

NAKANISHI HAND-TOOL

Emax EVOLUTION

Alt-Speed / SMS



Headquarters · Factory

700 Shimohinata, Kanuma, Tochigi 322-8666, Japan
TEL +81-289-64-3520 FAX +81-289-62-1135

www.nakanishi-inc.com

NAKANISHI INC. 2019

PR-K329E Ver.2 '19.03.03. ©

Specifications and design are subject to change without notice.



Nature of Tochigi, Japan

ADVANCED HIGH PERFORMANCE BRUSHLESS MICRO-GRINDER

Emax
EVolution Series

Emax
EVolution SERIES ◀◀

“Tough Torque”

“Flashing Live Load Indicator”

“No need of changing carbon brushes”
(Brushless motor)



Code No.	8233 (120V)	Model	EV410-120
Code No.	8225 (230V)	Model	EV410-230

*Please check the power source plug type (P.58).

- Standard Equipment
- Micro Grinder (IR-310+ENK-410S) : 1 pc.
 - Collet ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each
 - Controller (NE249) : 1 pc.
 - Accessories : Handpiece Holder : 1 pc., Handpiece Stand : 1 pc.
Power Supply Cord : 1 pc., Spanner (7 x 5.1) : 1 pc.
Pin Spanner (K-233) : 2 pcs., L Shaped Spanner (9) : 1 pc.

*Torque set → P.22



Application Examples



Tool : Electroplated Diamond Burs
→ Please see the NAKANISHI “POLISHING TOOLS” Catalog.



Tool : Diamond Grinding Discs
→ Please see the NAKANISHI “POLISHING TOOLS” Catalog.



Tool : Flap Wheels
→ Please see the NAKANISHI “POLISHING TOOLS” Catalog.



Tool : Abrasive Belts → P.72



Tool : Sand Paper Disk → P.69



Tool : Felt Bobs
→ Please see the NAKANISHI “POLISHING TOOLS” Catalog.

ADVANCED HIGH PERFORMANCE CONTROLLER

Emax
EVOLution Controller

Advanced Control Function

Upgraded Digital Display. EVOLUTION on Speed Control Volume with Flash Load Indicator.



Motor speed digital display

Load Meter

- Continuous load area
- Intermittent load area
- Overload

Forward / Reverse Select Switch
Forward/Reverse rotation can be selected.

ø12mm Speed Control Volume
Easy to operate by one finger

Motor A
ON/OFF Function

Emax EVOLution Controller			
Code No.	8224 (120V)	Model	NE249 120
Code No.	8227 (230V)	Model	NE249 230

Specifications	
Description	Emax EVOLution Controller
Power Source	AC120/230V, 50-60Hz
Dimensions	W130 x D254 x H97 mm
Weight	2.3 kg

Accessories : Handpiece Holder : 1 pc., Handpiece Stand : 1 pc.
Power Supply Cord : 1 pc.

Diversity for work efficiency

2 Motors of A and B can be connected, and select the suited motor for work situation.
(Simultaneous motor operation is not allowable)



Memory Speed Function FiXspeed®

An exclusive new feature of the Emax EVOLution, the FiXspeed® system allows everyone easily to fix speed of motor A and B independently prior to operate. For example motor A can be set to maintain the speed set by the FiXspeed® system while motor B has variable control using a foot controller. This function brings for unprecedented workability.

Auto Cruise Function

The controller is equipped with an Auto Cruise Function. While using foot controller for work, anyone could fix the motor at any speed by the embedded motor switch. Once speed is set, foot controller is not required. This function eliminates foot fatigue during operation.



Memory Speed Function FiXspeed®

Motor B
ON/OFF Function

⚠ Never connect to E-max Series motor.
*Please check the power source plug type (P.58).

Advanced User Friendly Design

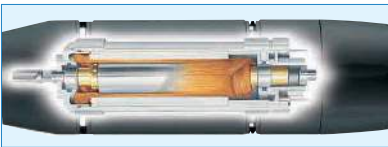
New Industrial Design. EVOLUTION from Tower-type solid E-Max to User-oriented Identity. Design meets Performance.



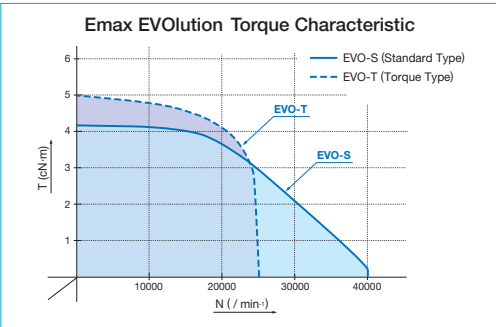
ADVANCED HIGH PERFORMANCE BRUSHLESS MOTOR

Emax
EVOLution Motor

Excellent Durability



- High performance brushless motor eliminates the need of changing carbon brushes.
- RPM variation is minimal even when load changes. Allowing difficult and stable cutting in stress free motion. Suitable performance for finish grinding.
- Provides superior quietness and smoothness from low speed to high speed.



Standard Type Motor

Code No.	8086
Model	ENK-410S

1,000~40,000 min⁻¹

- Excellent combination of high speed, lightweight, small diameter and high torque. This lightweight and compact general-use type is perfect for precision work.

