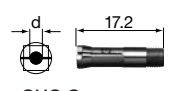
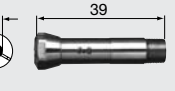


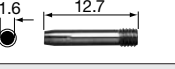

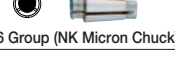
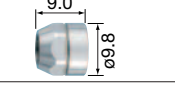







Collet Chuck

Product	Inside Diameter : ϕ d	Fit to	Model	Code No.
 CHC Group	ϕ 1.6	IC-300, KC-300	CHC-1.6	90416
	ϕ 2.35		CHC-2.35	90492
	ϕ 3.0		CHC-3.0	90430
	ϕ 3.175		CHC-3.175	90493
 CHG Group	ϕ 2.35	HG-200	CHG-2.35	91192
	ϕ 3.0		CHG-3.0	91130
	ϕ 3.175		CHG-3.175	91193
	ϕ 6.0		CHG-6.0	91160
	ϕ 6.35		CHG-6.35	91196
	ϕ 1.0, ϕ 1.5, ϕ 2.0, ϕ 2.5, ϕ 4.76		CHG-□□	—
	ϕ 1.6, ϕ 4.0, ϕ 5.0			
 CHH Group	ϕ 2.35	IH-300, IR-310	CHH-2.35	90692
	ϕ 3.0		CHH-3.0	90630
	ϕ 3.175		CHH-3.175	90693
	ϕ 1.0, ϕ 1.5, ϕ 2.0, ϕ 2.5		CHH-□□	—
	ϕ 1.6			
 CHM Group	ϕ 1.0	BMH-300	CHM-1.0	90910
	ϕ 1.6		CHM-1.6	90916
	ϕ 2.0		CHM-2.0	90920
	ϕ 2.35		CHM-2.35	90992
	ϕ 3.0		CHM-3.0	90930
	ϕ 3.175		CHM-3.175	90993
 MFC-300S	ϕ 1.6	MFC-300S	K-252	90316
	 MFC-300M	ϕ 1.6	MFC-300M	K-253
 NKM6 Group (NK Micron Chuck)		ϕ 2.35	IG-400	NKM6-2.35
	ϕ 3.0	NKM6-3.0		92092
	ϕ 3.175	NKM6-3.175		92093

Chuck Nut

Product	Description	Fit to	Model	Code No.
	Chuck Nut	IG-400 (for NKM6 Group)	CHN-6	2104

Parts

Product	Description	Fit to	Model	Code No.
	Straight Cord : 1.5 m <with Switch>	ENK-410S (Standard Type Motor)	ENKCD-410S	8088
		ENK-250T (Torque Type Motor)	ENKCD-250T	8089
	Power Supply Cord	Control Unit : Emax EVOLution NE249	K-269	1484
	Foot Control ON-OFF and speed change can be accomplished.	Control Unit : Emax EVOLution NE249	FC-64	8106
	Handpiece Holder	Control Unit : Emax EVOLution NE249	K-273	8107
	Handpiece Stand		K-274	8104

*Please mention "Code Number" upon your order.

• Specifications may be changed without notice.

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PR-K283E Ver.3 '10.10.03.A

Emax
EVOLution



Maximized Evolution

Evolutionary Five Identities of New Emax EVOLution

"Tough Torque Brushless Motor"

"Flashing Live Load Indicator"

"Auto-Cruise Control"

"FIXPEED Function"

and

"STYLE"



Advanced High Performance **Control Unit**

Advanced Control Function

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



Motor speed digital display

Load Meter



Advanced User Friendly Design

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



Forward / Reverse Select Switch

Forward/Reverse rotation can be selected.

