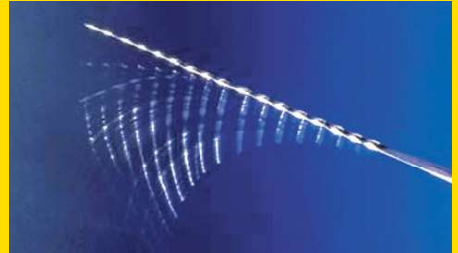


Reamers and K and H files series

MANI's deep knowledge of reamers has developed over a long history of

■ Using MANI hard-fiber Stainless steel

Dental treatment tools used inside the mouth require high corrosion resistance and durability. Above all, they must have a reliable cutting edge that meets the practical needs of the dentist. We chose 18-8 Stainless steel, because of its high corrosion resistance and ductility. We could find a material that can provide both flexibility and hardness through fine processing.



(MANI hard-fiber stainless steel)



(typical stainless steel)

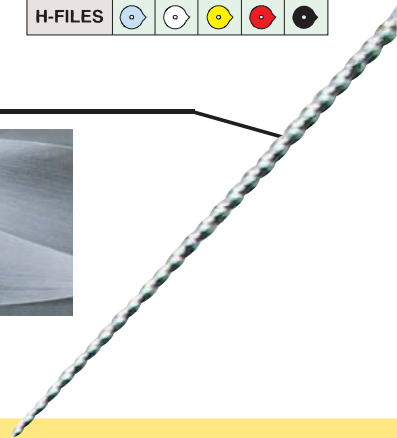
Rubber stopper

A suitable rubber stopper for each shape and length is fitted initially.

	Blue 18mm	White 21mm	Yellow 25mm	Red 28mm	Black 31mm
REAMERS					
K-FILES					
H-FILES					

Sharp edge and mirror finish

Wrap grinding process gives the surface a mirror finish.



and K and H files series manufacturing surgical needles.

Thread hole to prevent dropping

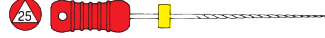
A thread allows a chain or string to pass through it to prevent the reamer from dropping when during use

Icons and numbers allow easy identification

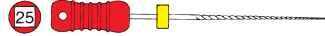
The top of the grip is marked with an easy-to-identify icon with a number.



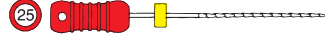
Reamers



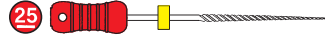
K-Files



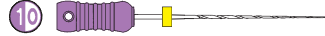
H-Files



RT Files



D Finders



Curved design for better holding

Easy-to-hold shape that fits the fingers

Anti-slip molded rings

The grip is molded to have anti-slip rings

Colors allow easy identification

The grips are grouped into different colors according to their thicknesses

Accurate dimensional machining

.02 taper meets ISO standards

*Except for the flare files

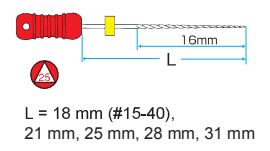
Reamers

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40, #45-80, #90-140 ■ Material: Stainless steel ■ Taper: .02

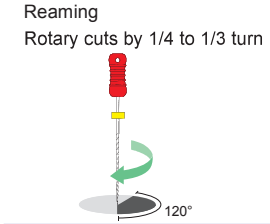
Size	Tip diameter (mm)	
06	0.06	
08	0.08	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	
70	0.70	
80	0.80	
90	0.90	
100	1.00	
110	1.10	
120	1.20	
130	1.30	
140	1.40	

Rubber Stoppers: 18 mm 21 mm 25 mm 28 mm 31 mm

Length of operative part(L)



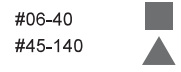
Usage



Magnified view of the cutting flute



Cross-section shape



Intended use

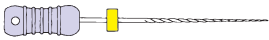
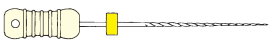


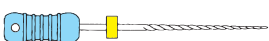
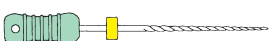
Root canal enlargement or
debridement



18 mm file

The length of the root canal differs depending on the individual and patient's growth process. The 18 mm file is effective for a short root canal, such as in a child patient.

