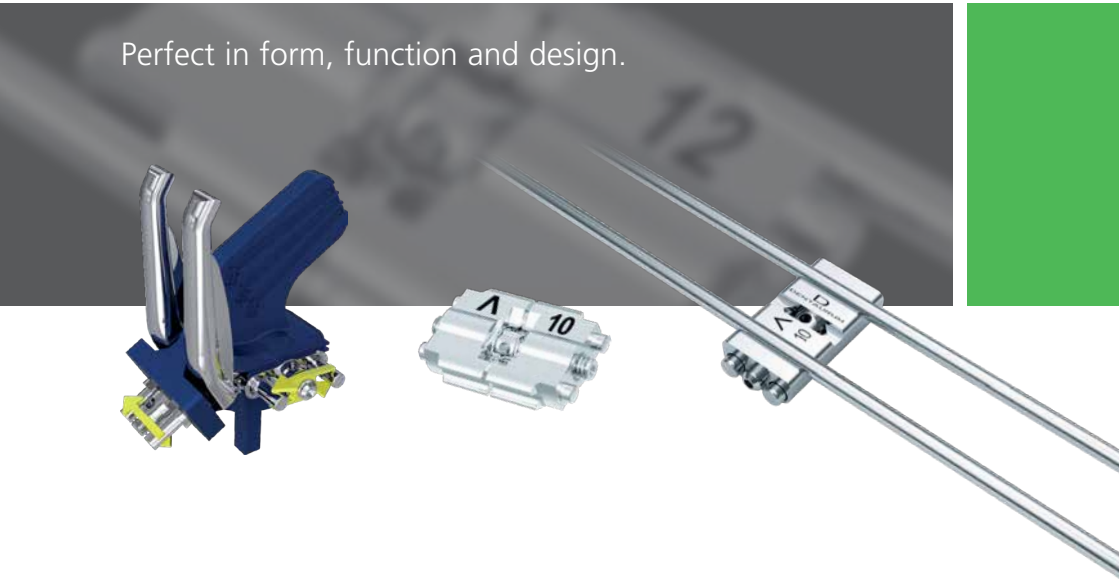
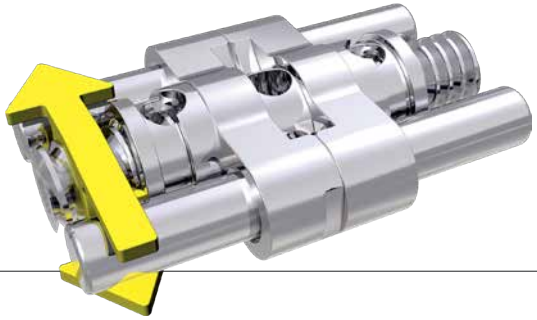
Expansion screws.

Perfect in form, function and design.



DENTAURUM ONLINE SHOP shop.dentaurum.com

Perfect in form, function and design.

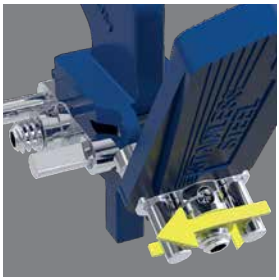


A wide range of products.

Dentaurum's selection of stainless steel expansion screws ranges from standard expansion screws to more complex special expansion screws. We have extended our range of special expansion screws with the Neo-bite jumping appliance acc. to F. M. Sander* – a modern, patented three-dimensional Bertoni expansion screw with guide ridges. Titan hyrax® and rematitan® expansion screws, the biocompatible alternatives in pure titanium, round off this wide selection.

Perfect in every detail.

Dentaurum's expansion screws achieve wide expansion despite their small size. The screws are guaranteed to open evenly and not reverse inadvertently thanks to the friction on the thread which has been carefully calculated, and an integrated stop mechanism. High precision manufacture and excellent quality ensure that the screw construction is strong and stable. Additional holes in the body ensure optimal retention in the acrylic.



Dentaurum expansion screws

The right solution for every type of treatment.

Neo-bite jumping appliance acc. to F. M. Sander*

Latest generation of the Sander appliance.

hyrax®

Special expansion screw for palatal expansion.

hyrax® click

The RPE screw with special feature to prevent unwanted reversing.

hyrax® neo

The alternative to the classic hyrax® screw.

Titan hyrax®

The world's first RPE screw in titanium.

Variety

The versatile, multi-functional expansion screw.

Variety click

The special expansion screw with special feature to prevent unwanted reversing.

* Patent owner FEMAdent GmbH & Co. KG

Standard expansion screws

Expansion screw Mini

Material: stainless steel

- with **cone-shaped or wide** expansion screw holder
- skeleton design
- holes in body of screws for better retention in acrylic
- built-in stops prevent screws from coming apart once maximum expansion has been achieved

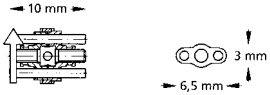
With expansion screw key, standard (straight, small).

Indication: for transverse expansion and distalization in the mandible or for especially narrow maxillae

Directional arrow: Plastic, white

Maximum expansion	4 x $^1/_4$ turn	REF (cone-shaped)	REF (wide)	Quantity
6.5 mm	= 0.7 mm	**600-300-10**	**600-320-10**	1 piece
6.5 mm	= 0.7 mm	**600-300-30**	**600-320-30**	10 pieces
6.5 mm	= 0.7 mm	**600-300-60**	**600-320-60**	100 pieces

CE



Expansion screw Medium

Material: stainless steel

- with **cone-shaped or wide** expansion screw holder
- skeleton design
- holes in body of screws for better retention in acrylic
- built-in stops prevent screws from coming apart once maximum expansion has been achieved

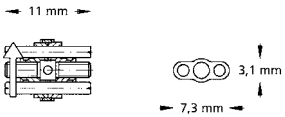
With expansion screw key straight, standard (straight, small).

