

CONTRA-ANGLES

CONTRA-ANGLES

Which Handpiece?

Choose the handpiece that matches your hand.



	Ti-Max Z	Ti-Max Z45L	nano series	Ti-Max X	S-Max M	FXseries
Grade	PREMIUM	SPECIAL	SPECIAL	ADVANCED	ADVANCED	BASIC
Head Size	ø8.9 x H 13.4 mm (Super mini)	ø9.6 x H 14.5 mm	ø8.9 x H 13.4 mm (Super mini)	ø10.0 x H 14.6 mm	ø10.0 x H 14.6 mm	ø9.6 x H 13.4 mm
Body	Titanium	Titanium	Titanium	Titanium	Stainless	Stainless
DURAGRIP	●	●	●			
DURACOAT				●		
DLC Coating	●	●	●			
Anti Heat System	●	●	●	●	●	
Ceramic Bearings	●	●	●	●	●	
Cellular Glass Optics	●	●	●	●	●	
Clean Head System	●	●	●	●	●	●
Push Button Chuck	●	●	●	●	●	●
Water Spray	Quattro	Quattro (Water Jet / Mist)	Quattro	Quattro	Quattro	
Microfilter	●	●	●	●		
Ergo Grip	●	●	●	●	●	●



Ti-Max Z
Contra-angle Series

DURABLE

A Stunningly Durable and Reliable Handpiece

NSK has combined advanced design and world-class processing technology to create incredibly durable instruments. The gear is coated with special diamond-like carbon to make wear resistance up to five times greater than on previous models. NSK's advanced technologies have boosted sterilization resistance, delivering even better reliability for dental practices.



COMFORT

The Ultimate in Handpieces The Result of Invaluable Clinical Feedback

The handpiece is more user-friendly, cleaner, and safer. By reviewing everything from the shape of the instrument, to hygiene aspects and safety features using the most advanced technologies, we have made the contra-angle more ergonomic and comfortable for the clinician and safer for the patient, reducing stress for clinicians and patients alike. Only NSK's Ti-Max Z premium range offers these unique features.



ADVANCED TECHNOLOGY

Amazingly Silent Operation

Amazing silence and minimal vibration: The marriage of micro-precision parts and gears has lowered noise and vibration even more to provide comfort for clinicians and patients alike.



Anti Heat System (Z95L, Z85L, Z84L)

Our proprietary Anti Heat System dramatically reduces the heat typically experienced with speed increasing contra-angles. This feature improves patient safety without compromising manoeuvrability.

