

FUTURESWISS
— LIVE TOOL SOLUTIONS —

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NSK AMERICA



INDUSTRIAL
HIGH SPEED SPINDLE & MICRO GRINDER
PRODUCT GUIDE

HAND TOOLS CATALOG

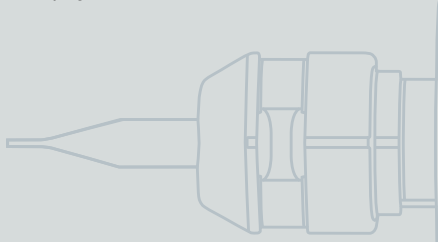
NSK America Corporation

[*www.nskamericacorp.com*](http://www.nskamericacorp.com)



Established in 1984 as a wholly owned subsidiary of NSK Nakanishi, Inc., NSK America Corporation serves as the North American Headquarters in Nakanishi's global network. NSK America provides sales, application support, and repair service for all Nakanishi industrial tools for the North, Central and South American markets.

Nakanishi Machine tool spindles and hand tools are engineered to meet the industry's demand for speed and precision. Meeting the challenge with the latest technology, NSK offers high speed milling and drilling spindles for turning, machining centers, and robotics. Our high speed precision hand tool offering includes electric and pneumatic drilling, polishing, grinding, engraving and deburring micro grinders as well as ultrasonic polishing equipment. Air, electric and air turbine spindles and motors are also available for small diameter milling, drilling, slitting, chamfering and grinding applications. Let our applications engineering department help you select the correct solution for your application.



NSK America is deeply committed to providing total solutions and customer satisfaction to its customers through our three vertical markets:



- Lobby at our Hoffman Estates, IL North American Headquarters

- A wide variety of Industrial and Dental products are on display in our showroom

Industrial Division:

www.nskamericacorp.com

Dental Division:

www.nskdental.us.com

Medical Department:

www.nsk-surgery.com

NSK America expert sales, customer service and technical support specialists utilize advanced industry knowledge to ensure every NSK product meets and exceeds your strictest requirements.

Our dedicated sales and support teams from each market look forward to thoroughly assisting you before, during and after the sale.



- Comprehensive parts crib for hand tool and spindle maintenance.



- Our 12,000sq/ft. warehouse provides a substantial inventory for all markets served.



- Our factory trained technicians provide in-house service to bring product back to original factory specifications.

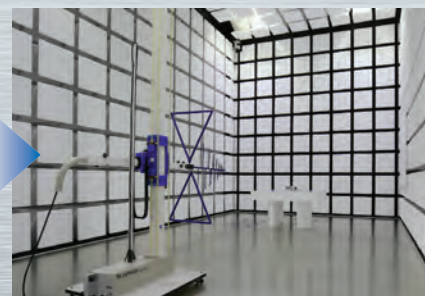
ULTRASONIC TOOLS

SONIC CUTTER ZERO AND SHEENUS ZERO
Ultrasonic Cutter and Polisher





Nakanishi Inc. utilizes new



“In-house built components” exceeds 85%

Nakanishi has specialized in ultra high-speed rotary cutting technology. Based on “Develop a product that satisfies users potential needs concept”, Nakanishi Inc. focuses on meeting our customers diverse requirements through timely product development, backed by our unparalleled production engineering and innovated technology.

Our highly technical manufacturing facility houses the most advanced CNC micro machining machines.

A vast wealth of knowledge in the fields of micro-machining, precision processing and manufacturing contributes to lower manufacturing costs while providing the finest products.

All products are inspected and performance tested before shipping.

Nakanishi Inc. products are shipped to over 130 countries around the world.





technologies for superior precision.

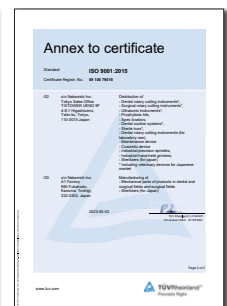
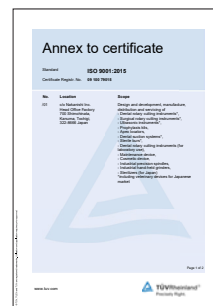
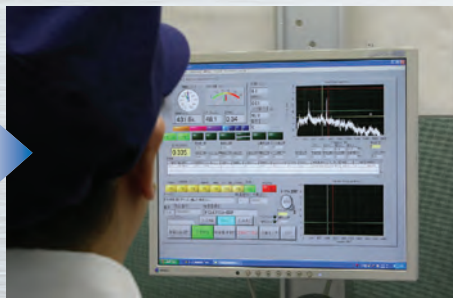


TABLE OF CONTENTS **HAND TOOLS**

1 Hand Tools

ELECTRIC HAND GRINDER

Emax EVolution *Modular Type Brushless Micro Grinder*.....
1,000–40,000 rpm **ELECTRICALLY DRIVEN**



.....**1** p2–19

ESPERT 500 *Modular Type Brushless Micro Grinder*.....
1,000–50,000 rpm **ELECTRICALLY DRIVEN**



.....**1** p20–27

PNEUMATIC HAND GRINDER

ROTUS *Modular Type High Torque Air Grinder*.....
30,000 rpm **PNEUMATICALLY DRIVEN**



.....**1** p30–33

IMPULSE SERIES *Pencil Type Air Grinder*.....
60,000 rpm **PNEUMATICALLY DRIVEN**



.....**1** p34–37

PRESTO II *Ultra-Precision High Speed Air Turbine Grinder*.....
320,000 rpm **PNEUMATICALLY DRIVEN**



.....**1** p38

ULTRASONIC PRODUCT

Sheenus ZERO *Ultrasonic Polisher*.....



1 p40–41

Sonic Cutter ZERO *Ultrasonic Cutter*.....



1 p42–44

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.0"/ø0.98"

ø0.897"

E3000

— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.87"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

HAND TOOLS

1

EmaxEVO
ESPERT
ROTUS
IMPULSE
PRESTO II
Sheenus
ZERO
Sonic-Cutter
ZERO

2

iSpeed3
E2000
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E3000
— 80,000rpm
E4000

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MA
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ø0.98"
ø1.18"
MS
ø0.75"
ø0.79"
ø0.87"
ø0.91"
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ø0.98"

4

HES
iSpeed5
HTS
PLANET
Xpeed
ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL
DATA

8

APPLICATION
EXAMPLES

INDEX



Emax EVolution

1,000–40,000 rpm

MODULAR TYPE BRUSHLESS MICRO GRINDER

- Digital display enhances safety and efficiency.
- Compact and functional design makes the controller portable.
- Soft touch switches permit easy operation and long service life.



ESPERT 500

1,000–50,000 rpm

MODULAR TYPE BRUSHLESS MICRO GRINDER

- High output power, 200W, and high reliability are achieved by combining a hall-element brushless DC motor and high grade electronics.



1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

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Sonic-Cutter

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E3000

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E3000

— 50,000rpm

E4000

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MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.73"

ø0.897"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

Emax EVOLution System Chart

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus
ZERO

Sonic-Cutter
ZERO

2

iSpeed3

E2000
ø1.0"/ø0.99"/ø0.857"

E3000
— One Piece

E3000
— Modular

ø1.18"

ø1.07"/ø0.98"
ø0.897"

E3000
— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.97"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL
DATA

8

APPLICATION
EXAMPLES

INDEX

Product Code	Product Name	
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1144	IR-310	
40,000 rpm Max. (*1)	40,000 rpm Max. (*2)	Page 1-p8

7097	IH-300	
40,000 rpm Max. (*1)	40,000 rpm Max. (*2)	Page 1-p8

2810	HG-200	
27,000 rpm Max. (*1)	27,000 rpm Max. (*2)	Page 1-p9

2904	BMH-300	
35,000 rpm Max. (*1)	35,000 rpm Max. (*2)	Page 1-p9

1012	MFC-300S	
15,000 rpm Max. (*1)	15,000 rpm Max. (*2)	Page 1-p9

1013	MFC-300M	
15,000 rpm Max. (*1)	15,000 rpm Max. (*2)	Page 1-p9

2900	IC-300	
35,000 rpm Max. (*1)	20,000 rpm Max. (*2)	Page 1-p10

2901	KC-300	
35,000 rpm Max. (*1)	20,000 rpm Max. (*2)	Page 1-p10

1302	LS-100	
30,000 rpm Max. (*1)	30,000 rpm Max. (*2)	Page 1-p12

1307	ML-8	
35,000 rpm Max. (*1)	30,000 rpm Max. (*2)	Page 1-p13

1380	SLS-16	
35,000 rpm Max. (*1)	24,000 rpm Max. (*2)	Page 1-p13

8060	HA-500	
20,000 rpm Max. (*1)	16,000 rpm Max. (*2)	Page 1-p16

1146	KBS-101	
35,000 rpm Max. (*1)	35,000 rpm Max. (*2)	Page 1-p16

Attachment



Ring Type



Lever Type



Torque Type (*3)



Long Type



90° Mini Angle Type



90° Mini Angle Type (Very Small Head)



90° Angle Type



50° Angle Type



LUSTER
(Reciprocating motion)



MINI-LUSTER (Reciprocating motion)



SWING-LUSTER (Right to Left motion)



Hammer Action Type



FINE BELT SANDER



LUSTER
(Reciprocating motion)
Built-in Motor

1483	NLS-110	
30,000 rpm Max. (*1)	30,000 rpm Max. (*2)	

- Wide selection of attachments available depending on the application.

Speed Reducer · Extension Joint



Extension Joint

1015	CN-01	
35,000 rpm Max. (*1)	35,000 rpm Max. (*2)	



1/4 Speed Reducer

1009	RG-01	
30,000 rpm Max. (*1)	30,000 rpm Max. (*2)	



1/15 Speed Reducer

1010	RG-02	
30,000 rpm Max. (*1)	30,000 rpm Max. (*2)	

*May be connected between the motor and the attachment as required for increased torque.

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

Motor		
Product Code	Product Name	

Controller		
Product Code	Product Name	



• Standard Type Motor with Cord
1,000~40,000 rpm Max.

8086	ENK-410S	
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• Torque Type Motor with Cord
1,000~25,000 rpm Max.

8087	ENK-250T	
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Emax
EVOLution



8224	NE249 120	
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Optional



Coiled Cord : 4.5 ft
<with Switch>

8090	ENKCD-410C		for ENK-410S
8091	ENKCD-250C		for ENK-250T

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000
ø1.0"/ø0.98"/ø0.897"

E3000
— One Piece

E3000
— Modular

ø1.18"

ø1.07"/ø0.98"
ø0.897"

E3000
— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL
DATA

8

APPLICATION
EXAMPLES

INDEX

Emax EVOLution FEATURES

- Digital display enhances safety and efficiency.
- Compact and functional design makes the controller portable.
- Soft touch switches permit easy operation and long service life.

New Advanced Design Controller

Advanced Control Function

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



Motor speed
digital display

Load Meter

● : Continuous load area
● : Intermittent load area
● : Overload

Diversity for work efficiency

2 Motors A and B can be connected to cover multiple work requirements.

*Simultaneous motor operation is not allowable



Memory Speed Function FiXspeed®

An exclusive new feature of the Emax EVOLution is the FiXspeed® system allowing independent foot switch operation for the A and B Motors. A Motor foot switch can be on/off and B Motor foot switch can be variable speed. This function brings unprecedented versatility and workability.

Advanced User Friendly Design

New Industrial Design.
EVOLUTION new user friendly case meets design and performance requirements.



Auto Cruise Function

The controller 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.

Forward / Reverse Select Switch

Forward/Reverse rotation can be selected.

ø4.72" Speed Control Volume

Easy to operate by one finger

Memory Speed Function FiXspeed®

Motor B ON/OFF Function

Motor A ON/OFF Function

Emax EVOLution Controller

Product Code	Product Name	Specifications
8224	NE249 120	• Weight : 5 lb. 1.13 oz. • Power Source : AC120V, 50-60Hz • Dimensions : W5.12" x D10.0" x H3.82"

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

1

EmaxEVO

ESPERT

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ZERO

Sonic-Cutter

ZERO

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iSpeed3

E2000

ø1.0"/ø0.99"/ø0.85"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.0"/ø0.98"

ø0.89"

E3000

— 80,000rpm

E4000

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MA

ø0.89"

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HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

Ultra-Precision Micro Grinder



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.



One Touch Tool Changing

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

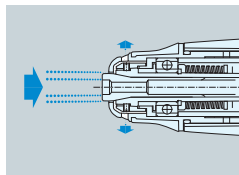


Various Collet Sizes

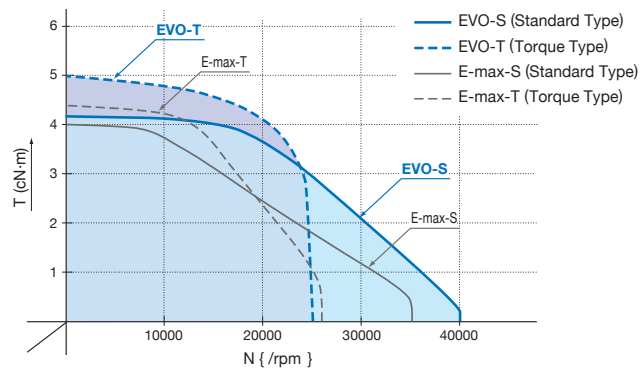
A variety of collet sizes ranging from 1.0 mm to 3.175 mm are available for most attachments.

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 rpm (ENK-410S) Blue
- Torque Type Motor 1,000~25,000 rpm (ENK-250T) Green

***Exclusive use for Emax EVOLUTION**

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



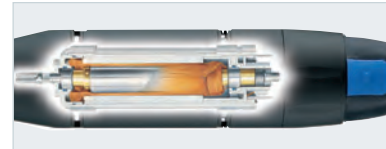
Emax EVOLUTION



Electer E-max

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.



13 Types of Attachments for All Types of Applications

Capable of infinite applications with 13 different attachments.

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

1

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ZERO

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iSpeed3

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ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"/ø0.897"

E3000

— ø0.000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"/ø0.79"

ø0.897"/ø0.91"

ø1.0"/ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xspeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

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4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

Emax EVOLution RING TYPE STANDARD SET

Capabilities for a wide variety of applications.
Excellent balance and motor power for smooth speed
and handling.

1,000~40,000 rpm



Product Code	8231	Product Name	EV410-IR
 Attachment IR-310  Motor ENK-410S			
Standard Equipment	• Micro Grinder (IR-310+ENK-410S) : 1 pc. • Collet ø1/8" (CHH-3.175), • ø2.35mm (CHH-2.35) : 1 pc. each • Controller (NE249 120) : 1 pc. • Handpiece Holder : 1 pc. • Handpiece Stand : 1 pc. • Power Supply Cord : 1 pc. • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 2 pcs. • L Shaped Wrench (9) : 1 pc.		

*Standard set with IH-300 is also available.
(Product Code 8222, Product Name EV410-IH, Price 1,127.00)

Product Code	8222	Product Name	EV410-IH
 Attachment IH-300  Motor ENK-410S			
Standard Equipment	• Micro Grinder (IR-310+ENK-410S) : 1 pc. • Collet ø1/8" (CHH-3.175), • ø2.35 mm (CHH-2.35) : 1 pc. each • Controller (NE249 120) : 1 pc. • Handpiece Holder : 1 pc. • Handpiece Stand : 1 pc. • Power Supply Cord : 1 pc. • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 2 pcs. • L Shaped Wrench (9) : 1 pc.		

Emax EVOLution RING TYPE TORQUE SET

For heavy duty and larger tools, torque type extends
to extend operation ranges.

1,000~25,000 rpm



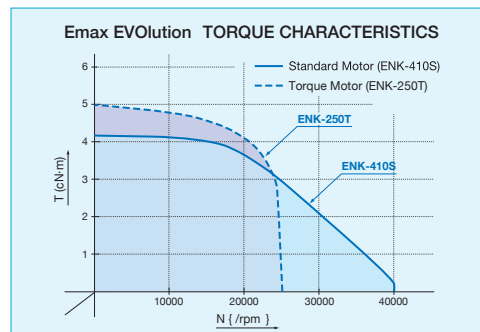
Product Code	8232	Product Name	EV250-IR
 Attachment IR-310  Motor ENK-250T			
Standard Equipment	• Micro Grinder (IR-310+ENK-250T) : 1 pc. • Collet ø1/8" (CHH-3.175), • ø2.35 mm (CHH-2.35) : 1 pc. each • Controller (NE249 120) : 1 pc. • Handpiece Holder : 1 pc. • Handpiece Stand : 1 pc. • Power Supply Cord : 1 pc. • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc. • L Shaped Wrench (9) : 1 pc.		

Motor for *Emax EVOLution* (Electrically Driven)

- NAKANISHI Smart Switch.
- High performance samarium cobalt magnet.
- High accuracy, lightweight, compact, high reliability and superior durability.
- Major reduction of RF noise.
- Provides extremely quiet operation from low to high speed with stepless speed adjustment.

Motor Specifications

Motor Model	ENK-410S	ENK-250T
Speed	1,000~40,000 rpm	1,000~25,000 rpm
Weight (w/o Cord)	3.17 oz.	5.19 oz.
Max. Torque	4.3 cN·m	4.8 cN·m
Output Power	73W	76W



Product Code **8086** STANDARD TYPE MOTOR ENK-410S



1,000~40,000 rpm

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

Product Code	Product Name	Standard Accessories	
8086	ENK-410S	• Straight Cord : 4.5 ft	

Product Code **8087** TORQUE TYPE MOTOR ENK-250T



1,000~25,000 rpm

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

Product Code	Product Name	Standard Accessories	
8087	ENK-250T	• Straight Cord : 4.5 ft	

1

EmaxEVO

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— 50,000rpm

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HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

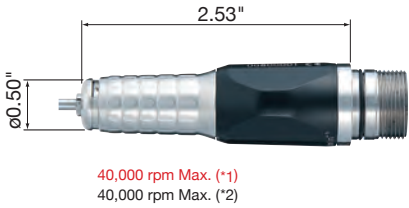
8

APPLICATION

EXAMPLES

INDEX

Product Code **1144** **RING TYPE ATTACHMENT IR-310**

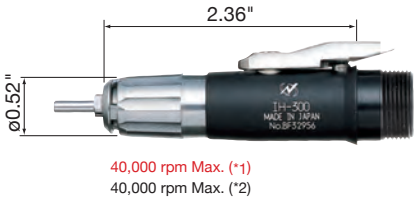


- Perfectly designed for powerful and delicate cutting and grinding, and made slim and light weight for comfortable gripping.
- Weight : 3.25 oz.
- Simple, no wrench bur replacement.
- Wrench is not required to exchange the chuck.
- Collet
 - Standard Size : $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35)
 - Optional Collets: CHH-□□ are shown in page (6-p2)

Ring Type Attachment

Product Code	Product Name	Standard Accessories	
1144	IR-310	• Collet $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35) : 1 pc. each • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc. • L Shaped Wrench (9) : 1 pc.	

Product Code **7097** **LEVER TYPE ATTACHMENT IH-300**



- Perfectly designed for powerful and delicate cutting and grinding, and made slim and light weight for comfortable gripping.
- Weight : 2.19 oz.
- Just turn the lever to exchange the bur.
- Wrench is not required to exchange the chuck.
- Collet
 - Standard Size : $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35)
 - Optional Collets: CHH-□□ are shown in page (6-p2)

Lever Type Attachment

Product Code	Product Name	Standard Accessories	
7097	IH-300	• Collet $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35) : 1 pc. each • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc.	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

$\phi 1.0"/\phi 0.99"/\phi 0.857"$

E3000

— One Piece

E3000

— Modular

$\phi 1.18"$

$\phi 1.07"/\phi 0.98"/\phi 0.897"$

E3000

— 50,000rpm

E4000

3

MA

$\phi 0.897"$

$\phi 1.0"$

$\phi 0.98"$

$\phi 1.18"$

MS

$\phi 0.75"$

$\phi 0.79"$

$\phi 0.87"$

$\phi 0.91"$

$\phi 1.0"$

$\phi 0.98"$

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

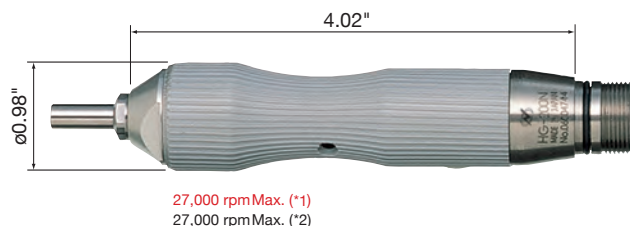
APPLICATION

EXAMPLES

INDEX

Product Code **2810**

TORQUE TYPE ATTACHMENT HG-200



- The resistance produced by cutting and grinding is absorbed by a special rubber grip to eliminate slipping.
- Chuck is tightened by a Wrench.
- Weight : 7.41 oz.
- Collet
Standard Size : $\phi 1/4"$ (CHG-6.35)
Optional Collets : CHG-[] are shown in page (6-p2)

Torque Type Attachment

*Use 6mm torque Type HG-200 to connect ENK-250T *Please use it with Speed Reducer. (ROTUS Air Motor)

Product Code	Product Name	Standard Accessories
2810	HG-200	• Collet $\phi 1/4"$ (CHG-6.35) : 1 pc. • Wrench (10 x 10) : 1 pc. • Bar Wrench (K-212) : 1 pc. • Pin Wrench (K-233) : 1 pc.

Product Code **2904**

For Deep Hole Grinding LONG ATTACHMENT BMH-300



- This unique slim body makes it ideal for cutting and grinding the bottom surface of deep ribs or holes.
- Weight : 5.50 oz.
- Wrench is not required to exchange the chuck.
- Collet
Standard Size : $\phi 1/8"$ (CHM-3.175)
Optional Collets : CHM-[] are shown in page (6-p4)

Long Attachment for Deep Hole Grinding

Product Code	Product Name	Standard Accessories
2904	BMH-300	• Collet $\phi 1/8"$ (CHM-3.175) : 1 pc. • Wrench (7 x 5.1), (6 x 4.5) : 1 pc. each • Pin Wrench (K-233) : 1 pc.