- Max. Power : 73W
- Max. Torque : 4.3 cN·m
- With Straight Cord : 1.5 m
- Weight : 90 g (w/o cord)

Standard Accessories
• Pin Spanner (K-233) : 1 pc.

⚠ Never connect to E-max Series controller.



Torque Type Motor

Code No.	8087
Model	ENK-250T

1,000~25,000 min⁻¹

- Combines the best of both high speed and high torque. It is perfect for applications requiring large burs.

- Max. Power : 76 W
- Max. Torque : 4.8 cN·m
- With Straight Cord : 1.5 m
- Weight : 147 g (w/o cord)

⚠ Never connect to E-max Series controller.



2 Types of Motors

- Provides choice of various applications.
- Standard Type Motor 1,000~40,000 min⁻¹ (ENK-410S) **Blue**
 - Torque Type Motor 1,000~25,000 min⁻¹ (ENK-250T) **Green**

*Exclusive use for Emax EVOLution

NAKANISHI Smart Switch

The switch provides a click sensation. A confirmation tone is reacted by the controller when the switch is operated. The motor type is distinguishable by the switch color.



Code No.	Model
----------	-------

Attachment

*Interchangeable with attachments form the E-max and ROTUS system.

1147 IR-310 (P.13)



Ring Type

1005 IH-300 (P.21)



Lever Type

2811 IG-400 (P.21)



Straight Type

1016 HG-200 (P.21)



6 mm Torque Type^{*1}

1017 BMH-300 (P.14)



Long Type

1012 MFC-300S (P.15)



90° Mini Angle Type

1013 MFC-300M (P.15)



90° Mini Angle Type (Very Small Head)

1006 IC-300 (P.16)



90° Angle Type

1014 KC-300 (P.16)



50° Angle Type

LUSTER
1302 LS-100 (P.21)



Pistol-Type Polisher
(Reciprocating motion)

MINI-LUSTER
1307 ML-8 (P.17)



Pencil-Type Reciprocating Polishing Finisher
(Reciprocating motion)

SWING-LUSTER
1380 SLS-16 (P.18)



Pencil-Type Reciprocating Polishing Finisher
(Right to Left motion)

Hammer Action Type
8060 HA-500 (P.21)



Engraving and Ornament Processing Work Hammer

FINE BELT SANDER
1146 KBS-101 (P.19)



Small-sized Handy Belt Sander



LUSTER
1483 NLS-110 (P.20)
Exclusive use for Emax EVOLUTION

- Wide selection of attachments available depending on the application.

Speed Reducer·Extension Joint



Extension Joint
1015 CN-01 (P.22)



1/4 Speed Reducer
1009 RG-01 (P.22)



1/15 Speed Reducer
1010 RG-02 (P.22)

- May be connected between the motor and the attachment when required increased torque.

Motor

Emax EVolution Series



• Standard Type Motor with Cord (P.10)
8086 ENK-410S 1,000~40,000 min⁻¹



• Torque Type Motor with Cord (P.10)
8087 ENK-250T 1,000~25,000 min⁻¹

Exclusive use for Emax EVOLUTION

Controller

Emax EVolution



8224 (120V) NE249 120
8227 (230V) NE249 230
(P.9)

• Foot Controller



8106 FC-64
(P.22)

Sets



Emax EVolution Standard Set

Code No.	Model
8233 (120V)	EV410-120
8225 (230V)	EV410-230

- Standard Equipment
- Micro Grinder (IR-310+ENK-410S) : 1 pc.
 - Collet ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each
 - Controller (NE249) : 1 pc.
 - Accessories : Handpiece Holder : 1 pc.
Handpiece Stand : 1 pc.
Power Supply Cord : 1 pc.
Spanner (7 x 5.1) : 1 pc.
Pin Spanner (K-233) : 2 pcs.
L Shaped Spanner (9) : 1 pc.

ROTUS Series



• Air Motor with Hose
360° Twist-Free Joint Mechanism (P.40)
1004 IM-301 3,000~30,000 min⁻¹

• Air Line Kit



4507 AL-H1207F
(P.44)

• Foot Controller



1064 AFC-45
(P.44)

* This air line kit is designed for use with the AFC-45 foot controller, Code No.1064.



ROTUS Standard Set

Code No.	Model
1163	ROTUS-IR

- Standard Equipment
- Air Grinder (IR-310+IM-301) : 1 pc.
 - Collet ø3.0mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each
 - Air Line Kit (AL-H1207F) : 1 pc.
 - Foot Controller (AFC-45) : 1 pc.
 - Accessories : Piping Hose 2m (K-275) : 1 pc.
Lubricating Oil (K-211) : 1 pc.
Spanner (7x5.1) : 1 pc.
Pin Spanner (K-233) : 2 pcs.
L Shaped Spanner (9) : 1 pc.

⚠ Details of Maximum Allowable speed on intermittent use or continuous use P.13~22

<Caution>
* 1 : Use 6 mm Torque Type HG-200 to connect ENK-250T

RING TYPE MICRO-GRINDER ◀◀

PRECISION MICRO-GRINDER

Ring Type Attachment

Ring Type Chucking System

- One-touch ring type bur replacement.
- High precision and high reliability is realized by micron precision.
- Slim, lightweight design allows for fine finishing of delicate parts.