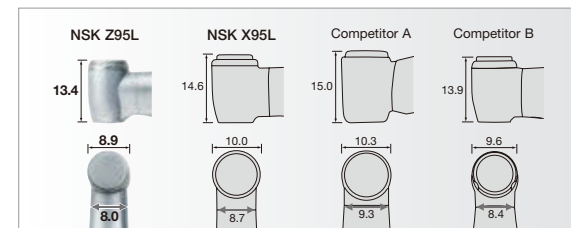
OUTSTANDING OPERABILITY

The Smallest Head

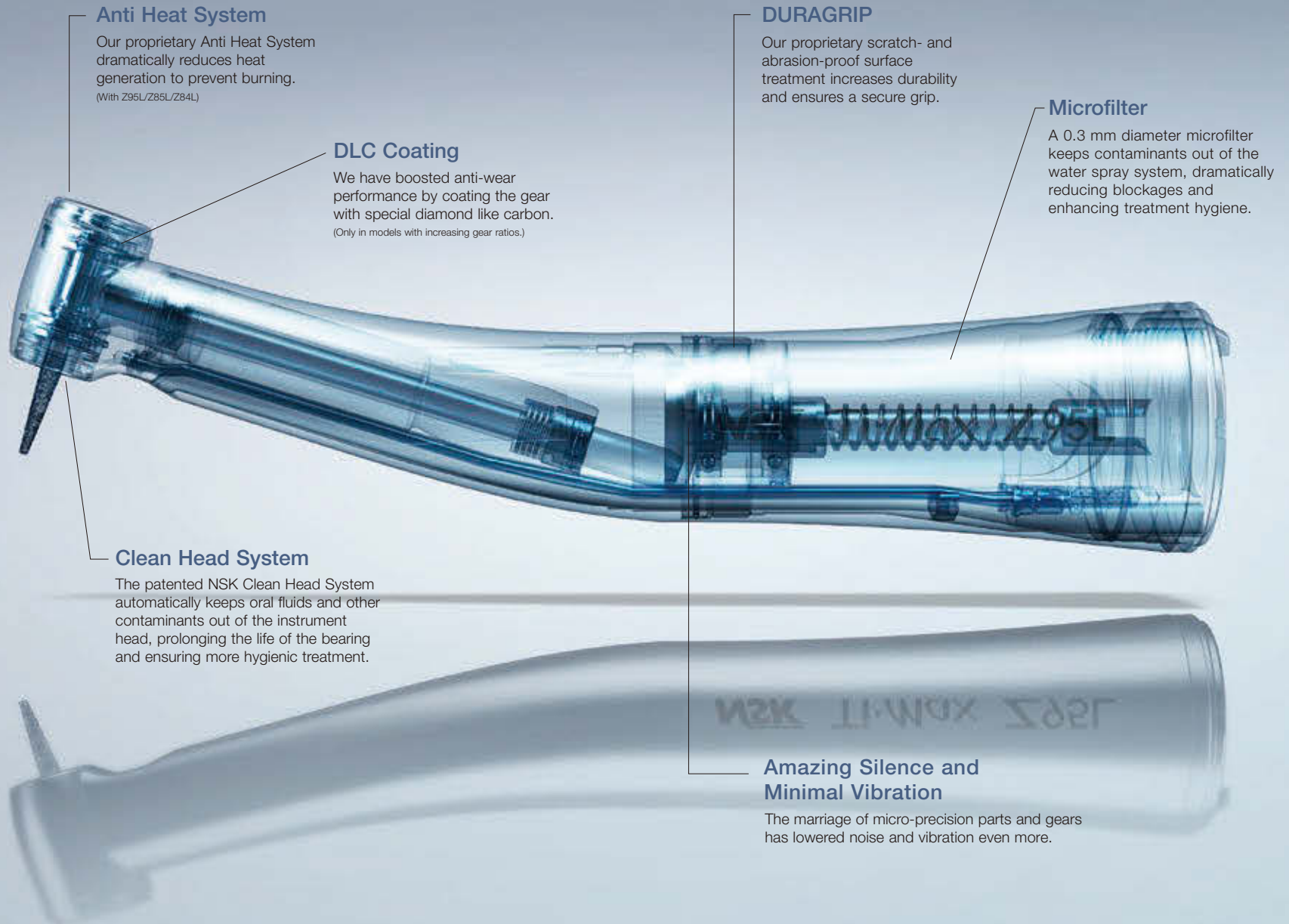
The head is angled 2° more than on the X95L for much better visibility and accessibility even for molars and other areas that are difficult to treat.

The Slimmest Neck

The slimmer neck provides much better visibility compared to existing products, delivering wide visibility of all treatment areas.



TECHNOLOGY & FUNCTION



Anti Heat System

Our proprietary Anti Heat System dramatically reduces heat generation to prevent burning.
(With Z95L/Z85L/Z84L)

DLC Coating

We have boosted anti-wear performance by coating the gear with special diamond like carbon.
(Only in models with increasing gear ratios.)

DURAGRIP

Our proprietary scratch- and abrasion-proof surface treatment increases durability and ensures a secure grip.

Microfilter

A 0.3 mm diameter microfilter keeps contaminants out of the water spray system, dramatically reducing blockages and enhancing treatment hygiene.

Clean Head System

The patented NSK Clean Head System automatically keeps oral fluids and other contaminants out of the instrument head, prolonging the life of the bearing and ensuring more hygienic treatment.