ø12mm Speed Control Volume
Easy to operate by one finger

Emax EVOLUTION Control Unit

Code No.	Model	Specifications
8224 (120V)	NE249 120	<ul style="list-style-type: none"> Weight : 2.3 kg Power Source : AC120/230V, 50-60Hz Dimensions : W130 x D254 x H97 mm
8227 (230V)	NE249 230	

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 FiXpeed®

An exclusive new feature of the Emax EVOLUTION, the FiXpeed® 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 FiXpeed® system while motor B has variable control using a foot controller. This function brings for unprecedented workability.

Auto Cruise Function

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



Memory Speed Function FiXpeed®

Motor B
ON/OFF Function

Motor A
ON/OFF Function

Handpiece System

NAKANISHI Smart Switch

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



One Touch Tool Changing

● Ring Type (IR-310)
Easy twist open/close chuck

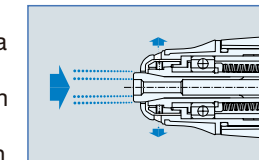


Various Collet Chuck Size

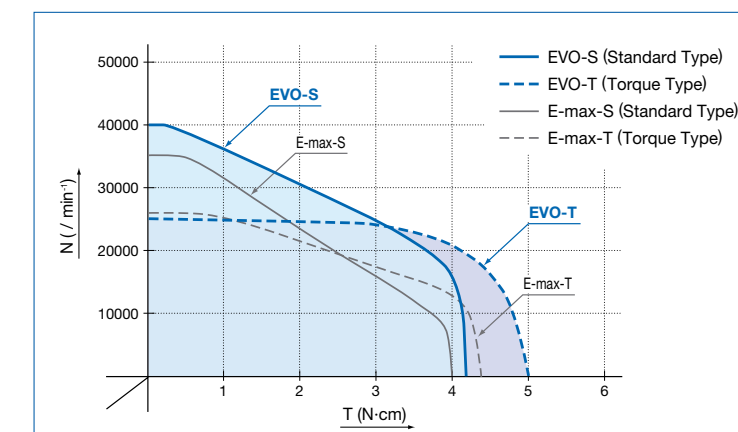
Various sizes ranging from ultra-small diameter (0.3 mm) are available for each attachment. Furthermore, collet replacement can be easily performed without spanner.

Special Dust Protection Mechanism (patented)

The chuck section of Emax EVOLUTION has a special built-in dust protection mechanism that prevents entry of foreign materials such as chips, and provides superior durability as well.



Emax EVOLUTION vs E-max Torque Characteristic



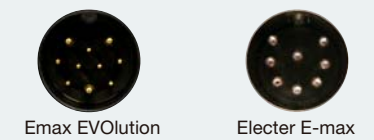
2 Types of Motors

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

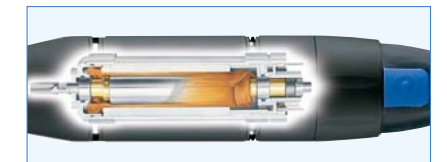
*Exclusive use for Emax EVOLUTION

Emax EVOLUTION and Electer E-max have different motor cord pin configurations.



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.



17 Type of Attachments for All Type of Applications

Capable of infinite applications with 14 different handpieces and 3 types of intermediate attachments.

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

Emax EVOLution RING TYPE STANDARD SET



Capable for wide range of applications. An excellent total balance in motor performance and dimension against required rotational speed.

1,000~40,000 min⁻¹

*New Ring Type IR-310 is the standard attachment for Emax EVOLution standard set EV410-120, EV410-230.

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

Attachment	Motor
IR-310	ENK-410S

Standard Equipment	Quantity
Micro Grinder (IR-310+ENK-410S)	1 pc.
Collet Chuck ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35)	1 pc. each
Control Unit (NE249)	1 pc.
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	1 pc.

Emax EVOLution RING TYPE TORQUE SET



For heavy duty and larger tools, Torque type promises to extend operation ranges.