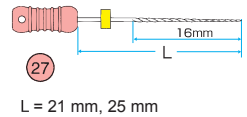
Medium reamers

■ Smallest available unit: 6 pcs per pack ■ Assortment: #12-37 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
12	0.12	
17	0.17	
22	0.22	
27	0.27	
32	0.32	
37	0.37	

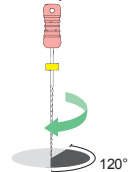
Rubber Stoppers: 21 mm  25 mm 

Length of operative part(L)



Usage

Reaming
Rotary cuts by 1/4 to 1/3 turn



Magnified view of the cutting flute



Cross-section shape

#12-37 

Intended use

Root canal enlargement or
debridement



Related products

For greater penetration force
than a reamer:

D Finders



For engine type:

Engine Reamers



Reaming

This is an operation to enlarge a root canal by cutting its wall through repeated rotations (1/4 to 1/3 turn).

Role of medium size

The reamers are manufactured in accordance with ISO standard. Of our files that meet ISO standards, the widest section has 50% transition rate between each file. In order to reduce the load on the file, use an medium-size ISO-compliant file. This enables more efficient enlargement of a root canal.

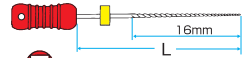
K-Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40, #45-80, #90-140 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
06	0.06	
08	0.08	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	
70	0.70	
80	0.80	
90	0.90	
100	1.00	
110	1.10	
120	1.20	
130	1.30	
140	1.40	

Rubber Stoppers: 18 mm 21 mm 25 mm 28 mm 31 mm

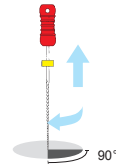
Length of operative part(L)



L = 18 mm (#15-40),
21 mm, 25 mm, 28 mm, 31 mm

Usage

turn and pull



Magnified view of the cutting flute



Cross-section shape

#06-40

#45-140

Intended use

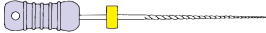





Root canal enlargement.

18 mm file

The length of the root canal differs depending on the individual and his/her growth process. The 18 mm file is effective for a short root canal, such as in a child patient.

Medium K-Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #12-37 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
12	0.12	
17	0.17	
22	0.22	
27	0.27	
32	0.32	
37	0.37	

Rubber Stoppers: 21 mm  25 mm 

Role of medium size

K-Files is manufactured in accordance with ISO standards. Of our files that meet ISO standards, the thinnest sections are half as thick as the widest sections. In order to reduce the load on the file, use an medium-size ISO-compliant file. This enables more efficient enlargement of a root canal.

Turn and pull

Rotate the file about 1/4 turn to cut into the dentine, then pull it out to continue cutting.

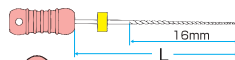
Watch-winding

Rotate the file about 30 to 60 degrees clockwise, and again to the same degree counterclockwise. Repeat this step to cut the dentine.

Balanced force technique

This is one of the techniques to enlarge a root canal while taking the displacement of root canal shape into consideration. To do this, cut the root canal using the file while maintaining uniform force to all of its walls. Insert the file into the root canal, gently apply force in the apical direction and rotate the file clockwise. Next, rotate the file counterclockwise while applying force in the apical direction. Finally, remove the file while rotating it clockwise. Repeat this step up to the working length.

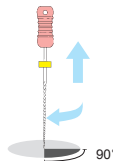
Length of operative part(L)



L = 21 mm, 25 mm

Usage

turn and pull



Magnified view of the cutting flute



Cross-section shape

#12-37

Related products

For better flexibility and cutting force than the K-Files:

Flexile Files

 ...P18

RT Files

 ...P20

For better penetration force than the K-Files:

D Finders

 ...P21

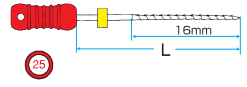
H-Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40, #45-80, #90-140 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
08	0.08	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	
70	0.70	
80	0.80	
90	0.90	
100	1.00	
110	1.10	
120	1.20	
130	1.30	
140	1.40	

Rubber Stoppers: 18 mm 21 mm 25 mm 28 mm 31 mm 31 mm

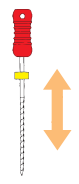
Length of operative part(L)



L = 18 mm (#15-40),
21 mm, 25 mm, 28 mm, 31 mm

Usage

Filing



Magnified view of the cutting flute



Cross-section shape

#08-140

Intended use

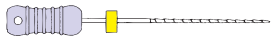
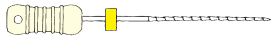
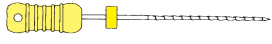
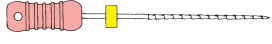
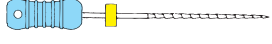

Root canal enlargement.