40,000 min⁻¹ Max.
◆ Weight : 92 g
Standard Size Collet
ø3.0 mm (CHH-3.0) ø2.35 mm (CHH-2.35)
Optional Collets : CHH group are shown in page (P.55)

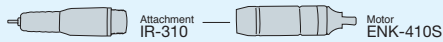


Code No. **1147** Model **IR-310**
Standard Accessories
• Spanner (7x5.1) : 1 pc. • Pin Spanner (K-233) : 1 pc.
• L Shaped Spanner (9) : 1 pc.



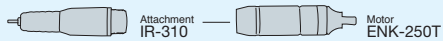
Ring Type Attachment + Standard Type Motor Combination Example

1,000~40,000 min⁻¹



Ring Type Attachment + Torque Type Motor Combination Example

1,000~25,000 min⁻¹



Emax EVolution Controller (P.9)
<Code No. : 8224 (120V) · Model : NE249 120>
<Code No. : 8227 (230V) · Model : NE249 230>

⚠ Never connect to E-max Series Controller.

Combination Example	d	D	L1	L2	L3	Weight	Max. Torque	Speed Range	Collet
1147+8086	ø12.8	ø24.5	64.2	97	161.2	182 g (*)	4.3 cN·m	1,000~40,000 min ⁻¹	ø0.3~ø3.175 mm CHH Group (P.55)
1147+8087	ø12.8	ø28.4	64.2	108	172.2	239 g (*)	4.8 cN·m	1,000~25,000 min ⁻¹	ø0.3~ø3.175 mm CHH Group (P.55)

* Weight (w/o Straight Cord)

LONG TYPE MICRO-GRINDER ◀◀

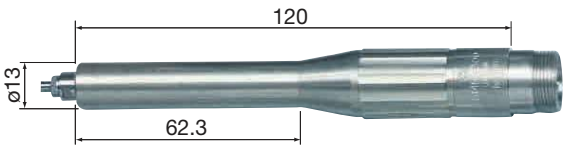
PRECISION MICRO-GRINDER

Long Type Attachment

Tip diameter ø13 mm

- This unique slim body makes it ideal for cutting and grinding the bottom surface of deep ribs or holes.
- Collet is tightened by a spanner.
- The tip diameter of attachment is Ø13 mm.

35,000 min⁻¹ Max.
◆ Weight : 156 g
Standard Size Collet
ø3.0 mm (CHM-3.0)
Optional Collets :
CHM group are shown in page (P.56)



Code No. **1017** Model **BMH-300**
Standard Accessories
• Spanner (7 x 5.1), (6 x 4.5) : 1 pc. each
• Pin Spanner (K-233) : 1 pc.



Long Type Attachment + Standard Type Motor Combination Example

1,000~35,000 min⁻¹



Emax EVolution Controller (P.9)
<Code No. : 8224 (120V) · Model : NE249 120>
<Code No. : 8227 (230V) · Model : NE249 230>

⚠ Never connect to E-max Series Controller.

Combination Example	Outside Diameter	Weight	Max. Torque	Speed Range	Collet
1017+8086	Refer to the dimensions	246 g (*)	4.3 cN·m	1,000~35,000 min ⁻¹	ø0.3~ø3.175 mm CHM Group (P.56)

* Weight (w/o Straight Cord)

MINI ANGLE TYPE MICRO-GRINDER ◀◀

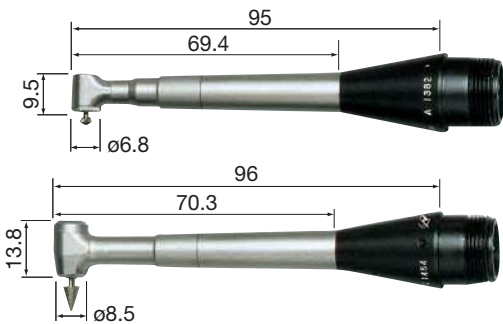
ANGLE TYPE GRINDER

Mini Angle Type Attachment

For Chamfering Deep Hole Bur Only ø1.6 mm Exclusive Tools P.71

- Suitable for chamfering and deburring the inside of the slit pipe.
- The world's smallest angle type attachment.
- Various ø1.6mm exclusive tools are also available.

- 15,000 min⁻¹ Max.
- ◆ Minimum Inner Diameter : ø13 mm
 - ◆ Holding tool width : 7.2 mm ◆ Weight : 47 g
 - ◆ Speed Reduction Ratio : 10/11
- Standard Size Collet Exclusive Tools P.71
- ø1.6 mm (K-253) P.56
-
- ◆ Minimum Inner Diameter : ø20 mm
 - ◆ Holding tool width : 11.9 mm ◆ Weight : 50 g
 - ◆ Speed Reduction Ratio : 10/11
- Standard Size Collet Exclusive Tools P.71
- ø1.6 mm (K-252) P.56



Mini Angle Type (Very Small Head)

Code No. **1013** Model **MFC-300M**

Standard Accessories

- Chuck Wrench (K-232) : 1 pc. • Pin Spanner (K-233) : 1 pc.