Amazing Silence and Minimal Vibration

The marriage of micro-precision parts and gears has lowered noise and vibration even more.

Ti-Max Z PREMIUM

- Titanium Body with Scratch Resistant DURAGRIP
- Cellular Glass Optics • Push Button Chuck
- Clean Head System (Exclude Z24L) • Microfilter



Quattro Spray



Optic MODEL Z95L ORDER CODE C1034

- 1:5 Increasing**
- Exceptional Durability • Quattro Spray
 - For FG burs (ø1.6) • Ceramic Bearings • DLC Coating
 - Anti Heat System • Max Speed: 200,000 min⁻¹

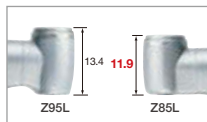


Single Spray



Optic MODEL Z85L ORDER CODE C1062

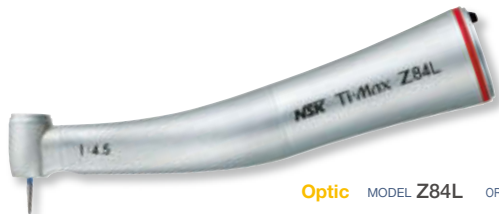
- 1:5 Increasing**
- Exceptional Durability • Single Spray • Miniature Head
 - For FG burs (ø1.6) • Ceramic Bearings • DLC Coating
 - Anti Heat System • Max Speed: 200,000 min⁻¹
- *Short Shank burs only



Head size comparison
Z85L offering extraordinary visibility and accessibility.

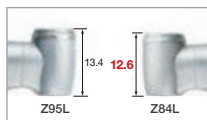


Quattro Spray



Optic MODEL Z84L ORDER CODE C1135

- 1:4.5 Increasing**
- Exceptional Durability • Quattro Spray • Miniature Head
 - For FG burs (ø1.6) • Ceramic Bearings • DLC Coating
 - Anti Heat System • Max Speed: 180,000 min⁻¹
- *Short Shank burs only



Head size comparison
Z84L offering extraordinary visibility and accessibility.



Single Spray



Optic MODEL Z25L ORDER CODE C1038

- 1:1 Direct Drive**
- Single Spray • For CA burs (ø2.35)
 - Max Speed: 40,000 min⁻¹



Optic MODEL Z24L ORDER CODE C1126

- 1:1 Direct Drive**
- Single Spray • Miniature Head
 - For CA burs (ø2.35) • Max Speed: 40,000 min⁻¹



Optic MODEL Z15L ORDER CODE C1039

- 4:1 Reduction**
- Single Spray • For CA burs (ø2.35)
 - Max Speed: 10,000 min⁻¹



Optic MODEL Z10L ORDER CODE C1040

- 16:1 Reduction**
- Single Spray • For CA burs (ø2.35)
 - Max Speed: 2,500 min⁻¹

Ti-Max Z45L SPECIAL

45-degree Angled Head Supplies Superior Accessibility and Maximum Visibility

The world's first 45-degree contra-angle, Ti-Max Z45L provides effortless access to hard-to-reach molars that a standard contra-angle simply can't match. The slim-form Ti-Max Z45L also offers excellent visibility and high operability, creating more space between adjacent teeth and the handpiece body. Ti-Max Z45L's powerful and consistent cutting shortens treatment time for time-consuming sectioning and third-molar extractions compared to standard contra-angles, dramatically reducing stress for both clinicians and patients.



- Titanium Body with Scratch Resistant DURAGRIP
- 45° Angle Head
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray (with two way spray function)
- Microfilter
- Anti Heat System
- DLC Coating



Optic MODEL Z45L ORDER CODE C1064

1:4.2 Increasing • For FG burs (ø1.6)
• Max Speed: 168,000 min⁻¹

CONTRA-ANGLES



Superior Accessibility

The 45-degree angled head allows easy access to the molar region, minimizing interference from the front teeth and adjacent teeth.