Indication: for transverse expansion and distalization in maxilla and mandible

Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF (cone-shaped)	REF (wide)	Quantity
7.5 mm	= 0.8 mm	**600-301-10**	**600-321-10**	1 piece
7.5 mm	= 0.8 mm	**600-301-30**	**600-321-30**	10 pieces
7.5 mm	= 0.8 mm	**600-301-60**	**600-321-60**	100 pieces

CE



Standard expansion screws

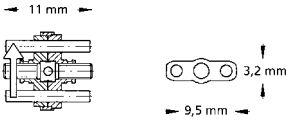
Expansion screw Maxi

Material: stainless steel
- with **cone-shaped or wide** expansion screw holder
- skeleton design
- holes in body of screws for better retention in acrylic
- built-in stops prevent screws from coming apart once maximum expansion has been achieved

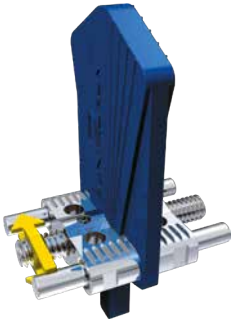
With expansion screw key straight, standard (straight, small).
Indication: for transverse expansion in the maxilla
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x 1/4 turn	REF (cone-shaped)	REF (wide)	Quantity
7.5 mm	= 0.8 mm	**600-302-10**	**600-322-10**	1 piece
7.5 mm	= 0.8 mm	**600-302-30**	**600-322-30**	10 pieces
7.5 mm	= 0.8 mm	**600-302-60**	**600-322-60**	100 pieces

CE



Expansion screw Magnum

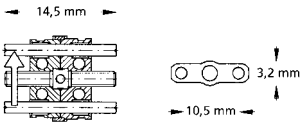


Material: stainless steel
- with **cone-shaped** expansion screw holder
- skeleton design
- version: extra strong, with larger screw body
- holes in body of screws for better retention in acrylic
- built-in stops prevent screws from coming apart

With expansion screw key straight, standard (straight, small).
Indication: for transverse expansion in the maxilla and bimaxillary functional gnatho-orthopedic appliances
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x 1/4 turn	REF	Quantity
11.0 mm	= 0.8 mm	**600-303-10**	1 piece
11.0 mm	= 0.8 mm	**600-303-30**	10 pieces
11.0 mm	= 0.8 mm	**600-303-60**	100 pieces

CE



Standard expansion screws

rematitan® expansion screw Medium

Material: titanium

- with **cone-shaped** expansion screw holder
- skeleton design
- holes in body of screws for better retention in acrylic
- built-in stops prevent screws from coming apart

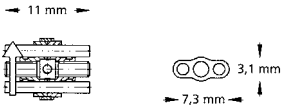
With expansion screw key, standard (straight, small).

Indication: for transverse expansion and distalization in maxilla and mandible

Directional arrow: Plastic, pearl-blue

Maximum expansion	4 x 1/4 turn	REF	Quantity
7.5 mm	= 0.8 mm	**600-400-10**	1 piece
7.5 mm	= 0.8 mm	**600-400-30**	10 pieces

CE



Trapezoidal expansion screw

Material: stainless steel

- with **cone-shaped** expansion screw holder
- skeleton design
- holes in body of screws for better retention in acrylic
- built-in stops prevent screws from coming apart

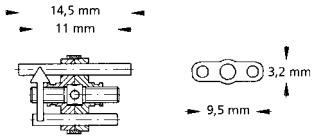
With expansion screw key, standard (straight, small).

Indication: for transverse expansion of narrow maxillae and as activation screw for bimaxillary functional gnatho-orthopedic appliances

Directional arrow: Plastic, neon yellow

Maximum expansion	4 x 1/4 turn	REF	Quantity
7.5 mm	= 0.8 mm	**600-310-30**	10 pieces

CE



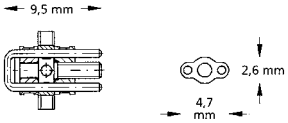
Sectional screw Mini

Material: stainless steel
- with **wide** expansion screw holder
- skeleton design
- guide pins: U-shaped, **straight**

With expansion screw key, standard (straight, small).
Indication: for movement of individual teeth
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
4.0 mm	= 0.35 mm	**600-502-10**	1 piece
4.0 mm	= 0.35 mm	**600-502-30**	10 pieces
4.0 mm	= 0.35 mm	**600-502-60**	100 pieces

CE



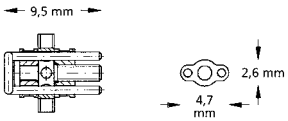
Sectional screw Mini

Material: stainless steel
- with **wide** expansion screw holder
- skeleton design
- guide pins: U-shaped, **angulated facing down**

With expansion screw key, standard (straight, small).
Indication: for movement of individual teeth
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
4.0 mm	= 0.35 mm	**600-503-10**	1 piece
4.0 mm	= 0.35 mm	**600-503-30**	10 pieces
4.0 mm	= 0.35 mm	**600-503-60**	100 pieces

CE



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Special expansion screws

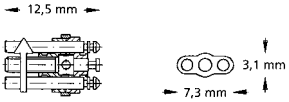
Sectional screw Medium

Material: stainless steel
- with **cone-shaped** expansion screw holder
- skeleton design
- guide pins: **straight**, with mushroom head retention
- holes in body of screws for better retention in acrylic
- built-in stops prevent screws from coming apart

With expansion screw key, standard (straight, small).
Indication: for distalization and segmentation of appliances, Y plates
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
6.0 mm	= 0.4 mm	**600-500-10**	1 piece
6.0 mm	= 0.4 mm	**600-500-30**	10 pieces
6.0 mm	= 0.4 mm	**600-500-60**	100 pieces

CE



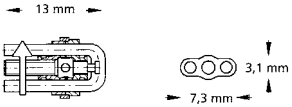
Sectional screw Medium

Material: stainless steel
- with **cone-shaped** expansion screw holder
- skeleton design
- guide pins: U-shaped, **angulated facing down**
- holes in body of screws for better retention in acrylic