Product Code **1012**

For Chamfering Deep Hole 90° MINI ANGLE TYPE ATTACHMENT MFC-300S



- Ideal for chamfering and deburring the inside of slit pipe.
- Minimum Inner Diameter : $\phi 0.79"$
- Weight : 1.66 oz.
- Standard Collet : $\phi 1.6$ mm (K-252)
- Speed Reduction Ratio : 10/11

90° MINI ANGLE TYPE Attachment for Chamfering Deep Hole, Bur Only $\phi 1.6$ mm *Please use it with Speed Reducer. (ROTUS Air Motor)

Product Code	Product Name	Standard Accessories
1012	MFC-300S	• Collet $\phi 1.6$ mm (K-252) : 1 pc. • Chuck Wrench (K-232) : 1 pc. • Pin Wrench (K-233) : 1 pc.

Product Code **1013**

For Chamfering Deep Hole 90° MINI ANGLE TYPE ATTACHMENT MFC-300M



- The smallest 90° Angle type head is suitable for chamfering and deburring the inside of the slit pipe.
- Minimum Inner Diameter : $\phi 0.51"$
- Weight : 1.66 oz.
- Standard Collet : $\phi 1.6$ mm (K-253)
- Speed Reduction Ratio : 10/11

90° MINI ANGLE TYPE Attachment for Chamfering Deep Hole, Bur Only $\phi 1.6$ mm (Very Small Head) *Please use it with Speed Reducer. (ROTUS Air Motor)

Product Code	Product Name	Standard Accessories
1013	MFC-300M	• Collet $\phi 1.6$ mm (K-253) : 1 pc. • Chuck Wrench (K-232) : 1 pc. • Pin Wrench (K-233) : 1 pc.

*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.

*Order by product code.

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

$\phi 1.9"/\phi 0.98"/\phi 0.897"$

E3000

— One Piece

E3000

— Modular

$\phi 1.18"$

$\phi 1.07"/\phi 0.98"/\phi 0.897"$

E3000

— 50,000rpm

E4000

3

MA

$\phi 0.897"$

$\phi 1.0"/\phi 0.98"$

$\phi 1.18"$

MS

$\phi 0.75"/\phi 0.79"$

$\phi 0.87"/\phi 0.91"$

$\phi 1.0"/\phi 0.98"$

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL DATA

8

APPLICATION EXAMPLES

INDEX

Product Code **2900**

90° ANGLE ATTACHMENT IC-300



Drive Motor & Controller

Electric Motor
(ENK-410S)
(ENK-250T)
Page 1-p7

Emax EVOLution
Controller
(NE249 120)
Page 1-p4

or

Air Motor
(IM-301)
Page 1-p33

ROTUS
Air Line Kit
(AL-H1207F) & AFC-45
Page 5-p2

- 90° Angle attachment with $\phi 1/8"$ ($\phi 3.175$ mm) Collet. Most suitable for polishing flat surfaces, corners and internal surfaces of pipes with paper disk mounted on rubber pad.

- Reduction Ratio : 3/4
- Weight : 1.59 oz.
- Collet
Standard Size : $\phi 1/8"$ (CHC-3.175)
Optional Collets : CHC-□□ are shown in page (6-p2)



90° Angle Attachment

*Please use it with Speed Reducer. (ROTUS Air Motor)

Product Code	Product Name	Standard Accessories	
2900	IC-300	• Collet $\phi 1/8"$ (CHC-3.175) : 1 pc. • Standard Accessories : 1 set • Chuck Wrench (K-231) : 1 pc. • Pin Wrench (K-233) : 1 pc.	

Product Code **2901**

50° ANGLE ATTACHMENT KC-300



Drive Motor & Controller

Electric Motor
(ENK-410S)
(ENK-250T)
Page 1-p7

Emax EVOLution
Controller
(NE249 120)
Page 1-p4

or

Air Motor
(IM-301)
Page 1-p33

ROTUS
Air Line Kit
(AL-H1207F) & AFC-45
Page 5-p2

- Ideal for the work at 50° angle, especially corners and deep concaves.
- Use the motor in reverse rotation for clockwise rotation.
- Speed Reduction Ratio : 3/4
- Weight : 1.59 oz.
- Collet
Standard Size : $\phi 1/8"$ (CHC-3.175)
Optional Collets : CHC-□□ are shown in page (6-p2)



50° Angle Attachment

*Please use it with Speed Reducer. (ROTUS Air Motor)

Product Code	Product Name	Standard Accessories	
2901	KC-300	• Collet $\phi 1/8"$ (CHC-3.175) : 1 pc. • Standard Accessories : 1 set • Chuck Wrench (K-231) : 1 pc. • Pin Wrench (K-233) : 1 pc.	

Standard Accessories for IC-300 and KC-300

Description		Product Code	Product Name	O.D.	Grits	Q'ty
Rubber Pad	(Small)	64105	— —	ø 10mm (ø 0.39")	—	1
	(Med)	64106	— —	ø 20mm (ø 0.79")	—	1
	(Large)	64107	— —	ø 30mm (ø 1.18")	—	1
Sandpaper Disk		64133	S-018	ø 11mm (ø 0.43")	# 180	5
		64137	S-060	ø 11mm (ø 0.43")	# 600	5
		64153	M-018	ø 21mm (ø 0.83")	# 180	5
		64157	M-060	ø 21mm (ø 0.83")	# 600	5
		64173	L-018	ø 31mm (ø 1.22")	# 180	5
		64177	L-060	ø 31mm (ø 1.22")	# 600	5

*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.

Optional Accessories for IC-300 and KC-300

Rubber Pad

Product	Description	Product Code	Product Name	O.D.	Grits	package	
	Rubber Pad (Small)	64105	64105	ø10 mm (ø0.39")	–	1 pc./pack	
	Rubber Pad (Med)	64106	64106	ø20 mm (ø0.79")	–	1 pc./pack	
	Rubber Pad (Large)	64107	64107	ø30 mm (ø1.18")	–	1 pc./pack	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

– One Piece

E3000

– Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

– 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

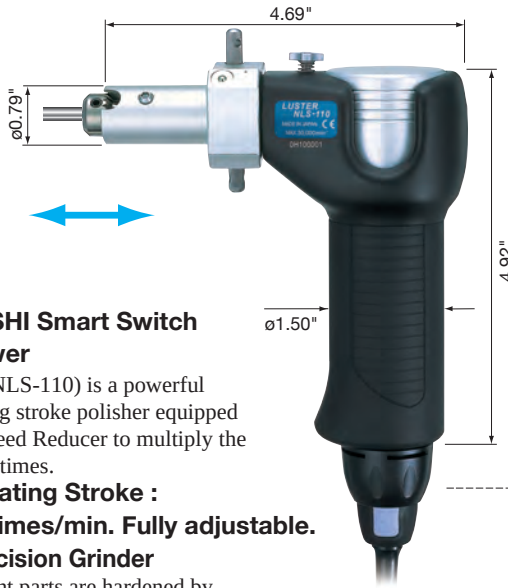
8

APPLICATION

EXAMPLES

INDEX

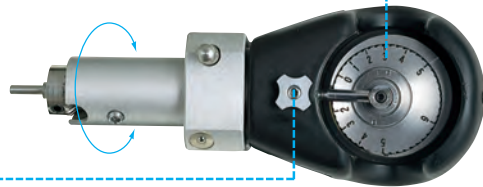
The Features of LUSTER Emax EVOLution NLS-110 (Built-in Motor)



- **NAKANISHI Smart Switch**
- **High Power**
LUSTER (NLS-110) is a powerful reciprocating stroke polisher equipped with 1/4 Speed Reducer to multiply the torque by 4 times.
- **Reciprocating Stroke :**
0~7,600 times/min. Fully adjustable.
- **Ultra-Precision Grinder**
All important parts are hardened by heat treatment to provide excellent durability.
- **Designed with comfortable rubber-grip**
Well balanced, rubber-grip absorbs vibration from reciprocating strokes reducing fatigue and allowing long, continuous operation.



- **Stroke Range : 0~6 mm adjustable by stroke cam**



- **The tilt angle of grindstone arbor is adjustable.**
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.

Controller



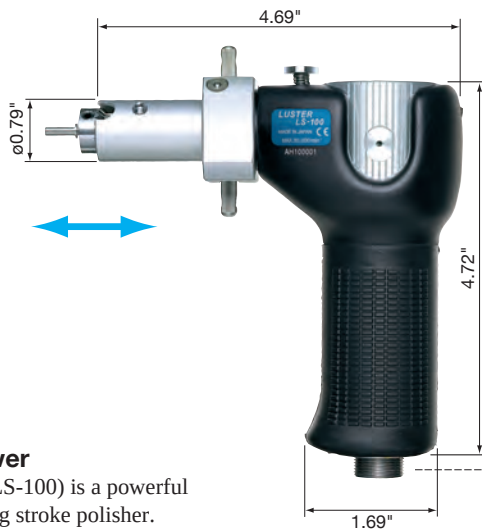
- Weight : 1 lb. 12.22 oz. (w/o cord)
- Max. tool shank diameter $\phi 0.25"$, Screw clamp type.
- Various types of attachment tools are provided as standard accessories.

Reciprocating Motion Polishing Finisher LUSTER

Product Code	Product Name	Standard Accessories
1483	NLS-110	• Standard Accessories : 1 set • Allen Wrench (2 mm), (3 mm) : 1 pc. each • Lubrication Oil • Lubrication Nozzle for LUSTER

30,000 rpm Max. (*1) 30,000 rpm Max. (*2)

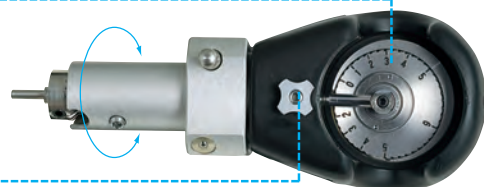
The Features of LUSTER LS-100



- **High Power**
LUSTER (LS-100) is a powerful reciprocating stroke polisher.
- **Reciprocating Stroke :**
0~7,600 times/min. Fully adjustable.
- **Ultra-Precision Grinder**
All important parts are hardened by heat treatment to provide excellent durability.
- **Designed with comfortable rubber-grip**
Well balanced, rubber-grip absorbs vibration from reciprocating strokes reducing fatigue and allowing long, continuous operation.



- **Stroke Range : 0~6 mm adjustable by stroke cam**



- **The tilt angle of grindstone arbor is adjustable.**
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.

Drive Motor & Controller



- Weight : 1 lb. 7.99 oz.
- Max. tool shank diameter $\phi 0.25"$, Screw clamp type.
- Various types of attachment tools are provided as standard accessories.

Reciprocating Motion Miniature Polisher LUSTER

Product Code	Product Name	Standard Accessories
1302	LS-100	• Standard Accessories : 1 set • Allen Wrench (2 mm), (3 mm) : 1 pc. each • Lubrication Oil • Lubrication Nozzle for LUSTER

30,000 rpm Max. (*1) 30,000 rpm Max. (*2)

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

$\phi 1.0"$ / $\phi 0.99"$ / $\phi 0.85"$

E3000

— One Piece

E3000

— Modular

$\phi 1.18"$

$\phi 1.07"$ / $\phi 0.98"$

$\phi 0.97"$

E3000

— 50,000rpm

E4000

3

MA

$\phi 0.897"$

$\phi 1.0"$

$\phi 0.98"$

MS

$\phi 0.75"$

$\phi 0.79"$

$\phi 0.87"$

$\phi 0.91"$

$\phi 1.0"$

$\phi 0.98"$

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

The Features of MINI-LUSTER ML-8



- Reciprocating Stroke (variable) : Approx 0~9,000 times/min.
- Stroke Range (fixed) : 0.8 mm.
- 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.



Drive Motor & Controller

 Electric Motor (ENK-410S) (ENK-250T) Page 1-p7	or	 Air Motor (IM-301) ROTUS Air Line Kit (AL-H1207F) & AFC-45 Page 1-p33 Page 5-p2
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- Weight : 5.12 oz.
- Max. tool shank diameter $\phi 0.13"$, Screw clamp type.
- Various attachment tools and holders are provided as standard accessories.

Pencil-Type Reciprocating Polishing Finisher MINI-LUSTER Attachment

Product Code	Product Name	Stroke Range	Standard Accessories
1307	ML-8	0.8mm	• Allen Wrench (1.5 mm) : 1 pc. • Standard Accessories : 1 set

35,000 rpm Max. (*1) 30,000 rpm Max. (*2)

The Features of SWING-LUSTER SLS-16



- 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 or large sections.

- Weight : 5.00 oz.
- Reciprocating Stroke (variable) : 0~9,000 times/min
- Stroke range (variable) : 0~1.6 mm
- Max. tool shank diameter $\phi 0.20"$, Screw clamp type.

Drive Motor & Controller

 Electric Motor (ENK-410S) (ENK-250T) Page 1-p7	or	 Air Motor (IM-301) ROTUS Air Line Kit (AL-H1207F) & AFC-45 Page 1-p33 Page 5-p2
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Pencil-Type Reciprocating Polishing Finisher SWING-LUSTER Attachment

Product Code	Product Name	Standard Accessories
1380	SLS-16	• Wrench (16 x 18), (20 x 24) : 1 pc. each • Allen Wrench (1.5 mm) : 1 pc. • Standard Accessories : 1 set

35,000 rpm Max. (*1) 24,000 rpm Max. (*2)

*Please use it with Speed Reducer. (ROTUS Air Motor)

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

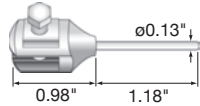
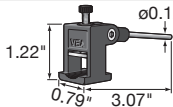
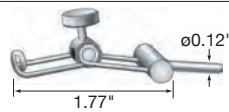
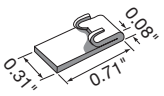
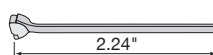
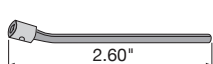
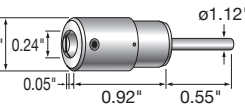
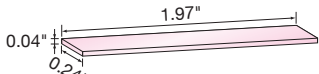
*1 : Maximum Allowable Speed, intermittent use.
*2 : Maximum Allowable Speed, continuous use.

1	EmaxEVO
	ESPERT
	ROTUS
	IMPULSE
	PRESTO II
	Sheenus ZERO
	Sonic-Cutter ZERO
2	iSpeed3
	E2000 at 0"/s0.98"/s0.897"
	E3000 — One Piece
	E3000 — Modular
	01.18"
	01.07"/0.98" 0.897"
	E3000 — 50,000rpm
	E4000
3	MA
	00.897"
	01.0"
	00.98"
	01.18"
	MS
	00.75"
	00.79"
	00.897"
	00.91"
	01.0"
	00.98"
4	HES
	iSpeed5
	HTS
	PLANET
	Xpeed
	ABT
5	AIR LINE KIT
6	PARTS
7	TECHNICAL DATA
8	APPLICATION EXAMPLES
	INDEX

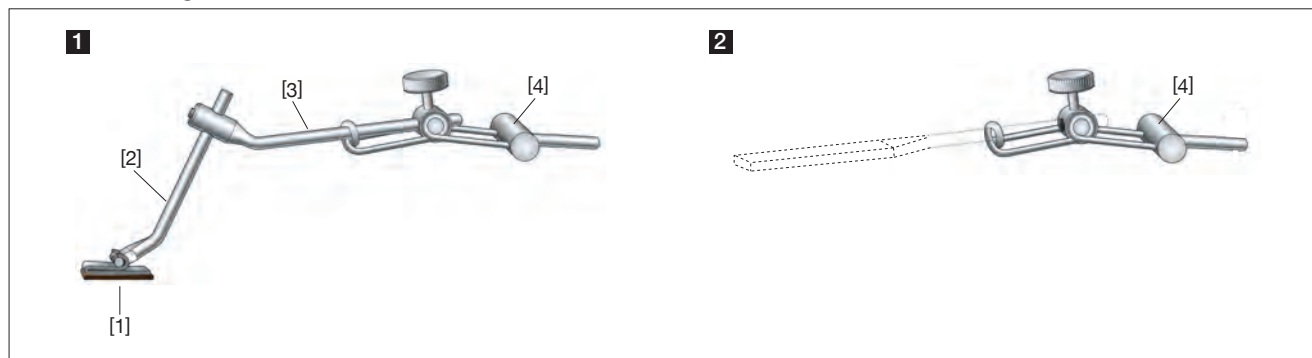
1
EmaxEVO
ESPERT
ROTUS
IMPULSE
PRESTO II
Sheenus ZERO
Sonic-Cutter ZERO
2
iSpeed3
E2000 ø1.0"/ø0.99"/ø0.887"
E3000 — One Piece
E3000 — Modular
ø1.18"
ø1.07"/ø0.98" ø0.897"
E3000 — 50,000rpm
E4000
3
MA
ø0.897"
ø1.0" ø0.98"
ø1.18"
MS
ø0.75" ø0.79"
ø0.87" ø0.81"
ø1.0" ø0.98"
4
HES
iSpeed5
HTS
PLANET
Xpeed
ABT
5
AIR LINE KIT
6
PARTS
7
TECHNICAL DATA
8
APPLICATION EXAMPLES
INDEX

Tool and standard accessories for LUSTER, MINI-LUSTER, SWING-LUSTER

• Each product is provided with tool ● as standard.

Product	Product Code	Product Name	LUSTER NLS-110 / LS-100 ELS-100	MINI-LUSTER ML-8 / EML-8	SWING-LUSTER SLS-16
Max. clampable size : Thickness 0.18" x width 0.43" 	62502	Grindstone Holder VES	● (1 pc.)		
Max. clampable size : Thickness 0.43" x width 0.53" 	62505	Grindstone Holder VEA	● (1 pc.)		
[4] 	62751	Tool Holder with Spring FVA	● (1 pc.)	● (1 pc.)	
[1] 	62525	Rectangular Pad LKE-2A	● (1 pc.)		
[2] 	62526	Rod for Rectangular Pad FBA-2	● (1 pc.)		
[3] 	62527	Angle Rod NGA	● (1 pc.)		
	62814	62814		● (1 pc.)	● (1 pc.)
Max. clampable size : Thickness 0.04" x width 0.24" 	62510	Ceramic Fiber Grindstone Holder		● (1 pc.)	● (1 pc.)
	60737	Ceramic Fiber Grindstone (#1,200)		● (1 pc.)	● (1 pc.)

● Illustration Usage



memo

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

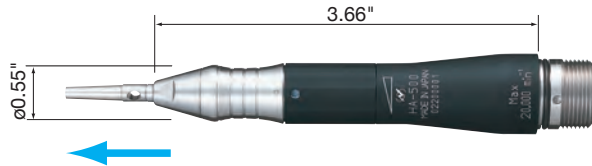
APPLICATION

EXAMPLES

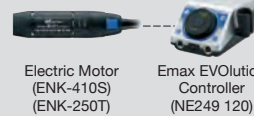
INDEX

1

The Features of HA-500



Drive Motor & Controller



Electric Motor
(ENK-410S)
(ENK-250T)

Emax EVOLution
Controller
(NE249 120)

or



Air Motor
(IM-301)

ROTUS
Air Line Kit
(AL-H1207F) & AFC-45

- Stroke speed : 25~5,000 strokes/min
- 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.
- Self lubricating hammer mechanism ensure excellent durability.

- Weight : 3.35 oz.
- Stroke range : 0.4 mm • Stroke Spring Pressure : 4.4~7.1N (Ring Adjustment Type)

Engraving and Ornament Processing Work Hammer Attachment

Product Code	Product Name	Standard Accessories
8060	HA-500	• Wrench (7 x 5.5) : 1 pc. • Bar Wrench (K-212) : 1 pc. • Oil and Oil offer machine • Hammer Bit (For replacement) : 2 pcs.

20,000 rpm Max. (*1) 16,000 rpm Max. (*2)

*Please use it with Speed Reducer. (ROTUS Air Motor)

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

Product Code	Product	Package
65301		3 pcs./pack

2

iSpeed3
E2000
ø1.0"/ø0.99"/ø0.85"
E3000
— One Piece
E3000
— Modular
ø1.18"
ø1.07"/ø0.98"
ø0.87"
E3000
— 50,000rpm
E4000

3

MA
ø0.897"
ø1.0"
ø0.98"
ø1.18"

MS
ø0.75"
ø0.79"
ø0.87"
ø0.91"
ø1.0"
ø0.98"

4

HES
iSpeed5
HTS
PLANET
Xpeed
ABT

5

AIR LINE KIT

6

PARTS

7

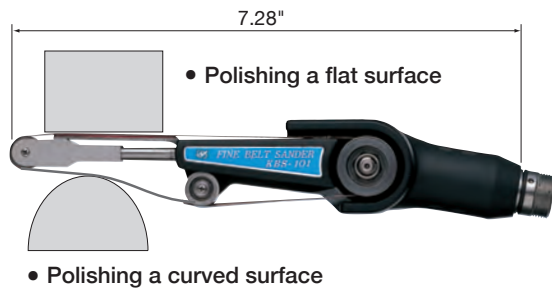
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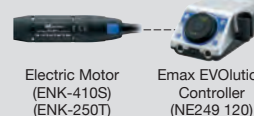
APPLICATION EXAMPLES

INDEX

The Features of FINE BELT SANDER KBS-101



Drive Motor & Controller



Electric Motor
(ENK-410S)
(ENK-250T)

Emax EVOLution
Controller
(NE249 120)

or



Air Motor
(IM-301)

ROTUS
Air Line Kit
(AL-H1207F) & AFC-45

- Belt runs Approx. 0~2,700 ft/min
- 8 mm, 6 mm and 4 mm width belts are available.
- The angle of the belt section is fully adjustable.
- Exchanging the belt is simply done by lever release.
- Weight : 12.35 oz.
- Light-weight, compact, minimal vibration and a small diameter grip design keep the hand free from fatigue for long, continuous operation.
- When polishing a curved surface, the tension between the front and central pulley can be utilized. When polishing a flat surface or a groove, use the flat part of belt.



