

MAXIMA EX Series

► Straight Rotary Hand piece Set

MAXIMA EX Series are the high-class and high-performance micro grinder system. The motor has a Hand Switch that can be turned On and Off at hand. the Motor part and Head part can be attached and detached with an attachment and exchangeable, various combinations can be made according to the applications.

MEX051S Max.55,000min⁻¹ Max.Torque: 3.6Ncm

MAXIMA EX Controller
+ EX051 Hand piece Set

High Speed type

Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JA15
Motors EX05
Hand piece stand TRC02
Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed



* Collet chuck 2.35 mm Dia. is installed into JA15 Head.
Collet chuck 3.0 mm or 3.175 mm Dia. is supplied as the spare parts.

MEX131S Max.35,000min⁻¹ Max.Torque: 5.4Ncm

MAXIMA EX Controller
+ EX131 Hand piece Set

All-Arounder type

Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JA15
Motors EX13
Hand piece stand TRC02
Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed



* Collet chuck 2.35 mm Dia. is installed into JA15 Head.
Collet chuck 3.0 mm or 3.175 mm Dia. is supplied as the spare parts.

MEX121S Max.20,000min⁻¹ Max.Torque: 6.4Ncm

MAXIMA EX Controller
+ EX121 Hand piece Set

High Torque type

Package contents

EX Controller EXP230(120)

Variable Foot Controller ... VC90
Heads JA15
Motors EX12
Hand piece stand TRC02

Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed



Auto Cruise Function
Keep a constant rotation speed.



Digital Rotation Display
Rotation speed is displayed in digital indicator.



Variable Foot Control
Control the rotation speed of the motor by stepping on.



Overload Protection
Stops and protects the handpiece when the motor is overloaded.



Alarm Function
When the motor is loaded, it sounds an alarm to stop and protect the handpiece.



Rotation Direction Change
One-touch operation to switch between forward rotation and reverse rotation.



Quick Chuck System
Quick chuck system that allows you to attach and detach tip tools with one-touch.

MAXIMA EX Series



Equipped with a convenient Hand Switch.

When using the MAXIMA EX motor with the MAXIMA EX controller, you can turn it On / Off with the Hand Switch.

MAXIMA EX Motor is equipped with a convenient Hand Switch. It is now possible to perform frequent On/Off operations on the Handpiece side during work. Even when the Variable Foot Pedal (VC90) is connected, the Hand Switch is automatically recognized and On/Off operation is possible. Also, even when 2 types of hand pieces are connected, the handpiece that presses the Hand Switch is automatically recognized without switching Stations on the Controller side. Equipped with a convenient

MEX231S Max.30,000min⁻¹ Max.Torque: 6.8Ncm

MAXIMA EX Controller
+ EX231 Hand piece Set

All-Arounder type

Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JA15
Motors EX23
Hand piece stand TRC02
Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed



* Collet chuck 2.35 mm Dia. is installed into JA15 Head.
Collet chuck 3.0 mm or 3.175 mm Dia. is supplied as the spare parts.

MEX211S Max.15,000min⁻¹ Max.Torque: 8.8Ncm

MAXIMA EX Controller
+ EX211 Hand piece Set

High Torque type

Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JA15
Motors EX21
Hand piece stand TRC02
Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed

MEX201S Max.8,000min⁻¹ Max.Torque: 9.8Ncm

MAXIMA EX Controller
+ EX201 Hand piece Set

Super Torque type

Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JA15
Motors EX20
Hand piece stand TRC02
Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed

For Straight type Hand pieces, we have a lineup of All-Arounder type, High Speed type, High Torque type, and Super Torque type. As one of the selection criteria for different types of Hand pieces, if the head diameter of the tip tool to be used is 6 mm or less, use EX051, EX121, EX131, which are light-weight and easy to handle, and if you powerfully want to use the tip tools with a head diameter larger than 6 mm, please select EX231, EX211, EX201 with large torque. Also, select a High Speed type for carbide cutters and diamond points, and an All-Arounder type Hand piece when using a lot of rubberized mounted points, Felt Buffs, Brushes, etc..

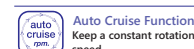
High-Performance Hand piece with Detachable Motor part and Head part

Head part and Motor part can be attached and detached easily and quickly by using a coupler joint system that simply pulls up the Ring on the Head part. You can freely switch from a Straight type Hand piece to an Angle type or Swing type Hand piece.



Motors
EX05
EX12
EX13

Motors
EX23
EX21
EX20



Auto Cruise Function
Keep a constant rotation speed.



Digital Rotation Display
Rotation speed is displayed in digital indicator.