With expansion screw key, standard (straight, small).
Indication: for distalization and segmentation of appliances, protrusion of an anterior segment
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
6.0 mm	= 0.4 mm	**600-501-10**	1 piece
6.0 mm	= 0.4 mm	**600-501-30**	10 pieces
6.0 mm	= 0.4 mm	**600-501-60**	100 pieces

CE



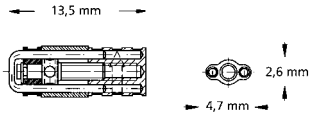
Retraction screw Extra Mini

Material: stainless steel
- with **cone-shaped** expansion screw holder
- screw body: closed
- guide pins: U-shaped, straight

With expansion screw key, standard (straight, small).
Indication: for space closing and movement of individual teeth
Directional arrow: printed, blue-yellow

Maximum retraction	4 x $^1/_4$ turn	REF	Quantity
3.0 mm	= 0.4 mm	**600-602-30**	10 pieces

CE



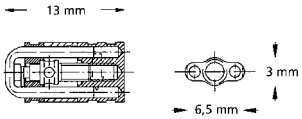
Retraction screw Mini

Material: stainless steel
- with **cone-shaped** expansion screw holder
- screw body: closed
- guide pins: U-shaped, straight

With expansion screw key, standard (straight, small).
Indication: for space closing and movement of individual teeth
Directional arrow: printed, blue-yellow

Maximum retraction	4 x $^1/_4$ turn	REF	Quantity
2.5 mm	= 0.4 mm	**600-601-30**	10 pieces

CE



Special expansion screws

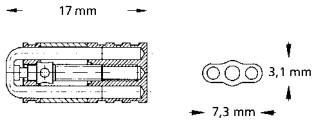
Retraction screw Medium

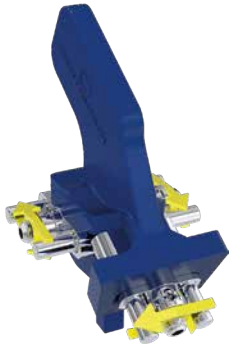
Material: stainless steel
- with **cone-shaped** expansion screw holder
- screw body: closed
- guide pins: U-shaped, straight

With expansion screw key straight, small – standard.
Indication: for space closing and movement of individual teeth
Directional arrow: printed, blue-yellow

Maximum retraction	4 x $^1/_4$ turn	REF	Quantity
4.5 mm	= 0.4 mm	**600-600-30**	10 pieces

CE





Neo-Bertoni three dimensional screw – three movements (type A)

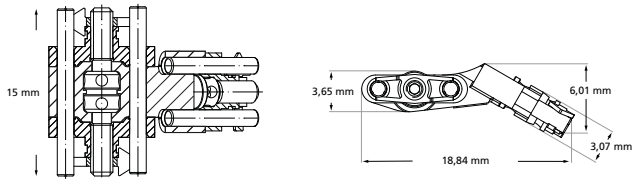
Material: stainless steel
- anatomically angled multi-dimensional screw
- three independently controlled movements
- same total expansion per segment

With expansion screw key, standard (straight, small).
Indication: for combined transverse and protrusion movements with Y-plates
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
3.5 mm / segment	= 0.40 mm/segment	**600-131-10**	1 piece

CE

NEW



Neo-Bertoni three dimensional screw – two movements (type B)

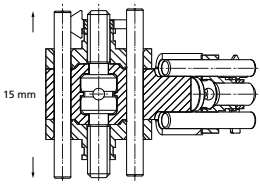
Material: stainless steel
- anatomically angled multi-dimensional screw
- two independently controlled movements (symmetrical transverse expansion)
- same total expansion per segment

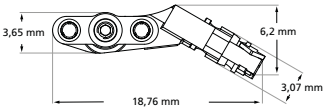
With expansion screw key, standard (straight, small).
Indication: for combined transverse and protrusion movements with Y plates
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
3.5 mm / segment	= 0.40 mm/segment	**600-132-10**	1 piece

CE

NEW





Neo-Bertoni 3D

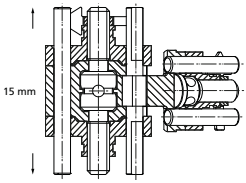
Material: stainless steel
- anatomical, individually adjustable three dimensional screw
- front segment can be adapted individually to the palate
- two independently controlled movements (symmetrical transverse expansion)
- same total expansion per segment

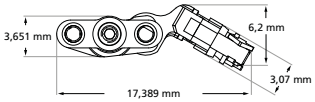
With expansion screw key, standard (straight, small).
Indication: for combined transverse and protrusion movements with Y plates
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
3.5 mm / segment	= 0.40 mm/segment	**600-133-10**	1 piece

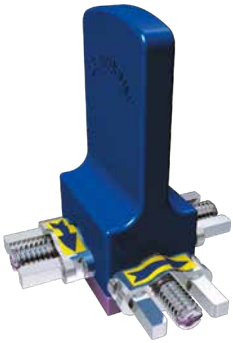
CE

NEW





Special expansion screws



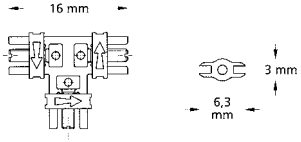
Three dimensional screw acc. to Bertoni – three movements (type A)

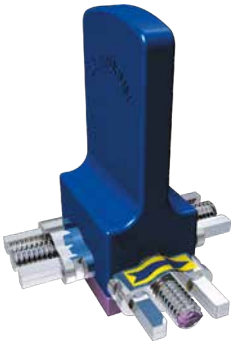
Material: stainless steel
- strengthened guides
- three independently controlled movements
- same total expansion per segment

With expansion screw key straight, standard (straight, small).
Indication: for combined transverse and protrusion movements with Y plates
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
4.0 mm / segment	= 0.35 mm/segment	**602-605-10**	1 piece

CE





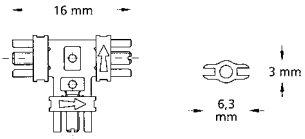
Three dimensional screw acc. to Bertoni – two movements (type B)

Material: stainless steel
- strengthened guides
- two independently controlled movements (symmetrical transverse expansion)
- same total expansion per segment

