

# High Performance Micro Grinder

**Made in Japan**



## Series



**URAWA**

# CONTROLLER

Micro Computer Control

High performance micro computer is mounted for maximum performance.

## UC900 G7 CONTROLLER

Item No.	Rated Input
UC901 (120V)	AC120V 60Hz
UC903 (230V)	AC230V 50Hz



▶ Weight : 2.3 kgs. ▶ Accessory : AC cord, Motor Hanger x 2, Fuse

## FUNCTION

### Micro Computer

Smooth and comfortable operation by built in micro computer. This will control best torque for each motor automatically.

### Auto Cruise Foot Pedal

It is possible to fix the rotation speed when using foot pedal. No more necessary to keep stepping foot pedal.



### Self Diagnostic Function

G7 controller checks condition of motor and controller for safety reason. When heating up, fan inside the controller start automatically to reduce the temperature.

### Load Indicator

8 steps load indicator allows operator to see the condition clearly. For longer life time, it will be cautioned for overwork.



### For Old Motor

It is possible to connect old type motor to this new controller. Rotation speed and error code are not going to be displayed when using with old motor.

### Operation Volume Control

It sounds beeping when pushing button, and also when overworks for cautions. It is possible to adjust sound volume as vol.3, vol.2, vol.1 and none.



### Mode Selection

Automatically find motor on A or B. It is also possible to use foot pedal only connecting to controller.

### Digital Rotation Display

2 digit display is for easy adjustment of rotation speed. Appropriate rotation speed for each tool brings out the best performance.



### Error Code

When heating up, overload and defective of motor cord, error code is displayed for easy trouble shooting.



### Convenient Accessories

Motor Hanger for keeping Motor Handpiece, and Carrying Handle is equipped on controller for easy carrying.



# MOTOR HANDPIECE

One Construction Type

Selectable from High Torque to Speed type according to the application.

## UG42A High Torque Handpiece



Item No.	R.P.M.	MAX. Torque
UG42A	1,000 - 20,000 min <sup>-1</sup>	6.4 Ncm

Item No.	Collet Size (mm)		
	Mounted	Included	Option
UG42A	φ2.34 (KP-036B)	φ3.0 (KP-032B)	φ3.175 (KP-033B)

▶ Weight : 220g(without motor cord) ▶ Accessory : Motor Stand, Carbon Brush, Spanner x 2, Silicone ring ▶ Cord length : 1.5m

## UG43A Speed Type Handpiece



Item No.	R.P.M.	MAX. Torque
UG43A	1,000 - 35,000 min <sup>-1</sup>	5.4 Ncm

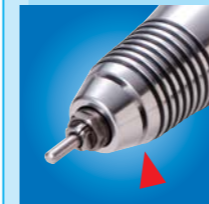
Item No.	Collet Size (mm)		
	Mounted	Included	Option
UG43A	φ2.34 (KP-036B)	φ3.0 (KP-032B)	φ3.175 (KP-033B)

▶ Weight : 220g(without motor cord) ▶ Accessory : Motor Stand, Carbon Brush, Spanner x 2, Silicone ring ▶ Cord length : 1.5m

## FUNCTION

### Dust Protection

New mechanism prevents more dust than ever, and this helps longer life time of ball bearings.



### High Precision

Minimize shaft vibration which is less than 0.02mm. This will enables high precision works.



### Hand Switch

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



### Ergonomic Design

Comfortable grip even for long time work, and silicon ring on the set-ring for slip reduction.



### Easy Tool Changing

Simple and easy tool changing. Only turning set ring with a bit of force.



\* Adapter(KE50-156) is necessary when connecting to existing controller(UC250,UC500 etc...), Hand Switch will not be effective on this occasion.

# HEAD

Choose the suitable Rotary Head according to the application for wide variety of usage.

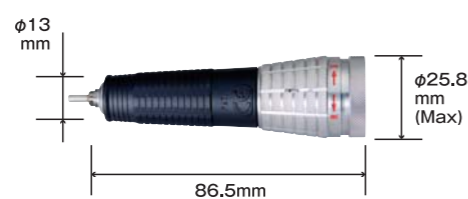
\*Please refer to the compatibility table for the adaptable combination.

## UT01 Standard Head



- ▶ Weight : 115g
- ▶ Accessory : KP-619 Chuck joint wrench  
KP-615A Chuck wrench

## UT02 Slender Head



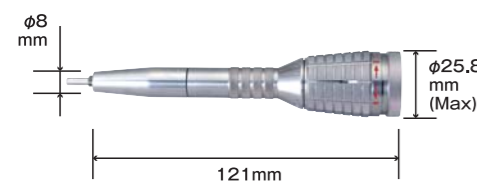
- ▶ Weight : 100g
- ▶ Accessory : KP-619 Chuck joint wrench  
KP-615A Chuck wrench

## UT03 Power Rotary Head



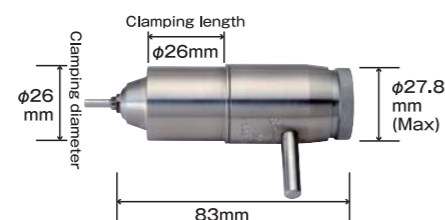
- ▶ Weight : 150g
- ▶ Accessory : KP-619 Chuck joint wrench  
KP-615A Chuck wrench