Variable Foot Control
Control the rotation speed of the motor by stepping on.



Overload Protection
Stops and protects the handpiece when the motor is overloaded.



Alarm Function
When the motor is loaded, it sounds an alarm to stop and protect the handpiece.



Rotation Direction Change
One-touch operation to switch between forward rotation and reverse rotation.



Quick Chuck System
Quick chuck system that allows you to attach and detach tip tools with one-touch.

MAXIMA EX Series

► Angle Rotary Hand piece & Swingfile Set

This is Angle Rotary Hand piece which is equipped with a 90 and 120 Angle Heads on a High Power Motor with a Hand Switch. Furthermore, It is Swingfile that swings sideways to the left and right. You can freely adjust the speed and amplitude.

MEX216S Max.15,000min⁻¹
Max.Torque: 8.8Ncm
MAXIMA EX Controller
+ EX216 Hand piece Set

● 90° Angle type

■ Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JR21
Motors EX21
Hand piece stand TRC02
Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed



* Collet chuck 3.0 mm Dia. is installed into JR21 Head.
Collet chuck 2.35 mm or 3.175 mm Dia. is supplied as the spare parts.

MEX217S Max.15,000min⁻¹
Max.Torque: 8.8Ncm
MAXIMA EX Controller
+ EX217 Hand piece Set

● 120° Angle type

■ Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JS21
Motors EX21
Hand piece stand TRC02
Carbon brushes
Joint stopper
Chuck wrench
Collet chuck installed



* Collet chuck 3.0 mm Dia. is installed into JS21 Head.
Collet chuck 2.35 mm or 3.175 mm Dia. is supplied as the spare parts.

MEX208S Max Vibration
8,000 times/min
MAXIMA EX Controller
+ EX208 Hand piece Set

● Swingfile

■ Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Heads JP11
Motors EX20
Hand piece stand TRC02
Carbon brushes



Instead of Collet system, V ditch chuck is mounted. 2.0-4.7mm Dia. of tip tools can be installed. Polish the bottom of the workpiece, deep cavities, corners to grooves.

MAXIMA EX Series

► Reciprofile Set

This is the electric filing machine that reciprocates back and forth with a stroke adjustment function. We have a lineup of two types, RE35 emphasizes stroke, and RE55 has an advantage in speed.

MEXRE35S

MAXIMA EX Controller
+ RE35 Reciprofile Set

● Reciprofile

■ Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Hand piece RE35

MEXRE55S

MAXIMA EX Controller
+ RE55 Reciprofile Set

● Reciprofile

■ Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Hand piece RE55



auto Auto Cruise Function
Keep a constant rotation speed.
variable Variable Foot Control
Control the rotation speed of the motor by stepping on.

STOP Overload Protection
Stops and protects the handpiece when the motor is overloaded.
stepl Steplless Control
Steplessly control the rotation speed of the handpiece.

► Belt Sander Set

Ideal for deburring work on flat surfaces, curved surfaces, and edge surfaces. The belt and belt arm are removable by one-touch operation.

MEXBS33S

MAXIMA EX Controller
+ BS33 Belt Sander Set

● Belt Sander

■ Package contents

EX Controller EXP230(120)
Variable Foot Controller ... VC90
Hand piece BS33
Standard Belt Arm BS1-100-2
Abrasive Belts 6mm width .. #120, #180, #320
Abrasive Belts 8mm width .. #120, #180, #320
* Each 1 piece every Mesh size.



auto Auto Cruise Function
Keep a constant rotation speed.
variable Variable Foot Control
Control the rotation speed of the motor by stepping on.

STOP Overload Protection
Stops and protects the handpiece when the motor is overloaded.
stepl Steplless Control
Steplessly control the rotation speed of the handpiece.

rotation Rotation Direction Change
One-touch operation to switch between forward rotation and reverse rotation.