Sectioning a Mandibular Left Impacted Third Molar



Caries Removal from a Maxillary Left Lateral Incisor's Cervical Area



Caries Removal from a Maxillary Left Second Premolar on Palatal Side



Clarifying the Root Canal Orifice of a Mandibular Right Second Premolar



Two-Way Spray Function

The world's first two-way spray function allows you to instantly choose between a mist or jet spray depending on the conditions and procedure. The water jet spray prevents subcutaneous emphysema in surgical procedures, and the mist spray effectively cools the bur while cutting.



2015 Edison Awards Gold Award Winner

The Ti-Max Z45L, the premium model in NSK's Contra-angle Series, won the gold in the newly-established "Dental & ENT Surgical Tools" category of the 2015 Edison Awards as the world's first 45-degree contra-angle.

nano series

Shorter, Perfectly Balanced

Shorter, lighter and perfectly balanced, "nano series" instruments are designed to be natural extensions of the clinician's hand, ensuring smoother procedures. Even during implant operations that require delicate and precise movements, a "nano series" faithfully mirrors the user's intent. NSK continues to challenge the limits of manufacturing and pioneer next-generation contra-angles.



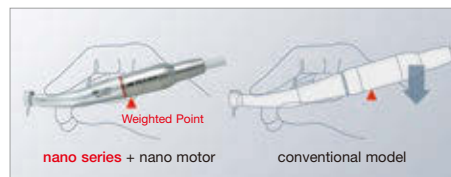
Features

- Perfect Balance
- Exceptionally Small Head and Slim Body
- Clear Visibility and Easy Access
- Amazingly Quiet Operation

Perfect Balance

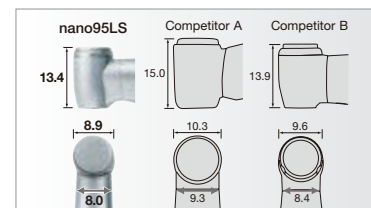
NSK's nano series preserves the high performance NSK contra-angles are known for, while these new instruments are approximately 10 percent smaller and lighter than conventional models. Yet, in combination with NLX nano micromotor nano series gives you the ease of manoeuvrability and accuracy you are used to from your air-turbine.

Reducing size and weight shifts the center of gravity to an optimal position, dramatically reducing fatigue during procedures and improving your fingertip dexterity.



Smaller and Slimmer

nano95LS has smaller head and slimmer neck dimensions.



Outstanding Durability

The nano95LS gear shapes have been designed using High Spec 3D simulation software to achieve optimal results in terms of durability and noise level minimization. In addition, special DLC Coating (Diamond-Like-Carbon) is applied to the gears, dramatically increasing durability.

nano Series instruments are compatible with NSK motor line up (NLX nano, NLX plus, M40LED, NBX, NBX N, X205L, M205LG and SGL70M micromotors) and other motors with insert less than 23 mm.

nano series SPECIAL

- Titanium Body with Scratch Resistant DURAGRIP
- Cellular Glass Optics • Clean Head System
- Push Button Chuck (Exclude nano65LS)



Quattro Spray



Optic MODEL nano95LS ORDER CODE C1099

- 1:5 Increasing**
- Exceptional Durability • Quattro Spray
 - For FG burs (ø1.6) • Ceramic Bearings
 - Microfilter • Anti Heat System • DLC Coating
 - Max Speed: 200,000 min⁻¹



Single Spray



Optic MODEL nano25LS ORDER CODE C1100

- 1:1 Direct Drive**
- Single Spray • For CA burs (ø2.35)
 - Microfilter • Max Speed: 40,000 min⁻¹



Optic MODEL nano15LS ORDER CODE C1101

- 4:1 Reduction**
- Single Spray • For CA burs (ø2.35)
 - Microfilter • Max Speed: 10,000 min⁻¹

Straight Handpiece



Optic MODEL nano65LS ORDER CODE H1048

- 1:1 Direct Drive**
- Single Spray • For HP / CA burs (ø2.35)*
 - Max Speed: 40,000 min⁻¹

*Need to insert the supplied bur stopper

Ti-Max X



Clean Head System

The patented NSK Clean Head System is a special mechanism designed to automatically prevent the entry of oral fluids and other contaminants into the handpiece head prolonging the life of the bearings.