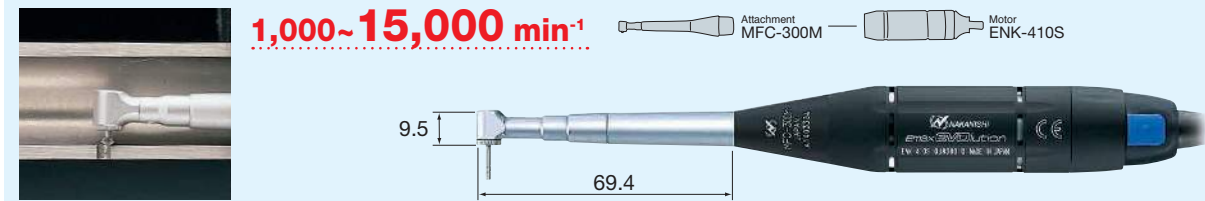
Mini Angle Type

Code No. **1012** Model **MFC-300S**

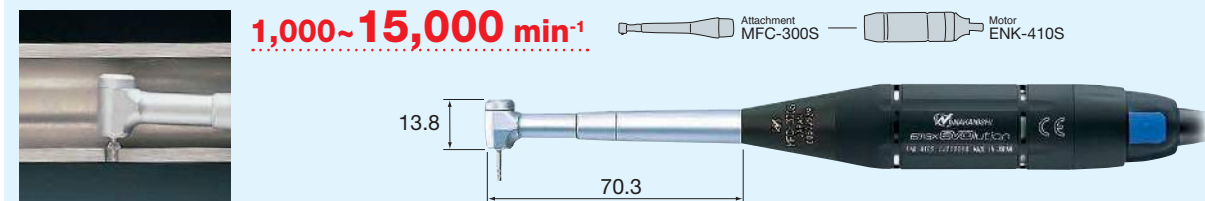
Standard Accessories

- Chuck Wrench (K-232) : 1 pc. • Pin Spanner (K-233) : 1 pc.

Mini Angle Type Attachment + Standard Type Motor Combination Example



Mini Angle Type Attachment + Standard Type Motor Combination Example



Combination Example	d	D	L1	L2	L3	Weight	Max. Torque	Speed Range	Collet
1013+8086	ø6.8	ø24.5	95	97	192	137 g (*)	4.3 cN·m	1,000~15,000 min ⁻¹	ø1.6 mm (K-253) (P.56)
1012+8086	ø8.5	ø24.5	96	97	193	140 g (*)	4.3 cN·m	1,000~15,000 min ⁻¹	ø1.6 mm (K-252) (P.56)

* Weight (w/o Straight Cord)



ANGLE TYPE MICRO-GRINDER ◀◀

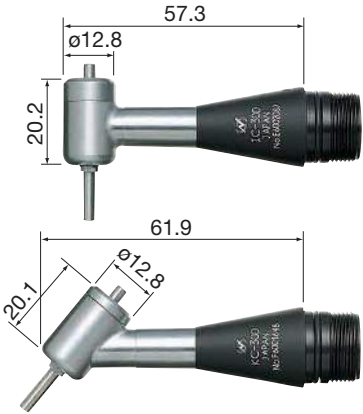
ANGLE TYPE GRINDER

Angle Type Attachment

Most suitable for polishing flat surfaces at speed Exclusive Tools P.69 ~ 71

- Suitable for polishing a flat surface at speed with a grinding disk pad.
- Perfect for finishing bottom surfaces and other tight, hard to reach areas.

- 30,000 min⁻¹ Max.
- ◆ Weight : 45 g
 - ◆ Speed Reduction Ratio : 3/4
- Standard Size Collet Exclusive Tools P.69 ~ 71
- ø3.0 mm (CHC-3.0)
- Optional Collets : CHC group are shown in page (P.55)
-
- ◆ Weight : 45 g
 - ◆ Speed Reduction Ratio : 3/4
 - ◆ Use the motor in reverse rotation for clockwise rotation.
- Standard Size Collet Exclusive Tools P.69 ~ 71
- ø3.0 mm (CHC-3.0)
- Optional Collets : CHC group are shown in page (P.55)



Angle Type (90°)

Code No. **1006** Model **IC-300**

Standard Accessories

- Chuck Wrench (K-231) : 1 pc. • Pin Spanner (K-233) : 1 pc. • Standard Accessories : 1 set

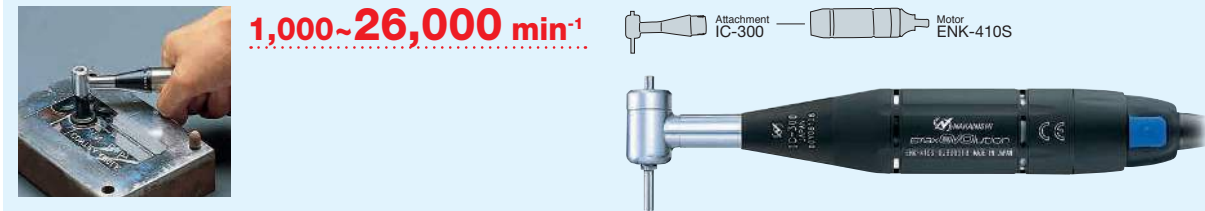
Angle Type (50°)