18 mm file

The length of the root canal differs depending on the individual and his/her growth process. The 18 mm file is effective for a short root canal, such as in a child patient.

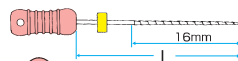
Medium H-Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #12-37 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
12	0.12	
17	0.17	
22	0.22	
27	0.27	
32	0.32	
37	0.37	

Rubber Stoppers: 21 mm ○ 25 mm ●

■ Length of operative part(L)



L = 21 mm, 25 mm

■ Cross-section shape

#12-37

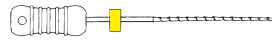
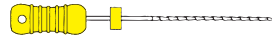
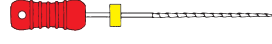
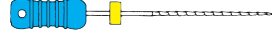
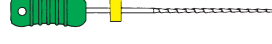



Role of medium size

The H-files are manufactured in accordance with ISO standards. Of our files that meet ISO standards, the thinnest sections are half as thick as the widest sections. In order to reduce the load on the file, use a medium-size ISO-compliant file. This enables more efficient enlargement of a root canal.

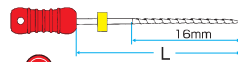
NiTi H-Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40 ■ Material: Nickel titanium: ■ Taper: .02

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	

Rubber Stoppers: 21 mm ○ 25 mm ●

■ Length of working portion (L)



L = 21 mm, 25 mm

■ Cross-section shape

#15-40


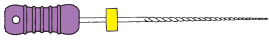
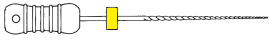
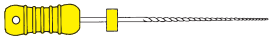
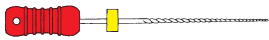
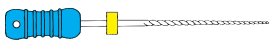
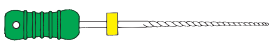
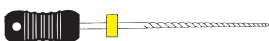
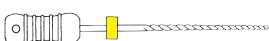







Filing

Also called rasping, one technique to enlarge a root canal. File the entire wall of the root canal continuously in 1-mm increments.

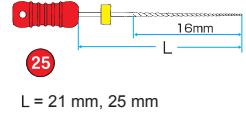
SEC O-Files K

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40, #45-80 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
08	0.08	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	
70	0.70	
80	0.80	

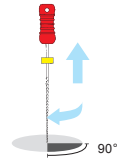
Rubber Stoppers: □ 21 mm ■ 25 mm

Length of operative part(L)



Usage

turn and pull



Cross-section shape

#08-40
#45-80



Intended use

Root canal enlargement.

Magnified view of the cutting flute



The rounded end is less likely to cause a ridge or perforation, allowing the file to be smoothly led along a root canal.

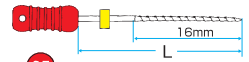
SEC O-Files H

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40, 45-80 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	
70	0.70	
80	0.80	

Rubber Stoppers: 21 mm ○ 25 mm ●

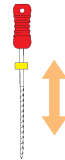
Length of operative part(L)



L = 21 mm, 25 mm

Usage

Filing



Cross-section shape

#10-80



Intended use

Root canal enlargement.

Magnified view of the cutting flute



The rounded end is less likely to cause a ridge or perforation, allowing the file to be smoothly led along a root canal.

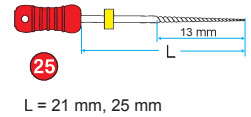
Flare Files

Smallest available unit: 6 pcs per pack Assortment: #15-40 Material: Stainless steel Taper: .05

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	

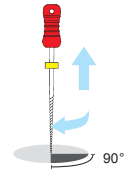
Rubber Stoppers: 21 mm 25 mm

Length of operative part(L)



Usage

turn and pull



Magnified view of the cutting flute

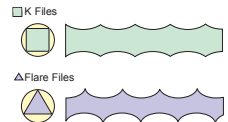


Cross-section shape

#12-60

Intended use

Root canal enlargement.



Medium Flare Files

Smallest available unit: 6 pcs per pack Assortment: #12-37 Material: Stainless steel Taper: .05

Size	Tip diameter (mm)	
12	0.12	
17	0.17	
22	0.22	
27	0.27	
32	0.32	
37	0.37	

Rubber Stoppers: 21 mm 25 mm

Role of medium size

In order to reduce the load on the files, use a medium size. This enables more efficient enlargement of a root canal.