1,000~25,000 min⁻¹

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

Code No.	Model
8234 (120V)	EV250-120 (120V)
8226 (230V)	EV250-230 (230V)

Attachment	Motor
IR-310	ENK-250T

Standard Equipment	Quantity
Micro Grinder (IR-310+ENK-250T)	1 pc.
Collet Chuck ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35)	1 pc. each
Control Unit (NE249)	1 pc.
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	1 pc.

Code No. Model

Attachment



Ring Type

1147 IR-310



90° Angle Type

1006 IC-300

35,000 min⁻¹ Max. (*1) 20,000 min⁻¹ Max. (*2)



Lever Type

1005 IH-300



45° Angle Type

1014 KC-300

35,000 min⁻¹ Max. (*1) 20,000 min⁻¹ Max. (*2)

New



Straight Type

2811 IG-400



LUSTER (Reciprocating motion)

1302 LS-100

30,000 min⁻¹ Max. (*1)



6 mm Torque Type (*3)

1016 HG-200

25,000 min⁻¹ Max. (*1)



MINI-LUSTER (Reciprocating motion)

1307 ML-8

35,000 min⁻¹ Max. (*1) 30,000 min⁻¹ Max. (*2)



Long Type

1017 BMH-300

35,000 min⁻¹ Max. (*1)



SWING-LUSTER (Right to left motion)

1380 SLS-16

35,000 min⁻¹ Max. (*1)



90° Mini Angle Type

1012 MFC-300S

15,000 min⁻¹ Max. (*1)



Hammer Action Type

8060 HA-500

20,000 min⁻¹ Max. (*1) 16,000 min⁻¹ Max. (*2)



90° Mini Angle Type (Very Small Head)

1013 MFC-300M

15,000 min⁻¹ Max. (*1)



FINE BELT SANDER

1146 KBS-101

35,000 min⁻¹ Max. (*1)

* Can be used for Emax series attachments, reducers, and extension joint

* When using Emax EVOLution, be careful for Maximum Allowable Speed.

* Never connect to Emax Series motor NK-351, NK-261 and NK-151.

Exclusive use for Emax EVOLution



LUSTER (Reciprocating motion)

Built-in Motor

1483 NLS-110

30,000 min⁻¹ Max. (*1)

* 3 : Use 6mm torque Type HG-200 to connect ENK-250T

System Chart

Speed Reducer·Extension Joint



Extension Joint

1015 CN-01

35,000 min⁻¹ Max. (*1)



1/4 Speed Reducer

1009 RG-01

30,000 min⁻¹ Max. (*1)



1/15 Speed Reducer

1010 RG-02

30,000 min⁻¹ Max. (*1)