Code No. **1014** Model **KC-300**

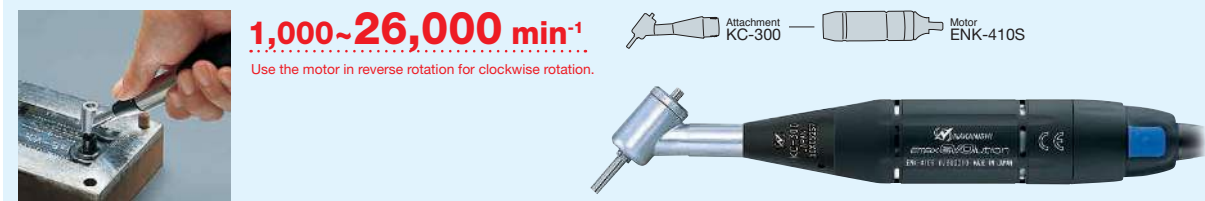
Standard Accessories

- Chuck Wrench (K-231) : 1 pc. • Pin Spanner (K-233) : 1 pc. • Standard Accessories : 1 set

90° Angle Type Attachment + Standard Type Motor Combination Example



50° Angle Type Attachment + Standard Type Motor Combination Example



Combination Example	d	D	L1	L2	L3	Weight	Max. Torque	Speed Range	Collet
1006+8086	20.2	ø24.5	57.3	97	154.3	135 g (*)	4.3 cN·m	1,000~26,000 min ⁻¹	ø1.0~ø3.175 mm
1014+8086	20.1	ø24.5	61.9	97	158.9	135 g (*)	4.3 cN·m	1,000~26,000 min ⁻¹	CHC Group (P.55)

* Weight (w/o Straight Cord)

Standard Accessories					
Code No.	Description	Package	Code No.	Description	Package
64101	Rubber Pad (Small) O.D. ø10 mm	1 pc./pack	64153	Sand Paper Disk for med. pad ø21 #180	5 pcs./pack
64102	Rubber Pad (Med) O.D. ø20 mm		64157	Sand Paper Disk for med. pad ø21 #600	
64103	Rubber Pad (Large) O.D. ø30 mm		64173	Sand Paper Disk for large pad ø31 #180	
64133	Sand Paper Disk for small pad ø11 #180	5 pcs./pack	64177	Sand Paper Disk for large pad ø31 #600	
64137	Sand Paper Disk for small pad ø11 #600				

• Exclusive tools for Angle Type Attachment P.69~71

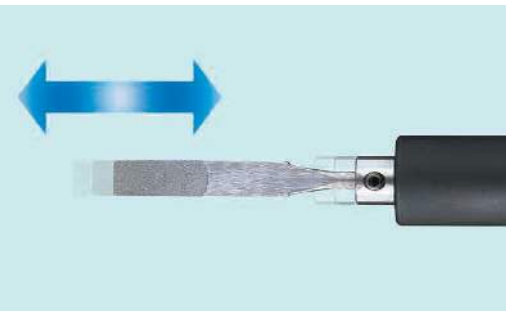
MINI-LUSTER ◀◀

PENCIL-TYPE RECIPROCATING POLISHING FINISHER

MINI-LUSTER Attachment

Stroke Range 0.8 mm Reciprocating Motion Exclusive Tools P.67 ~ 69

- Due to pencil type grip, it is most suitable for polishing narrow grooves, details, etc.
- Lightweight, compact design and minimal vibration keep the hand free from fatigue for long continuous operation.
- By using the grindstone holder provided, various tools such as oil stone, super stone, diamond files, etc. can be used.



25,000 min⁻¹ Max.
◆ Stroke Range (Fixed) : 0.8 mm
◆ Reciprocating Stroke (Variable) : 0~6,380 times/min.
◆ Weight : 130 g
◆ Max. tool shank diameter ø3.2 mm, Screw clamp type

Exclusive Tools P.67 ~ 69

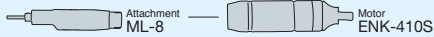


Code No. 1307 Model ML-8 Stroke (0.8 mm)

Standard Accessories
• Allen Wrench (1.5 mm) : 1 pc.
• Standard Accessories : 1 set

MINI-LUSTER Attachment + Standard Type Motor Combination Example

Reciprocating Stroke
0~6,380 times/min.



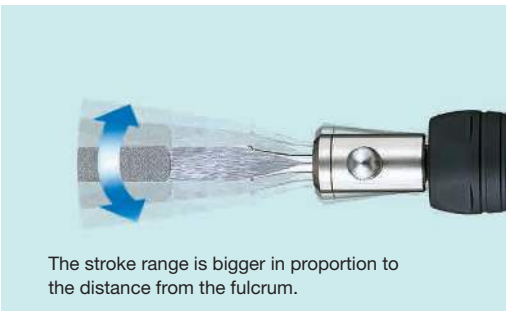
SWING-LUSTER ◀◀

PENCIL-TYPE RECIPROCATING POLISHING FINISHER

SWING-LUSTER Attachment

Stroke Range 0~1.6 mm Right to Left Motion Exclusive Tools P.67 ~ 69

- High speed grinding and polishing operations can be performed while maintaining the fine and delicate feeling of hand polishing.
- Lightweight pencil type design makes it easy to work in tight areas.
- Ergonomically designed to provide high sensitivity for precision work.
- Easily adjustable stroke length allows efficient work on minute areas of large sections.