FINE BELT SANDER Attachment

Product Code	Product Name	Standard Accessories
1146	KBS-101	• 8 mm Belt (3 kinds 2 pcs. each) • 6 mm Belt (3 kinds 2 pcs. each) • 4 mm Belt (3 kinds 2 pcs. each) • Allen Wrench (3 mm) : 1 pc.

35,000 rpm Max. (*1) 35,000 rpm Max. (*2)

Belt for FINE BELT SANDER

Product	Description	Product Code	Grit	Width (mm)	Length (mm)	Package	
	Abrasive Belt	64901	# 80	4	300	30 pcs./pack	
		64902	# 120				
		64903	# 180				
		64904	# 240				
		64905	# 320				
		64906	# 400				
		64911	# 80	6			
		64912	# 120				
		64913	# 180				
		64914	# 240				
		64915	# 320				
		64916	# 400				
		64921	# 80				
		64922	# 120				
		64923	# 180				
		64924	# 240				
		64925	# 320				
		64926	# 400				
64927	# 600						
64928	# 800						
	Zirconia Belt	64971	# 80	8	300	30 pcs./pack	
		64972	# 100				
		64973	# 120				
	Diamond Belt (Hard Type)	65011	# 80	8	300	3 pcs./pack	
		65012	# 120				
		65014	# 240	8	300	3 pcs./pack	
		65015	# 320				
		65017	# 600				
	Diamond Belt (Soft Type)	65021	# 120	8	300	3 pcs./pack	
		65022	# 180				
		65023	# 240				
		65024	# 320	8	300	3 pcs./pack	
		65028	# 400				
		65025	# 600				
		65026	# 800				
		65027	#1,000				

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.97"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.97"

E3000

— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.87"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

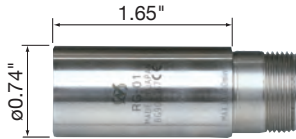
APPLICATION

EXAMPLES

INDEX

1

Product Code **1009** SPEED REDUCER RG-01



TORQUE UP 4 TIMES
(1/4 Speed Reducer)

- The speed is reduced to 1/4 but the torque is multiplied by 4 times.
- Weight : 2.40 oz.

30,000 rpm Max. (*1) 30,000 rpm Max. (*2)

Speed Reducer (1/4)

Product Code	Product Name	Standard Accessories	
1009	RG-01	• Pin Wrench (K-233) : 1 pc.	

Product Code **1010** SPEED REDUCER RG-02



TORQUE UP 15 TIMES
(1/15 Speed Reducer)

- The speed is reduced to 1/15 but the torque is multiplied by 15 times.
- Weight : 3.28 oz.

30,000 rpm Max. (*1) 30,000 rpm Max. (*2)

Speed Reducer (1/15)

Product Code	Product Name	Standard Accessories	
1010	RG-02	• Pin Wrench (K-233) : 1 pc.	

2

iSpeed3
E2000
— One Piece
E3000
— Modular
— 1.18"
— 0.75"/0.98"
— 0.897"
E3000
— 30,000rpm
E4000

3

MA
— 0.897"
— 1.0"/0.98"
— 1.18"
MS
— 0.75"/0.79"
— 0.897"/0.941"
— 1.0"/0.98"

4

HES
iSpeed5
HTS
PLANET
Xspeed
ABT

5

AIR LINE KIT

6

PARTS

7

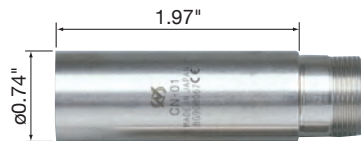
TECHNICAL DATA

8

APPLICATION EXAMPLES

INDEX

Product Code **1015** EXTENSION JOINT CN-01



(Speed 1 : 1)

- This is a joint to be connected between a motor and an attachment to extend the total length of the attachment.

- Weight : 2.93 oz.

35,000 rpm Max. (*1) 35,000 rpm Max. (*2)

Extension Joint (Speed 1 : 1)

Product Code	Product Name	Standard Accessories	
1015	CN-01	• Pin Wrench (K-233) : 1 pc.	

Product Code **8106** FOOT PEDAL FC-64

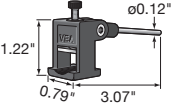
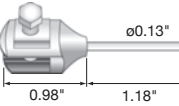
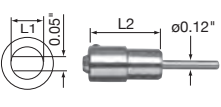
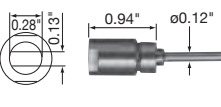
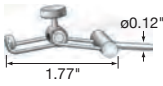
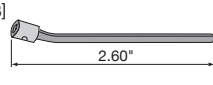
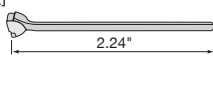
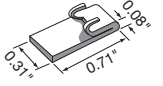


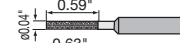
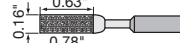
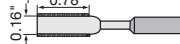
- Used as an ON/OFF switch as well as a variable speed control.

Foot Pedal

Product Code	Product Name	Fit to	
8106	FC-64	Emax EVolution (NE249)	

Common Tools for LUSTER, MINI-LUSTER

Product	Product Code	Description · Product Name
	62505	Grindstone Holder VEA for (W 0.53" x T 0.43")
	62502	Grindstone Holder VES for (W 0.43" x T 0.18")
	62508 62507 62506	Holder for Super Stone ...SH-10 (L1=0.40") (L2=1.10") ...SH-6 (L1=0.24") (L2=0.92") ...SH-4 (L1=0.16") (L2=0.87")
	62509	Oil Stone Lapping Stick Holder for (W 0.24" x T 0.12")
[4] 	62751	Tool Holder with Spring FVA
[3] 	62527	Angle Rod NGA
[2] 	62526	Rod for Lapping FBA-2
[1] 	62525	LKE-2A with Hinge Use with FBA-2

Product	Product Code	Description · Product Name
	62840	DLA-1-100
	62814	DLA4 x 1-100
	62871	DLA1 x 4-100

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

at 0"/ø0.58"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.837"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

[1]~[4] : Please See Page 1-p14 for Illustration Usage.

● Evolutionary New Design High-Performance Brushless Micro Grinder.

Ultra-Precision Micro Grinder

The Esperit 500 brushless motor takes motor technology to an even higher level. The new state of the art motor has dramatically increased efficiency and torque output. The microprocessor based controller provides optimal control of the motors and allows for increased flexibility in this multi-function system.

Speed : 1,000~50,000 rpm

Speed is steplessly variable from 1,000~50,000 rpm. Smooth and powerful torque is delivered at both high and low speeds. The extremely high maximum speed of 50,000 rpm allows high precision micro-machining.

Low Noise, Low Vibration

The brushless motor and incorporated cooling fan have reduced the vibration and noise levels, resulting in a quieter, more comfortable work environment. Dramatically compared with conventional grinders.

2 Types of Motors

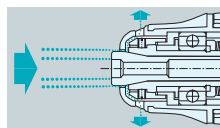
Very high torque from compact motors.

NAKANISHI Smart Switch Color

- Compact Type (ENK-500C) 140W Blue
- Torque Type (ENK-500T) 200W Gray

Special Dust-Proof Mechanism

The handpiece has a patented built-in dust protection system to prevent the infiltration of dust and debris into the front bearings. This NAKANISHI patented design assures long-term durability.



NAKANISHI Smart Switch

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

NAKANISHI Smart Switch



9 Types of Attachments Available

9 different types of attachments making an almost infinite number of applications possible.

Wide Range of Collets Available

A variety of collet sizes ranging from 1.0 mm to 3.175 mm are available for most attachments.

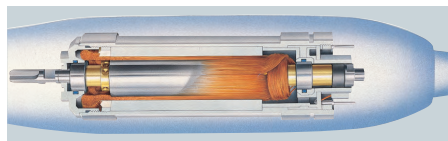
Micro Grinder & Handpiece Stand

This specially designed micromotor stand allows easy pick-up and set-down of the micro grinder. Strong, but soft to the touch, the micro grinder stand contains convenient, integrated storage compartments for adjustment wrenches and a spare chuck.



Excellent Durability

High performance brushless motor eliminates the need to change carbon brushes. NAKANISHI's internal load test has proven continuous use for more than 5,000 hours.



High Precision

NAKANISHI's ultra-precision technology ensures bur concentricity of 0.02 mm (0.0008") or less, which allows for very high precision finishing.

Simple Screw on Attachments



New Advanced Design Controller

Optimal Control via Microcomputer

The operation of all Espert 500 functions is controlled by a high performance microcomputer (CPU) that is programmed with NAKANISHI's proprietary technology. NAKANISHI's CPU has direct control of the brushless micro grinder allowing smooth and highly precise cutting and polishing of a wide variety of materials. Bur "chatter" has been eliminated. The system automatically senses which micromotor is attached (ENK-500C or ENK-500T) and self adjusts to provide optimum micro grinder performance.

Eco-Friendly Design

The electronic circuits are designed using NAKANISHI's proprietary technology to meet eco-friendly expectations by minimizing power consumption. Since power demands are minimal, no significant heat is generated and no cooling fan is required.

Auto Cruise Function

The controller is equipped with an auto cruise function that operates the micro grinder at a preset speed without the need to use the foot pedal. This function eliminates foot fatigue during prolonged operation.

Memory Speed Function FiXspeed®

An exclusive new feature of the Espert 500 system, the FiXspeed® system allows the user to independently preset the speed of motor A and motor B. 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 pedal. This function allows for unprecedented flexibility.

Simplified Hand and Foot Pedal Control

You no longer need to push a switch on the controller to switch between hand and foot pedal control. If you want to operate the motor handpiece by hand simply push the NAKANISHI Smart Switch, if you want to use foot pedal control simply depress the foot pedal.

A/B 2 Motors Can Be Connected

High Quality Metallic Silver Body

Other Features

- Self Check Function (Maintenance Mode)
- Smooth Operation
- Operation Check Sound
- Highly Visible and easy to operate front panel
- 2-Digit Digital Display
- Error Code Display Function



ESPERT 500 Controller

Product Code	Product Name	Specifications	
9793	NE96	• Power Source : AC120V, 50-60Hz • Dimensions : W6.77" x D9.06" x H3.70" • Weight : 5 lb. 11.71 oz. • Accessories : Handpiece Stand : 1 pc. - Handpiece Holder : 1 pc.	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.99"/ø0.85"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.89"

E3000

— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.87"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

Espert 500 Standard Set (Ring Type)



- High Power System. Max. Output 140W
- Speed Range : 1,000 ~ 50,000 rpm
- Microprocessor controlled for optimal motor control
- Hand Switch [NAKANISHI Smart Switch]
- Memory Speed Function [FiXpeed®]

Product Code	7340	Product Name	ES50C-HR
Attachment	EHR-500	Motor	ENK-500C
Controller	NE96		
Standard Accessories	• Controller (NE96) : 1 pc. • Compact Motor Handpiece (ENK50C-HR) : 1 pc. • Collet ø1/8" (CHH-3.175) : 1 pc. • Collet ø2.35 mm (CHH-2.35) : 1 pc. • Handpiece Holder : 1 pc. • Handpiece Stand : 1 pc. • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc. • L Shaped Wrench (9) : 1 pc.		

Espert 500 Compact Motor Handpiece

NAKANISHI Smart Switch (Blue)



Product Code	7339	Product Name	ENK50C-HR
Attachment	EHR-500	Motor	ENK-500C
Standard Accessories	• Collet ø1/8" (CHH-3.175) : 1 pc. • Collet ø2.35 mm (CHH-2.35) : 1 pc. • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc. • L Shaped Wrench (9) : 1 pc.		

Espert 500 Torque Set (Ring Type)



- Highest Power in its Class. Max. Output 200W
- Speed Range : 1,000 ~ 50,000 rpm
- Microprocessor controlled for optimal motor control
- Hand Switch [NAKANISHI Smart Switch]
- Memory Speed Function [FiXpeed®]

Product Code	7342	Product Name	ES50T-HR
Attachment	EHR-500	Motor	ENK-500T
Controller	NE96		
Standard Accessories	• Controller (NE96) : 1 pc. • Torque Motor Handpiece (ENK50T-HR) : 1 pc. • Collet ø1/8" (CHH-3.175) : 1 pc. • Collet ø2.35 mm (CHH-2.35) : 1 pc. • Handpiece Holder : 1 pc. • Handpiece Stand : 1 pc. • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc. • L Shaped Wrench (9) : 1 pc.		

Espert 500 Torque Motor Handpiece

NAKANISHI Smart Switch (Gray)



Product Code	7341	Product Name	ENK50T-HR
Attachment	EHR-500	Motor	ENK-500T
Standard Accessories	• Collet ø1/8" (CHH-3.175) : 1 pc. • Collet ø2.35 mm (CHH-2.35) : 1 pc. • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc. • L Shaped Wrench (9) : 1 pc.		

Product Code	Product Name	
--------------	--------------	--

Attachment



Ring Type

7182	EHR-500	
------	---------	--

50,000 rpm Max. (*1)
40,000 rpm Max. (*2)

Page 1-p24



Lever Type

2912	EHL-401	
------	---------	--

50,000 rpm Max. (*1)
40,000 rpm Max. (*2)

Page 1-p24



Torque Type

2973	EHG-400	
------	---------	--

40,000 rpm Max. (*1)
30,000 rpm Max. (*2)

Page 1-p25



90° Angle Type

2933	EIC-300	
------	---------	--

40,000 rpm Max. (*1)
20,000 rpm Max. (*2)

Page 1-p25



50° Angle Type

2932	EKC-300	
------	---------	--

40,000 rpm Max. (*1)
20,000 rpm Max. (*2)

Page 1-p25



90° Angle Torque Type

2923	ERA-270	
------	---------	--

40,000 rpm Max. (*1)
20,000 rpm Max. (*2)

Page 1-p25



LUSTER (Reciprocating motion)

1516	ELS-100	
------	---------	--

30,000 rpm Max. (*1)
30,000 rpm Max. (*2)

Page 1-p26



MINI-LUSTER (Reciprocating motion)

1554	EML-8	
------	-------	--

40,000 rpm Max. (*1)
30,000 rpm Max. (*2)

Page 1-p26



FINE BELT SANDER

1145	EBS-101	
------	---------	--

40,000 rpm Max. (*1)
30,000 rpm Max. (*2)

Page 1-p26

- Use ECN-011 or ERG-01 for ELECTER Emax EVOLUTION, ROTUS attachments



Extension Adaptor

1518	ECN-011	
------	---------	--

40,000 rpm Max. (*1)
30,000 rpm Max. (*2)

Page 1-p27



Speed Reducer (1/4)

1517	ERG-01	
------	--------	--

40,000 rpm Max. (*1)
30,000 rpm Max. (*2)

Page 1-p27

System Chart

Speed Reducer



- 1/4 Speed Reducer

1553	ERG-01B	
------	---------	--

40,000 rpm Max. (*1)
30,000 rpm Max. (*2)

May be connected between the motor and the spindle as required for increased torque.

Motor



- Compact Motor and Cord
1,000~50,000 rpm

9088	ENK-500C	
------	----------	--



- Torque Motor and Cord
1,000~50,000 rpm

9089	ENK-500T	
------	----------	--

Controller



- Espert 500

9793	NE96	
------	------	--

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000
ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xspeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL DATA

8

APPLICATION EXAMPLES

INDEX

ESPERT 500 MOTORS & ATTACHMENTS

Product Code **9088**

COMPACT TYPE MOTOR ENK-500C



1,000~50,000 rpm

- Small, lightweight, high-speed brushless DC motor.
- Incorporates the NAKANISHI Smart Switch for easy on/off operation.
- Very low vibration noise and maintenance.
- Weight : 4.06 oz. excluding cord

Compact Type Motor

Product Code	Product Name	Specifications	
9088	ENK-500C	• Output Power : 140W • Maximum Torque : 6.0 cN·m • Cord Length : 4.5 ft	

Product Code **9089**

TORQUE TYPE MOTOR ENK-500T



1,000~50,000 rpm

- High-power, high-torque, high-speed brushless DC motor.
- Incorporates the NAKANISHI Smart Switch for easy on/off operation.
- Very low vibration noise and maintenance.
- Weight : 5.64 oz. excluding cord

Torque Type Motor

Product Code	Product Name	Specifications	
9089	ENK-500T	• Output Power : 200W • Maximum Torque : 8.7 cN·m • Cord Length : 4.5 ft	

Product Code **7182**

RING TYPE ATTACHMENT EHR-500



- Manufactured with micron level precision for high accuracy and high reliability.
- Slim, lightweight design allows for fine finishing of delicate parts.
- Ring Type one touch bur release.
- Collet
Standard Size : $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35) : 1 pc. each
Optional Collets : CHH-□□ are shown in page (6-p2)
• Weight : 3.32 oz.
- 50,000 rpm Max. (*1) 40,000 rpm Max. (*2)

Ring Type Attachment

Product Code	Product Name	Standard Accessories	
7182	EHR-500	• Collet $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35) : 1 pc. each • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc. • L Shaped Wrench (9) : 1 pc.	

Product Code **2912**

LEVER TYPE ATTACHMENT EHL-401



- To attain more powerful grinding and fine polishing finish, attachment EHL-401 is designed to make it lightweight and fit to pen-grip type holding.
- Simple lever turning for bur exchange.
- Same chuck as used in EHR-500.
- Collet
Standard Size : $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35) : 1 pc. each
Optional Collets : CHH-□□ are shown in page (6-p2)
• Weight : 2.47 oz.
- 50,000 rpm Max. (*1) 40,000 rpm Max. (*2)

Lever Type Attachment

Product Code	Product Name	Standard Accessories	
2912	EHL-401	• Collet $\phi 1/8"$ (CHH-3.175), $\phi 2.35$ mm (CHH-2.35) : 1 pc. each • Wrench (7 x 5.1) : 1 pc. • Pin Wrench (K-233) : 1 pc.	

Product Code **2973**

TORQUE TYPE ATTACHMENT EHG-400



- Torque type attachment used with $\phi 1/4$ " chuck diameter as standard and nicely fits in hand-grip.

- Collet
Standard Size : $\phi 1/4$ " (CHG-6.35) : 1 pc.
Optional Collets : CHG-□□ are shown in page (6-p2)
- Weight : 3.88 oz.

40,000 rpm Max. (*1) 30,000 rpm Max. (*2)

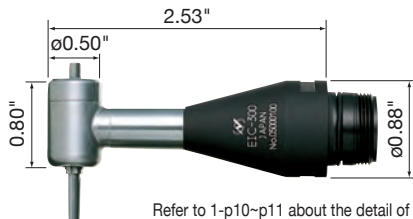
*Please use it with Speed Reducer.

Torque Type Attachment

Product Code	Product Name	Standard Accessories
2973	EHG-400	• Collet $\phi 1/4$" (CHG-6.35) : 1 pc. • Wrench (10 x 10) : 1 pc. • Bar Wrench (K-212) : 1 pc.

Product Code **2933**

90°ANGLE ATTACHMENT EIC-300



Refer to 1-p10~p11 about the detail of Accessories.

- 90° Angle Attachment with $\phi 1/8$ " Collet is conveniently small and equally suitable for polishing flat surfaces with rubber pad paper disk, corner work, and grinding the inside of a pipes.

- Speed Reduction Ratio : 3/4
- Collet
Standard Size : $\phi 1/8$ " (CHC-3.175) : 1 pc.
Optional Collets : CHC-□□ are shown in page (6-p2)
- Standard Accessories : Rubber Pad, Sandpaper Disk • Weight : 1.90 oz.

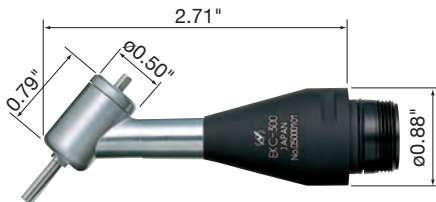
40,000 rpm Max. (*1) 20,000 rpm Max. (*2)

90° Angle Attachment

Product Code	Product Name	Standard Accessories
2933	EIC-300	• Collet $\phi 1/8$" (CHC-3.175) : 1 pc. • Chuck Wrench (K-231) : 1 pc. • Wrench (20 x 24) : 1 pc. • Standard Accessories : 1 set

Product Code **2932**

50°ANGLE ATTACHMENT EKC-300



Refer to 1-p10~p11 about the detail of Accessories.

- 50° Angle Attachment is suitable for working in corners, cavities, etc.

- Reverse rotation against the motor
- Speed Reduction Ratio : 3/4
- Collet
Standard Size : $\phi 1/8$ " (CHC-3.175) : 1 pc.
Optional Collets : CHC-□□ are shown in page (6-p2)
- Standard Accessories : Rubber Pad, Sandpaper Disk
- Weight : 1.90 oz.

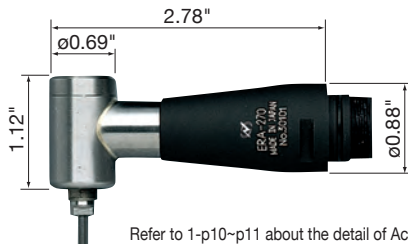
40,000 rpm Max. (*1) 20,000 rpm Max. (*2)

50° Angle Attachment

Product Code	Product Name	Standard Accessories
2932	EKC-300	• Collet $\phi 1/8$" (CHC-3.175) : 1 pc. • Chuck Wrench (K-231) : 1 pc. • Wrench (20 x 24) : 1 pc. • Standard Accessories : 1 set

Product Code **2923**

90°ANGLE TORQUE ATTACHMENT ERA-270



Refer to 1-p10~p11 about the detail of Accessories.

- 90° Angle type is suitable for the work of corner and the grinding of the inside of pipe.

- Speed Reduction Ratio : 1/1.5
- Collet
Standard Size : $\phi 1/8$ " (CHS-3.175) : 1 pc.
Optional Collets : CHS-□□ are shown in page (6-p4)
- Weight : 3.77 oz.

40,000 rpm Max. (*1) 20,000 rpm Max. (*2)

90° Angle Torque Attachment

Product Code	Product Name	Standard Accessories
2923	ERA-270	• Collet $\phi 1/8$" (CHS-3.175) : 1 pc. • Wrench (8 x 5), (7 x 5.1), (20 x 24) : 1 pc. each

*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.

*Order by product code.