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

Motor

Exclusive use for Emax EVOLution



• Standard Type Motor with Cord 1,000~40,000 min⁻¹

8086 ENK-410S



• Torque Type Motor with Cord 1,000~25,000 min⁻¹

8087 ENK-250T

Control Unit





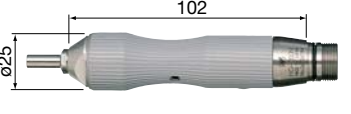




Emax EVOLution Control Unit

8224 (120V) NE249 120

8227 (230V) NE249 230

Emax EVOLUTION Attachments

Product	Description	Specifications	Model	Code No.
	Emax EVOLUTION Control Unit	<ul style="list-style-type: none"> Weight : 2.3 kg Power Source : AC 120/230V, 50-60Hz Dimensions : W130 x D254 x H97 mm 	NE249 120	8224 (120V)
			NE249 230	8227 (230V)
	Standard Type Motor with Cord	<ul style="list-style-type: none"> Weight : 90 g (w/o Cord) Max. Torque 4.3 cN-m with Straight Cord 1.5m Max. Power : 73W Speed : 1,000-40,000 min⁻¹ Accessory : Pin Spanner (K-233) 1 pc. 	ENK-410S	8086
	Torque Type Motor with Cord	<ul style="list-style-type: none"> Weight : 147 g (w/o Cord) Max. Torque 4.8 cN-m with Straight Cord 1.5m Max. Power : 76W Speed : 1,000-25,000 min⁻¹ 	ENK-250T	8087
	Ring Type Attachment	<ul style="list-style-type: none"> 1,000-40,000 min⁻¹ Weight : 92 g Collet Chuck : ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) Accessory : Spanner (7 x 5.1) 1 pc., Pin Spanner (K-233) 1 pc., L Shaped Spanner 1 pc. 	IR-310	1147
	Lever Type Attachment	<ul style="list-style-type: none"> 1,000-40,000 min⁻¹ Weight : 62 g Collet Chuck : ø3.0 mm (CHH-3.0), ø2.35 mm (CHH-2.35) Accessory : Spanner (7 x 5.1) 1 pc., Pin Spanner (K-233) 1 pc. 	IH-300	1005
	Straight Type Attachment	<ul style="list-style-type: none"> 1,000-40,000 min⁻¹ Weight : 55 g Collet Chuck : ø3.0 mm (NKM6-3.0) Chuck Nut (CHN-6) Accessory : Spanner (9 x 9), (15 x 17) 1 pc. each, Bar Wrench (PCR-30) 1 pc. 	IG-400	2811
	6 mm Torque Type Attachment	<ul style="list-style-type: none"> Weight : 210 g Collet Chuck : ø6.0 mm (CHG-6.0), Accessory : Spanner (10 x 10) 1 pc., Bar Wrench (K-212) 1 pc., Pin Spanner (K-233) 1 pc. * Use 6mm torque Type HG-200 to connect ENK-250T 25,000 min⁻¹ Max. (*1) 	HG-200	1016
	Long Type Attachment for Deep Hole Grinding ø13 mm	<ul style="list-style-type: none"> Weight : 156 g Collet Chuck : ø3.0 mm (CHM-3.0) Accessory : Spanner (7 x 5.1), (6 x 4.5) 1 pc. each, Pin Spanner (K-233) 1 pc. 35,000 min⁻¹ Max. (*1) 	BMH-300	1017
	90° MINI ANGLE TYPE Attachment for Chamfering Deep Hole (Very Small Head)	<ul style="list-style-type: none"> Weight : 47 g Speed Reduction Ratio : 10/11 Collet Chuck : ø1.6 mm (K-253) Accessory : Chuck Wrench (K-232) 1 pc., Pin Spanner (K-233) 1 pc. 15,000 min⁻¹ Max. (*1) 	MFC-300M	1013
	90° MINI ANGLE TYPE Attachment for Chamfering Deep Hole	<ul style="list-style-type: none"> Weight : 50 g Speed Reduction Ratio : 10/11 Collet Chuck : ø1.6 mm (K-252) Accessory : Chuck Wrench (K-232) 1 pc., Pin Spanner (K-233) 1 pc. 15,000 min⁻¹ Max. (*1) 	MFC-300S	1012
	90° ANGLE Attachment	<ul style="list-style-type: none"> Weight : 45 g Standard Accessories (Rubber Pad, Paper Disk) Collet Chuck : ø3.0 mm (CHC-3.0) Accessory : Standard Accessories 1 set, Chuck Wrench (K-231) 1 pc., Pin Spanner (K-233) 1 pc. 35,000 min⁻¹ Max. (*1) 20,000 min⁻¹ Max. (*2) 	IC-300	1006
	45° ANGLE Attachment	<ul style="list-style-type: none"> Weight : 45 g Standard Accessories (Rubber Pad, Paper Disk) Collet Chuck : ø3.0 mm (CHC-3.0) Accessory : Standard Accessories 1 set, Chuck Wrench (K-231) 1 pc., Pin Spanner (K-233) 1 pc. 35,000 min⁻¹ Max. (*1) 20,000 min⁻¹ Max. (*2) 	KC-300	1014