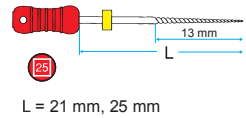
NiTi Flare Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40 ■ Material: Nickel titanium: ■ Taper: .05

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	

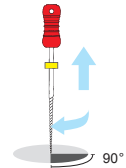
Rubber Stoppers: 21 mm 25 mm

Length of operative part(L)



Usage

turn and pull



Magnified view of the cutting flute



Cross-section shape

#15-40

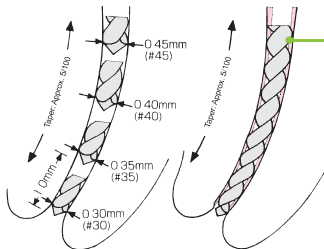


Intended use

Root canal enlargement.

Fewer Steps

This procedure is typically complicated due to the need for several files. The use of **fewer flare files** enables more efficient flaring from the root canal orifice to the apical foramen.



Ideal taper: .05 to .07

Although these files have a large taper, their triangular cross-sectional shapes are designed to improve flexibility and cutting efficiency.

Role of medium size

In order to reduce the load on the files, use an medium size. This enables more efficient enlargement of a root canal.

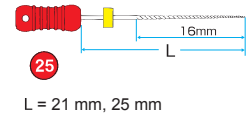
Flexile Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	

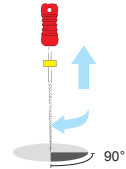
Rubber Stoppers: 21 mm 25 mm

■ Length of operative part(L)



■ Usage

turn and pull



■ Magnified view of the cutting flute



■ Cross-section shape

#15-40

■ Intended use

Root canal enlargement.

Related products

For engine type:

Super Files

...P24

Improved flexibility

MANI K-files with small diameters have a rectangular cross-section to improve torsional strength and fracture resistance. However, their flexibility is quite limited. The Flexile files have a triangular cross-section. This decreases cross-sectional two dimensional moment (Fig. 2) to provide better flexibility than files with a rectangular cross-section.

Fig.1: Cross-section of Flexile and MANI K-Files

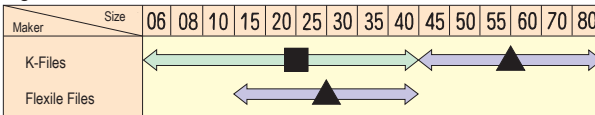
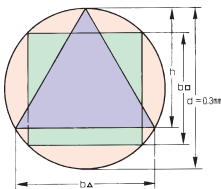


Fig.2: The secondary moment(I) of the cross section of #30 K-Files is—



- When the cross-section is :
 $I_{\square} = 1.68 \times 10^{-4} \text{Mm}^4$
- When the cross-section is :
 $I_{\triangle} = 0.82 \times 10^{-4} \text{Mm}^4$

The flexibility of the triangular cross-section type is about two times that of the square cross-section type.

Medium Flexile Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #12-37 ■ Material: Stainless steel ■ Taper: .02

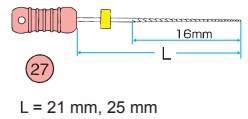
Size	Tip diameter (mm)	
12	0.12	
17	0.17	
22	0.22	
27	0.27	
32	0.32	
37	0.37	

Rubber Stoppers: 21 mm 25 mm

Role of medium size

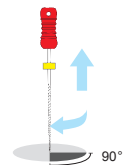
In order to reduce the load on the file, use a medium size. This enables more efficient enlargement of a root canal.

Length of operative part(L)



Usage

turn and pull



Magnified view of the cutting flute



Cross-section shape

#12-37

Intended use

Root canal enlargement.