Ceramic Bearings

Ceramic Bearings are 25% harder than conventional steel bearings but are only half the weight. Because frictional wear between the ball bearings and the bearing retainer is significantly reduced the efficiency and durability is significantly increased. (X95L / X95)

Ti-Max X ADVANCED

- Titanium Body with Scratch Resistant DURACOAT
- Cellular Glass Optics • Clean Head System
- Push Button Chuck (Exclude X65L / X65)
- Microfilter (Exclude X65L / X65)



Quattro Spray



Optic MODEL X95L ORDER CODE C600
Non-Optic MODEL X95 ORDER CODE C610

- 1:5 Increasing** • Quattro Spray • For FG burs (ø1.6) • Ceramic Bearings
 • Anti Heat System • Max Speed: 200,000 min⁻¹



Single Spray



Optic MODEL X25L ORDER CODE C601
Non-Optic MODEL X25 ORDER CODE C611

- 1:1 Direct Drive** • Single Spray • For CA burs (ø2.35)
 • Max Speed: 40,000 min⁻¹



Optic MODEL X15L ORDER CODE C602
Non-Optic MODEL X15 ORDER CODE C612

- 4:1 Reduction** • Single Spray • For CA burs (ø2.35)
 • Max Speed: 10,000 min⁻¹

Straight Handpiece



Optic MODEL X65L ORDER CODE H273
Non-Optic MODEL X65 ORDER CODE H274

- 1:1 Direct Drive** • Single Spray • For HP burs (ø2.35)
 • For CA burs (ø2.35)* • Max Speed: 40,000 min⁻¹
 *Need to insert the supplied bur stopper

CONTRA-ANGLES

Ti-Max X ADVANCED

- Titanium Body with Scratch Resistant DURACOAT
- Cellular Glass Optics
- Microfilter (Exclude X57L / X57 / X95EX)



Single Spray



Optic MODEL X12L ORDER CODE C606
Non-Optic MODEL X12 ORDER CODE C616

- 10:1 Reduction**
- Single Spray
 - For CA burs (ø2.35)
 - Clean Head System
 - Push Button Chuck
 - Max Speed: 4,000 min⁻¹

External Water Spray



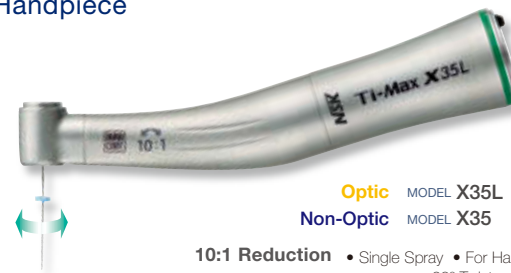
Quattro Spray



Non-Optic MODEL X95EX ORDER CODE C1072

- 1:5 Increasing**
- Clean Head System
 - Ceramic Bearings
 - Push Button Chuck
 - Quattro Spray
 - For FG burs (ø1.6)
 - Max Speed: 200,000 min⁻¹

Endodontic Handpiece



Optic MODEL X35L ORDER CODE C620
Non-Optic MODEL X35 ORDER CODE C624

- 10:1 Reduction**
- Single Spray
 - For Hand File & Engine File
 - 60° Twist
 - Push Button Chuck
 - Max Speed: 4,000 min⁻¹

MODEL QF Adaptor ORDER CODE C877701

Prophylaxis Handpiece



Special Dust Proof



Optic MODEL X57L ORDER CODE C609
Non-Optic MODEL X57 ORDER CODE C619

- 16:1 Reduction**
- For Screw-in Cups and Brushes
 - 360° Rotation
 - w/o Spray
 - Max Speed: 2,500 min⁻¹