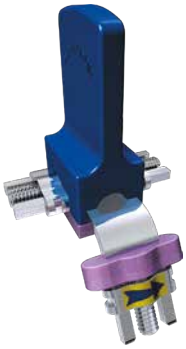
With expansion screw key straight, standard (straight, small).
Indication: for combined transverse and protrusion movements with Y plates
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
4.0 mm / segment	= 0.35 mm/segment	**602-606-10**	1 piece

CE



Special expansion screws



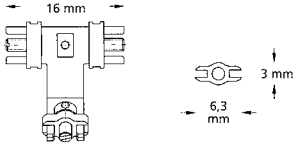
Three dimensional screw acc. to Steiner

Material: stainless steel
- strengthened guides
- individually adjustable middle bar for adapting to different palatal vault curvatures
- two independently controlled movements (symmetrical transverse expansion)
- same total expansion per segment

With expansion screw key, standard (straight, small).
Indication: for combined transverse and protrusion movements with Y plates
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
4.0 mm / segment	= 0.35 mm/segment	**602-604-10**	1 piece

CE



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Special expansion screws

Fan-type expansion screw

Material: stainless steel
• with **wide** expansion screw holder
• plate sections are opened fanwise
With expansion screw key straight, standard (straight, small).
Indication: for maxillary anterior or posterior expansion
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
7.0 mm	= 0.8 mm	**606-600-00**	1 piece
7.0 mm	= 0.8 mm	**606-600-30**	10 pieces

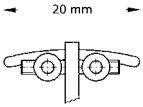
CE

Mandibular bow screw acc. to Müller

Material: stainless steel
• with **cone-shaped** expansion screw holder
• minimal fan-type opening of the arch screw, according to the anterior arch
With expansion screw key straight, standard (straight, small).
Indication: for transverse expansion of the mandibular anterior arch
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
5.0 mm	= 0.8 mm	**606-701-00**	1 piece
5.0 mm	= 0.8 mm	**606-701-30**	10 pieces

CE



Neo-bite jumping appliance acc. to F.M. Sander*, set

Material: stainless steel

Patented, three-dimensional Bertoni expansion screw with guide ridges for forward thrust acc. to F.M. Sander*. The lastest generation of the Sander appliance allows, alongside class II/1 treatment, corrections in class II/2 thanks to the sagittal expansion element.

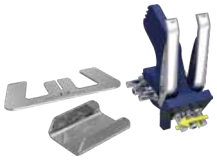
REF 600-120-00	1 set

CE

Contents:

1 x Neo-bite jumping appliance acc. to F.M. Sander	REF 600-121-10
1 x Neo-bite jumping appliance mounting template	REF 600-122-00
1 x Neo-bite jumping appliance guide template (for inclined plane)	REF 600-123-00

NEW



Neo-bite jumping appliance acc. to F.M. Sander*

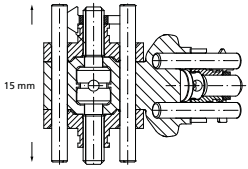
Material: stainless steel

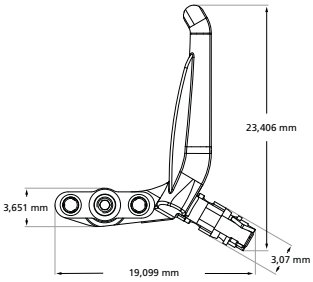
Directional arrow: Plastic, neon yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
4.0 mm / segment	= 0.35 mm/segment	**600-121-10**	1 piece

CE

NEW





Neo-bite jumping appliance mounting template

acc. to Sander & Höbel

The angle to the occlusal plane can be adapted to each individual patient in comination with the slots at 55°, 60° and 65° in the expansion screw holder of the neo-bite jumping appliance.

REF 600-122-00	1 piece

NEW

Neo-bite jumping appliance guide template

acc. to Sander & Höbel

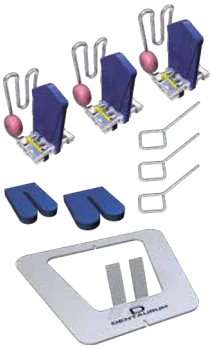
To produce an inclined plane in the mandible.

REF 600-123-00	10 pieces

NEW

* Patent owner FEMAdent GmbH & Co. KG

Special expansion screws



Flexible forward thrust double plate system acc. to Schaneng, set

Material: stainless steel

- flexible intermaxillary element
- maxillary screws with intermaxillary guide ridge for forward thrust double plate. Double loop, wax coated

With expansion screw key, standard (straight, small).

Indication: for treatment of Angle Class II/1 (distoclusion), for advancement of the mandible

REF 600-000-00	1 set

CE

Contents:

3 x screw for maxilla with guide ridge for forward thrust double plate	REF 600-001-00
1 x adapter, narrow	REF 600-003-00
1 x adapter, wide	REF 600-004-00
1 x locating template	REF 600-005-00

Guide ridge for flexible forward thrust double plate system acc. to Schaneng

With double loop, wax coated.

Material: stainless steel

Length of guide ridge: 14.0 mm

Version	REF	Quantity	REF	Quantity
with palatal expansion screw	**600-001-00**	1 piece	**600-001-30**	10 pieces
without palatal expansion screw	**600-002-00**	1 piece	**600-002-30**	10 pieces

CE

Guide ridge adapter for flexible forward thrust double plate system acc. to Schaneng

To produce the diagonal level in the mandibular.

Adapter	Width	REF	Quantity
narrow	14.0 mm	**600-003-00**	10 pieces
wide	18.0 mm	**600-004-00**	10 pieces

Locating template acc. to Schaneng

Locating template to produce the 60° angle of inclination.