●●● Related products ●●●

For engine type:

Super Files

...P24

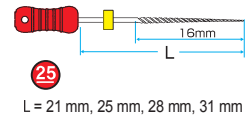
RT Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40, #45-80 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	
70	0.70	
80	0.80	

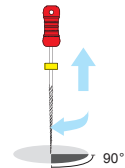
Rubber Stoppers: 21 mm 25 mm 28 mm 31 mm

Length of operative part(L)



Usage

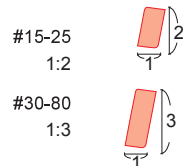
turn and pull



Magnified view of the cutting flute



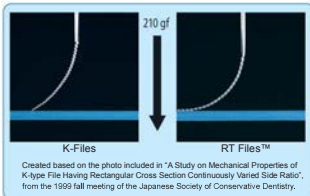
Cross-section shape



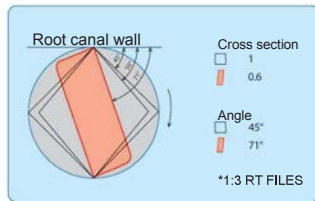
Intended use

Root canal enlargement.

Effective file for treatment of a curved root canal



Comparison of flexibility



Cross-section and edge angle

Flexibility

The RT files is more flexible than MANI K-files, effective, in particular, for the treatment of curved root canals.

Cutting force





The RT files has about 1.5 times the strength in cutting force of MANI K-files. (based on comparison of our products)



Fracture resistance

The angle to fracture is large, reducing the possibilities of file breakage.

D Finders

■ Smallest available unit: 6 pcs per pack ■ Material: Stainless steel ■ Taper: .02

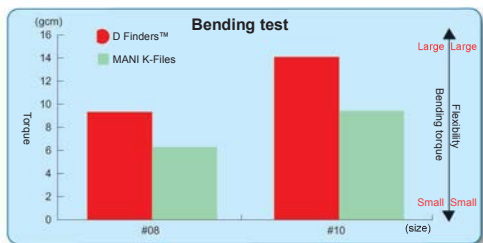
Size	Tip diameter (mm)	
08	0.08	
10	0.10	
12	0.12	
15	0.15	

Rubber Stoppers: 21 mm  25 mm 

Designed for calcified canal access

Features

D Finders has a D-shaped cross-section, thereby increasing their strength and resilience. This increased resilience improves the penetration force, making the files effective for a root canal narrowed by calcification. The cutting flutes are shaped to prevent cutting in [screwing effect].

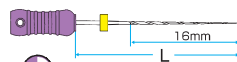


(Table 1)



Magnified view of cutting flute

Length of operative part(L)



L = 21 mm, 25 mm

Usage

Reaming
Rotary cuts by 1/4 to 1/3 turn



Magnified view of the cutting flute



Cross-section shape

#08-15 

Intended use

Root canal enlargement or penetration of a narrowed and calcified root canal

Barbed Broaches

■ 12 pcs per pack ■ Smallest available unit: 6 packs (Total 72 pcs) per box ■ Material: Stainless steel

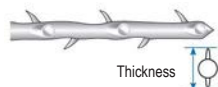
Size		
000	XXX Fine	
00	XX Fine	
0	X Fine	
1	Fine	
2	Medium	
3	Coarse	

■ Length of operative part(L)



L = 52 mm

■ Magnified view of the cutting flute



Thickness

■ Intended use

Size	000	00	0	1	2	3
Thickness	0.30	0.36	0.42	0.50	0.58	0.66

Square Broaches

■ 12 pcs per pack ■ Smallest available unit: 6 packs (Total 72 pcs) per box ■ Material: Stainless steel

Size		
000	XXX Fine	
00	XX Fine	
0	X Fine	
1	Fine	
2	Medium	
3	Coarse	

■ Length of operative part(L)



L = 52 mm

■ Magnified view of the cutting flute



Thickness














■ Intended use

To locate a root canal, to remove moisture in a root canal by wrapping the square broach with cotton or to investigate the length and thickness of the root canal.

Size	000	00	0	1	2	3
Thickness	0.15	0.18	0.21	0.24	0.27	0.30

Engine Reamers

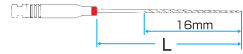
■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40, #45-80 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	
70	0.70	
80	0.80	

Working length types

In addition to 21 and 25 mm, 18 mm (for infants, molar teeth, etc.) and 28 mm (for cuspid teeth, etc.) working lengths are also available.

Length of operative part(L)



L = 18 mm, 21 mm, 25 mm, 28 mm

Usage

Use the Engine Reamer at max. allowable speed of 800 min⁻¹ for rotary contrahead.



Applicable to rotational motion

Magnified view of the cutting flute



Cross-section shape

#10-40



#45-80



Intended use

Enlargement or cleaning of a root canal.