With Tip Lock Mechanism



Optic MODEL X55L ORDER CODE C608
Non-Optic MODEL X55 ORDER CODE C618

- 4:1 Reduction**
- Single Spray
 - For Profin / EVA Tips
 - Vertical Reciprocating (Stroke Length 1.4 mm)
 - Lamineer Tips not included
 - Max Speed: 10,000 min⁻¹

S·Max M

Incomparable Powerful Cutting and Superb Grip

S-Max M Series contra-angles allow cost-effective powerful cutting. Durable and quiet the ergonomic and well balanced instrument allows good accessibility and has superb grip. The NSK S-Max M Series has been designed without compromise. Experience it for yourself.



S·Max M

ADVANCED

- Stainless Steel Body
- Cellular Glass Optics
- Clean Head System
- Push Button Chuck (Exclude M65)



Quattro Spray



Optic MODEL M95L ORDER CODE C1023
Non-Optic MODEL M95 ORDER CODE C1026

- 1:5 Increasing** • Quattro Spray • For FG burs (ø1.6) • Ceramic Bearings
 • Anti Heat System • Max Speed: 200,000 min⁻¹



Single Spray



Optic MODEL M25L ORDER CODE C1024
Non-Optic MODEL M25 ORDER CODE C1027

- 1:1 Direct Drive** • Single Spray • For CA burs (ø2.35)
 • Max Speed: 40,000 min⁻¹



Optic MODEL M15L ORDER CODE C1025
Non-Optic MODEL M15 ORDER CODE C1028

- 4:1 Reduction** • Single Spray • For CA burs (ø2.35)
 • Max Speed: 10,000 min⁻¹

Straight Handpiece



Non-Optic MODEL M65 ORDER CODE H1008

- 1:1 Direct Drive** • Single Spray • For HP burs (ø2.35)
 • For CA burs (ø2.35)* • Max Speed: 40,000 min⁻¹
 *Need to insert the supplied bur stopper



Washable in the thermos disinfectant



Autoclavable up to 135°C

FX series

Integrated Handpieces : Ergonomic : Functional : Reliable

After 35 years of outstanding global success, the classic NSK EX handpiece series has now evolved into a new stage. - NSK FX handpiece series - a modernization of the EX series. The traditional NSK simple design technology, functional reliability, durability, and cost effective pricing still remains, but FX has been updated to an integrated design in response to modern demands.



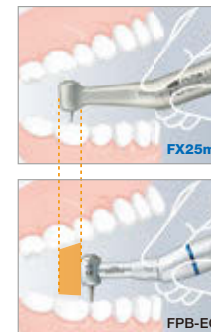
Durable Stainless Steel Body

Stainless is lighter and more durable than brass. Handpiece weight is considerably reduced and ergonomic hand comfort is greatly enhanced with a realistic tactile sense.

Improved Visibility : Ideal Balance

The extra slim head and body design greatly improves direct and indirect visibility to the oral operational field. This includes increased visibility of even difficult access areas in the oral cavity.

The slim, lighter weight design delivers an entirely comfortable ergonomic balance, especially when used in conjunction with the new NSK FX Mini Air motor.



Maximum accessibility

Easy Cartridge Replacement

In some instances cartridges are easily replaced in surgery with the accessory tools supplied with the new product. Service costs and downtime are reduced (FX25m).



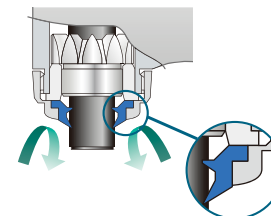
Clean Head System

The patented NSK Clean Head System is a special mechanism designed to automatically prevent the entry of oral fluids and other contaminants into the handpiece head prolonging the life of the bearings. (FX25m / FX15m / FX65m)



FX57m Paste Defense System

The prophylaxis handpiece head incorporates the unique NSK Paste Defense System which prevents dust and polishing paste debris from entering the handpiece. In addition, the NSK DLC coating on the rotor prevents possible breakage caused by surface abrasions from the polishing paste. These are some features that illustrate extended FX handpiece durability.