Material: stainless steel

REF 600-005-00	1 piece

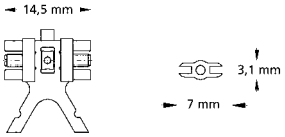
Special expansion screws

Expansion screw for split activator

Material: stainless steel
• with **cone-shaped** expansion screw holder
• strengthened guides
With expansion screw key, standard (straight, small).
Indication: for separate expansion of maxilla and mandible
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
7.0 mm	= 0.8 mm	**600-610-00**	1 piece
7.0 mm	= 0.8 mm	**600-610-30**	10 pieces

CE

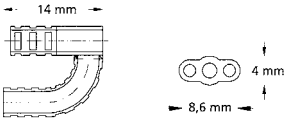


Expansion screw for progenia activator acc. to Weise

Material: stainless steel
• without expansion screw holder
• for fabricating horizontally split activators, which allow connection and shifting of both split planes
• stable connection of the maxillary plate with the mandibular plate using a strong U-shaped bar
With expansion screw key, standard (straight, small).
Indication: for the treatment of Angle Class III (progenia), for distal shifting of the mandible
Directional arrow: printed, blue-yellow

Maximum expansion	4 x $^1/_4$ turn	REF	Quantity
5.0 mm	= 0.9 mm	**603-000-00**	1 piece

CE



Special expansion screws

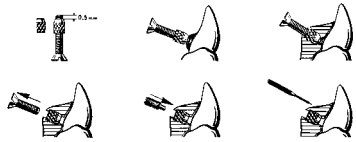
Piston spring screws, set

Material: stainless steel

- delicate design
- constant, elastic and finely controllable pressure on the tooth to be moved
- a protrusion of up to 7 mm can be attained according to the progress of treatment using three different lengths of screws (4 / 6 / 8 mm)

Indication: for movement of individual teeth

4 x $^1/_4$ turn = 0.35 mm



REF 609-500-00	1 set

CE

Contents:

10 x piston spring screw, 4 mm	REF 609-004-00
10 x piston spring screw, 6 mm	REF 609-006-00
10 x piston spring screw, 8 mm	REF 609-008-00
10 x positioning screw	REF 609-100-00
10 x serrated housing nut	REF 609-200-30
1 x reamer	REF 609-300-01
1 x screwdriver	REF 609-400-00

NEW

Piston spring screw

Material: stainless steel

- delicate design
- constant, elastic and finely controllable pressure on the tooth to be moved

Indication: for movement of individual teeth

Length	4 x $^1/_4$ turn	REF	Quantity
4.0 mm	= 0.35 mm	**609-004-00**	10 pieces
6.0 mm	= 0.35 mm	**609-006-00**	10 pieces
8.0 mm	= 0.35 mm	**609-008-00**	10 pieces

CE

Positioning screw

For piston spring screw.

To position the piston spring screw into the acrylic.

Material: stainless steel

Length	REF	Quantity
12.0 mm	**609-100-00**	10 pieces

Serrated housing nut

For piston spring screw.

To position into acrylic or to weld onto wire elements.

Material: stainless steel

Length	REF	Quantity
3.0 mm	**609-200-30**	10 pieces

CE

Special expansion screws

Reamer

For piston spring screw.

Material: stainless steel

REF 609-300-01	1 piece

NEW

Screwdriver

For piston spring screw.

To activate the piston spring screw.

Material: aluminum

REF 609-400-00	1 piece

DENTAURUM ONLINE SHOP shop.dentaurum.com

Variety expansion screws

Variety click Mini – 8

Monoguided special expansion screw with click feature to prevent unwanted reversing. Primarily for treatment of malocclusions in the mandible using fixed appliances, e.g. for distalization, mesialization or for space closure by moving individual teeth. Also for early palatal expansion.

- optimal screw locking during the active treatment phase
- small dimensions with maximum expansion
- reliable activation / deactivation of the screw with clearly perceptible click after a $^1/_4$ turn
- break resistant retention legs and stable guidance throughout the entire expansion
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 12.9 mm
Screw body: 9.6 mm
4 x $^1/_4$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
8.0 mm	**602-836-12**	**602-836-10**	1 piece
8.0 mm	**602-836-32**	**602-836-30**	10 pieces

CE 0483

Variety click SP (small palate) Mini – 8

Monoguided special expansion screw with click feature to prevent unwanted reversing. For the fixed appliance technique. Can be widely used in the upper and lower jaw, for distalization, mesialization of posterior teeth, or for space closure by moving individual teeth. Also for early palatal expansion.

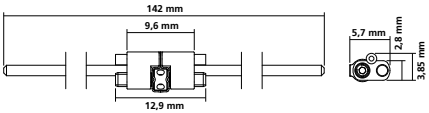
- optimal screw locking during the active treatment phase
- especially suitable for very narrow jaws
- retention legs can be bent very close to the screw body
- small dimensions with maximum expansion
- reliable activation / deactivation of the screw with clearly perceptible click after a $^1/_4$ turn
- break resistant retention legs and stable guidance throughout the entire expansion
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion

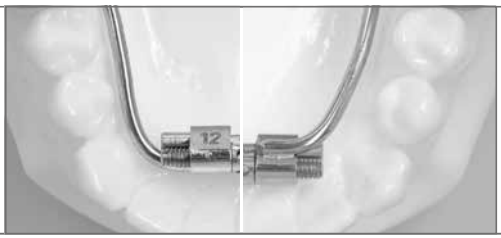
Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 12.9 mm
Screw body: 9.6 mm
4 x $^1/_4$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
8.0 mm	**602-838-12**	**602-838-10**	1 piece
8.0 mm	**602-838-32**	**602-838-30**	10 pieces

CE 0483

Dimensions Variety click / Variety click SP Mini – 8





Variety expansion screws

Variety click Maxi – 12

Monoguided special expansion screw with click feature to prevent unwanted reversing. Primarily for treatment of malocclusions in the mandible using fixed appliances, e.g. for distalization, mesialization or for space closure by moving individual teeth. Also for early palatal expansion.