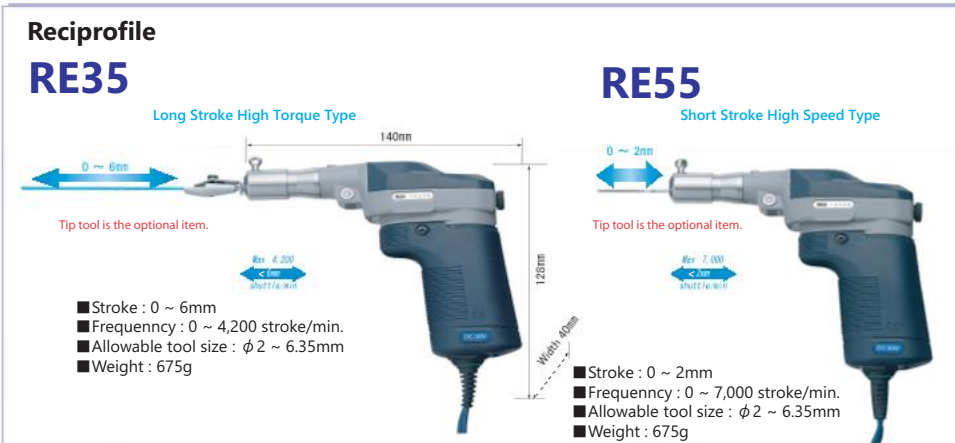
MAXIMA EX Series

► Swingfile (Head + Motor Separate type) & Reciprofile

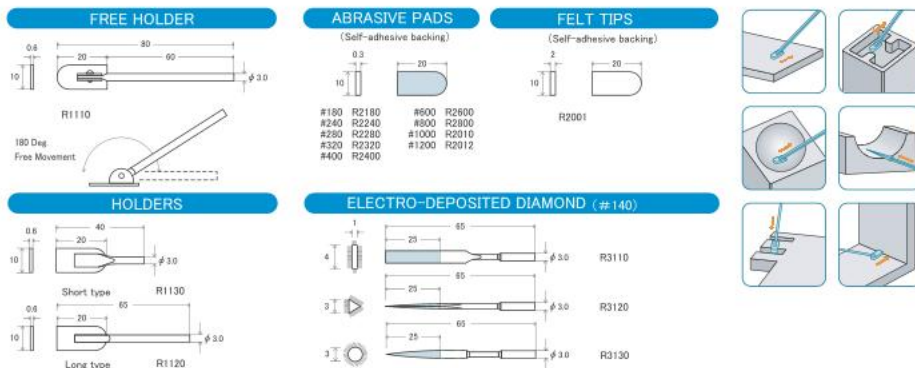
Swingfile EX208 a unique sideways reciprocating action with a choice of speed and stroke is perfect for polishing base areas in deep cavities, corners and deep slots. The Hand piece EX208 consists of Head JP11 and Motor EX20.



RE35 and RE55 reciprocating profilers are light-weight and comfortable Hand pieces for continuous polishing. Both models have adjustable stroke and floating Head with 360° orientation.



Tools for RE35/55 and EX208



MAXIMA EX Series

► Belt Sander

Belt Sander

BS33



Suitable for deburring, removing EDM and machine tool marks, and sanding flat and curved surface and narrow slots.

- Belt Speed : 5 ~ 12m/sec.
- Standard Belt Arm : BS1-100-2
- Cord length : 150mm
- Weight : 400g

Optional Belt Arm

□ Thin Belt Arm (Option)

BS1-100-1 (Belt width : 4 ~ 8mm)



□ Standard Belt Arm (Standard Accessories)

BS1-100-2 (Belt width : 6 ~ 8mm)



□ Angle Arm (Option)

BS1-100-3 (Belt width : 6 ~ 8mm)



ABRASIVE BELTS (Overall length 300mm)



4mm Width	6mm Width	8mm Width
#80 B4080 #120 B4120 #180 B4180 #320 B4320	#80 B6080 #120 B6120 #180 B6180 #320 B6320	#80 B8080 #120 B8120 #180 B8180 #320 B8320



► Controller

EXP-120 & EXP-230

(AC120V type)

(AC230V type)

- Input Voltage : AC120V / AC230V, 50/60Hz
- Dimension : 200(w) x 180(D) x 110(H) mm
- Max. Output power : 120 W
- Weight : 2.3 kgs

With digital rotation display function.

Two hand pieces can be connected, and it also supports Motors with a Hand Switch.