FX series BASIC

General Applications Handpiece

External Water Spray

1:1 Direct Drive



Non-Optic MODEL **FX25m** ORDER CODE **C1052001**

- For CA burs (ø2.35) • Push Button Chuck
- Stainless Steel Body • Clean Head System
- Ball Bearing • Max Speed: 40,000 min⁻¹

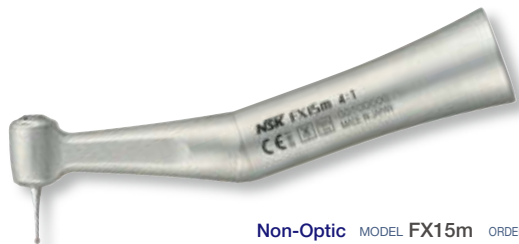
1:1 Direct Drive



Non-Optic MODEL **FX22** ORDER CODE **C1129**

- For CA burs (ø2.35) • Latch type
- Max Speed: 30,000 min⁻¹

4:1 Reduction



Non-Optic MODEL **FX15m** ORDER CODE **C1053001**

- For CA burs (ø2.35) • Push Button Chuck
- Stainless Steel Body • Clean Head System
- Ball Bearing • Max Speed: 10,000 min⁻¹

Endodontic Handpiece

External Water Spray

16:1 Reduction



Non-Optic MODEL **FX75m** ORDER CODE **C1055001**

- Miniature Head • For engine files • Stainless Steel Body
- 360° Rotation • Push Button Chuck
- Max Speed: 2,300 min⁻¹

Prophylaxis Handpiece

4:1 Reduction



Paste Defense System



Non-Optic MODEL **FX57m** ORDER CODE **C1054001**

- For screw-in cups and brushes • Stainless Steel Body
- 360° Rotation • w/o Spray • Paste Defense System
- Max Speed: 5,000 min⁻¹

Straight Handpiece

1:1 Direct Drive



Non-Optic MODEL **FX65m** ORDER CODE **H1014001**

- For HP burs (ø2.35) • Stainless Steel Body
- Clean Head System • Max Speed: 40,000 min⁻¹



Washable in the thermodisinfecteur (FX25m, FX15m)



Autoclavable up to 135°C



Washable in the thermodisinfecteur



Autoclavable up to 135°C

EX Series

BASIC

Heads for General Application

Non-Optic External Water Spray



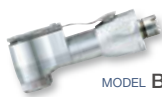
MODEL **FPB-Y** ORDER CODE **C875**

- For CA burs (ø2.35) • Clean Head System
- Push Button Chuck • Ball Bearing
- Max Speed: 40,000 min⁻¹



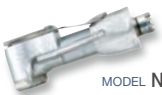
MODEL **NAC-Y** ORDER CODE **C032002**

- For CA burs (ø2.35) • Latch type
- Max Speed: 30,000 min⁻¹



MODEL **BB-Y** ORDER CODE **C037**

- For CA burs (ø2.35) • Latch type
- Ball Bearing • Max Speed: 40,000 min⁻¹



MODEL **NBBW-Y** ORDER CODE **C211**

- For CA burs (ø2.35) • Latch type • Ball Bearing
- With Water Nozzle • Max Speed: 40,000 min⁻¹



MODEL **NM-Y** ORDER CODE **C247**

- Miniature Head • Latch type
- For CA burs (ø2.35) • Max Speed: 30,000 min⁻¹



MODEL **FFB-Y** ORDER CODE **C884**

- For FG burs (ø1.6) • Clean Head System
- Push Button Chuck • Max Speed: 40,000 min⁻¹