1-p25

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

$\phi 1/2$ " $\phi 0.88$ " $\phi 0.89$ "

E3000

— One Piece

E3000

— Modular

$\phi 1.18$ "

$\phi 1.07$ " $\phi 0.98$ "

$\phi 0.89$ "

E3000

— 50,000rpm

E4000

3

MA

$\phi 0.89$ "

$\phi 1.0$ "

$\phi 0.98$ "

$\phi 1.18$ "

MS

$\phi 0.75$ "

$\phi 0.79$ "

$\phi 0.87$ "

$\phi 0.91$ "

$\phi 1.0$ "

$\phi 0.98$ "

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

Product Code **1516**

Reciprocating Motion Polishing Finisher LUSTER ATTACHMENT ELS-100



- Reciprocating Stroke (variable) : 0~7,600 times/min (Max.)
- Perfect for final finishing such as lapping and honing after grinding. Streamlines conventional hand-finishing of metal molds.
- Reciprocating type compact special polisher for ESPERT motor.
- Stroke is adjustable from 0~6 mm.

- Max. tool shank diameter $\phi 0.25"$, Screw clamp type.
- Weight : 1 lb. 7.99 oz.

30,000 rpm Max. (*1) 30,000 rpm Max. (*2)

Reciprocating Motion Polishing Finisher LUSTER Attachment

Product Code	Product Name	Standard Accessories	
1516	ELS-100	• Standard Accessories : 1 set • Allen Wrench (2 mm), (3 mm) : 1 pc. each • Lubrication Oil • Lubrication Nozzle for LUSTER	

Product Code **1554**

Pencil-Type Reciprocating Polishing Finisher MINI-LUSTER ATTACHMENT EML-8



- Reciprocating Stroke (variable) : 0~10,000 times/min (Max.)
- Stroke Range : 0.8 mm

- Max. tool shank diameter $\phi 0.13"$, Screw clamp type.
- Weight : 4.59 oz.

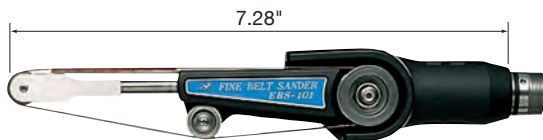
40,000 rpm Max. (*1) 30,000 rpm Max. (*2)

Pencil-Type Reciprocating Polishing Finisher MINI-LUSTER Attachment

Product Code	Product Name	Stroke Range	Standard Accessories	
1554	EML-8	0.8 mm	• Standard Accessories : 1 set • Allen Wrench (1.5 mm) : 1 pc.	

Product Code **1145**

FINE BELT SANDER ATTACHMENT EBS-101



- The angle of belt section is steplessly adjustable.

- Width of Belt : 8 mm, 6 mm, 4 mm.
- Belt Speed : 0~3,084 ft/min (Max.)
- Weight : 12.52 oz.

40,000 rpm Max. (*1) 30,000 rpm Max. (*2)

*Refer to 1-p17 about the detail of Belt.

FINE BELT SANDER Attachment

Product Code	Product Name	Standard Accessories	
1145	EBS-101	• 8 mm Belt (3 different kinds) : 2 pcs. each • 6 mm Belt (3 different kinds) : 2 pcs. each • 4 mm Belt (3 different kinds) : 2 pcs. each • Allen Wrench (3 mm) : 1 pc.	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus ZERO

Sonic-Cutter ZERO

2

iSpeed3

E2000 $\phi 1.0"/\phi 0.39"/\phi 0.85"$

E3000 — One Piece

E3000 — Modular

$\phi 1.18"$

$\phi 1.0"/\phi 0.98"$

E3000 — 50,000rpm

E4000

3

MA

$\phi 0.897"$

$\phi 1.0"/\phi 0.98"$

$\phi 1.18"$

MS

$\phi 0.75"/\phi 0.79"$

$\phi 0.87"/\phi 0.81"$

$\phi 1.0"/\phi 0.98"$

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL DATA

8

APPLICATION EXAMPLES

INDEX

ESPERT 500 SPEED REDUCER & PARTS

Product Code **1553**

SPEED REDUCER (1/4) ERG-01B



- 1/4 Speed Reducer ERG-01B provides 4 times greater torque by mounting it in between the motor and the attachment.
- Speed Reduction Ratio 1/4
- Weight : 2.29 oz.
- 40,000 rpm Max. (*1)
- 30,000 rpm Max. (*2)

Speed Reducer (1/4)

Product Code	Product Name	Standard Accessories	
1553	ERG-01B	• Pin Wrench (K-233) : 1 pc.	

Product Code **1518**

EXTENSION ADAPTOR ECN-011



- The Adaptor can be used with the attachments for Emax EVOLUTION and ROTUS you already have.
- Speed Ratio 1 : 1
- Weight : 1.09 oz.
- 40,000 rpm Max. (*1)
- 30,000 rpm Max. (*2)

Extension Adaptor

Product Code	Product Name	Standard Accessories	
1518	ECN-011	• Wrench (20 x 24) : 1 pc.	

Product Code **1517**

SPEED REDUCER (1/4) ERG-01

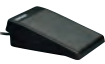


- The Speed Reducer can be used with the attachments for Emax EVOLUTION and ROTUS you already have.
- Reduces the speed 1/4 and multiplies the torque by 4 times.
- Speed Reduction Ratio 1/4
- Weight : 2.19 oz.
- 40,000 rpm Max. (*1)
- 30,000 rpm Max. (*2)

Speed Reducer (1/4)

Product Code	Product Name	Standard Accessories	
1517	ERG-01	• Pin Wrench (K-233) : 1 pc.	

ESPERT 500 Spare Parts

Product	Description	Product Code	Product Name	Specifications	
	Foot Pedal	1440	FC-40	• Variable Speed Control Foot Pedal	
	Espert 500 Handpiece Stand	8104	K-274		
	Espert 500 Compact Motor Cord	9093	ENKCD-50C	• Compact Motor Cord • 4.5 ft Long	
	Espert 500 Compact Motor Cord	9095	ENKCD-50C 3M	• Compact Motor Cord • 9.84 ft Long	
	Espert 500 Torque Motor Cord	9094	ENKCD-50T	• Torque Motor Cord • 4.5 ft Long	
	Espert 500 Torque Motor Cord	9096	ENKCD-50T 3M	• Torque Motor Cord • 9.84 ft Long	

*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.

*Order by product code.

1-p27

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"/ø0.897"

E3000

— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"/ø0.79"

ø0.897"/ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

1
EmaxEVO
ESPERT
ROTUS
IMPULSE
PRESTO II
Sheenus ZERO
Sonic-Cutter ZERO
2
iSpeed3
E2000 ø1.0"/ø0.98"/ø0.897"
E3000 — One Piece
E3000 — Modular
ø1.18"
ø1.07"/ø0.98" ø0.897"
E3000 — 80,000rpm
E4000
3
MA
ø0.897"
ø1.0" ø0.98"
ø1.18"
MS
ø0.75" ø0.79"
ø0.87" ø0.91"
ø1.0" ø0.98"
4
HES
iSpeed5
HTS
PLANET
Xpeed
ABT
5
AIR LINE KIT
6
PARTS
7
TECHNICAL DATA
8
APPLICATION EXAMPLES
INDEX

ROTUS

30,000 rpm

MODULAR TYPE HIGH TORQUE AIR GRINDER

- High torque air motor assembled with special vane mechanism.
- Two types of air motors can be selected depending on the application.
- 1/4 and 1/15 Speed Reducers (RG-01, RG-02) can be connected.
- **Lubricating oil is required.**



IMPULSE

60,000 rpm

PENCIL TYPE AIR GRINDER

- Durable and quiet high-efficient air grinder.
- The IMPULSE Series also offers 60 degree and 90 degree models. Choose the type that best fits your application requirements.
- **Lubricating oil is required.**



PRESTO II

320,000 rpm

ULTRA-PRECISION HIGH SPEED AIR TURBINE GRINDER

- Most suitable for delicate processing works due to no lube air turbine handpiece.



1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

ROTUS System Chart

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.99"/ø0.85"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.89"

E3000

— ø0.000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.87"

ø0.94"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

Product Code	Product Name	
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1144	IR-310	
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40,000 rpm Max. (*1) 40,000 rpm Max. (*2) Page 1-p8

7097	IH-300	
------	--------	--

40,000 rpm Max. (*1) 40,000 rpm Max. (*2) Page 1-p8

2810	HG-200	
------	--------	--

30,000 rpm Max. (*1) 27,000 rpm Max. (*2) Page 1-p9

2904	BMH-300	
------	---------	--

35,000 rpm Max. (*1) 35,000 rpm Max. (*2) Page 1-p9

1012	MFC-300S	
------	----------	--

15,000 rpm Max. (*1) 15,000 rpm Max. (*2) Page 1-p9

1013	MFC-300M	
------	----------	--

15,000 rpm Max. (*1) 15,000 rpm Max. (*2) Page 1-p9

2900	IC-300	
------	--------	--

35,000 rpm Max. (*1) 20,000 rpm Max. (*2) Page 1-p10

2901	KC-300	
------	--------	--

35,000 rpm Max. (*1) 20,000 rpm Max. (*2) Page 1-p10

1302	LS-100	
------	--------	--

30,000 rpm Max. (*1) 30,000 rpm Max. (*2) Page 1-p12

1307	ML-8	
------	------	--

35,000 rpm Max. (*1) 30,000 rpm Max. (*2) Page 1-p13

1380	SLS-16	
------	--------	--

35,000 rpm Max. (*1) 24,000 rpm Max. (*2) Page 1-p13

8060	HA-500	
------	--------	--

20,000 rpm Max. (*1) 16,000 rpm Max. (*2) Page 1-p16

1146	KBS-101	
------	---------	--

35,000 rpm Max. (*1) 35,000 rpm Max. (*2) Page 1-p16

Attachment



Ring Type



Lever Type



Torque Type



Long Type



90° Mini Angle Type



90° Mini Angle Type (Very Small Head)



90° Angle Type



50° Angle Type



LUSTER
(Reciprocating motion)



MINI-LUSTER (Reciprocating motion)



SWING-LUSTER (Right to Left motion)



Hammer Action Type



FINE BELT SANDER

Speed Reducer · Extension Joint



Extension Joint

1015	CN-01	
------	-------	--

35,000 rpm Max. (*1) Page 1-p18
35,000 rpm Max. (*2)



1/4 Speed Reducer

1009	RG-01	
------	-------	--

30,000 rpm Max. (*1) Page 1-p18
30,000 rpm Max. (*2)



1/15 Speed Reducer

1010	RG-02	
------	-------	--

30,000 rpm Max. (*1) Page 1-p18
30,000 rpm Max. (*2)

*May be connected between the motor and the attachment as required for increased torque.



• Air Motor with Chip Air Mechanism
3,000~30,000 rpm

1003	IM-300	
------	--------	--

Page 1-p33



• Air Motor with 360° Twist-Free Joint
3,000~30,000 rpm

1004	IM-301	
------	--------	--

Page 1-p33



• Air Line kit

4507	AL-H1207F	
------	-----------	--

*This air line kit is designed for use with the Page 5-p2
AFC-45 foot control, Product Code AF10045.



• Foot Control

1064	AFC-45	
------	--------	--

Page 6-p9

*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.

Ultra-Precision High-Torque Air Grinder

- 30,000 rpm
- High torque air motor assembled with special vane mechanism.
- Two types of air motors can be selected depending on the application.
- 1/4 and 1/15 Speed Reducers (RG-01, RG-02) can be connected.

One Touch Tool Changing

- Ring Type (IR-310)
- Ring operated open/close chuck



A Special Rotary Vane Air Motor is Incorporated

The air motor utilizes a special vane design which keeps constant speed even under load providing stable grinding and polishing operation.

Twist Free Hose

To prevent twisting of the hose, 360° Twist- Free Joint connects the motor and the hose.

Wide-range of Collet Sizes

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

Ring Switch

Assembled with ON/OFF, speed control and FWD./REV. control ring switch.

13 Types of Attachments for All Types of Applications

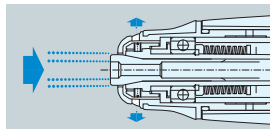
Capable of infinite applications with 13 different attachments.

*Interchangeable with attachments from the Emax EVOLution series.



Special Dust Protection Mechanism (patented)

The chuck section of ROTUS has a special built-in dust protection mechanism that prevents entry of foreign matter such as chips and provides superior durability.



Attachment IR-310 + Air motor IM-301

Specifications

Speed	: Max. 30,000 rpm (58PSI)
Proper Air Pressure	: 44~65PSI
Air Consumption	: 2.65CFM
Output Power	: 46W (motor)
Max. Torque	: 6.6 cN · m (58PSI)
Motor	: Air motor IM-301
Dimensions	: Air motor (IM-301) + Attachment (IR-310) See left figures
Weight	: Air motor (IM-301) + Attachment (IR-310) : 7.83 oz.

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.0"/ø0.98"

ø0.897"

E3000

— 50,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xspeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

1
EmaxEVO
ESPERT
ROTUS
IMPULSE
PRESTO II
Sheenus ZERO
Sonic-Cutter ZERO
2
iSpeed3
E2000 ø1.0"/ø0.99"/ø0.857"
E3000 — One Piece
E3000 — Modular
ø1.18"
ø1.07"/ø0.98" ø0.89"
E3000 — 50,000rpm
E4000
3
MA
ø0.897"
ø1.0" ø0.98"
ø1.18"
MS
ø0.75" ø0.79"
ø0.87" ø0.91"
ø1.0" ø0.98"
4
HES
iSpeed5
HTS
PLANET
Xpeed
ABT
5
AIR LINE KIT
6
PARTS
7
TECHNICAL DATA
8
APPLICATION EXAMPLES
INDEX

Product Code
 1164
 ROTUS STANDARD SET (Ring Type)



The ROTUS System is a hand-held grinder with an energy saving air motor. Since it is an air driven system, there is virtually no heat generation resulting in excellent durability. Select from a variety of attachments depending on the application.

30,000 rpm

Product Code	1164	Product Name	R301-IR
		Attachment	IR-310
		Motor	IM-301
Standard Equipment	Air Grinder (IM-301+IR-310) : 1 pc. Collet ø1/8" (CHH-3.175), ø2.35 mm (CHH-2.35) : 1 pc. each Air Line Kit (AL-H1207F) : 1 pc. Foot Control (AFC-45) : 1 pc. Hose for Piping (K-275) 6 ft : 1 pc. Lubricating Oil (K-211) : 1 pc. Wrench (7 x 5.1) : 1 pc. Pin Wrench (K-233) : 2 pcs. L Shaped Wrench (9) : 1 pc.		

Motor for ROTUS (Pneumatically Driven)

Air motor designed for high-efficiency

To achieve high torque, ROTUS air motor is assembled with micron precision between the vanes and the internal surface of cylinder using NAKANISHI's proprietary techniques. This high performance air motor with minimal power loss from load fluctuation has excellent performance in its grinding stability. Moreover, the motor with minimal air consumption runs quietly and the energy-saving mechanism makes it possible to operate with a 1 hp (0.75KW) air compressor.

Air Cooling System generates no heat for a continuous operation

The motor prevents heat generation and expansion of metal by air cooling system and provides stable rotation speed.

Light-weight and compact design

The motor with attachment IR-310 is only 7.83 oz. Its light-weight and well balanced design provides excellent grinding performance.

Assembled with Speed Control and Forward/Reverse Control Ring

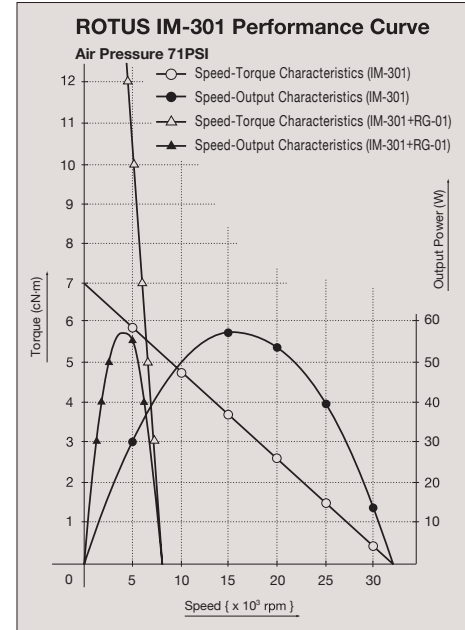
Forward/Reverse Rotating Direction Control Ring located at the end of the motor can control the motor speed as well.

Speed control by Foot Control

Fine adjustment of variable speed can be controlled by Foot Control.

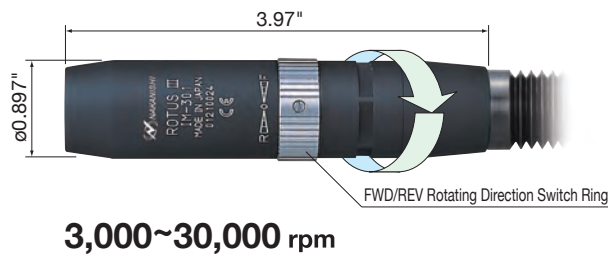
Excellent quietness with Silencer

By attaching the silencer to the end of the exhaust air tubing, the motor is operated extremely quiet.



Product Code 1004

AIR MOTOR IM-301 (with Twist-Free Joint Mechanism)



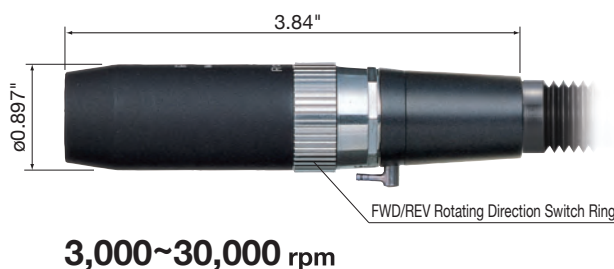
Air Motor with 360° Twist-Free Joint Mechanism

- Adopted Twist-Free Joint mechanism between the motor and the hose has solved the problem of hose twisting.
- Weight : 4.59 oz. excluding hose

Product Code	Product Name	Standard Accessories	Price
1004	IM-301	• Hose (K-206) : 6 ft • Silencer (K-209) • Pin Wrench (K-233) : 1 pc.	445.00

Product Code 1003

AIR MOTOR IM-300 (with Chip Air Mechanism)



Air Motor with Chip Air Mechanism

- Air motor IM-300 with Chip Air mechanism blows away the cutting dust with clean air coming through the top end of the attachment. The handheld cutting work remains cool by the chip air allowing comfort through out the working process.
(This is only with the attachment IH-300)
- Weight : 4.59 oz. excluding hose



Product Code	Product Name	Standard Accessories	Price
1003	IM-300	• Hose (K-207) : 6 ft • Silencer (K-209) • Pin Wrench (K-233) : 1 pc.	445.00

- 60,000 rpm • Durable and quiet high-efficient air grinder.
- The IMPULSE Series also offers 60 degree and 90 degree models. Choose the type that best fits your application requirements.

Product Code **2990** **STRAIGHT IMPULSE NSP-601A** 60,000 rpm



The air motor is assembled with a special vane design which keeps constant speed even under load providing stable grinding and polishing operation.

- The shape of the grinder is designed for sensitive finger touch control toward the top of the cutting tool.
- Smooth start is guaranteed.
- The safety design of clamping the chuck up to 1.14" maintains stable rotation of the cutting tool.

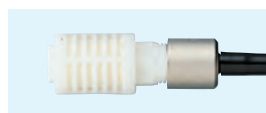
Product Code	Product Name	Standard Accessories	
2990	NSP-601A	• Collet $\phi 1/8"$ (CHS-3.175) : 1 pc. • Wrench (8 x 5) : 1 pc. • Bar Wrench (K-212) : 1 pc. • Hose (K-213) 4.5 ft • Silencer (K-208) : 1 pc.	

Features

- The shape of the grinder is specially designed for sensitive finger touch control toward the top of the cutting tool. The front part of the NSP-601 model is made of stainless steel ; the back portion of aluminum alloy. The exhaust air line hose with silencer keeps the noise level to a minimum. To prevent twisting of the double line hose, a 360 degree twist-free joint connects the motor and the hose.

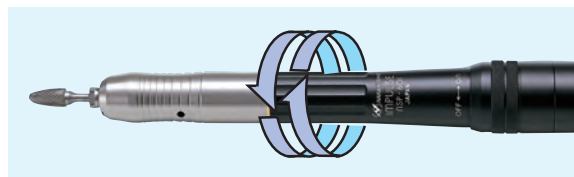
• Excellent Silencer

Silencer on the exhaust air hose keeps the grinder very quiet.



• Free From Twisting Hose

To prevent the twisting of hose, 360° Twist-Free Joint connects the motor and the hose.



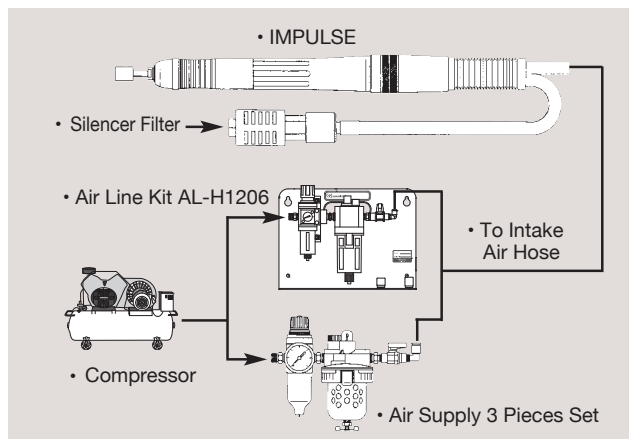
• Mounting & Dismounting Cutting Tool

Insert the wrench provided into the hole on the spindle and open or close the chuck with the Chuck Wrench to exchange the cutting tool.