Related products








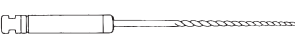



For manual type:

Reamers

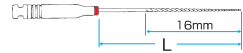
...P 8

Super Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	
55	0.55	
60	0.60	

Length of operative part(L)



L = 18 mm, 21 mm, 25 mm

Usage

Use Super Files at max. allowable speed of 800 min⁻¹.



Magnified view of the cutting flute



Cross-section shape

#10
#15-60



Intended use

Root canal enlargement.

Pulse cutting method

Insert the Super Files with the Twist Contra in a slow and gentle vertical insertion and withdrawal. If you feel that the tip of the file begins to lock, slowly draw back the file and enter the canal again. Repeat this step to enlarge the root canal.

If you try to enlarge the root canal by applying the entire cutting flute, a large area will be cut at one time, requiring careful cleaning of the root canal.

Appropriate for curved root canal

Because the Super Files is very flexible, it is more appropriate to use in curved root canals than our K-Files.

●●● Related products ●●●










For manual type:

Flexile Files

 ...P 18

U-Files

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
10	0.10	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	
45	0.45	
50	0.50	

Length of operative part(L)



L = 33 mm

Usage

Use U-Files by attaching it to an active device (e.g. scaler or plaque remover)



Magnified view of the cutting flute



Cross-section shape

#10-40



#45-50



Intended use

Root canal enlargement.

Use a device that has the following shank diameter:





#10-40 ϕ 0.8 mm

#45-50 ϕ 1.0 mm

Note: Depending on which ultrasonic device is used, the tip attachment and power required will differ. For proper use, follow the instructions provided by the manufacturer.

GPR

- Smallest available unit: 4 pcs per pack
- Assortment: 1S (#70), 2S (#50), 3N (#40), 4N (#30) (2 Stainless steel files, 2 NiTi files)
- Taper: .04 Material: Stainless steel, Nickel Titanium

Size	Tip diameter (mm)	
1S (#70)	0.70	
2S (#50)	0.50	
3N (#40)	0.40	
4N (#30)	0.30	

S = Stainless steel, N = Nickel Titanium

Length of operative part(L)



- 1S : L = 16 mm
- 2S : L = 18 mm
- 3N : L = 21 mm
- 4N : L = 21 mm

Usage

Reaming



Max. allowable speed
1000±500 min⁻¹

Magnified view of the cutting flute



Cross-section shape



Intended use

To remove gutta-percha.

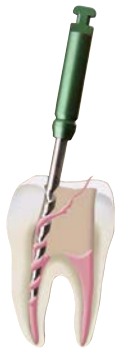
Four combinations

- 1S → 3N
- 1S → 4N
- 2S → 3N
- 2S → 4N

Superior Results!

Two simple steps

Faster, easier,
and more efficient



STEP 1

Remove gutta-percha from the root canal orifice up to the middle part of the root canal.



STEP 2

Remove gutta-percha from the middle part of the root canal up to 1-2 mm below the apex.



Cases * Photos provided by Dr. Yasuhisa Tsujimoto, Nihon Univ. School of Dentistry at Matsudo, Dept. of Dentistry, JAPAN.









- NOTE:
- Stress-free
 - Easy to use
 - Fast & dynamic removal
 - No need for solvents! removal


Max. allowable speed
1000±500/min⁻¹

Peeso Reamers

■ Smallest available unit: 6 pcs per pack ■ Assortment: #1-6 ■ Material: Stainless steel

Size	Maximum diameter of working portion (mm)	
1	0.70	
2	0.90	
3	1.10	
4	1.30	
5	1.50	
6	1.70	

Length of operative part(L)



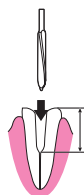
L ₁	L ₂	L ₃
28 mm	15 mm	6.5 mm
32 mm	19 mm	8.5 mm
38 mm	25 mm	8.5 mm

Magnified view of the cutting flute



Intended use







Max. allowable speed: 1200 min⁻¹
Rotary cutting instruments attached to a micro-motor



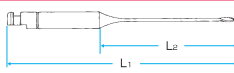
The Peeso Reamer is used to flare a root canal orifice into a funnel shape. It cuts more linearly than the Gates Drill.

