid brackets with button hooks

Torque	- 7°	- 7°	- 2°	+ 8°	+ 12°	+ 12°	+ 8°	- 2°	- 7°	- 7°
Angulation	0°	0°	+ 13°	+ 9°	+ 5°	+ 5°	+ 9°	+ 13°	0°	0°
In/Out	0.7 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
Width	3.2 mm	3.2 mm	3.2 mm	3.0 mm	3.6 mm	3.6 mm	3.0 mm	3.2 mm	3.2 mm	3.2 mm
Order-No.	790-141-00	790-141-00	790-104-00	790-102-00	790-100-00	790-101-00	790-103-00	790-105-00	790-142-00	790-142-00
Quantity	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

CE 0483



Torque	- 22°	- 17°	- 11°	- 1°	- 1°	- 1°	- 1°	- 11°	- 17°	- 22°
Angulation	0°	0°	+ 7°	0°	0°	0°	0°	+ 7°	0°	0°
In/Out	0.7 mm	0.7 mm	0.7 mm	1.3 mm	1.3 mm	1.3 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
Width	3.2 mm	3.2 mm	2.9 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.9 mm	3.2 mm	3.2 mm
Order-No.	790-145-00	790-143-00	790-108-00	790-107-00	790-107-00	790-107-00	790-107-00	790-109-00	790-144-00	790-146-00
Quantity	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

### Sortimente:

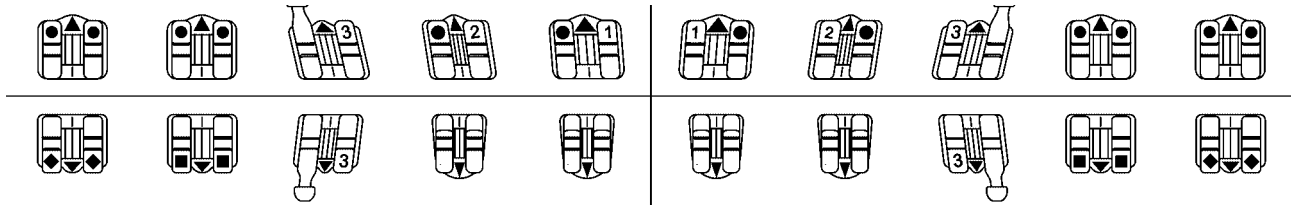
1 Case	20 Brackets	<b>891-295-00</b>
10 Cases	200 Brackets	<b>891-296-00</b>
50 Cases	1,000 Brackets	<b>891-297-00</b>

## Discovery®

Slot: 0.56 x 0.76 mm / 22 x 30 · Cuspid brackets with button hooks

<b>Torque</b>	- 7°	- 7°	- 2°	+ 8°	+ 12°	+ 12°	+ 8°	- 2°	- 7°	- 7°
<b>Angulation</b>	0°	0°	+ 13°	+ 9°	+ 5°	+ 5°	+ 9°	+ 13°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	3.2 mm	3.0 mm	3.6 mm	3.6 mm	3.0 mm	3.2 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-118-00</b>	<b>790-118-00</b>	<b>790-116-00</b>	<b>790-114-00</b>	<b>790-112-00</b>	<b>790-113-00</b>	<b>790-115-00</b>	<b>790-117-00</b>	<b>790-118-00</b>	<b>790-118-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

CE 0483



<b>Torque</b>	- 22°	- 17°	- 11°	- 1°	- 1°	- 1°	- 1°	- 11°	- 17°	- 22°
<b>Angulation</b>	0°	0°	+ 7°	0°	0°	0°	0°	+ 7°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	1.3 mm	1.3 mm	1.3 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	2.9 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.9 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-123-00</b>	<b>790-122-00</b>	<b>790-120-00</b>	<b>790-119-00</b>	<b>790-119-00</b>	<b>790-119-00</b>	<b>790-119-00</b>	<b>790-121-00</b>	<b>790-122-00</b>	<b>790-123-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

### Assortments:

1 Case	20 Brackets	<b>891-183-00*</b>
10 Cases	200 Brackets	<b>891-184-00</b>
50 Cases	1,000 Brackets	<b>891-185-00</b>

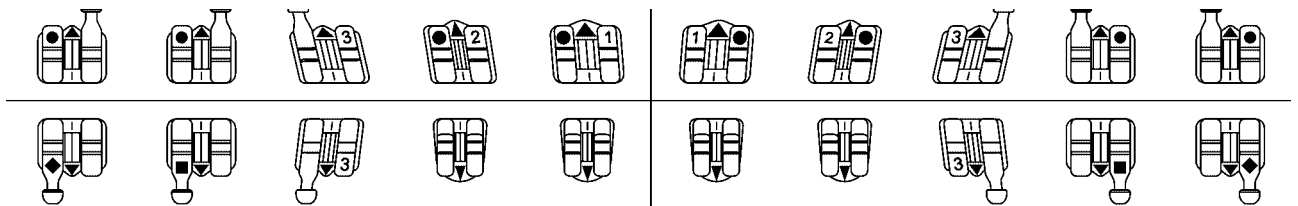
\* **Note:** 1 case assortment Order-No. 891-197-00 compares to Order-No. 891-183-00, including an additional 4 buccal tubes (724-110-51/724-111-51/724-112-51/724-113-51)

## Discovery®

Slot: 0.56 x 0.76 mm / 22 x 30 · Cuspid and bicuspid brackets with button hooks

<b>Torque</b>	- 7°	- 7°	- 2°	+ 8°	+ 12°	+ 12°	+ 8°	- 2°	- 7°	- 7°
<b>Angulation</b>	0°	0°	+ 13°	+ 9°	+ 5°	+ 5°	+ 9°	+ 13°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	3.2 mm	3.0 mm	3.6 mm	3.6 mm	3.0 mm	3.2 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-147-00</b>	<b>790-147-00</b>	<b>790-116-00</b>	<b>790-114-00</b>	<b>790-112-00</b>	<b>790-113-00</b>	<b>790-115-00</b>	<b>790-117-00</b>	<b>790-148-00</b>	<b>790-148-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

CE 0483



<b>Torque</b>	- 22°	- 17°	- 11°	- 1°	- 1°	- 1°	- 1°	- 11°	- 17°	- 22°
<b>Angulation</b>	0°	0°	+ 7°	0°	0°	0°	0°	+ 7°	0°	0°
<b>In/Out</b>	0.7 mm	0.7 mm	0.7 mm	1.3 mm	1.3 mm	1.3 mm	1.3 mm	0.7 mm	0.7 mm	0.7 mm
<b>Width</b>	3.2 mm	3.2 mm	2.9 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.9 mm	3.2 mm	3.2 mm
<b>Order-No.</b>	<b>790-151-00</b>	<b>790-149-00</b>	<b>790-120-00</b>	<b>790-119-00</b>	<b>790-119-00</b>	<b>790-119-00</b>	<b>790-119-00</b>	<b>790-121-00</b>	<b>790-150-00</b>	<b>790-152-00</b>
<b>Quantity</b>	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces

### Assortments:

1 Case	20 Brackets	<b>891-298-00</b>
10 Cases	200 Brackets	<b>891-299-00</b>
50 Cases	1,000 Brackets	<b>891-300-00</b>

Date of Information: 05/03