• Exchangeable Collet

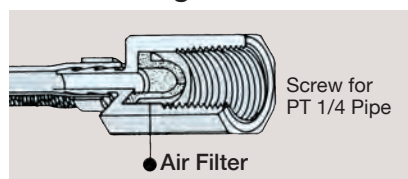
- Standard Size : $\phi 1/8"$ (CHS-3.175)
- Optional Collets : CHS-□□ are shown in page (6-p4)

• Set-Up Drawing



- Use Air Line Kit AL-H1206 or air supply 3 pieces set. (Air Filter, Air Regulator, Lubricator)

• Connecting Part To Air Line Kit

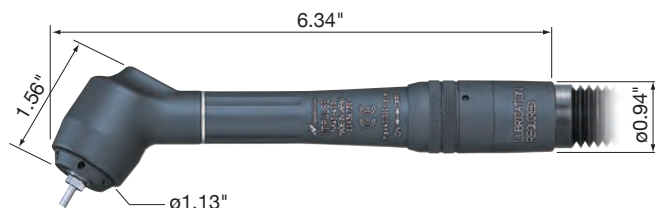


Specifications

Rotating Speed	: 60,000 rpm
Air Consumption	: 5.83CFM
Proper Air Pressure	: 58~87PSI
Hose Length	: 4.5 ft
Weight	: 5.82 oz.
Output	: 70W
Intake Air Hose Length	: 4.5 ft
Eraser Hose Length	: 3.9 ft

Product Code 2905 60° IMPULSE NA45-400

40,000 rpm

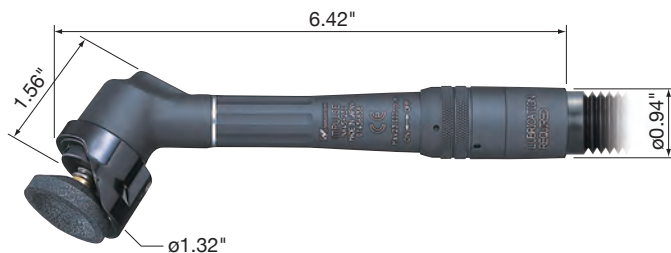


- Angled model housings are all aluminum alloy.
- Collet
Standard Size : $\phi 1/8"$ (CHS-3.175)
Optional Collets : CHS-□□ are shown in page (6-p4)
- Weight : 7.41 oz.

Product Code	Product Name	Standard Accessories	
2905	NA45-400	• Collet $\phi 1/8"$ (CHS-3.175) : 1 pc. • Wrench (8 x 5) : 1 pc. • Bar Wrench (K-212) : 1 pc. • Hose (K-213) 4.5 ft • Silencer (K-208) : 1 pc.	

Product Code 2906 60° IMPULSE HIGH TORQUE NA45-230

23,000 rpm

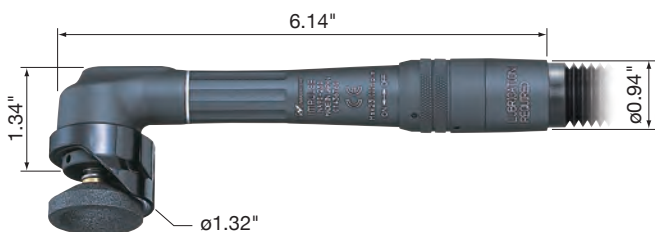


- Angled model housings are all aluminum alloy.
- Collet
Standard Size : $\phi 1/8"$ (CHS-3.175)
Optional Collets : CHS-□□ are shown in page (6-p4)
- Weight : 6.70 oz.

Product Code	Product Name	Standard Accessories	
2906	NA45-230	• Collet $\phi 1/8"$ (CHS-3.175) : 1 pc. • Special Grindstone Arbor (NCH-01) : 1 pc. • Wrench (8 x 5) : 1 pc. • Bar Wrench (K-212) : 2 pcs. • Allen Wrench (1.5 mm) : 1 pc. • Hose (K-213) 4.5 ft • Silencer (K-208) : 1 pc. • Cup Wheel (NK06104, NK45800) : 1 pc. each • Mounted Point (42423) : 1pc. • Rubber Pad (NK11033) : 1 pc. • Sandpaper Disk (Grits #120, 320, 600, 1000) : 2 pcs. each	

Product Code 2907 90° IMPULSE NA90-230

23,000 rpm



- Angled model housings are all aluminum alloy.
- Collet
Standard Size : $\phi 1/8"$ (CHS-3.175)
Optional Collets : CHS-□□ are shown in page (6-p4)
- Weight : 6.70 oz.

Product Code	Product Name	Standard Accessories	
2907	NA90-230	• Collet $\phi 1/8"$ (CHS-3.175) : 1 pc. • Special Grindstone Arbor (NCH-01) : 1 pc. • Wrench (8 x 5) : 1 pc. • Bar Wrench (K-212) : 2 pcs. • Allen Wrench (1.5 mm) : 1 pc. • Hose (K-213) 4.5 ft • Silencer (K-208) : 1 pc. • Cup Wheel (NK06104, NK45800) : 1 pc. each • Mounted Point (42423) : 1pc. • Rubber Pad (NK11033) : 1 pc. • Sandpaper Disk (Grits #120, 320, 600, 1000) : 2 pcs. each	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

$\phi 1.0"/\phi 0.98"/\phi 0.897"$

E3000

— One Piece

E3000

— Modular

$\phi 1.18"$

$\phi 0.97"/\phi 0.98"/\phi 0.897"$

E3000

— 50,000rpm

E4000

3

MA

$\phi 0.897"$

$\phi 1.0"/\phi 0.98"$

$\phi 1.18"$

MS

$\phi 0.75"/\phi 0.79"/\phi 0.897"$

$\phi 0.897"/\phi 0.91"/\phi 0.98"$

$\phi 1.0"/\phi 0.98"$

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL DATA

8

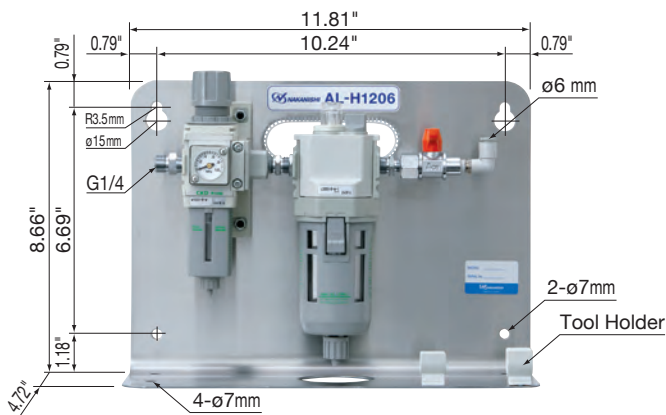
APPLICATION EXAMPLES

INDEX

- When using IMPULSE series, use with the air line kit AL-H1206 shown below or equivalent air line kit in order to provide proper air pressure and lubrication to the air motor.

*All lubricators offered by NAKANISHI are micro-mist type. They are specially designed to supply about 3% of visual drip rate (about 3 drops/min) into the secondary side (air motor).

Product Code **4506** **AIR LINE KIT AL-H1206** (Automatic Lubricating Device)



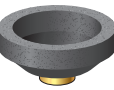
- Supplies smooth air flow and automatic lubrication, ensuring stable speed and power.
- Adjustable lubrication and air pressure settings provide longevity to the Air Grinder.
- Best for grinding and polishing applications. This compact Air Line Kit allows for portability or stationary mounting as well as a carrier for the Impulse.

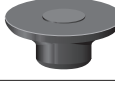
Air Line Kit (For 6 mm Hose · Filter Mesh 5 μm)

Product Code	Product Name	Standard Equipment · Accessories	
4506	AL-H1206	• Air Filter · Air Regulator • Air Pressure Gauge · Lubricator • Air ON-OFF Valve • Hose for Piping (K-275) : 6 ft • Lubricating Oil (K-211) : 1 pc.	

1
EmaxEVO
ESPERT
ROTUS
IMPULSE
PRESTO II
Sheenus ZERO
Sonic-Cutter ZERO
2
iSpeed3
E2000 ø1.0"/ø0.98"/ø0.857"
E3000 — One Piece
E3000 — Modular
ø1.18"
ø1.07"/ø0.98" ø0.897"
E3000 — 50,000rpm
E4000
3
MA
ø0.897"
ø1.0" ø0.98"
ø1.18"
MS
ø0.75" ø0.79"
ø0.87" ø0.91"
ø1.0" ø0.98"
4
HES
iSpeed5
HTS
PLANET
Xpeed
ABT
5
AIR LINE KIT
6
PARTS
7
TECHNICAL DATA
8
APPLICATION EXAMPLES
INDEX

Optional Accessories

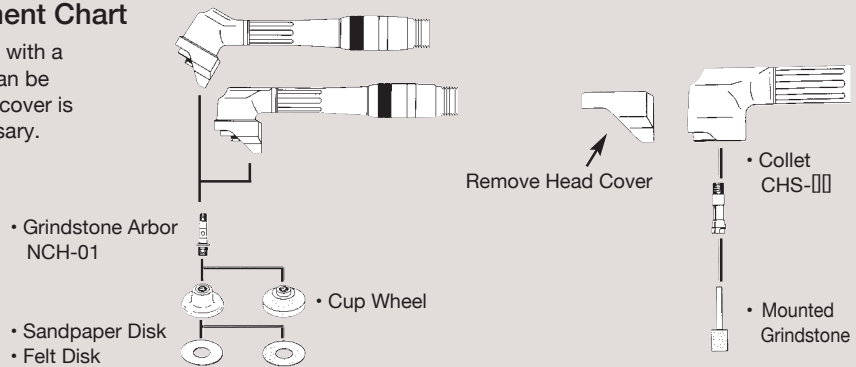
Product	Product Code	Grit	O.D. (mm)	Description • Product Name
	64830	# 36	ø 20	Cup Wheel (12 pcs./pack)
	64831	# 46		
	64832	# 80		
	64835	# 36	ø 30	Polishing Sander (5 pcs./pack)
	64836	# 46		
	64837	# 80		
	64838	# 120		
	64842	# 80	ø 30	Mounted Grindstone (10 pcs./pack)
	64844	# 120		
	64846	# 180		
	64847	# 240		
	64849	# 400		

Product	Product Code	Grit	O.D. (mm)	Description • Product Name
	64821	—	ø 20	Rubber Pad (5 pcs./pack) (use sandpaper)
	64822	—	ø 30	
	42423	# 100	ø 4	Mounted Point (10 pcs./pack)

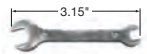
• The Exchangeable Attachment Chart

If you replace the Cup Grinding Stone with a ø1/8" Collet, a mounted grindstone can be used. When using a Collet, the wheel cover is removable for better visibility if necessary.

*When using a rubber pad, slow down the rotating speed.



IMPULSE Spare Parts

Product	Description	Product Code	Product Name	Fit to
	Grindstone Arbor (for Cup Wheel & Rubber Pad)	1045	NCH-01	IMPULSE
	Head Cover	1043	CNA	IMPULSE
	Hose 4.5 ft	1038	K-213	IMPULSE
	Silencer Small (w/Metal Fittings)	1061	K-208	IMPULSE
	Wrench 8 x 5 mm (0.31" x 0.20")	2012	—	IMPULSE
	Bar Wrench (2.83")	2013	K-212	IMPULSE
	Allen Wrench (1.5 mm)	—	—	IMPULSE
	Lubricating Oil (4 oz.)	AA10478C	K-211	For Air Line Kit AL-H1206
	Lubricating Oil (32 oz.)	AA10480C	K-202	For Air Line Kit AL-H1206

- 320,000 rpm
- Ultra-high speed no lube air turbine handpiece ideal for delicate processing application.
- Chip air blows away the cutting powder and cools the cutting tool.
- Built-in dust protect mechanism developed by NAKANISHI ensures long durability.

Product Code 1125 PRESTO II STANDARD SET



- PRESTO II is a ultra high speed 320,000 rpm non-lube air turbine. It is most suitable for precision processing works such as small precision parts, ceramic, correction of printed circuit board, etc. due to its non-lube handpiece. Flexible tubing ensures excellent workability reducing fatigue to the operator's hand for long continuous use.



- NAKANISHI's Own Dust Protection Mechanism Chip Air Mechanism blows away the cutting powder to improves cutting efficiency. It also reduces the heat generated by cutting to extend the service life of the bur.

Specifications

Rotating Speed	: 320,000 rpm
Proper Air Pressure	: 36PSI
Weight	: 2.50 oz. (w/o Hose)
Inside Diameter	: $\phi 1.6$ mm Bur Only
Air Consumption	: 1.41CFM

PRESTO II Standard Set

Product Code	Product Name	Standard Equipment
1125	PR2-304S	• Presto Handpiece (PR-304) : 1pc. • Air Line Kit (PR2-06) : 1pc. • Foot Control (AFC-40) : 1pc. • Handpiece Holder (Z014) : 1pc.

Product	Product Code	Product Name	Standard Accessories
	1122	PR-304	• 6 ft Hose

PRESTO II Spare Parts

Product	Product Code	Description · Product Name	Specifications
	Z307015	PRESTO II Air Line Kit PR2-06 (w/o Lubricator · Filter Mesh 5 μ m)	
	1124	PRESTO Foot Control AFC-40	
	1120	PRESTO II Cartridge PR-03	
	Z101240	Piping Hose K-237	• 6 ft Long • $\phi 0.24$"
	T815220	Air Turbine Hose K-238	• 6 ft Long • $\phi 0.20$"
	2002	Pin Wrench T-751	

Sheenus ZERO

19 - 29 KHz

ULTRASONIC POLISHER

- Sheenus ZERO can be used for grinding, polishing and mirror finishing on a wide range of materials from aluminum dies to cemented carbide dies. It is also perfect for plastic molds, press, casting, forging, trimming and header dies.
- This tool quickly removes hard layer of EDM deposits and polishes difficult areas such as complex corners and ribs.



1
EmaxEVO
ESPERT
ROTUS
IMPULSE
PRESTO II
Sheenus ZERO
Sonic-Cutter ZERO
2
iSpeed3
E2000 ø1.0"/ø0.98"/ø0.897"
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4
HES
iSpeed5
HTS
PLANET
Xpeed
ABT
5
AIR LINE KIT
6
PARTS
7
TECHNICAL DATA
8
APPLICATION EXAMPLES
INDEX

- Sheenus ZERO can be used for grinding, polishing and mirror finishing on a wide range of materials from aluminum dies to cemented carbide dies. It is also perfect for plastic molds, press, casting, forging, trimming and header dies.
- This tool quickly removes hard layers of EDM deposits and polishes difficult areas such as complex corners and ribs.
- Capabilities include bur removal, grinding and polishing of precision molds, dies electronic and ceramic components.

Product Code **7775** SHEENUS ZERO STANDARD SET



Specifications

Controller Model	: NE330 120V
Power Source	: AC120V/240V, 50-60Hz
Power consumption	: 100VA
Dimensions	: W6.34" x D10.08" x H3.31"
Oscillation frequency	: 19 KHz - 29 KHz
Power conditioning	: Continuous variable type
Frequency control	: Auto-tracking type
Output power	: UNCLAMP mode Max. 45W
	: CLAMP mode Max. 20W
Weight	: 3 lb. 5 oz.

Handpiece Model	: US-50P
Oscillator	: PZT piezoelectric type
Attachment fixing	: M6 screw
Cable length	: 6 ft
Dimensions	: ø0.63" (Max. ø1.10") x L5.28"
Weight	: 5.29 oz. (excluding cable)



Sheenus ZERO Standard Set

Product Code	Product Name	Standard Equipment	
7775	US-50PS 120V	• Controller (NE330 120V) • Ultrasonic Handpiece (US-50P) • Power Cable • Included Accessories: 1 set [Tip Holder (60902, 60922) 2 pcs., Ceramic fiber grindstone (60735) 1 pc., Electroplated diamond file (60101) 1 pc.] • Tool box (plastic): 1 pc. • Wrench (10 mm) • Allen Wrench (2.5 mm) • Foot Pedal (FC-24) : 1 pc. • Fuse AC120V (T1 .6AH 250V) : 2 pcs.	

Product Code **7778** CONTROLLER NE330 120V



- Power Level Indicator
 - 2 Mode Display Selection
 - Easy Touch Function Switches
 - Powerful and Constant
- Maximum output of 45W (Frequency 19 - 29 KHz) and constant output power.

Product Code	Product Name	Standard Accessories	
7778	NE330 120V	• Fuse AC120V (T1.6AH 250V) : 2 pcs.	

Product Code **7780** HANDPIECE US-50P



Tip holder and Ceramic fiber grindstone in this picture are not provided when only handpiece US-50P is purchased.

- Ergonomically comfortable and lightweight for effortless work over long periods.
- Light, resin body ergonomically designed to provide precise control while operating.

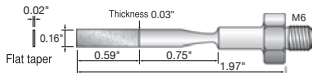
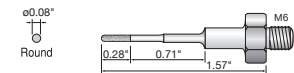
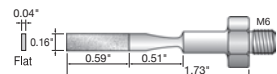
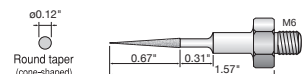
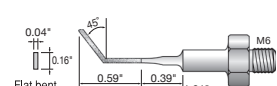
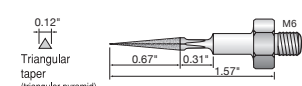
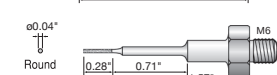
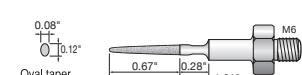
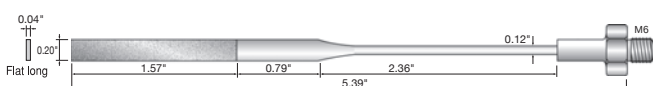
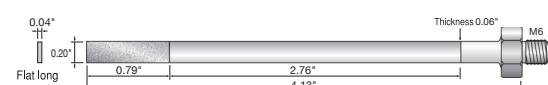
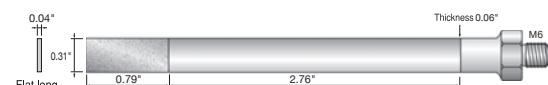
Product Code	Product Name	Specifications	
7780	US-50P	• Oscillator : PZT piezoelectric type • Attachment fixing : M6 screw • Cable length : 6 ft (2.12 oz.) • Dimensions : ø0.63" (Max. ø1.10") x L5.28" • Weight : 5.29 oz. (excluding cable)	

Sheenus ZERO Spare Parts

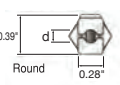
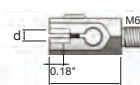
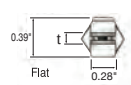
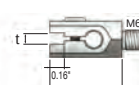
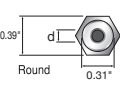
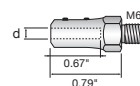
Product	Product Code	Description
	8103	FC-24 Foot Pedal (ON/OFF switch only)
	8104	K-274 Handpiece Stand

Product	Description
	Wrench - 10mm
	Allen Wrench - 2.5mm

Electroplated diamond file (comes with 1 piece)

 0.02° 0.16° Thickness 0.03" 0.59" 0.75" 1.97" Flat taper	<table><tr><th>Grit</th><th>Product Code</th></tr><tr><td># 200</td><td>60101</td></tr><tr><td># 320</td><td>60102</td></tr><tr><td># 600</td><td>60103</td></tr></table>	Grit	Product Code	# 200	60101	# 320	60102	# 600	60103	 ø0.08" Round 0.28" 0.71" 1.57" Round	<table><tr><th>Grit</th><th>Product Code</th></tr><tr><td># 200</td><td>60155</td></tr><tr><td># 320</td><td>60156</td></tr><tr><td># 600</td><td>60157</td></tr></table>	Grit	Product Code	# 200	60155	# 320	60156	# 600	60157
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# 200	60101																		
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Grit	Product Code																		
# 200	60155																		
# 320	60156																		
# 600	60157																		
 0.04° 0.16° Flat 0.59" 0.51" 1.73" Flat	<table><tr><td># 200</td><td>60105</td></tr><tr><td># 320</td><td>60106</td></tr><tr><td># 600</td><td>60107</td></tr></table>	# 200	60105	# 320	60106	# 600	60107	 ø0.12" Round taper (cone-shaped) 0.67" 0.31" 1.57" Round taper (cone-shaped)	<table><tr><td># 200</td><td>60181</td></tr><tr><td># 320</td><td>60182</td></tr><tr><td># 600</td><td>60183</td></tr></table>	# 200	60181	# 320	60182	# 600	60183				
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 0.04° 0.16° Flat bent 0.59" 0.39" 1.61" Flat bent	<table><tr><td># 200</td><td>60111</td></tr><tr><td># 320</td><td>60112</td></tr><tr><td># 600</td><td>60113</td></tr></table>	# 200	60111	# 320	60112	# 600	60113	 0.12° Triangular taper (triangular pyramid) 0.67" 0.31" 1.57" Triangular taper (triangular pyramid)	<table><tr><td># 200</td><td>60185</td></tr><tr><td># 320</td><td>60186</td></tr><tr><td># 600</td><td>60187</td></tr></table>	# 200	60185	# 320	60186	# 600	60187				
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# 320	60112																		
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 ø0.04" Round 0.28" 0.71" 1.57" Round	<table><tr><td># 200</td><td>60151</td></tr><tr><td># 320</td><td>60152</td></tr><tr><td># 600</td><td>60153</td></tr></table>	# 200	60151	# 320	60152	# 600	60153	 0.08° 0.12° Oval taper 0.67" 0.28" 1.61" Oval taper	<table><tr><td># 200</td><td>60191</td></tr><tr><td># 320</td><td>60192</td></tr><tr><td># 600</td><td>60193</td></tr></table>	# 200	60191	# 320	60192	# 600	60193				
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 0.04° 0.20° Flat long 1.57" 0.79" 2.36" 5.39" Flat long			<table><tr><td># 200</td><td>60115</td></tr><tr><td># 320</td><td>60116</td></tr><tr><td># 600</td><td>60117</td></tr></table>	# 200	60115	# 320	60116	# 600	60117										
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# 320	60116																		
# 600	60117																		
* Flat long type is used to set output power LOW mode.																			
 0.04° 0.20° Flat long taper 0.79" 2.76" 4.13" Flat long taper			<table><tr><td># 200</td><td>60231</td></tr><tr><td># 320</td><td>60232</td></tr><tr><td># 600</td><td>60233</td></tr></table>	# 200	60231	# 320	60232	# 600	60233										
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# 320	60232																		
# 600	60233																		
 0.04° 0.31° Flat long taper 0.79" 2.76" 4.13" Flat long taper			<table><tr><td># 200</td><td>60235</td></tr><tr><td># 320</td><td>60236</td></tr><tr><td># 600</td><td>60237</td></tr></table>	# 200	60235	# 320	60236	# 600	60237										
# 200	60235																		
# 320	60236																		
# 600	60237																		