30,000 min⁻¹ Max.
◆ Reciprocating Stroke (variable) : 0~7,650 times/min.
◆ Stroke Range (variable) : 0~1.6 mm
◆ Weight : 127 g
◆ Max. tool shank diameter ø5.0 mm, Screw clamp type.

Exclusive Tools P.67 ~ 69

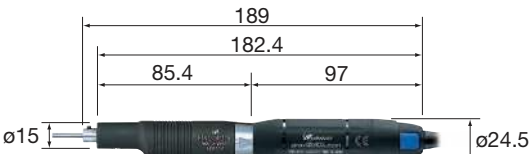
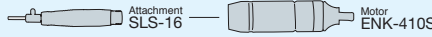


Code No. 1380 Model SLS-16

Standard Accessories
• Spanner (16 x 18), (20 x 24) : 1 pc. each
• Allen Wrench (1.5 mm) : 1 pc.
• Standard Accessories : 1 set

SWING-LUSTER Attachment + Standard Type Motor Combination Example

Reciprocating Stroke
0~7,650 times/min.



Combination Example	Outside Diameter	Weight	Max. Torque	Reciprocating Stroke	Max. Tool Shank
1307+8086	Refer to the dimensions	220 g (*)	4.3 cN·m	0~6,380 times/min.	ø3.2 mm (screw clamp type)

Code No.	Description	Package
62751	Spring Holder	1 pc. each
62510	Ceramic Fiber Grindstone Holder	
62814	Electroplated Diamond File 1.2 x 4 x 50 #100	
60737	Ceramic Fiber Grindstone 1 x 6 x 50 #1200	

• Exclusive tools P.67~69

* Weight (w/o Straight Cord)



Combination Example	Outside Diameter	Weight	Max. Torque	Reciprocating Stroke	Max. Tool Shank
1380+8086	Refer to the dimensions	217 g (*)	4.3 cN·m	0~7,650 times/min.	ø5.0 mm (screw clamp type)

Code No.	Description	Package
60737	Ceramic Fiber Grindstone 1 x 6 x 50 #1200	1 pc. each
62814	Electroplated Diamond File 1.2 x 4 x 50 #100	
62510	Ceramic Fiber Grindstone Holder	

• Exclusive tools P.67~69

* Weight (w/o Straight Cord)

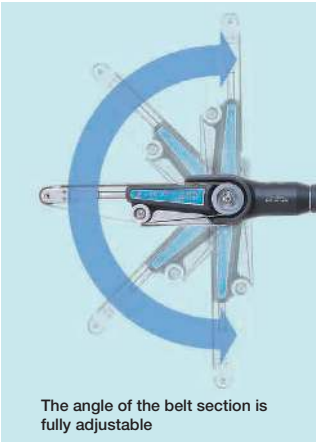
FINE BELT SANDER ◀◀

SMALL-SIZED HANDY BELT SANDER

FINE BELT SANDER Attachment

Exclusive Tools P.72 ~ 73

- Very high belt speed, ideal for applications from deburring to finishing.
- Belt runs Approx. 0~705 m/min.
- Lightweight, compact, minimal vibration and a small diameter grip design keep the hand free from fatigue for long, continuous operation.
- The angle of the belt section is fully adjustable.
- Exchanging the belt is simply done by lever release.
- 4, 6, 8 mm width belts are available.



The angle of the belt section is fully adjustable



Grinding a curved surface



Grinding a flat surface

30,000 min⁻¹ Max.
◆ Belt Speed : 0~705 m/min.
◆ Weight : 350 g ◆ Belt Sizes : 4, 6, 8 mm Widenx300mm long

Exclusive Tools P.72 ~ 73



Code No. **1146** Model **KBS-101**

Standard Accessories
• Allen Wrench (3 mm) : 1 pc. • Standard Accessories : 1 set

FINE BELT SANDER Attachment + Standard Type Motor Combination Example

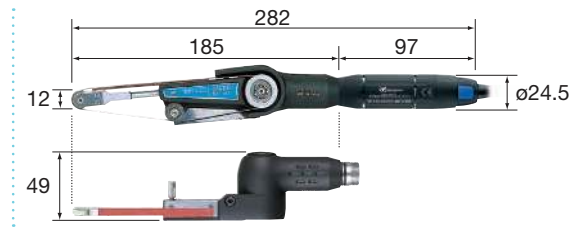
0~705 m/min.

Attachment KBS-101 — Motor ENK-410S



Emax EVolution Controller (P.9)
<Code No. : 8224 (120V) · Model : NE249 120>
<Code No. : 8227 (230V) · Model : NE249 230>

⚠ Never connect to E-max Series Controller.