- optimal screw locking during the active treatment phase
- small dimensions with maximum expansion
- reliable activation / deactivation of the screw with clearly perceptible click after a $^1/_4$ turn
- break resistant retention legs and stable guidance throughout the entire expansion
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 17.2 mm
Screw body: 9.6 mm
4 x $^1/_4$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
12.0 mm	**602-837-12**	**602-837-10**	1 piece
12.0 mm	**602-837-32**	**602-837-30**	10 pieces

CE 0483

Variety click SP (small palate) Maxi – 12

Monoguided special expansion screw with click feature to prevent unwanted reversing. Primarily for treatment of malocclusions in the mandible using fixed appliances, e.g. for distalization, mesialization or for space closure by moving individual teeth. Also for early palatal expansion.

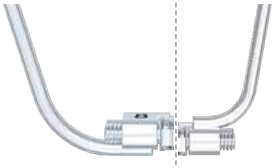
- optimal screw locking during the active treatment phase
- especially suitable for very narrow jaws
- retention legs can be bent very close to the screw body
- small dimensions with maximum expansion
- reliable activation / deactivation of the screw with clearly perceptible click after a $^1/_4$ turn
- break resistant retention legs and stable guidance throughout the entire expansion
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 17.2 mm
Screw body: 9.6 mm
4 x $^1/_4$ turn = 0.8 mm
Material: stainless steel

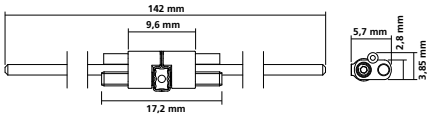
Maximum expansion	REF (without)	REF (straight)	Quantity
12.0 mm	**602-839-12**	**602-839-10**	1 piece
12.0 mm	**602-839-32**	**602-839-30**	10 pieces

CE 0483

Variety click | Variety click SP



Dimensions Variety click / Variety click SP Maxi – 12



Variety expansion screws

Variety Mini – 8

Monoguided special expansion screw. Primarily for treatment of malocclusions in the mandible using fixed appliances, e.g. for distalization, mesialization or for space closure by moving individual teeth. Also for early palatal expansion.

- small dimensions with maximum expansion
- break resistant retention legs and stable guidance throughout the entire expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion
- screw can be tied down once desired expansion has been reached

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 12.9 mm
Screw body: 9.6 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
8.0 mm	**602-815-12**	**602-815-10**	1 piece
8.0 mm	**602-815-32**	**602-815-30**	10 pieces

CE 0483

Variety SP (small palate) Mini – 8

Monoguided special expansion screw. Primarily for treatment of malocclusions in the mandible using fixed appliances, e.g. for distalization, mesialization or for space closure by moving individual teeth. Also for early palatal expansion.

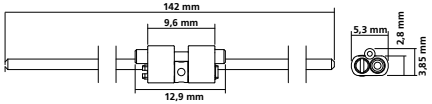
- especially suitable for very narrow jaws
- retention legs can be bent very close to the screw body
- small dimensions with maximum expansion
- break resistant retention legs and stable guidance throughout the entire expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion
- screw can be tied down once desired expansion has been reached

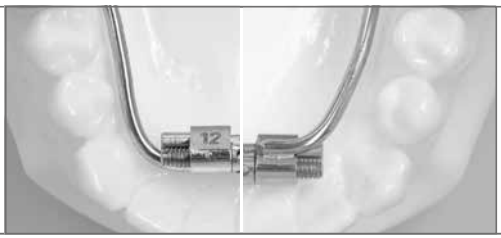
Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 12.9 mm
Screw body: 9.6 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
8.0 mm	**602-819-12**	**602-819-10**	1 piece
8.0 mm	**602-819-32**	**602-819-30**	10 pieces

CE 0483

Dimensions Variety / Variety SP Mini – 8





Variety expansion screws

Variety Maxi – 12

Monoguided special expansion screw. Primarily for treatment of malocclusions in the mandible using fixed appliances, e.g. for distalization, mesialization or for space closure by moving individual teeth. Also for early palatal expansion.

- small dimensions with maximum expansion
- break resistant retention legs and stable guidance throughout the entire expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion
- screw can be tied down once desired expansion has been reached

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 14.9 mm
Screw body: 9.6 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
12.0 mm	**602-806-12**	**602-806-10**	1 piece
12.0 mm	**602-806-32**	**602-806-30**	10 pieces

CE 0483

Variety SP (small palate) Maxi – 12

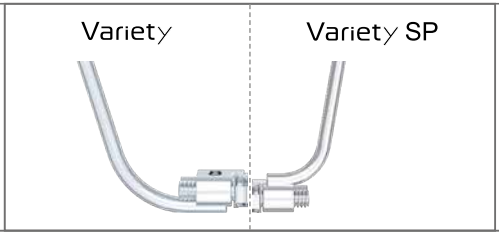
Monoguided special expansion screw. Primarily for treatment of malocclusions in the mandible using fixed appliances, e.g. for distalization, mesialization or for space closure by moving individual teeth. Also for early palatal expansion.

- especially suitable for very narrow jaws
- retention legs can be bent very close to the screw body
- small dimensions with maximum expansion
- break resistant retention legs and stable guidance throughout the entire expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion
- screw can be tied down once desired expansion has been reached

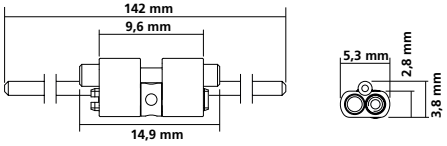
Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Assembly dimension: 14.9 mm
Screw body: 9.6 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
12.0 mm	**602-809-12**	**602-809-10**	1 piece
12.0 mm	**602-809-32**	**602-809-30**	10 pieces

CE 0483



Dimensions Variety / Variety SP Maxi – 12



RPE screws

Titan hyrax® Maxi – 12

RPE screw of titanium

For rapid palatal expansion by means of fixed appliances.

The screw is anchored to the teeth using cast titanium and laser-welded cap splints or alternatively using acrylic cap splints fabricated from Orthocryl® acrylic.

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.