Special tip holder (2 piece pack) **

		<table><tr><th>Grain diameter</th><th>Product Code</th></tr><tr><td>d=ø0.08"</td><td>60901</td></tr><tr><td>d=ø0.12"</td><td>60902</td></tr><tr><td>d=ø0.126"</td><td>60904</td></tr><tr><td>d=ø0.13"</td><td>60903</td></tr></table>	Grain diameter	Product Code	d=ø0.08"	60901	d=ø0.12"	60902	d=ø0.126"	60904	d=ø0.13"	60903			<table><tr><th>Grain diameter</th><th>Product Code</th></tr><tr><td>t=ø0.03"</td><td>60921</td></tr><tr><td>t=ø0.04"</td><td>60922</td></tr><tr><td>t=ø0.08"</td><td>60923</td></tr><tr><td>t=ø0.12"</td><td>60924</td></tr><tr><td>t=ø0.126"</td><td>60925</td></tr></table>	Grain diameter	Product Code	t=ø0.03"	60921	t=ø0.04"	60922	t=ø0.08"	60923	t=ø0.12"	60924	t=ø0.126"	60925
Grain diameter	Product Code																										
d=ø0.08"	60901																										
d=ø0.12"	60902																										
d=ø0.126"	60904																										
d=ø0.13"	60903																										
Grain diameter	Product Code																										
t=ø0.03"	60921																										
t=ø0.04"	60922																										
t=ø0.08"	60923																										
t=ø0.12"	60924																										
t=ø0.126"	60925																										
		<table><tr><td>d=ø0.08"</td><td>60911</td></tr><tr><td>d=ø0.12"</td><td>60912</td></tr><tr><td>d=ø0.126"</td><td>60913</td></tr></table>	d=ø0.08"	60911	d=ø0.12"	60912	d=ø0.126"	60913																			
d=ø0.08"	60911																										
d=ø0.12"	60912																										
d=ø0.126"	60913																										

Brass lapping tip (5 piece pack) **

Round		Grain diameter	Product Code	
		d=ø0.08"	60801	
		d=ø0.12"	60802	
Flat			60805	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus
ZERO

Sonic-Cutter
ZERO

2

iSpeed3

E2000
ø1.0"/ø0.98"/ø0.897"

E3000
— One Piece

E3000
— Modular

ø1.18"

ø1.07"/ø0.98"
ø0.897"

E3000
— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"
ø0.98"

ø1.18"

MS

ø0.75"
ø0.79"

ø0.87"
ø0.91"

ø1.0"
ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL
DATA

8

APPLICATION
EXAMPLES

INDEX

Sonic Cutter ZERO

38 - 40 kHz

ULTRASONIC CUTTER

- Sonic Cutter ZERO's vibration-free operation ensures accurate and sharp cutting finishes. Its ergonomic design reduces hand fatigue for long and continuous operation.
- The output power auto adjusts to load and constant frequency provides steady cutting results.



Sonic Cutter ZERO

ULTRASONIC CUTTER

ULTRASONIC

- Effortlessly perform intricate and Accurate Cutting
- Vibration-Free Operation Ensures Accurate and Sharp Cutting Finishes

Product Code 7782 SONIC CUTTER ZERO STANDARD SET



Specifications

Controller Model	: 7782
Dimensions	: W 6.34 x D 10.08 x H 3.31 in.
Oscillation frequency	: 38 kHz - 40 kHz
Frequency Control	: Auto-tracking system
Output	: 30 W
Output Adjustment	: 21 steps variable
Rated input	: AC 100 - 240V
Weight	: 3.09 lbs
Handpiece Model	: UA-40C
Oscillator	: Bolt-clamped Langevin type
Setting the Blade	: screwed the blade W 0.16 x thickness 0.015 in.
Cable Length	: 118 in.
Dimensions	: $\phi 0.984$ in. x L 6.54 in.
Weight	: 120 g (excluding cable)

Sonic Cutter ZERO Standard Set

Product Code	Product Name	Standard Equipment
7782	UA-40C Set	• Controller: 1 pc. • Handpiece: 1 pc. • Spare blades (BDC-200P 30°): 40 pcs. • Hexagon wrench (0.0787 in.): 2 pcs. • Spare set screws (M4 x P0.7 x L4): 4 pcs. • Spare fuse (T1.6AH 250V): 2 pcs. • O-ring: 1 pc. • Main power cord (78.74 in.): 1 pc. (Plug type: 120V)

Product Code 7785 CONTROLLER 120V



- Output Power Auto Adjusts to Load
- Constant Frequency Provides Steady Cutting Results

Product Code	Product Name	Specifications
7785	NE337	• Oscillation frequency: 38 kHz - 40 kHz • Frequency control: Auto-tracking system • Output: 30 W • Weight: 3.09 lbs • Dimensions: W 6.34 x D 10.08 x H 3.31 in.

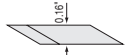
Product Code 7787 HANDPIECE UA-40C



- Easy-to-Maneuver Handpiece
- Ergonomic Design Reduces Hand Fatigue for Long and Continuous Operation

Product Code	Product Name	Specifications
7787	UA-40C	• Oscillator: Bolt-clamped Langevin type • Setting the blade: screwed the blade W 0.16 x thickness 0.015 in. • Cable length: 118 in. • Dimensions: Max. $\phi 0.984$ in. x L 6.54 in. • Weight: 120 g (excluding cable)

Sonic Cutter ZERO Spare Parts

Product	Product Code	Description
	DC200	Spare Blade (40 pack)

Product	Product Code	Description
	8103	FC-24 Foot Pedal (ON/OFF switch only)

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

$\phi 1.07/\phi 0.98/\phi 0.897$

E3000

— One Piece

E3000

— Modular

$\phi 1.18"$

$\phi 1.07/\phi 0.98"$

$\phi 0.897"$

E3000

— 50,000rpm

E4000

3

MA

$\phi 0.897"$

$\phi 1.0"$

$\phi 0.98"$

$\phi 1.18"$

MS

$\phi 0.75"$

$\phi 0.79"$

$\phi 0.87"$

$\phi 0.91"$

$\phi 1.0"$

$\phi 0.98"$

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

1

Sonic Cutter ZERO Applications

- For cutting and deburring of plastics



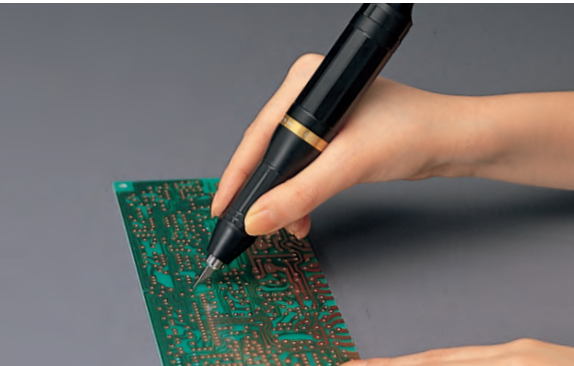
Efficient for cutting and deburring of composite material of FRP and plastic materials.

- For cutting of sheet, cloth, etc.



Delicate and beautiful cutting with a light touch can be made on sheet, cloth, etc.

- For correction of PCB patterns



Most suitable for accurate correction work required on PCB.

- For cutting rubber, film, etc.



Beautiful cutting finish is made for cutting out designs and patterns on rubber, POP sheet, paper, etc.

2

iSpeed3
E2000
ø1.0"/ø0.98"/ø0.85"
E3000
— One Piece
E3000
— Modular
ø1.18"
ø1.0"/ø0.98"
ø0.85"
E3000
— 80,000rpm
E4000

3

MA
ø0.897"
ø1.0"
ø0.98"
ø1.18"
MS
ø0.75"
ø0.79"
ø0.87"
ø0.91"
ø1.0"
ø0.98"

4

HES
iSpeed5
HTS
PLANET
Xpeed
ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL DATA

8

APPLICATION EXAMPLES

INDEX



Index

Collet	6-p2~6-p6
Collet Nut	6-p6~6-p7
Motor Cord	6-p8~6-p9
Foot Pedal & Handpiece Stand etc.	6-p9
Parts for Air Turbine & FINE BELT SANDER etc.	6-p10
Oil, Grease, Grease Nipple & Silencer	6-p11
Hose	6-p12~6-p13
Metal Fitting, Filter Joint & Grindstone Flange etc.	6-p13
Special Arbor	6-p14~6-p15
Wrench	6-p16~6-p17
Grip Ring, Split Bushing	6-p18~6-p19

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xspeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

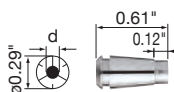
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APPLICATION

EXAMPLES

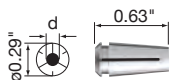
INDEX

CHA Group



Product Name :
CHA-1.0,
CHA-3.0, CHA-3.0AA,
CHA-3.175, CHA-3.175AA,
CHA-4.0, CHA-4.0AA

Fit to : K-263
: CHN-A



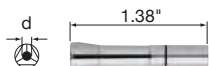
Product Name :
Besides the above

Fit to

AMS-1200 · AMS-1210 · AMS-1500 · AMS-1501 · AMS-250 · ABS-800 · iSpeed3
MS-19 · 20 · 22 · MSS-19 · 20 · 22 · NR-3080S · NRA-5080 · NR-320
PS20-70/120 · PS20S-70 · PSA23-80/130 · PSA23S-80 · PMS-3020A · BANTAM 250
PLANET 850 · PLANET 1500 · PLANET 2000 · SMS · HTS · EM20-S6000 · EM25-S6000
EMS-3060A · NR3060-AQC · NRR3060-QC · HES810 · HPS500 · Xpeed1600 · ABT-1000

Product Code	Product Name	Inside Diameter d
91405	CHA-0.5	ø0.5
91406	CHA-0.6	ø0.6
91407	CHA-0.7	ø0.7
91408	CHA-0.8	ø0.8
91409	CHA-0.9	ø0.9
91410	CHA-1.0	ø1.0
91411	CHA-1.1	ø1.1
91412	CHA-1.2	ø1.2
91413	CHA-1.3	ø1.3
91414	CHA-1.4	ø1.4
91415	CHA-1.5	ø1.5
91416	CHA-1.6	ø1.6
91417	CHA-1.7	ø1.7
91418	CHA-1.8	ø1.8
91419	CHA-1.9	ø1.9
91420	CHA-2.0	ø2.0
91421	CHA-2.1	ø2.1
91422	CHA-2.2	ø2.2
91423	CHA-2.3	ø2.3
91492	CHA-2.35	ø2.35
91424	CHA-2.4	ø2.4
91425	CHA-2.5	ø2.5
91426	CHA-2.6	ø2.6
91427	CHA-2.7	ø2.7
91428	CHA-2.8	ø2.8
91429	CHA-2.9	ø2.9
91430	CHA-3.0	ø3.0
91494	CHA-3.0AA*	ø3.0
91431	CHA-3.1	ø3.1
91493	CHA-3.175	ø1/8"
91496	CHA-3.175AA*	ø1/8"
91432	CHA-3.2	ø3.2
91433	CHA-3.3	ø3.3
91434	CHA-3.4	ø3.4
91435	CHA-3.5	ø3.5
91436	CHA-3.6	ø3.6
91437	CHA-3.7	ø3.7
91438	CHA-3.8	ø3.8
91439	CHA-3.9	ø3.9
91440	CHA-4.0	ø4.0
91495	CHA-4.0AA*	ø4.0

CHB Group

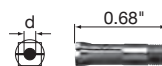


Fit to

NRR-2651 · NRR-3060 · NR40-5100 ATC

Product Code	Product Name	Inside Diameter d
92820	CHB-2.0	ø2.0
92830	CHB-3.0	ø3.0
92893	CHB-3.175	ø1/8"
92840	CHB-4.0	ø4.0

CHC Group



Fit to

IC-300 · KC-300 · EIC-300 · EKC-300 · IC-E · KC-E

Product Code	Product Name	Inside Diameter d
90416	CHC-1.6	ø1.6
90492	CHC-2.35	ø2.35
90430	CHC-3.0	ø3.0
90493	CHC-3.175	ø1/8"

CHG Group



Fit to

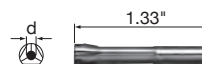
HG-200 · NR-301 · EH-400

Fit to

NR-301

Product Code	Product Name	Inside Diameter d
91110	CHG-1.0	ø1.0
91115	CHG-1.5	ø1.5
91116	CHG-1.6	ø1.6
91120	CHG-2.0	ø2.0
91192	CHG-2.35	ø2.35
91125	CHG-2.5	ø2.5
91130	CHG-3.0	ø3.0
91193	CHG-3.175	ø1/8"
91140	CHG-4.0	ø4.0
91194	CHG-4.76	ø4.76
91150	CHG-5.0	ø5.0
91160	CHG-6.0	ø6.0
91196	CHG-6.35	ø1/4"

CHH Group

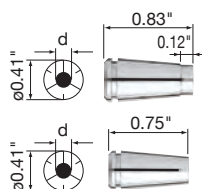


Fit to

IH-300 · IR-310 · EHL-401 · EHR-401 · EHR-500 · VH-E

Product Code	Product Name	Inside Diameter d
90610	CHH-1.0	ø1.0
90615	CHH-1.5	ø1.5
90616	CHH-1.6	ø1.6
90620	CHH-2.0	ø2.0
90692	CHH-2.35	ø2.35
90625	CHH-2.5	ø2.5
90630	CHH-3.0	ø3.0
90693	CHH-3.175	ø1/8"

CHK Group



Product Name :
CHK-1.0,
CHK-3.0, CHK-3.0AA,
CHK-3.175, CHK-3.175AA,
CHK-4.0, CHK-4.0AA,
CHK-6.0, CHK-6.0AA,
CHK-6.35, CHK-6.35AA

Fit to : K-265
: CHN-B

Product Name :
Besides the above

■ Fit to

NR-302 · ENR-302

■ Fit to

ABS-70P · ABS-400 · AMX-50 · AMX-65 (1/1 Ratio) · AMX-80 (1/1 Ratio)
EM30-S6000 · EMA-3020K · EMS-3041 · EMS-3045 · EMS-3052 · EMS-3056
EMS-3046-J4 · EMS-3057-J4 · EMS-6040 · EMS-6040K · EMS-3060K
EMSF-3060K · EMR-3008K · MS-23 · 25 · MSH-25 · MSS-25 · MSSH-25 · MST-23
MSST-23 · NR-2351 · NR-2532 · NR-H2532 · NR-2551 · NR-H2551 · NR-303
NR-303P · NR-311 · NR-3060S · NR-403E · NR-453E · NRAF-5080 · NRL-300
NRL-300E · NR3060-AQC · NRR3060-QC · NR4040-AQC · NRR4040-QC
PMA-3013K · PMR-3005K · PMS-3020K · PS23-80/130 · PS23S-80 · PSA25-90/140
PSA25S-90 · PSA30-100/160 · PSA30S-100 · PSA35-120/180 · PSA35S-120
RAS-101 · RAS-151E · RAX-271E · RAX-71E · RAS-2511 · RAS-H2511 · FG-01S
HES510 · HPS250 · PLANET 400 · PLANET 600 · Xpeed1200

*High precision type

Product Code	Product Name	Inside Diameter d	
91505	CHK-0.5	ø0.5	
91506	CHK-0.6	ø0.6	
91507	CHK-0.7	ø0.7	
91508	CHK-0.8	ø0.8	
91509	CHK-0.9	ø0.9	
91510	CHK-1.0	ø1.0	
91511	CHK-1.1	ø1.1	
91512	CHK-1.2	ø1.2	
91513	CHK-1.3	ø1.3	
91514	CHK-1.4	ø1.4	
91515	CHK-1.5	ø1.5	
91516	CHK-1.6	ø1.6	
91517	CHK-1.7	ø1.7	
91518	CHK-1.8	ø1.8	
91519	CHK-1.9	ø1.9	
91520	CHK-2.0	ø2.0	
91521	CHK-2.1	ø2.1	
91522	CHK-2.2	ø2.2	
91523	CHK-2.3	ø2.3	
91592	CHK-2.35	ø2.35	
91524	CHK-2.4	ø2.4	
91525	CHK-2.5	ø2.5	
91526	CHK-2.6	ø2.6	
91527	CHK-2.7	ø2.7	
91528	CHK-2.8	ø2.8	
91529	CHK-2.9	ø2.9	
91530	CHK-3.0	ø3.0	
91597	CHK-3.0AA*	ø3.0	
91531	CHK-3.1	ø3.1	
91593	CHK-3.175	ø1/8"	
91598	CHK-3.175AA*	ø1/8"	
91532	CHK-3.2	ø3.2	
91533	CHK-3.3	ø3.3	
91534	CHK-3.4	ø3.4	
91535	CHK-3.5	ø3.5	
91536	CHK-3.6	ø3.6	
91537	CHK-3.7	ø3.7	
91538	CHK-3.8	ø3.8	
91539	CHK-3.9	ø3.9	
91540	CHK-4.0	ø4.0	
91599	CHK-4.0AA*	ø4.0	
91541	CHK-4.1	ø4.1	
91542	CHK-4.2	ø4.2	
91543	CHK-4.3	ø4.3	
91544	CHK-4.4	ø4.4	
91545	CHK-4.5	ø4.5	
91546	CHK-4.6	ø4.6	
91547	CHK-4.7	ø4.7	
91594	CHK-4.76	ø4.76	
91548	CHK-4.8	ø4.8	
91549	CHK-4.9	ø4.9	
91550	CHK-5.0	ø5.0	

Product Code	Product Name	Inside Diameter d	
91551	CHK-5.1	ø5.1	
91552	CHK-5.2	ø5.2	
91553	CHK-5.3	ø5.3	
91554	CHK-5.4	ø5.4	
91555	CHK-5.5	ø5.5	
91556	CHK-5.6	ø5.6	
91557	CHK-5.7	ø5.7	
91558	CHK-5.8	ø5.8	
91559	CHK-5.9	ø5.9	
91560	CHK-6.0	ø6.0	
91600	CHK-6.0AA*	ø6.0	
91596	CHK-6.35	ø1/4"	
91601	CHK-6.35AA*	ø1/4"	

■ indicates Hand Grinder use

■ indicates Machine Spindle use

*Order by product code.

6-p3

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.97"/ø0.98"

ø0.897"

E3000

— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.69"

ø0.31"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

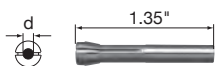
8

APPLICATION

EXAMPLES

INDEX

CHM Group

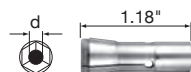


Fit to
MH-300 · BMH-300

Fit to
NR-600 · NR-601 · AMH-300 · AMH-301

Product Code	Product Name	Inside Diameter d	
90910	CHM-1.0	ø1.0	
90916	CHM-1.6	ø1.6	
90920	CHM-2.0	ø2.0	
90992	CHM-2.35	ø2.35	
90930	CHM-3.0	ø3.0	
90993	CHM-3.175	ø1/8"	

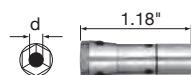
CHR Group



Fit to
NR-5040E ATC · NR-5041E ATC · NR50-5100 ATC

Product Code	Product Name	Inside Diameter d	
91920	CHR-2.0	ø2.0	
91930	CHR-3.0	ø3.0	
91993	CHR-3.175	ø1/8"	
91940	CHR-4.0	ø4.0	
91960	CHR-6.0	ø6.0	
91996	CHR-6.35	ø1/4"	

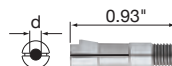
CHR RS Group



Fit to
NR-5040E ATC · NR-5041E ATC · NR50-5100 ATC-RS

Product Code	Product Name	Inside Diameter d	
93201	CHR-3.0 RS	ø3.0	
93202	CHR-3.175 RS	ø1/8"	
93203	CHR-4.0 RS	ø4.0	
93204	CHR-6.0 RS	ø6.0	
93205	CHR-6.35 RS	ø1/4"	

CHS Group

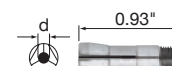


Fit to
ERA-270 · IMPULSE SERIES

Fit to
RA-200 · RA-271E · RA-2521 · RA-H2521

Product Code	Product Name	Inside Diameter d	
90508	CHS-0.8	ø0.8	
90509	CHS-0.9	ø0.9	
90510	CHS-1.0	ø1.0	
90511	CHS-1.1	ø1.1	
90512	CHS-1.2	ø1.2	
90513	CHS-1.3	ø1.3	
90514	CHS-1.4	ø1.4	
90515	CHS-1.5	ø1.5	
90516	CHS-1.6	ø1.6	
90517	CHS-1.7	ø1.7	
90518	CHS-1.8	ø1.8	
90519	CHS-1.9	ø1.9	
90520	CHS-2.0	ø2.0	
90521	CHS-2.1	ø2.1	
90522	CHS-2.2	ø2.2	
90523	CHS-2.3	ø2.3	
90592	CHS-2.35	ø2.35	
90524	CHS-2.4	ø2.4	
90525	CHS-2.5	ø2.5	
90526	CHS-2.6	ø2.6	
90527	CHS-2.7	ø2.7	
90528	CHS-2.8	ø2.8	
90529	CHS-2.9	ø2.9	
90530	CHS-3.0	ø3.0	
90593	CHS-3.175	ø1/8"	

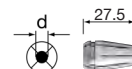
CHSS Group



Fit to
EMA-3020S · PMA-3013S

Product Code	Product Name	Inside Diameter d	
93010	CHSS-1.0	ø1.0	
93015	CHSS-1.5	ø1.5	
93020	CHSS-2.0	ø2.0	
93092	CHSS-2.35	ø2.35	
93025	CHSS-2.5	ø2.5	
93030	CHSS-3.0	ø3.0	
93093	CHSS-3.175	ø1/8"	