Gates Drills

■ Smallest available unit: 6 pcs per pack ■ Assortment: #1-6 ■ Material: Stainless steel

Size	Maximum diameter of working portion (mm)	
1	0.50	
2	0.70	
3	0.90	
4	1.10	
5	1.30	
6	1.50	

Length of operative part(L)



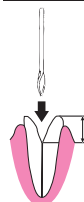
L ₁	L ₂
28 mm	15 mm
32 mm	19 mm
38 mm	25 mm

Magnified view of the cutting flute



Intended use

Max. allowable speed: 800 min⁻¹
Rotary cutting device attached to a micro-motor







The Gates Drills are used to flare a root canal orifice into a funnel shape or flare one-third of the coronal side of a root canal.

Mainly used to flare a root canal orifice into a funnel shape or to flare one third of the coronal side of a root canal.

Paste Carriers

■ Smallest available unit: 4 pcs per case ■ Assortment: #25-40 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
25	0.25	
30	0.30	
35	0.35	
40	0.40	

The base of the working portion is shaped like a spring to properly absorb vibration.

Paste Carriers is also called lentulo or filler.

Length of operative part(L)



L = 21 mm, 25 mm, 29 mm

Magnified view of the cutting flute









Max. allowable speed: 800 min⁻¹

Intended use

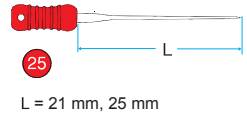
To fill a root canal with filling material or to apply agent to a root canal.

Spreaders

■ Smallest available unit: 6 pcs per pack ■ Assortment: #15-40 ■ Material: Stainless steel ■ Taper: .02

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	

■ Length of operative part(L)



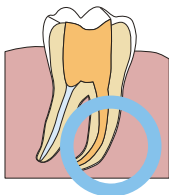
■ Magnified view of the cutting flute



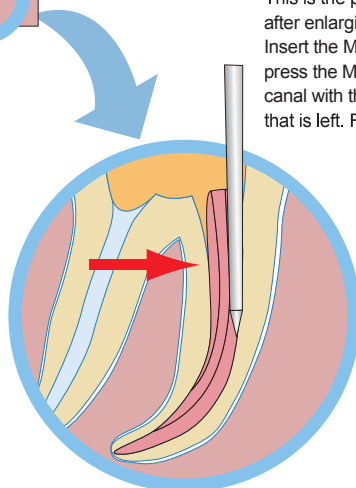
■ Intended use

To fill a root canal.

Usage



After enlarging the root canal









Lateral condensation of root canal filling

This is the process of filling root canal with a Master Point and sealer after enlarging and cleaning of the root canal space is completed. Insert the Master Point, coated with sealer, into the root canal. Now press the Master Point coronally and laterally into the walls of the root canal with the Spreader. Now insert an Accessory Point into the gap that is left. Repeat this process to tightly fill the root canal space.

Flare Finger Spreaders

■ Smallest available unit: 6 pcs per case ■ Assortment: #15-40 ■ Material: Stainless steel ■ Taper: .05

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	

■ Length of operative part(L)



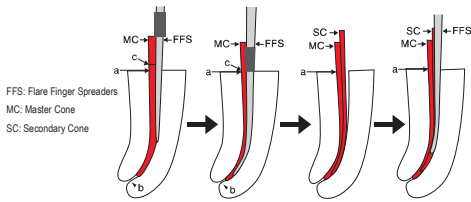
L = 21 mm, 25 mm

■ Magnified view of the cutting flute



■ Intended use







To fill a root canal.



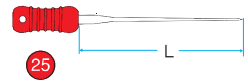
Because of .05 taper, apply light pressure to secure the necessary gap for the Accessory Point.

Pluggers

■ Smallest available unit: 6 pcs per case ■ Assortment: #15-40 ■ Material: Stainless steel ■ Taper: 0.35

Size	Tip diameter (mm)	
15	0.15	
20	0.20	
25	0.25	
30	0.30	
35	0.35	
40	0.40	

■ Length of operative part(L)



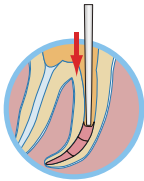
L = 21 mm, 25 mm

■ Magnified view of the cutting flute



■ Intended use

To fill a root canal.



Vertical condensation technique of root canal filling

This is the filling of a root canal by applying sealer to the root canal, heating the appropriate Master Point, and then vertically applying pressure with a Plugger.