## UT11 Long Slender Head



- ▶ Weight : 120g
- ▶ Accessory : KP-619 Chuck joint wrench  
KP-615A Chuck wrench

## UT12 Standard Clamp Head



- ▶ Weight : 235g
- ▶ Accessory : KP-619 Chuck joint wrench  
KP-615A Chuck wrench

## UT05 Angle Head 90°



- ▶ Weight : 100g
- ▶ Accessory : HS1.5 Hexagon key wrench  
KP-615A Chuck wrench

## UT06 Power Angle Head 90°

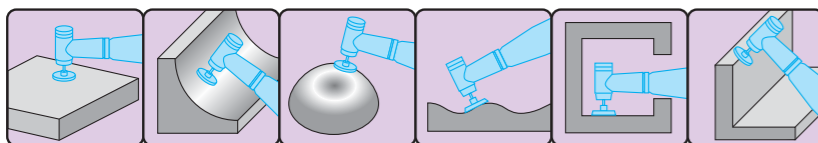


- ▶ Weight : 200g
- ▶ Accessory : Accessory:KP-615A Chuck wrench

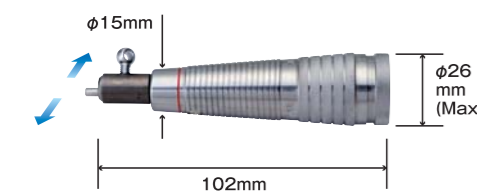
## UT07 Power Angle Head 120°



- ▶ Weight : 210g
- ▶ Accessory : KP-615A Chuck wrench

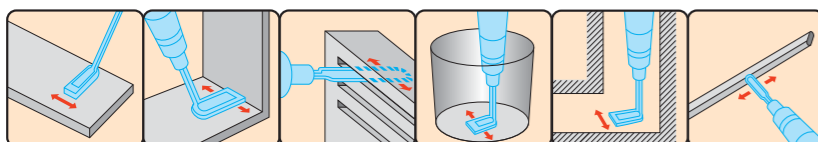


## UT08 Swing Head



Instead of Collet system, V ditch chuck is amounted : possible to attach the tool of  $\phi$ 2-4.7mm, also triangle, and square handle tools.

- ▶ Weight : 140g ▶ Accessory : HS1.5 Hexagon key wrench  
KP-093 Bur wrench



## UT15 Reduction Joint



- ▶ Weight : 100g

Attach the Joint between motor and rotary head.

Reduce the rotary speed to 1/4.

# MOTOR

Choose the suitable Motor Handpiece according to the application for pleasant work.

\*Please refer to the compatibility table for the adaptable combination.

## UM20A·UM21A·UM23A High Power Type



- ▶ Weight : 176g(without cord) ▶ Accessory : Carbon Brush, Motor Stand ▶ Cord length : 1.5m

Excellent for heavy duty grinding and polishing.

Item No.	UM20A	UM21A	UM23A
R.P.M. (min <sup>-1</sup> )	1,000 - 8,000	1,000 - 15,000	1,000 - 30,000
MAX. Torque (N.cm)	9.8	8.8	6.8

## UM12A·UM13A·UM14A Standard Type



- ▶ Weight : 120g(without cord) ▶ Accessory : Carbon Brush, Motor Stand ▶ Cord length : 1.5m

Well designed Motor Handpiece with the excellent balance of speed and power. Useful for versatile application.

Item No.	UM12A	UM13A	UM14A
R.P.M. (min <sup>-1</sup> )	1,000 - 20,000	1,000 - 35,000	2,000 - 45,000
MAX. Torque (N.cm)	6.4	5.4	5.0

## UM05A High Speed Type



- ▶ Weight : 90g(without cord) ▶ Accessory : Carbon Brush, Motor Stand ▶ Cord length : 1.5m

Excellent for precision work. Compact and light weight.

Item No.	UM05A
R.P.M. (min <sup>-1</sup> )	2,000 - 55,000
MAX. Torque (N.cm)	3.6

### Hand Switch

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






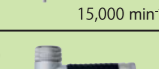




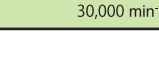
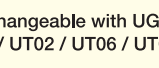
Simple and easy rotary head changing.



Item No. and max speed is indicated on the Motor.




\* Adapter(KE50-156) is necessary when connecting to existing controller(UC250,UC500 etc...), Hand Switch will not be effective on this occasion.