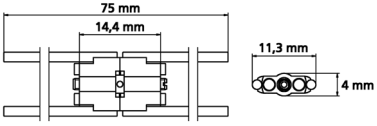
Screw body: 14.4 mm

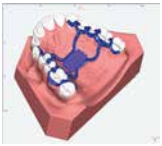
4 x $^{1}/_{4}$ turn = 0.8 mm

Material: titanium

Maximum expansion	REF (without)	REF (straight)	Quantity
12.0 mm	**602-810-12**	**602-810-10**	1 piece
12.0 mm	**602-810-32**	**602-810-30**	10 pieces

CE 0483





rematitan® straight wire

Titanium grade 1

Norm: DIN EN ISO 28319, DIN EN ISO 5832-2

For laser welding.

ø	Length	REF	Quantity
1.00 mm / 39	each 100 mm	**528-041-00**	10 pieces
1.20 mm / 47	each 100 mm	**528-042-00**	10 pieces

CE 0483

L.O.M. LASER OPTIMIZED MATERIAL

hyrax® click Mini – 7

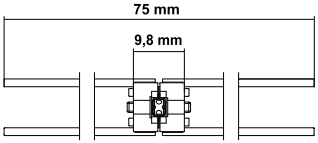
RPE screw with click feature to prevent unwanted reversing
For effective and reliable rapid palatal expansion by means of fixed appliances.

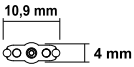
- optimal screw locking during the active treatment phase
- built-in stops prevent the screws from coming apart once maximum expansion has been obtained
- reliable activation / deactivation of the screw with clearly perceptible click after a $^1/_4$ turn
- no accidental reversing when pulling out safety key during activation
- minimal dimensions with maximum expansion range
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 9.8 mm
4 x $^1/_4$ turn = 0.8 mm
Material: stainless steel

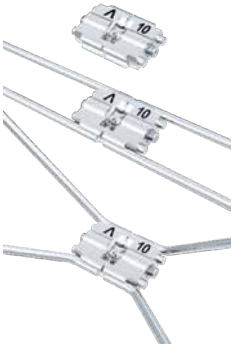
Maximum expansion	REF (without)	REF (straight)	REF (angulated)	Quantity
7.0 mm	**602-830-12**	**602-830-10**	**602-831-10**	1 piece
7.0 mm	**602-830-32**	**602-830-30**	**602-831-30**	10 pieces

CE 0483





hyrax® click Medium – 10



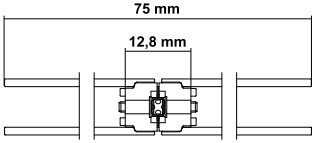
RPE screw with click feature to prevent unwanted reversing
For effective and reliable rapid palatal expansion by means of fixed appliances.

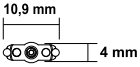
- optimal screw locking during the active treatment phase
- built-in stops prevent the screws from coming apart once maximum expansion has been obtained
- reliable activation / deactivation of the screw with clearly perceptible click after a $^1/_4$ turn
- no accidental reversing when pulling out safety key during activation
- minimal dimensions with maximum expansion range
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 12.8 mm
4 x $^1/_4$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	REF (angulated)	Quantity
10.0 mm	**602-832-12**	**602-832-10**	**602-833-10**	1 piece
10.0 mm	**602-832-32**	**602-832-30**	**602-833-30**	10 pieces

CE 0483





RPE screws

hyrax® click Maxi – 12

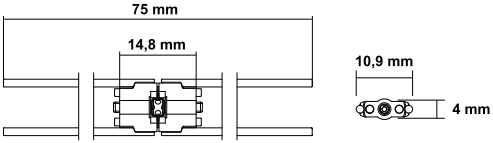
RPE screw with click feature to prevent unwanted reversing
For effective and reliable rapid palatal expansion by means of fixed appliances.

- optimal screw locking during the active treatment phase
- built-in stops prevent the screws from coming apart once maximum expansion has been obtained
- reliable activation / deactivation of the screw with clearly perceptible click after a $^1/_4$ turn
- no accidental reversing when pulling out safety key during activation
- minimal dimensions with maximum expansion range
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 14.8 mm
4 x $^1/_4$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	REF (angulated)	Quantity
12.0 mm	**602-834-12**	**602-834-10**	**602-835-10**	1 piece
12.0 mm	**602-834-32**	**602-834-30**	**602-835-30**	10 pieces

CE 0483



tomas®-RPE eyelet

(coupling element for RPE screws)
Eyelet for direct coupling between tomas®-pin with all hyrax® RPE screws with two supports for easier placement on working model.
Can be used for hybrid RPE appliance or skeletal RPE appliance using Pin-Last© approach.

Outer ø eyelet	Inner ø eyelet	Thickness eyelet	REF	Quantity
5.0 mm	top 3.0 mm bottom 2.3 mm	1.5 mm	**302-602-00**	12 pieces + 2 holders

CE 0483

hyrax® Mini – 7

RPE screw

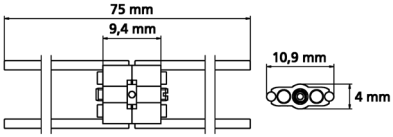
For rapid palatal expansion by means of fixed appliances.

- built-in stops prevent the screws from coming apart once maximum expansion has been obtained
- small dimensions with maximum expansion
- break resistant retention legs, stable guidance throughout complete expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion
- screw can be tied down once desired expansion has been reached

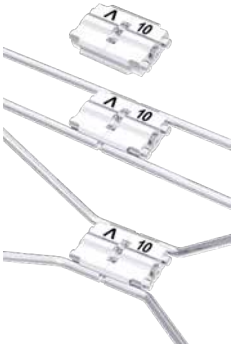
Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 9.4 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	REF (angulated)	Quantity
7.0 mm	**602-800-12**	**602-800-10**	**602-801-10**	1 piece
7.0 mm	**602-800-32**	**602-800-30**	**602-801-30**	10 pieces

CE 0483



hyrax® Medium – 10



RPE screw

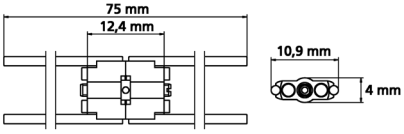
For rapid palatal expansion by means of fixed appliances.