► Accessories

VC90

Variable Foot Controller



- Weight : 540 g
- Cord length : 1.5m
- Dimension : 100(w) x 185(D) x 75(H) mm

TRC02

Hand piece Stand



- Weight : 77g
- Dimension : 110(w) x 50(D) x 40(H) mm

KE50-155

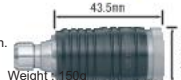
Extension Cord



- Cord length : 3m

MAXIMA EX Series

Heads

Standard Head JA15  Applicable Motor: EX20, EX21, EX23, EX05, EX12, EX13 Allowable rotation speed <55,000 rpm Weight: 100g Standard collet size: 2.35, 3.0mm Special collet size: 3.175mm	Heavy Duty Head JA33  Applicable Motor: EX20, EX21, EX23 Allowable rotation speed <30,000 rpm Weight: 150g Standard collet size: 6.0mm Special collet size: 2.35, 3.0, 3.175, 6.35mm
90° Angle Head JR21  Applicable Motor: EX20, EX21 Allowable rotation speed <15,000 rpm Weight: 200g Standard collet size: 2.35, 3.0mm Special collet size: 3.175mm	120° Angle Head JS21  Applicable Motor: EX20, EX21 Allowable rotation speed <15,000 rpm Weight: 210g Standard collet size: 2.35, 3.0mm Special collet size: 3.175mm
Slender Head JA45  Applicable Motor: EX20, EX21, EX23, EX05, EX12, EX13 Allowable rotation speed <55,000 rpm Weight: 120g Standard collet size: 3.0mm Special collet size: 2.35, 3.175mm	Swing Head JP11  Applicable Motor: EX20 Allowable rotation speed <10,000 rpm Weight: 140g Available tool: 0~1.6mm
1/4 Reduction Gear UT15  Applicable Motor: EX20, EX21, EX23, EX12 Connect between the motor and head for four times torque and reduce speed one fourth. Weight: 150g Allowable rotation speed <30,000 rpm	

Motors



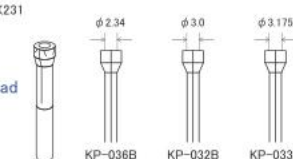
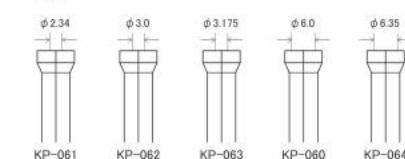
Hand Switch
 It is easy to start and stop by Hand Switch.
 It is not necessary to push the button on the controller.

EX 05 Max. RPM 55,000 Max. Torque: 3.6Ncm Weight: 90g 	EX 12 Max. RPM 20,000 Max. Torque: 6.4Ncm Weight: 120g 	EX 13 Max. RPM 35,000 Max. Torque: 5.4Ncm Weight: 120g 
EX 20 Max. RPM 8,000 Max. Torque: 9.8Ncm Weight: 176g 	EX 21 Max. RPM 15,000 Max. Torque: 8.8Ncm Weight: 176g 	EX 23 Max. RPM 30,000 Max. Torque: 6.8Ncm Weight: 176g 

Use the protective goggles and the dust protective mask during operation.

MAXIMA EX Series

Optional Collet Chuck

Applicable Handpiece EX051 • EX121 • EX131 EX201 • EX211 • EX231 EX216 • EX217 	Applicable Head JA33 
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Reducing Collet Sleeves

This is the Reducing collet sleeve that can quickly adapt

to the shaft diameter used without replacing the collet chuck.

The diagram illustrates the assembly process for the reducing collet sleeve. It shows a 'Tip Tool' (a thin rod) being inserted into a 'Reducing collet' (a sleeve with a central hole). The 'Reducing collet' is then shown inserted into a 'Collet chuck' (a larger sleeve with a central hole). The process is indicated by blue arrows pointing from left to right.

The diagram shows 10 different sizes of reducing collet sleeves, each with its own dimensions. The dimensions are listed in two rows: the top row shows the outer diameter (OD) and the bottom row shows the inner diameter (ID). The sizes are labeled RM 2416, RM 3005, RM 3006, RM 3007, RM 3008, RM 3009, RM 3010, RM 3012, RM 3015, and RM 3016.

Model	OD (mm)	ID (mm)
RM 2416	1.6	2.34
RM 3005	0.5	3.0
RM 3006	0.6	3.0
RM 3007	0.7	3.0
RM 3008	0.8	3.0
RM 3009	0.9	3.0
RM 3010	1.0	3.0
RM 3012	1.2	3.0
RM 3015	1.5	3.0
RM 3016	1.6	3.0

The diagram shows 4 different sizes of reducing collet sleeves, each with its own dimensions. The dimensions are listed in two rows: the top row shows the outer diameter (OD) and the bottom row shows the inner diameter (ID). The sizes are labeled RM 3020, RM 3024, RM 3216, and RM 3224.

Model	OD (mm)	ID (mm)
RM 3020	2.0	3.0
RM 3024	2.34	3.0
RM 3216	1.6	3.175
RM 3224	2.34	3.175

VC90

Variable Foot Controller

In addition to turning on / off the rotation, the output value can be adjusted by stepping on.



Weight : 540g
 Cord length : 1.5m
 Size : 100W x 185D x 75H mm

KE50-155

Hand piece Extension Cord

The length of the motor cord of MAXIMA EX MOTOR can be extended.



Cord length : 3m

TRC02

Hand piece Stand

The handpiece can be placed on the Hand piece Cradle when not in use.



Weight : 77g
 Size : 110W x 50D x 40H mm