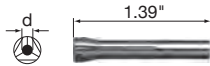
CH16OH Group



Fit to
BMS-4040-MQL · BMS-4040-MQL-2M

Product Code	Product Name	Inside Diameter d	Price
93330	CH16OH-3.0	ø3.0	270.00
93331	CH16OH-3.175	ø3.175	
93340	CH16OH-4.0	ø4.0	
93350	CH16OH-5.0	ø5.0	
93360	CH16OH-6.0	ø6.0	
93363	CH16OH-6.35	ø6.35	
93370	CH16OH-7.0	ø7.0	
93380	CH16OH-8.0	ø8.0	
93390	CH16OH-9.0	ø9.0	
93400	CH16OH-10.0	ø10.0	

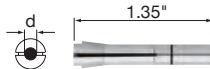
CH6 Group



Fit to
ABS-1600

Product Code	Product Name	Inside Diameter d	
90830	CH6-3.0	ø3.0	
90893	CH6-3.175	ø1/8"	

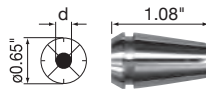
CH8 Group



Fit to
RA-100 · RA-151E · RA-2511
RA-H2511

Product Code	Product Name	Inside Diameter d	
91008	CH8-0.8	ø0.8	
91009	CH8-0.9	ø0.9	
91010	CH8-1.0	ø1.0	
91011	CH8-1.1	ø1.1	
91012	CH8-1.2	ø1.2	
91013	CH8-1.3	ø1.3	
91014	CH8-1.4	ø1.4	
91015	CH8-1.5	ø1.5	
91016	CH8-1.6	ø1.6	
91017	CH8-1.7	ø1.7	
91018	CH8-1.8	ø1.8	
91019	CH8-1.9	ø1.9	
91020	CH8-2.0	ø2.0	
91021	CH8-2.1	ø2.1	
91022	CH8-2.2	ø2.2	
91023	CH8-2.3	ø2.3	
91092	CH8-2.35	ø2.35	
91024	CH8-2.4	ø2.4	
91025	CH8-2.5	ø2.5	
91026	CH8-2.6	ø2.6	
91027	CH8-2.7	ø2.7	
91028	CH8-2.8	ø2.8	
91029	CH8-2.9	ø2.9	
91030	CH8-3.0	ø3.0	
91093	CH8-3.175	ø1/8"	

CH16 Group

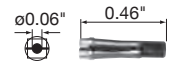


Fit to
BMS-4020 · BMS-4020 2M · BMS-4020RA
BMS-4040 · BMS-4040 2M · BMS-4040RA
NR-4040 · NR4040-AQC · NRR4040-QC

CH16-10.0 Length 0.96"

Product Code	Product Name	Inside Diameter d	
93130	CH16-3.0	ø3.0	
93193	CH16-3.175	ø1/8"	
93140	CH16-4.0	ø4.0	
93160	CH16-6.0	ø6.0	
93196	CH16-6.35	ø1/4"	
93180	CH16-8.0	ø8.0	
93100	CH16-10.0	ø10.0	

CH20 Group



Fit to
PLANET 2000

Product Code	Product Name	Inside Diameter d	
90216	CH20-16	ø1/16"	

1

Emax EVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.92"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.97"/ø0.98"

ø0.897"

E3000

— 30,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

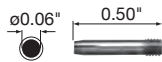
indicates Hand Grinder use

indicates Machine Spindle use

*Order by product code.

6-p5

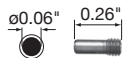
K-252



Fit to _____
MFC-300S

Product Code	Product Name	Inside Diameter d	
90316	K-252	0.1/16"	

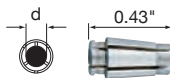
K-253



Fit to _____
MFC-300M

Product Code	Product Name	Inside Diameter d	
90016	K-253	0.1/16"	

NKM6 Group (NK Micron Collet)



Fit to : CHN-6

Fit to _____
IG-400

Product Code	Product Name	Inside Diameter d	
92030	NKM6-2.35	0.2/35	
92092	NKM6-3.0	0.3/0	
92093	NKM6-3.175	0.1/8"	

Collet Nut CHN-A



Fit to : CHA

Fit to _____
iSpeed3 · EM20-S6000 · EM25-S6000 · EMS-3060A · HES810 · HPS500
MSS-19 · MSS-20 · MSS-22 · NR-3080S · NR3060-AQC · NRR3060-QC
PMS-3020A · SMS401

Product Code	Product Name	Fit to	
2102	CHN-A	CHA	

Collet Nut CHN-AA

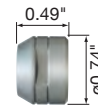


Fit to : CHA

Fit to _____
HTS · AMS-1501/1510 · AMS-1210

Product Code	Product Name	Fit to	
2159	CHN-AA	CHA	

Collet Nut CHN-B (For EMS-6040/6040K)



Fit to : CHK

Fit to _____
EMS-6040 · EMS-6040K

Product Code	Product Name	Fit to	
2123	CHN-B	CHK	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

0.1/0.06"/0.08"/0.097"

E3000

One Piece

E3000

Modular

0.1/18"

0.1/0.06"/0.08"/0.097"

E3000

80,000rpm

E4000

3

MA

0.0.897"

0.1/0"

0.0.96"

0.1/18"

MS

0.0.75"

0.0.79"

0.0.87"

0.0.91"

0.1/0"

0.0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

Collet Nut CHN-3A



Fit to : CHA

Fit to
Xpeed1600 · ABT-1000

Product Code	Product Name	Fit to	
2160	CHN-3A	CHA	

Collet Nut CHN-16

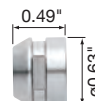


Fit to : CH16

Fit to
BMS-4020 · BMS-4020 2M · BMS-4020RA · BMS-4040 · BMS-4040 2M
BMS-4040RA · NR-4040 · NR4040-AQC · NRR4040-QC

Product Code	Product Name	Fit to	
2161	CHN-16	CH16	

Collet Nut K-265

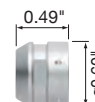


Fit to : CHK

Fit to
ABS-400 · ABS-70P · AMX-50 · AMX-65 (1/1 Ratio) · AMX-80 (1/1 Ratio)
EM30-S6000 · EMA-3020K · EMS-3041 · EMS-3046-J4 · EMS-3052 · EMS-3057-J4
EMS-3060K · EMSF-3060K · EMR-3008K · FG-01S · HES510 · HPS250
NR-403E · NR-453E · NRL-300E · NR-2532 · NR-H2532 · NR-2511 · NR-H2511
NR-2551 · NR-H2551 · NR-2351 · NRL-300 · NR-303 · NR-303P · NR-311 · NR-3060S
NR3060-AQC · NRR3060-QC · NR4040-AQC · NRR4040-QC · MS-23 · MSS-23
MST-23 · MSST-23 · MS-25 · MSH-25 · MSS-25 · MSSH-25 · PMA-3013K
PMR-3005K · PMS-3020K · PS23-80/130 · PS23S-80 · PSA25-90/140 · PSA25S-90
PSA30-100/160 · PSA30S-100 · PSA35-120/180 · PSA35S-120 · PLANET 400
PLANET 600 · RAS-101 · RAS-151E · RAS-2510 · RAS-H2510 · RAX-271E · RAX-71E

Product Code	Product Name	Fit to	
2129	K-265	CHK	

Collet Nut K-265A



Fit to : CHK

Fit to
NRAF-5080 · Xpeed1200

Product Code	Product Name	Fit to	
2158	K-265A	CHK	

indicates Hand Grinder use
indicates Machine Spindle use

*Order by product code.

6-p7

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.92"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.87"/ø0.98"

ø0.897"

E3000

— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.82"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

■ Emax EVolution Motor Cord

Product	Description	Product Code	Product Name	Fit to	
	Straight Cord : 4.5 ft <with Switch>	8088	ENKCD-410S	ENK-410S (Standard Motor)	
		8089	ENKCD-250T	ENK-250T (Torque Motor)	
	Coiled Cord : 4.5 ft <with Switch>	8090	ENKCD-410C	ENK-410S (Standard Motor)	
		8091	ENKCD-250C	ENK-250T (Torque Motor)	

■ ELECTER Motor Cord

Product	Description	Product Code	Product Name	Fit to	Switch color	
	Coiled Cord : 4.5 ft <with Switch>	8004	NCL-351C	NK-351 (Standard Motor)	Blue	
		8013	NCL-261C	NK-261 (Torque Motor)	Green	
	Straight Cord : 6 ft <with Switch>	8005	NCL-351S	NK-351 (Standard Motor)	Blue	
		8014	NCL-261S	NK-261 (Torque Motor)	Green	
	Extension Straight Cord : 10 ft	8051	NCL-EXT	ELECTER E-max Motor (All Types)		

■ ESPERT 500 Motor Cord

Product	Description	Product Code	Product Name	Fit to	
	ESPERT 500 Compact Motor Cord : 4.5 ft	9093	ENKCD-50C	ENK-500C (Compact Motor Cord)	
	ESPERT 500 Compact Motor Cord : 9.84 ft	9095	ENKCD-50C 3M		
	ESPERT 500 Torque Motor Cord : 4.5 ft	9094	ENKCD-50T	ENK-500T (Torque Motor Cord)	
	ESPERT 500 Torque Motor Cord : 9.84 ft	9096	ENKCD-50T 3M		

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.89"

E3000

One Piece

E3000

Modular

ø1.18"

ø1.0"/ø0.98"/ø0.89"

E3000

80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.96"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.87"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

< PARTS > FOOT PEDAL & HANDPIECE

■ Foot Pedal

Product	Description	Product Code	Product Name	Fit to	
	Foot Pedal ON-OFF and speed change can be accomplished.	8106	FC-64	Controller Emax EVOLution NE249	
	Foot Pedal ON-OFF and speed change can be accomplished.	1440	FC-40	Controller ELECTER E-max NE129 · ELECTER-GX NE22E ESPERT 400 NE51 · ESPERT 500 NE96 SONIC-CUTTER NE80	
	Foot Pedal ON-OFF switch only	8103	FC-24	SHEENUS NE124 · SHEENUS neo NE240	
	Foot Control	1064	AFC-45	MIRACLE · ROTUS FINE BELT SANDER ROTUS Air Line Kit AL-0306 · AL-H1207F	
		1124	AFC-40	PRESTO II PR2-06 · PRESTO PR-06	

■ Handpiece Stand, Handpiece Holder & Head Cover

Product	Description	Product Code	Product Name	Fit to	
	Handpiece Stand	8104	K-274	Emax EVOLution · ELECTER E-max SHEENUS · SHEENUS neo ESPERT 500	
		1519	Z095101	ESPERT 400	
	Handpiece Holder	8107	K-273	Controller Emax EVOLution NE249	

■ indicates Hand Grinder use
■ indicates Machine Spindle use

*Order by product code.

6-p9

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07"/ø0.98"

ø0.897"

E3000

— 30,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xspeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

< PARTS > PRESTO II & FINE BELT SANDER ETC.

■ Power Supply Cord

Product	Description	Product Code	Product Name	Fit to	
	Power Supply Cord	1484	K-269	Controller Emax EVOLution NE249	

■ PRESTO II / PRESTO

Product	Description	Product Code	Product Name	Fit to	
	PRESTO II Cartridge	1120	PR-03	PRESTO II · PRESTO	

■ FINE BELT SANDER

Product	Description	Product Code	Product Name	Fit to	
	Tension Pulley	1103	TP-12A	KBS-101 · EBS-101	
	Tension Pulley Assembly	1104	TPA-12A	KBS-101 · EBS-101	

■ Carbon Brush

Product	Description	Product Code	Product Name	Fit to	
	Carbon Brush (each 2 pcs.)	1424	E023011	NK-351 NK-350 · NK-804T ET II NK-260	
		1425	E037011	NK-151 · NK-261 NK-150 ET II NK-260N	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0"/ø0.98"/ø0.897"

E3000

One Piece

E3000

Modular

ø1.18"

ø1.0"/ø0.98"/ø0.897"

E3000

80,000rpm

E4000

3

MA

ø0.897"

ø1.0"/ø0.98"

ø1.18"

MS

ø0.75"/ø0.79"

ø0.897"/ø0.91"

ø1.0"/ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL DATA

8

APPLICATION EXAMPLES

INDEX

< PARTS > OIL, GREASE, GREASE NIPPLE & SILENCER

Oil List

Product	Description	Product Code	Product Name	Fit to	
	Lubricating Oil (4 oz.)	AA10478C	K-211	For Air Motor · Air Line Kit	
	Lubricating Oil (32 oz.)	AA10480C	K-202	For Air Motor · Air Line Kit	

Grease & Grease Nipple

Product	Description	Product Code	Product Name	Fit to	
	Grease for Reducer (2.5mL)	1547	GR35ML	ARG-011E · ARG-021E · EMR-3008K EMA-3020K · RAX-271E · RAX-71E	
	Grease for Reducer (10mL)	1550	GR10ML		
	Grease for Reducer (100mL)	1549	GR100ML		
	Grease Nipple	K137A251	GN		

Silencer

Product	Description	Product Code	Product Name	Fit to	
	Silencer Large (with Metal Fitting)	1060	K-209	ROTUS AMS-20 · 50 · 150 · 250 · 600 · AM-300 (R · L) AM-2526 (RA · LA) · AM-H2526 (RA · LA) · MS-19 · 20 · 22 (R · L) MSS-19 · 20 · 22 (R) · MS-23 (R · L) · MST-23 (R · L) MSTN-23 (R · L) · MS-25 (R · L) · MSH-25 (R · L) · MSS-25 (R) MSSH-25 (R) · MSST-23 (R) · PLANET 550	
	Silencer Small (with Metal Fitting)	1061	K-208	IMPULSE · MIRACLE AM-300 (RA · LA) · AM-600 · AM-310 · AM-2526 (R · L) AM-H2526 (R · L) · MS-19 · 20 · 22 (RA · LA) · MSS-19 · 20 · 22 (RA) MS-23 (RA · LA) · MST-23 (RA · LA) · MSST-23 (RA) MSTN-23 (RA · LA) · MS-25 (RA · LA) · MSH-25 (RA · LA) · MSS-25 (RA) MSSH-25 (RA) · ABS-600 · AM-3020	
	Silencer (with Metal Fitting)	1546	K-246	AMX-8003 · AMX-8001	
	Silencer	K1049101	—	PLANET 600	

■ indicates Hand Grinder use
■ indicates Machine Spindle use

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0" / ø0.99" / ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.97" / ø0.98"

ø0.897"

E3000

— 80,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.89"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

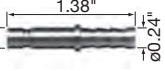
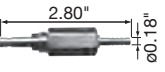
Hose List

Product	Description	Product Code	Product Name	Fit to		
	Hose 6 ft (INTAKE)	2027	K-206	■ ROTUS IM-301		
	Hose 6 ft (INTAKE, Chip Air Mechanism)	2020	K-207	■ ROTUS IM-300		
	Hose 4.5 ft	1038	K-213	■ IMPULSE & PNEU-SONIC		
	Hose for Piping 6 ft (ø6.0 mm)	Z101240	K-237	■ PRESTO II · PRESTO		
	Turbine Hose 6 ft (ø5.1 mm)	T815220	K-238	■ PRESTO II · PRESTO		
	Hose for Piping 6 ft with Metal Fitting	2070	K-275	■ ■ For Air Line Kit		
	Hose ø6 mm (O.D.) (INTAKE) 13 ft · Blue	2056	K-247	■ EMS-6040 · EMS-6040K · HTS SERIES		
	Hose ø6 mm (O.D.) (INTAKE) 6 ft · Blue	2059	K-254	■ ABS-400 · 800 · 1600 AMS-1210 · AMS-1501 · PLANET 600		
	Hose ø6 mm (O.D.) (INTAKE) 6 ft	2028	K-215	■ AM-300 (RA · LA) · AM-310 (RA · LA) · AM-2526 (RA · LA) AM-H2526 (RA · LA) · AM-600RA · MS-19 · 20 · 22 (RA · LA) MSS-19 · 20 · 22 (RA) · MS-23 (RA · LA) · MST-23 (RA · LA) MSST-23 (RA) · MSTN-23 (RA · LA) · MS-25 (RA · LA) · MSH-25 (RA · LA) MSS-25 (RA) · MSSH-25 (RA) · ABS-400 · ABS-800 · ABS-1600 ABS-70P · PLANET 400 · AM-3020 · AMX-50 · AMX-65 · AMX-8008 SMS400 · 401 · PMA-3020A · PMA-3013K · PMA-3013S · PMS-3020K PMS-3020A · PMR-3005K		
	Hose ø8 mm (O.D.) (EXHAUST) 3 ft	2029	K-216	■ AM-300 (RA · LA) · AM-310 (RA · LA) · MS-19 · 20 · 22 (RA · LA) MSS-19 · 20 · 22 (RA) · MS-23 (RA · LA) · MST-23 (RA · LA) MSTN-23 (RA · LA) · MSST-23 (RA) · MS-25 (RA · LA) · MSH-25 (RA · LA) MSS-25 (RA) · MSSH-25 (RA) · ABS-800 · AM-600RA		
	Hose ø8 mm (O.D.) (INTAKE) 6 ft	2043	K-223	■ AMX-8003 · AMX-8001		
	Hose ø8 mm (O.D.) (EXHAUST) 3 ft	2052	K-256	■ AM-2526 (RA · LA) · AM-H2526 (RA · LA) · AM-3020 AMX-50 · AMX-65 · AMX-8008 · PMA-3013K · PMA-3013S PMR-3005K · PMS-3020A · PMS-3020K		
	Hose 6 ft	2030	K-204	■ AM-310 (R · L) · AM-600R · AM-2526 (R · L) · AM-H2526 (R · L) MST-23 (R · L) · MSTN-23 (R · L) · MSS-25 (R) · MSSH-25 (R) MSST-23 (R) · AM-H2525 (R · L) · AM-2525 (R · L) · MS-25 (R · L) MSH-25 (R · L)		
	Hose 6 ft	2049	K-221	■ AM-300 (R · L) · MSS-19 · 20 · 22 (R) MS-19 · 20 · 22 (R · L)		
	Air Hose with filter ø6 mm (O.D.) 6 ft	2058	K-251	■ NE123 · NE145 · NE145-OP1 · NE314 · NE147 · NE147-800 NE147-400 · NE211 · NE211-OP1 · NE236 · NE246 · NE260 NE273 · NR40-5100 ATC · NR3060-AQC · NR4040-AQC NR50-5100 ATC · NR50-5100 ATC-RS · NR-5041E ATC		

■ Hose List

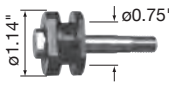
Product	Description	Product Code	Product Name	Fit to	
	EMCD-3000 Air Hose	E304052	E304052	■ EMCD-3000 · EMCD-3000A	

■ Metal Fitting & Filter Joint

Product	Description	Product Code	Product Name	Fit to	
	Metal Fitting (for ø6 mm Quick Disconnecting Joint)	2035	K-241	■ (For K-215 Hose) ■ (For K-259 Hose)	
	Metal Fitting (for ø6 mm Quick Disconnecting Joint)	2036	K-242	■ (For K-204 Hose)	
	Filter Joint (for ø6 mm Quick Disconnecting Joint)	2038	FJ-01	■ (For K-206 Hose) (For K-207 Hose) ■ (For K-211 Hose) (For K-215 Hose) (For K-247 Hose) ■ (For K-254 Hose) (For K-259 Hose)	
	Filter Joint (for ø6 mm Quick Disconnecting Joint)	2039	FJ-02	■ (For K-213 Hose) ■ (For K-204 Hose)	

■ Grindstone Flange

*NGF2-19, EGF-19 for right hand (cw) rotation only.

Product	Description	Product Code	Product Name	Fit to	Specifications	
	Grindstone Flange	2143	NGF2-19	NR-311	Applicable Grindstone Dimensions ø19.05 (I.D.) x ø40 (O.D.) x 7 (W) mm	
		2138	EGF-19	NR-403E · NR-453E · NR-3060S · EMS-3041 · EMS-3045 EMS-3052 · EMS-3056 · EMS-3060K · EMSF-3060K EM30-S6000 · PMS-3020K · PS23 · PSA25 · PSA30 · PSA35		

■ indicates Hand Grinder use
■ indicates Machine Spindle use

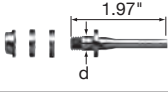
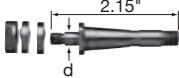
Special Drill Chuck Arbor

*For right hand (cw) rotation only.

Product	Description	Product Code	Product Name	Fit to
	Special Drill Chuck Arbor For Drill Chuck Jacob's Taper No. 0 Run-out Accuracy : Within 0.05 mm	2132	DCH-J0K	■ ENR-302 ■ RAS-101 · RAS-151E · RAX-271E · RAX-71E · RAS-2511 · RAS-H2511 NR-3060S · NR-311 · NR-303 · NR-2351 · NR-303P · NR-403E · NR-453E NR-2551 · NR-H2551 · NR-2532 · NR-H2532 · MS-23 · MST-23 · MSST-23 MSTN-23 · MS-25 · MSH-25 · MSS-25 · MSSH-25 · EMA-3020K EMS-3041 · EMS-3052 · EMS-3045 · EMS-3056 · EMS-3060K EMR-3008K · EMSF-3060K · EMS-6040 · EMS-6040K · ABS-70P HES · PS23 · PSA25 · PSA30 · PSA35 · NRL-300 · NRL-300E PMA-3013K · PMR-3050K · PMS-3020K

Special Metal Saw Arbor

*For right hand (cw) rotation only.