## Head and Motor Compatibility Table

Motor Max. R.P.M. Head Allowable Max R.P.M.	UM20A 8,000 min <sup>-1</sup>	UM21A 15,000 min <sup>-1</sup>	UM23A 30,000 min <sup>-1</sup>	UM12A 20,000 min <sup>-1</sup>	UM13A 35,000 min <sup>-1</sup>	UM14A 45,000 min <sup>-1</sup>	UM05A 55,000 min <sup>-1</sup>
UT01  35,000 min <sup>-1</sup>	○	○	○	○	○		
UT02  55,000 min <sup>-1</sup>	○	○	○	○	○	○	○
UT03  30,000 min <sup>-1</sup>	○	○	○	○			
UT05  15,000 min <sup>-1</sup>	○	○	△	△			
UT06  15,000 min <sup>-1</sup>	○	○	△	△			
UT07  15,000 min <sup>-1</sup>	○	○	△	△			
UT08  8,000 min <sup>-1</sup>	○	△	△	△			
UT11  55,000 min <sup>-1</sup>	○	○	○	○	○	○	○
UT12  30,000 min <sup>-1</sup>	○	○	○	○			
UT15  30,000 min <sup>-1</sup>	○	○	○	○			


○ : Adaptable    △ : Adaptable by combine use of UT15



## Collet chuck Compatibility Table






Interchangeable with UG42A / UG43A UT01 / UT02 / UT06 / UT07 / UT11 / UT12			Interchangeable with UT03					Interchangeable with UT05					
	φ2.34	φ3.0	φ3.175mm		φ2.34	φ3.0	φ3.175	φ6.0	φ6.35mm		φ2.34	φ3.0	φ3.175mm
Item No.	KP-036B	KP-032B	KP-033B	Item No.	KP-061A	KP-062A	KP-063A	KP-060A	KP-064A	Item No.	KP-021	KP-022	KP-025


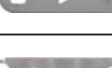




Item No.	Mounted Collet	Included Collet	Optional Collet	Item No.	Mounted Collet	Included Collet	Optional Collet
UG42A UG43A UT01 UT02	φ2.34mm (KP-036B)	φ3.0mm (KP-032B)	φ3.175mm (KP-033B)	UT03	φ6.0mm (KP-060A)	φ3.0mm (KP-062A)	φ2.34mm (KP-061A)
UT06 UT07 UT11	φ3.0mm (KP-032B)	φ2.34mm (KP-036B)	φ3.175mm (KP-033B)				φ3.175mm (KP-063A)
UT05	φ3.0mm (KP-022)	φ2.34mm (KP-021)	φ3.175mm (KP-025)				φ6.35mm (KP-064A)
				UT12	φ3.175mm (KP-033B)		φ2.34mm (KP-036B) φ3.0mm (KP-032B)



## Option & Accessory



Foot Controller				
Product	Model	Item No.	Specification	Item for
	Foot Controller	VC90	It is possible to adjust the speed gradually. Max. speed is according to the controller setting. Auto Cruise function is to fix the rotation speed without stepping the foot pedal. Dimension : W101 x D190 x H76 mm Weight :445g	UC900

Extension Cord and Adapter				
Product	Model	Item No.	Specification	Item for
	Extension Cord	KE50-155	For all the G7 series Motor. Length : 3m	UG42A , UG43A UM20A , UM21A UM23A , UM12A UM13A , UM14A UM05A
	Adapter for old controller	KE50-156	Connect G7 series Motor to Old type Controller (UC250&UC500)	UG42A , UG43A UM20A , UM21A UM23A , UM12A UM13A , UM14A UM05A

Expendable Parts				
Product	Model	Item No.	Specification	Item for
	Carbon Brush	PKE60-101A	Replacement Carbon Brush x 2	UG42A , UG43A UM12A , UM13A UM14A
	Carbon Brush	PKE60-103A	Replacement Carbon Brush x 2	UM20A , UM21A UM23A
	Carbon Brush	PKE-625B	Replacement Carbon Brush x 2	UM05A
	Motor Cord	KE50-154	Replacement Motor Cord (1.5m)	UG42A,UG43A,UM20A UM21A,UM23A,UM12A UM13A,UM14A,UM05A
	Silicone Ring	OS10-301	Silicone Rubber Ring for UG43A and UG42A for slip guard	UG42A , UG43A

Tools				
Product	Model	Item No.	Specification	Item for
	Chuck joint wrench	KP-619	Use to hold the derlin joint when removing collet chuck	UT01 , UT02 UT03 , UT11 UT12
	Chuck wrench	KP30-101	Use to replace the collet chuck	UG42A , UG43A
	Chuck wrench	KP-615A	Use to replace the collet chuck	UT01 , UT02 , UT05 UT06 , UT07 , UT11 UT12
	Chuck wrench	KP-613B	Use to replace the collet chuck	UT03
	Hexagon key wrench	HS1.5	Use to replace the collet chuck for UT05 Also for changing the swing length of UT08	UT05 , UT08
	Bur wrench	KP-093	Use to change the tools for UT08	UT08

Motor Stand and Hanger				
Product	Model	Item No.	Specification	Item for
	Motor Stand	KP91-109	Elastic base to hold the motor	All Motors
	Motor Hanger	MC15-790	Motor holder attach to the controller	UC900

Spare Parts for Controller				
Product	Model	Item No.	Specification	Item for
	AC Cord	AC17-002	Removable Cord for replacement	UC900
	Fuse	UF-2A-1	Replacement Fuse	UC900



**URAWA**



● The specifications and designs in this catalogue are subject to change without notice.

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