Combination Example	Outside Diameter	Weight	Max. Torque	Belt Speed	Belt Width
1146+8086	Refer to the dimensions	440 g (※)	4.3 cN·m	0~705 m/min.	4 mm, 6 mm, 8 mm

* Weight (w/o Straight Cord)

Code No.	Description	Package
64902	Abrasive Belt Width 4mm #120	2 pcs. each
64904	Abrasive Belt Width 4mm #240	
64906	Abrasive Belt Width 4mm #400	
64912	Abrasive Belt Width 6mm #120	
64914	Abrasive Belt Width 6mm #240	
64916	Abrasive Belt Width 6mm #400	
64922	Abrasive Belt Width 8mm #120	
64924	Abrasive Belt Width 8mm #240	
64926	Abrasive Belt Width 8mm #400	

Spare Parts

Product	Description	Code No.	Model
	Tension Pulley	1103	TP-12A
	Tension Pulley Assembly	1104	TPA-12A

LUSTER ◀◀

PISTOL-TYPE RECIPROCATING POLISHING FINISHER

LUSTER Emax EVolution

With Motor ON/OFF Switch

Reciprocating Motion

Exclusive Tools P.67 ~ 69

- Powerful reciprocating stroke polisher equipped with 1/4 Speed Reducer to multiply the torque by 4 times.
- Reciprocating speed and stroke can be easily and continuously controlled.
- LUSTER NLS has a built-in motor. Insert the cord plug into the controller.



LUSTER Emax EVolution

Reciprocating Stroke

0~6,300 times/min.

Code No. **1483**
Model **NLS-110**

25,000 min⁻¹ Max.

Specifications
Stroke Range : 0~6 mm (variable)
Reciprocating Stroke : 0~6,300 times/min. (variable)
Max. Torque : 17.2 cN·m
Weight : 800 g (w/o cord)
With Straight Cord : 1.5 m

Standard Accessories
• Allen Wrench (2 mm), (3 mm) : 1 pc. each
• Lubricating Oil
• Lubrication Nozzle for LUSTER
• Standard Accessories : 1 set



Stroke Range : 0~6 mm adjustable by allen wrench.



The grinding surface can be set at any angle between 0 and 360° enabling grinding of bottom, right, left and top surfaces without moving the machine itself.
Mountable tool : Screw clamp type. Max. Tool Shank ø6.4 mm

Designed with comfortable rubber-grip. Well balanced, rubber-grip absorbs vibration from reciprocating strokes reducing fatigue and allowing long, continuous operation.

With Motor ON/OFF Switch



Emax EVolution Controller (P.9)
<Code No. : 8224 (120V) · Model : NE249 120>
<Code No. : 8227 (230V) · Model : NE249 230>

⚠ Never connect to E-max Series Controller.



Code No.	Outside Diameter	Weight	Max. Torque	Reciprocating Stroke	Max. Tool Shank
1483	Refer to the dimensions	800 g (※)	17.2 cN·m	0~6,300 times/min.	ø6.4 mm (screw clamp type)

* Weight (w/o Straight Cord)

Code No.	Description	Package
62502	Stone Holder	1 pc./pack
62505	Stone Holder	
62751	Spring Holder	
62525	Rectangular Pad	
62526	Rod for Rectangular Pad	

Code No.	Description	Package
62527	Angle Rod	1 pc./pack
62552	Sand Paper Tip #120	10 pcs./pack
62555	Sand Paper Tip #320	
62557	Sand Paper Tip #600	
62559	Sand Paper Tip #1000	

• Exclusive tools for LUSTER P.67~69

Lever Type Attachment

Code No. **1005** Model **IH-300**



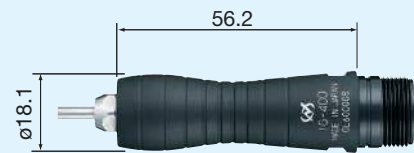
- 40,000 min⁻¹ Max.**
- High precision and high reliability is realized by micron precision.
 - Slim, lightweight design allows for fine finishing of delicate parts.
 - Lever Type one touch bur release.



◆ Weight : 62 g
Standard Size Collet
ø3.0 mm (CHH-3.0) ø2.35 mm (CHH-2.35)
Optional Collets : CHH group are shown in page (P.55)
Standard Accessories
• Spanner (7x5.1) : 1 pc. • Pin Spanner (K-233) : 1 pc.

Straight Type Attachment

Code No. **2811** Model **IG-400**



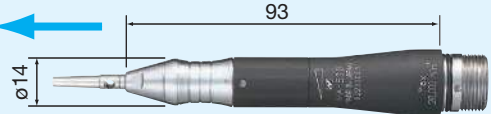
- 40,000 min⁻¹ Max.**
- Lightweight ergonomically designed with minimal vibration for extended use.
 - NK Micron Collet permits strong retention and high precision performance.