- built-in stops prevent the screws from coming apart once maximum expansion has been obtained
- small dimensions with maximum expansion
- break resistant retention legs, stable guidance throughout complete expansion
- offset body for earliest possible angling of the retention legs
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion
- screw can be tied down once desired expansion has been reached

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 12.4 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	REF (angulated)	Quantity
10.0 mm	**602-808-12**	**602-808-10**	**602-840-10**	1 piece
10.0 mm	**602-808-32**	**602-808-30**	**602-840-30**	10 pieces

CE 0483



RPE screws

hyrax® Maxi – 12

RPE screw

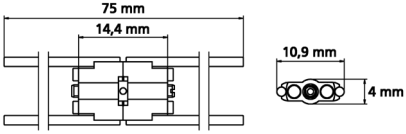
For rapid palatal expansion by means of fixed appliances.

- built-in stops prevent the screws from coming apart once maximum expansion has been obtained
- small dimensions with maximum expansion
- break resistant retention legs, stable guidance throughout complete expansion
- offset body for earliest possible angling of the retention legs
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and max. expansion
- screw can be tied down once desired expansion has been reached

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 14.4 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	REF (angulated)	Quantity
12.0 mm	**602-811-12**	**602-811-10**	**602-812-10**	1 piece
12.0 mm	**602-811-32**	**602-811-30**	**602-812-30**	10 pieces

CE 0483



hyrax® neo Mini – 7

RPE screw

For rapid palatal expansion by means of a fixed appliance.

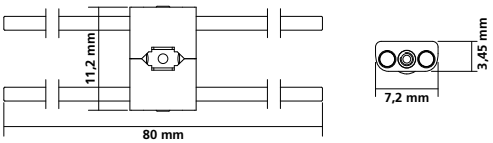
- (no active) expansion stop
- small dimensions with maximum expansion
- TAD-optimized design
- break resistant retention legs, stable guidance throughout complete expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and maximum expansion
- screw can be tied down once desired expansion has been reached

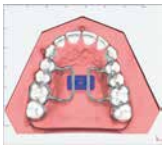
Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 11.2 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
7.0 mm	**602-845-12**	**602-845-10**	1 piece
7.0 mm	**602-845-32**	**602-845-30**	10 pieces

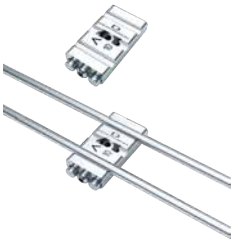
CE 0483

NEW





hyrax® neo Medium – 10



RPE screw

For rapid palatal expansion by means of a fixed appliance.

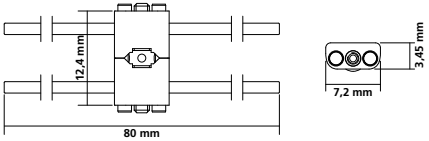
- (no active) expansion stop
- small dimensions with maximum expansion
- TAD-optimized design
- break resistant retention legs, stable guidance throughout complete expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and maximum expansion
- screw can be tied down once desired expansion has been reached

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 12.4 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

Maximum expansion	REF (without)	REF (straight)	Quantity
10.0 mm	**602-846-12**	**602-846-10**	1 piece
10.0 mm	**602-846-32**	**602-846-30**	10 pieces

CE 0483

NEW



hyrax® neo Maxi – 12

RPE screw

For rapid palatal expansion by means of a fixed appliance.

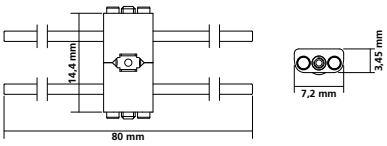
- (no active) expansion stop
- small dimensions with maximum expansion
- TAD-optimized design
- break resistant retention legs, stable guidance throughout complete expansion
- the integrated spindle friction prevents unwanted reversing
- permanently laser marked arrow on the body of the screw indicates the opening direction and maximum expansion
- screw can be tied down once desired expansion has been reached

Pack (1 piece) with 1 safety key, pack (10 pieces) with 10 safety keys.
Screw body: 14.4 mm
4 x $^{1}/_{4}$ turn = 0.8 mm
Material: stainless steel

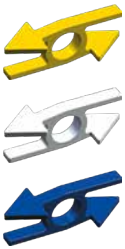
Maximum expansion	REF (without)	REF (straight)	Quantity
12.0 mm	**602-847-12**	**602-847-10**	1 piece
12.0 mm	**602-847-32**	**602-847-30**	10 pieces

CE 0483

NEW



Accessories



Arrow to indicate the opening direction

For expansion screws.

Color	REF	Quantity
yellow	**611-130-00**	50 pieces
white	**611-131-00**	50 pieces
pearl-blue	**611-132-00**	50 pieces

CE

Universal bending key

Easy bending of the retention legs of all hyrax® and Variety screws without using any additional pliers (leverage principle).
Material: stainless steel

REF 611-122-00	1 piece

Safety key

Can be used with all Dentaurum hyrax® and Variety screws.
For safe intra-oral activation of the expansion screws in fixed appliances.

REF 611-120-01	10 pieces

CE

Expansion screw key, standard

straight, small

Can be used with all Dentaurum expansion screws.
To activate all expansion screws in removable appliances (outside of the mouth).
Material: stainless steel

REF 611-115-00	1 piece
REF 611-115-30	10 pieces
REF 611-115-60	100 pieces

CE

Expansion screw key, large

with elongated handle

Can be used with all Dentaurum expansion screws.
To activate all expansion screws in removable appliances (outside of the mouth).
Material: stainless steel

REF 611-116-00	1 piece

CE

Accessories

Expansion screw sample kit

The kit includes a selection from Dentaurum's large range of expansion screws and is for promotional and demonstration purposes only. The content of this kit is not certified for use on patients!
Filled with 27 expansion screws that are on stock, 2 expansion screw keys and 1 universal bending key. **1 set = 30 pieces.**

REF 612-000-00	1 set

Wedge gauge

For checking the gap width on palatal expanders.

REF 043-720-00	1 piece

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