MODEL **NRS2-Y** ORDER CODE **C549**

- 10:1 Reduction • For CA burs (ø2.35)
- Clean Head System • Push Button Chuck
- Max Speed: 3,000 min⁻¹

Heads for Prophylaxis Application

Non-Optic



MODEL **AR-Y (S)** ORDER CODE **C187**

- For screw-in cups and brushes
- Max Speed: 5,000 min⁻¹



MODEL **AR-Y (K)** ORDER CODE **C188**

- For snap-on cups
- Max Speed: 5,000 min⁻¹



MODEL **EVA-Y** ORDER CODE **C235**

- For Eva tips • Vertical Reciprocating (Stroke Length 1.4 mm)
- Max Speed: 10,000 min⁻¹

Heads for Endodontic Application

Non-Optic



MODEL **MP-Y** ORDER CODE **C547**

- Miniature Head • Push Button Chuck
- Max Speed: 20,000 min⁻¹



MODEL **MPA-Y** ORDER CODE **C548**

- Connection for Apex locator (For long shank)
- Miniature Head • Push Button Chuck
- Max Speed: 20,000 min⁻¹



MODEL **MPAS-Y** ORDER CODE **C882**

- Connection for Apex locator (For short shank)
- Miniature Head • Push Button Chuck
- Max Speed: 20,000 min⁻¹



MODEL **TEQ-Y** ORDER CODE **C849**

- 80° Twist • For engine files (ø2.35)
- Push Button Chuck
- Max Speed: 4,000 min⁻¹



MODEL **TEP-Y** ORDER CODE **C837**

- 60° Twist • For hand files
- Push Button Chuck
- Max Speed: 4,000 min⁻¹

Shanks



MODEL **EC-30** ORDER CODE **C100008**

MODEL **EC-30M** ORDER CODE **C100007**

- 1:1 Direct Drive



MODEL **ER4** ORDER CODE **C634**

MODEL **ER4M** ORDER CODE **C634002**

- 4:1 Reduction



MODEL **ER10** ORDER CODE **C635**

- 10:1 Reduction



MODEL **ER16** ORDER CODE **C636**

- 16:1 Reduction



MODEL **ER64** ORDER CODE **C637**

- 64:1 Reduction

■ Shanks and heads are sold separately. You can combine Shanks and heads according to your wishes and the indication.



FPB-Y, FFB-Y, NRS2-Y, AR-Y (S), AR-Y (K) and EVA-Y can be washed in the thermocycler.

135°C Autoclavable up to 135°C



MP-Y, MPA-Y, MPAS-Y, TEP-Y, EC-30M and ER4M can be washed in the thermocycler.

135°C Autoclavable up to 135°C

EX Series

BASIC

External Water Spray

1:1 Direct Drive



Non-Optic MODEL **NAC-EC** ORDER CODE **Y110148**

- For CA burs (ø2.35)
- Latch type
- Max Speed: 30,000 min⁻¹



MODEL **Spray Nozzle** ORDER CODE **C032701**

- For NAC (Optional)

Straight Handpieces

1:1 Direct Drive



Non-Optic MODEL **EX-6B** ORDER CODE **H260001**

- For HP burs (ø2.35)
- Clean Head System
- Max Speed: 40,000 min⁻¹



Non-Optic MODEL **EX-6D** ORDER CODE **H267001**

- For HP burs (ø2.35)
- Clean Head System
- Max Speed: 40,000 min⁻¹

4:1 Reduction



Non-Optic MODEL **EX-5B** ORDER CODE **H262**

- For HP burs (ø2.35)
- Clean Head System
- Max Speed: 10,000 min⁻¹



MODEL **Spray Nozzle** ORDER CODE **H019711**

- For EX-6B, EX-5B (Optional)

isoE-LUX Light Probe



Optic MODEL isoE-LUX ORDER CODE Z1265

- E-Type Optic Motor Connection
- Glass Fiber Optics
- Stainless Steel Body



Washable in the
thermodisinfectior



135°C Autoclavable
up to 135°C