◆ Weight : 55 g
Standard Size Collet
ø3.0 mm (NKM6-3.0)
Optional Collets : NKM6 group are shown in page (P.56)
Standard Accessories
• Collet Nut (CHN-6) • Bar Wrench (PCR-30) : 1 pc.
• Spanner (9 x 9), (15 x 17) : 1 pc. each

Hammer Attachment

Code No. **8060** Model **HA-500**



- 16,000 min⁻¹ Max.**
- A wide variety of patterns can be produced by varying the spring pressure and hammer speed.
 - Light weight, pencil type grip makes the handpiece very comfortable to hold and easy to use.
 - Adjustable spring pressure. ◆ Weight : 95 g
 - Self lubricating hammer mechanism ensure excellent durability.
 - Stroke Range : 0.4mm ◆ Stroke Times : 25~4,000 times/min.
 - Stroke Spring Pressure : 4.4~7.1 N (Ring Adjustment Type)

Standard Accessories
• Spanner (7 x 5.5) : 1 pc. • Bar Wrench (K-212) : 1 pc.
• Oil and Oil offer machine • Hammer Bit (For replacement) : 2 pcs.

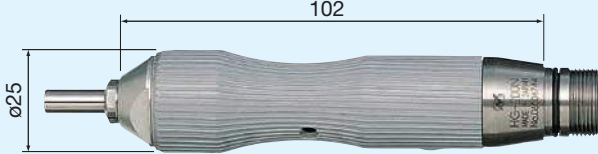
Hammer Bit to be machined to required shapes
(SUS-420, heat treated, approx. HRC50)



Code No.	Package
65301	3 pcs./pack

6 mm Torque Type Attachment

Code No. **1016** Model **HG-200**



- Use ENK-250T to connect HG-200.
30,000 min⁻¹ Max.
- Permits the use of ø6.0 mm shank burs.
 - The resistance produced by cutting and grinding is absorbed by a special rubber grip to eliminate slipping.
 - Collet is tightened by a spanner.



◆ Weight : 210 g
Standard Size Collet
ø6.0 mm (CHG-6.0)
Optional Collets : CHG group are shown in page (P.55)
Standard Accessories
• Spanner (10 x 10) : 1 pc. • Bar Wrench (K-212) : 1 pc.
• Pin Spanner (K-233) : 1 pc.

LUSTER Attachment (Pistol-Type Polisher)

Code No. **1302** Model **LS-100**



- 25,000 min⁻¹ Max.**
- High performance grinding & polishing with high power and reciprocating stroke.
 - Well-balanced, rubber-grip absorbs vibration.
 - Stroke Range : 0~6 mm (variable)
 - Reciprocating Stroke : 0~6,300 times/min. (variable)



◆ Weight : 680 g
◆ Max. tool shank diameter ø6.4 mm, Screw clamp type
Standard Accessories
• Allen Wrench (2 mm), (3 mm) : 1 pc. each
• Lubricating Oil • Lubrication Nozzle for LUSTER
• Standard Accessories : 1 set

Exclusive Tools P.67 ~ 69

Code No.	Description	Package
62502	Stone Holder	1 pc./pack
62505	Stone Holder	
62751	Spring Holder	
62525	Rectangular Pad	
62526	Rod for Rectangular Pad	
62527	Angle Rod	10 pcs./pack
62552	Sand Paper Tip #120	
62555	Sand Paper Tip #320	
62557	Sand Paper Tip #600	
62559	Sand Paper Tip #1000	

1/4 Speed Reducer

Code No. **1009** Model **RG-01**



- 30,000 min⁻¹ Max.**
- Mounted between an attachment and a motor.
 - The speed is reduced to 1/4 but the torque is multiplied by 4 times.
 - Suitable for high torque grinding process or drilling.
- ◆ Weight : 68 g

Standard Accessories
• Pin Spanner (K-233) : 1 pc.

1/15 Speed Reducer

Code No. **1010** Model **RG-02**



- 30,000 min⁻¹ Max.**
- Mounted between an attachment and a motor.
 - The speed is reduced to 1/15 but the torque is multiplied by 15 times.
 - Suitable for high torque grinding process or drilling.
- ◆ Weight : 93 g

Standard Accessories
• Pin Spanner (K-233) : 1 pc.

Extension Joint

Code No. **1015** Model **CN-01**



- 35,000 min⁻¹ Max.**
- Speed Ratio 1 : 1
 - This is a joint to be connected between a motor and an attachment to extend the total length of the attachment.
- ◆ Weight : 83 g

Standard Accessories
• Pin Spanner (K-233) : 1 pc.

Foot Controller

Code No. **8106** Model **FC-64**



- Used as an ON/OFF switch as well as a variable speed control.
- For Emax EVolution (NE249)

Emax EVolution Torque Set

1,000~25,000 min⁻¹



For heavy duty and larger tools, Torque type promises to extend operation ranges. One-touch ring type bur replacement.

Ring Type IR-310 is the standard attachment for Emax EVolution torque set EV250-120, EV250-230.

Code No. **8234** (120V) Model **EV250-120**

Code No. **8226** (230V) Model **EV250-230**

*Please check the power source plug type (P.58).

Standard Equipment
• Micro Grinder (IR-310+ENK-250T) : 1 pc.
• Collet ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) : 1 pc. each
• Controller (NE249) : 1 pc.
• Accessories : Handpiece Holder : 1 pc., Handpiece Stand : 1 pc.
Power Supply Cord : 1 pc., Spanner (7 x 5.1) : 1 pc.
Pin Spanner (K-233) : 1 pc., L Shaped Spanner (9) : 1 pc.