Product	Description	Product Code	Product Name	Fit to
	Special Metal Saw Arbor Dimensions of Metal Saw ϕd (I.D.) x $\phi 1.18"$ (O.D.) Run-out Accuracy : Within 0.02 mm	2146	KCH-02 (5.0)	■ RA-100 · RA-151E · RA-2511 · RA-H2511
		1077	KCH-02 (6.0)	
		2147	KCH-02 (8.0)	
	Special Metal Saw Arbor Dimensions of Metal Saw ϕd (I.D.) x $\phi 1.18"$ (O.D.) Run-out Accuracy : Within 0.02 mm	2148	KCH-03 (5.0)	■ ENR-302 ■ RAS-101 · RAS-151E · RAX-271E · RAX-71E · RAS-2511 · RAS-H2511 NR-3060S · NR-311 · NR-303 · NR-2351 · NR-303P · NR-403E · NR-453E NR-2551 · NR-H2551 · NR-2532 · NR-H2532 · MS-23 · MST-23 · MSST-23 MSTN-23 · MS-25 · MSH-25 · MSS-25 · MSSH-25 · EMA-3020K EMS-3041 · EMS-3052 · EMS-3045 · EMS-3056 · EMS-3060K EMR-3008K · EMS-30600 · EMSF-3060K · EMS-6040 · EMS-6040K ABS-70P · PS23 · PSA25 · PSA30 · PSA35 · NRL-300 · NRL-300E PMA-3013K · PMR-3050K · PMS-3020K
		2130	KCH-03 (6.0)	
		2164	KCH-03 (6.35)	
		2149	KCH-03 (8.0)	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

$\phi 1.0"/\phi 0.98"/\phi 0.897"$

E3000

One Piece

E3000

Modular

$\phi 1.18"$

$\phi 1.0"/\phi 0.98"/\phi 0.897"$

E3000

80,000rpm

E4000

3

MA

$\phi 0.897"$

$\phi 1.0"/\phi 0.98"$

$\phi 1.18"$

MS

$\phi 0.75"/\phi 0.79"$

$\phi 0.87"/\phi 0.91"$

$\phi 1.0"/\phi 0.98"$

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

EXAMPLES

INDEX

■ Grindstone Arbor

*For right hand (cw) rotation only.

Product	Description	Product Code	Product Name	Fit to	Price
	Grindstone Arbor (for Cup Wheel & Rubber Pad)	1045	NCH-01	■ IMPULSE	
	Grindstone Arbor Run-out Accuracy : Within 0.02 mm For Grindstone with ø5.0 mm I.D.	1029	AGM-01	■ AMH-300 · AMH-301 NR-600 · NR-601 · SMS401	
	Grindstone Arbor Run-out Accuracy : Within 0.02 mm For Grindstone with ø5.0 mm I.D.	2131	AGM-03	■ ENR-302 ■ RAS-101 · RAS-151E · RAX-271E · RAX-71E · RAS-2511 · RAS-H2511 NR-3060S · NR-311 · NR-303 · NR-2351 · NR-303P · NR-403E · NR-453E NR-2551 · NR-H2551 · NR-2532 · NR-H2532 · MS-23 · MST-23 · MSST-23 MSTN-23 · MS-25 · MSH-25 · MSS-25 · MSSH-25 · EMA-3020K EMS-3041 · EMS-3052 · EMS-3045 · EMS-3056 · EMS-3060K EMR-3008K · EM30-S6000 · EMSF-3060K · EMS-6040 · EMS-6040K ABS-70P · HES · PS23 · PSA25 · PSA30 · PSA35 · NRL-300 NRL-300E · PMA-3013K · PMR-3050K · PMS-3020K · HPS250	

1

EmaxEVO

ESPERT

ROTUS

IMPULSE

PRESTO II

Sheenus

ZERO

Sonic-Cutter

ZERO

2

iSpeed3

E2000

ø1.0" / ø0.98" / ø0.897"

E3000

— One Piece

E3000

— Modular

ø1.18"

ø1.07" / ø0.98"

ø0.897"

E3000

— 30,000rpm

E4000

3

MA

ø0.897"

ø1.0"

ø0.98"

ø1.18"

MS

ø0.75"

ø0.79"

ø0.897"

ø0.91"

ø1.0"

ø0.98"

4

HES

iSpeed5

HTS

PLANET

Xpeed

ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL

DATA

8

APPLICATION

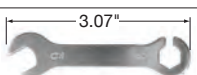
EXAMPLES

INDEX

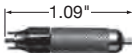
■ indicates Hand Grinder use

■ indicates Machine Spindle use

Wrench List

Product	Description	Product Code	Product Name	Fit to
 2.34"	Wrench 6 x 4.5 mm (0.24" x 0.18")	2001	—	■ BMH-300 · MH-300 ■ NR-600 · NR-601 · AMH-300 · AMH-301
 2.34"	Wrench 6.1 x 8 mm (0.24" x 0.31")	2069	—	■ NRR-2651 · NR40-5100 ATC NRR-3060 · EMA-3020S
 3.15"	Wrench 7 x 5.1 mm (0.28" x 0.20")	2009	—	■ IH-300 · IR-310 · ERA-270 · BMH-300 · MH-300 EHR-401 · EHL-401 · EHR-500 · VH-E ■ NRR-2650 · NR-600 · NR-601 · AMH-300 · AMH-301 RA-200 · RA-271E · RA-2521 · RA-H2520 · NR-3080 ABS-1600 · EMA-3020S · PMA-3013S
 3.15"	Wrench 7 x 5.5 mm (0.28" x 0.22")	2010	—	■ HA-500 ■ RA-100 · RA-151E · RA-2511 RA-H2510
 3.15"	Wrench 8 x 5 mm (0.31" x 0.20")	2012	—	■ ERA-270 · K-042 · IMPULSE ■ AMS-250 · AMS-1210 · AMS-1501 · iSpeed3 · EM20-S6000 EM25-S6000 · EMS-3060A · NR-3080S · NR3060-AQC NRR3060-QC · HES810 · HPS500 · HTS · MS-19 · 20 · 22 MSS-19 · 20 · 22 · NR-320 · NRA-5080 · NRR-2650 · PLANET 850 PLANET 1500 · PMS-3020A · PMA-3013S · RA-100 · RA-151E RA-200 · RA-271E · RA-2511 · RA-2521 · SMS400 · SMS401
 3.07"	Wrench 9 x 9 mm (0.35" x 0.35")	2064	—	■ IG-400
 3.05"	Wrench 10 x 10 mm (0.39" x 0.39")	2008	—	■ HG-200 · EHG-400 ■ PLANET 550 · PLANET 850 · PLANET 1500 · BANTAM 150 BANTAM 250 · NR-301 · MS-19 · 20 · 22 · AMS-150 · 250 · 600 ABS-800 · HES-50/40 RA · NR-320 · PS20 · NRA-5080 · SMS400 NR-5041E ATC · NRR-2651 · HPS500 · ABT-1000
 L	Wrench 9 x 11 mm (0.35" x 0.43") (Length 3.54")	2054	—	■ AMS-1210 · 1501 · EM20-S6000 · EM25-S6000 · EMS-3060A HTS · HES810 · iSpeed3 · MSS-19 · 20 · 22 · NR-5041E ATC NR40-5100 ATC · NR50-5100 ATC · NR50-5100 ATC-RS NR-3080S · NR3060-AQC · NRR3060-QC · PMS-3020A · SMS401
	Wrench 12 x 14 mm (0.47" x 0.55") (Length 3.94")	2026	—	■ NR-302 · ENR-302 ■ ABS-400 · ABS-800 · ABS-70P · AMS-20 · AMS-50 · AMX-50 AMX-6510 · AMX-8008 · EM30-S6000 · EMS-6040 · EMS-6040K EMS-3060K · EMSF-3060K · EMS · EMR-3008K · EMA-3020K HES510 · HPS250 · NR-2351 · NR-401E · NR-311 · NR-303 NR-3060S · NR-303P · NRAF-5080 · NR-2532 · NR-H2532 NR-2551 · NR-H2551 · NR-403E · NR-453E · NR50-5100 ATC NR50-5100 ATC-RS · NR3060-AQC · NRR3060-QC · NR4040-AQC NRR4040-QC · MS-23 · MST-23 · MSST-23 · MSTN-23 · MS-25 MSS-25 · MSH-25 · MSSH-25 · NRL-300E · NRL-300 · PLANET 400 PLANET 600 · PMS-3020K · PS23 · PSA23 · PSA25 · PSA30 PSA35 · RAS-101 · RAS-151E · RAX-271E · RAX-71E · RAS-2511 RAS-H2511 · RA-H2530 · PMR-3005K · PMA-3013K · Xpeed1200
	Wrench 15 x 17 mm (0.59" x 0.67") (Length 4.53")	2048	—	■ IG-400 ■ AMX-6501 · AMX-6503 · PSA40
	Wrench 16 x 18 mm (0.63" x 0.71") (Length 4.92")	2047	—	■ SLS-16 ■ EMS-6040 · EMS-6040K · PSA35
	Wrench 17 x 22 mm (0.67" x 0.87") (Length 5.51")	2083	—	■ BMS-4020 · BMS-4020 2M · BMS-4020RA · BMS-4040 · BMS-4040 2M BMS-4040RA · NR-4040 · NR4040-AQC · NRR4040-QC
	Wrench 20 x 24 mm (0.79" x 0.94") (Length 5.91")	2018	—	■ NR-302 · SLS-16 · EIC-300 · EKC-300 · ERA-270 ECN-011 ■ AM-300 · AM-310 · AM-600 · EM-2350J · NR-2351 NR-301 · NR-303 · NR-600 · NR-601 · RAS-101 · RA-100 RA-200 · NR-311 · AMH-300 · AMH-301 · MSTN-23 PSA45 · PSA60 · NRL-300 · NRL-300E · AMX-8001 · AMX-8003
	Wrench 22 x 27 mm (0.87" x 1.06") (Length 6.69")	2045	—	■ AM-2526 · AM-H2526 · AM-3020 · AMX-6501 · AMX-6503 EM25-5000-J4 · EM-3060 · EM-3060J · EM25N-5000-J4 EM-805 · EM-3080J · EM-3030J · EM-3030T-J NR-2532 · NR-H2532 · NR-2551/H2551 · NR-3080S NR-3060S · NR-403E · NR-453E · NRAF-5080 · NRR-2651 NRR-3060 · NR3060-AQC · NRR3060-QC · PSA40 · PSA45 PSA50 · PSA60 · PST50 · PST60 · RA-151E · RA-271E RAS-151E · RAX-271E · RAX-71E

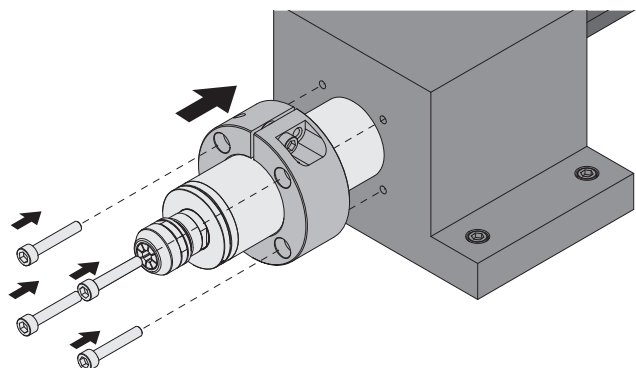
Wrench List

Product	Description	Product Code	Product Name	Fit to	
	Chuck Wrench	2006	K-232	■ MFC-300S · MFC-300M	
	Chuck Wrench	2007	K-231	■ IC-300 · KC-300 · EIC-300 · EKC-300 IC-E · KC-E	
	Wrench 4 x 7 mm (0.16" x 0.28") (for K-231)	2068	—	■ IC-300 · KC-300 · EIC-300 · EKC-300 IC-E · KC-E	
	Bar Wrench (2.83")	2013	K-212	■ HG-200 · HA-500 · EHG-400 · IMPULSE ■ ABS-1600	
	Bar Wrench (3.94")	2046	K-236	■ NR-260E ATC · NR-5041E ATC · NRA-5080 · NRAF-5080 NR50-5100 ATC · NR50-5100 ATC-RS · NR40-5100 ATC	
	Bar Wrench	2073	K-277	■ Xpeed1600 · ABT-1000	
	Bar Wrench	2067	PCR-30	■ IG-400	
	Pin Wrench	2014	K-233	■ NK-351 · ENK-410S · IH-300 · IR-310 · HG-200 · SR-300 BMH-300 · MH-300 · MFC-300S · MFC-300M · IC-300 IC-E · KC-300 · KC-E · K-042 · RG-01 · RG-02 · CN-01 EHR-500 · EHL-401 · ERG-01B · ERG-01 · IM-301 · IM-300	
	Pin Wrench	2002	T-751	■ PRESTO II / PRESTO · HI-RITE ■ NR-3080	
	Allen Wrench (1.5 mm)	—	—	■ ML-2 · ML-4 · ML-8 · EML-8 · SLS-16 IMPULSE · SONIC-CUTTER	
	Allen Wrench (2 mm)	—	—	■ NLS-110 · LS-100 · NLS-100 · ELS-100 ■ Xpeed1600 · ABT-1000	
	Allen Wrench (2.5 mm)	—	—	■ SHEENUS · SHEENUSneo ■ ABS-1600	
	Allen Wrench (3 mm)	—	—	■ KBS-101 · NLS-110 · LS-100 · NLS-100 · ELS-100 · EBS-101	
	Allen Wrench (6 mm)	—	—	■ PST50 · PST60	
	Wrench with Handle (8 mm)	2016	K-248	Length : 4.09"	
	Wrench with Handle (10 mm)	2017	K-249	Length : 4.13"	
	Wrench (10 mm)	—	—	■ SHEENUS · SHEENUS neo	
	Wrench (36 mm)	2080	—	■ EM-4040 · EM-4040A · EM-4020 EM-4020A · NR-4040 · NR4040-AQC NRR4040-QC	
	L Shaped Wrench (9 mm)	2055	—	■ EHR-500 · IR-310 ■ E400Z · E500Z · E800Z	
	Torque Wrench Head (10 mm)	2082	—	■ Xpeed1600	
	Torque Wrench Head (14 mm)	2081	—	■ Xpeed1200	
	Torque Wrench	60000518	60000518	■ Xpeed1600 · Xpeed1200	

■ indicates Hand Grinder use
■ indicates Machine Spindle use

1	EmaxEVO
	ESPERT
	ROTUS
	IMPULSE
	PRESTO II
	Sheenus ZERO
	Sonic-Cutter ZERO
2	iSpeed3
	E2000 ø1.0" / ø0.92" / ø0.89"
	E3000 — One Piece
	E3000 — Modular
	ø1.18"
	ø1.97" / ø0.98" ø0.89"
	E3000 — 80,000rpm
	E4000
3	MA
	ø0.897"
	ø1.0"
	ø0.98"
	ø1.18"
	MS
	ø0.75"
	ø0.79"
	ø0.83"
	ø0.91"
	ø1.0"
	ø0.98"
4	HES
	iSpeed5
	HTS
	PLANET
	Xpeed
	ABT
5	AIR LINE KIT
6	PARTS
7	TECHNICAL DATA
8	APPLICATION EXAMPLES
	INDEX

GRIP RING



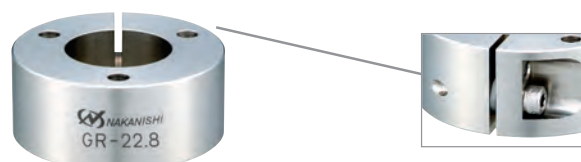
- The Grip Ring is an adjustable position split type flange for 40mm and 30mm spindles.
- The Grip Ring can easily mounted or removed from any CNC machine or specialty machine tool block or tool post.
- Eliminates the chance of over tightening and damaging the spindle in the sleeve during installation.



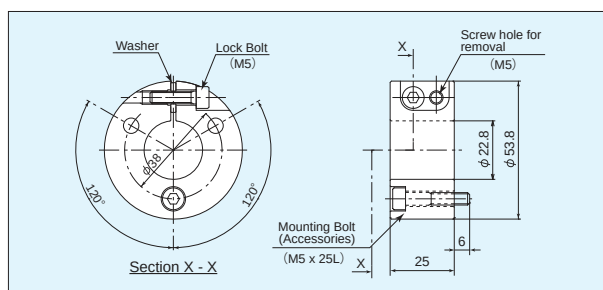
Caution

- Do not remove the Lock Bolt. If the Lock Bolt is removed, the Washer inside may move. Once the Washer is moved, it may make it impossible to attach the Lock Bolt.
- Do not remove the spindle while the Grip Ring is attached to the machines' holder. This may cause deformation and / or damage to the Grip Ring.

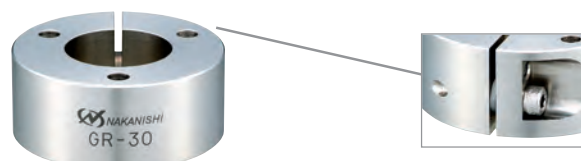
Product Code 1888 GRIP RING GR-22.8



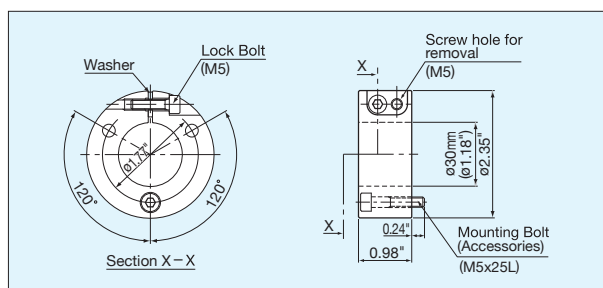
Product Code	Product Name	Standard Equipment · Accessories	
1888	GR-22.8	• Mounting Bolt (M5x25) : 3 pcs.	



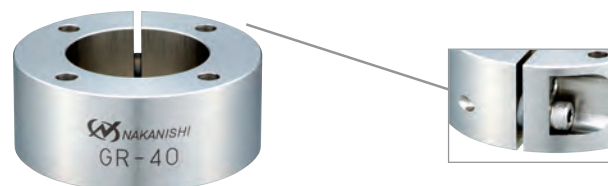
Product Code 1885 GRIP RING GR-30



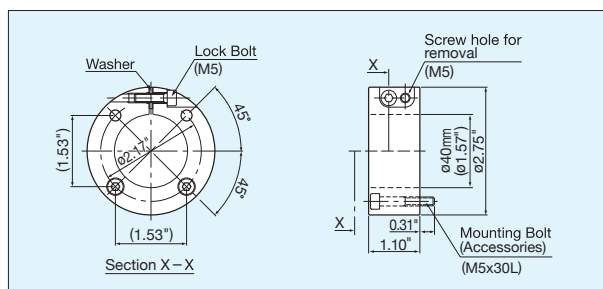
Product Code	Product Name	Standard Equipment · Accessories	
1885	GR-30	• Mounting Bolt (M5x25) : 3 pcs.	



Product Code 1886 GRIP RING GR-40



Product Code	Product Name	Standard Equipment · Accessories	
1886	GR-40	• Mounting Bolt (M5x30) : 4 pcs.	



< PARTS > SPLIT BUSHING

■ Split Bushing : Bushings to allow smaller dia. spindles to be mounted in larger dia. holders

Description	Product Code	Product Name	I.D.	O.D.	Length	Fit to	
	1871	RB-22.8x25	ø0.897" (ø22.8 mm)	ø0.98" (ø25 mm)	44 mm	RA-100	
	1872	RBS-22.8x25	ø0.897" (ø22.8 mm)	ø0.98" (ø25 mm)	25 mm	NR-303 · NR-2351 NR-311 · AMH-301 RA-200 · RAS-101	
	1873	RB-22.8x25.4	ø0.897" (ø22.8 mm)	ø1.0" (ø25.4 mm)	44 mm	RA-100	
	1874	RBS-22.8x25.4	ø0.897" (ø22.8 mm)	ø1.0" (ø25.4 mm)	25 mm	NR-303 · NR-2351 NR-311 · AMH-301 RA-200 · RAS-101	
	1875	RB-20x23	ø0.79" (ø20 mm)	ø0.91" (ø23 mm)	40 mm	EM20-S6000 MSS2030 · MSS2008 MSS2002	
	1876	RB-20x22.8	ø0.79" (ø20 mm)	ø0.897" (ø22.8 mm)	40 mm	EM20-S6000 MSS2030 · MSS2008 MSS2002	
	1877	RB-20x22	ø0.79" (ø20 mm)	ø0.87" (ø22 mm)	40 mm	EM20-S6000 MSS2030 · MSS2008 MSS2002	
	1878	RB-20x25	ø0.79" (ø20 mm)	ø0.98" (ø25 mm)	40 mm	EM20-S6000 MSS2030 · MSS2008 MSS2002	
	1879	RB-20x25.4	ø0.79" (ø20 mm)	ø1.0" (ø25.4 mm)	40 mm	EM20-S6000 MSS2030 · MSS2008 MSS2002	
	1880	RB-30x32	ø1.18" (ø30 mm)	ø1.26" (ø32 mm)	45 mm	NR-3060S NR-403E	
	1881	RB-30x36	ø1.18" (ø30 mm)	ø1.42" (ø36 mm)	45 mm	NR-3060S NR-403E	
	1883	RB-22x25x34L	ø0.87" (ø22 mm)	ø0.98" (ø25 mm)	33.5 mm	BM-322FL · BM-322FR	
	1884	RB-22x25.4x34L	ø0.87" (ø22 mm)	ø1.0" (ø25.4 mm)	33.5 mm	BM-322FL · BM-322FR	

Note : After inserting spindle into bushing, verify the O.D. measurement vs. the machine holder I.D.

■ indicates Hand Grinder use
■ indicates Machine Spindle use

*Order by product code. **6-p19**

1

EmaxEVO
ESPERT
ROTUS
IMPULSE
PRESTO II
Sheenus
ZERO
Sonic-Cutter
ZERO

2

iSpeed3
E2000
ø1.0"/ø0.98"/ø0.897"
E3000
— One Piece
E3000
— Modular
ø1.18"
ø1.07"/ø0.98"
ø0.897"
E3000
— 30,000rpm
E4000

3

MA
ø0.897"
ø1.0"
ø0.98"
ø1.18"
MS
ø0.75"
ø0.79"
ø0.87"
ø0.91"
ø1.0"
ø0.98"

4

HES
iSpeed5
HTS
PLANET
Xspeed
ABT

5

AIR LINE KIT

6

PARTS

7

TECHNICAL
DATA

8

APPLICATION
EXAMPLES

INDEX