Emax EVOLUTION Attachments

Product	Description	Specifications	Model	Code No.
	MINI-LUSTER Attachment (Pencil-Type Polisher) (Reciprocating motion)	<ul style="list-style-type: none"> Weight : 130 g Max. tool shank diameter ø3.2 mm, Screw clamp type. Stroke range (fixed) : 0.8 mm Accessory : Standard Accessories 1 set, Allen Wrench (1.5 mm) 1 pc. 35,000 min⁻¹ Max. (*1) 30,000 min⁻¹ Max. (*2) 	ML-8	1307
	SWING-LUSTER Attachment (Pencil-Type Polisher) (Right to Left motion)	<ul style="list-style-type: none"> Weight : 127 g Reciprocating Stroke (Variable) : 0-9,000 times/min. Stroke range (Variable) : 0-1.6 mm Max. tool shank diameter ø5.0 mm, Screw clamp type. Accessory : Standard Accessories 1 set, Allen Wrench (1.5 mm) 1 pc. 35,000 min⁻¹ Max. (*1) 	SLS-16	1380
	Hammer Attachment for Engraving and Ornament Processing Work	<ul style="list-style-type: none"> Weight : 95 g Stroke Times : 25-5,000 times/min. Stroke Spring Pressure : 4.4-7.1N (Ring Adjustment Type) Accessory : Spanner (7 x 5.1) 1 pc., Bar Wrench (K-212) 1 pc., Oil and nozzle, Hammer Bit (For replacement) 2 pcs. 20,000 min⁻¹ Max. (*1) 16,000 min⁻¹ Max. (*2) 	HA-500	8060
	FINE BELT SANDER Attachment	<ul style="list-style-type: none"> Weight : 350 g Belt Speed : 0-825 m/min. Belt Size : 4, 6, 8 mm Accessory : 8, 6, 4 mm Belts, Allen Wrench (3 mm) : 1 pc. 35,000 min⁻¹ Max. (*1) 	KBS-101	1146
	LUSTER Attachment (Pistol-Type Polisher) (Reciprocating motion) Built-in Motor	<ul style="list-style-type: none"> Weight : 800 g Max. Torque 17.2 cN-m with Straight Cord 1.5m Stroke Range : 0-6 mm (variable) Max. tool shank diameter ø6.4 mm, Screw clamp type. Reciprocating Stroke (variable) : 0-7,600 times/min Accessory : Standard Accessories 1 set, Allen Wrench (2 mm) 1 pc., Lubrication Oil, Lubrication Nozzle for LUSTER 30,000 min⁻¹ Max. (*1) 	NLS-110	1483
	LUSTER Attachment (Pistol-Type Polisher) (Reciprocating motion)	<ul style="list-style-type: none"> Weight : 680 g Stroke Range : 0-6 mm (variable) Max. tool shank diameter ø6.4 mm, Screw clamp type. Reciprocating Stroke (variable) : 0-7,600 times/min Accessory : Standard Accessories 1 set, Allen Wrench (2 mm) 1 pc., Lubrication Oil, Lubrication Nozzle for LUSTER 30,000 min⁻¹ Max. (*1) 	LS-100	1302
	EXTENSION JOINT	<ul style="list-style-type: none"> Weight : 83 g Pin Spanner (K-233) : 1 pc. 35,000 min⁻¹ Max. (*1) 	CN-01	1015
	1/4 SPEED REDUCER	<ul style="list-style-type: none"> Weight : 68 g Pin Spanner (K-233) : 1 pc. 30,000 min⁻¹ Max. (*1) 	RG-01	1009
	1/15 SPEED REDUCER	<ul style="list-style-type: none"> Weight : 93 g Pin Spanner (K-233) : 1 pc. 30,000 min⁻¹ Max. (*1) 	RG-02	1010

*Maximum Allowable Speed, continuous use may change depending on the material being cut and other application variables.

*1 : Maximum Allowable Speed, intermittent use.
*2 : Maximum Allowable Speed, continuous use.

* Please mention "Code Number" upon your order.