

MSA	Voltage	Power	Size	Kg
20.362	220 V	73 W	254 x 130 x 97	2.300
20.362-110	110 V	"	"	"

Table micromotor NAKANISHI Emax EVOLution improved with the last technologies. Digital display on the centre roller, variator with speed memory possibility (1.000-40.000 r.p.m.) Maximum torque 4.3 cN-m. Start switch can be made on the tower or directly on the micromotor. Clockwise and anticlockwise rotation. A second motor can be connected at the tower with a A and B selector. Motors A and B cannot be used simultaneously.

Delivered with :

- 1 motor MSA 20.362-M1 (here bellow illustrated)
- 1 handpiece MSA 20.360-P2 (here bellow illustrated)
- 1 chuck \varnothing 2.35mm MSA 20.360-C235
- 1 chuck \varnothing 3.0 mm MSA 20.360-C300
- 1 micromotor table stand MSA 20.360-S
- 1 set of keys for chucks locking and unlocking.
- 1 power supply cord.

Optional accessories/replaceable items :

MSA	Voltage	Size mm	Kg
20.364	110/230 V	254 x 130 x 97	2.300

Tower only Emax EVOLution for MSA 20.362 delivered in 110 or 220 V 50/60Hz.

MSA	Kg
20.362-F	0.543

ON/OFF foot and speed control pedal for Emax EVOLution MSA 20.362.

MSA	Power	Size mm	Kg
20.362-M1	73 W	\varnothing 24.5 x 97	0.090

Motor only for MSA 20.362. Speed 1.000~40.000 r.p.m. Maximum Torque 4.3 cN-m.

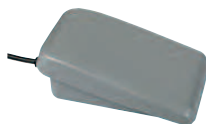
Delivered with a 1.5 m power supply cord and tightening key.

MSA	Size mm	Kg
20.360-P1	\varnothing 14 x 60	0.062

Handpiece with a side lever for fast chuck tightening for Micromotor MSA 20.362. Maximum speed 40'000 r.p.m. Chucks \varnothing 2.35 and 3.00 mm included.

Delivered with tightening keys.

SPEED
1.000~40.000 RPM



MSA	Size mm	Kg
20.360-P2	\varnothing 13 x 64	0.147

Handpiece with a side lever for fast chuck tightening for Micromotor MSA 20.362. Maximum speed 40'000 r.p.m. Chucks \varnothing 2.35 and 3.00 mm included.

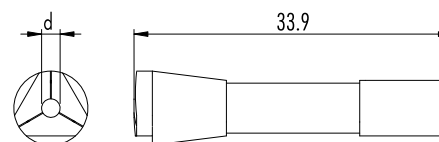
Delivered with tightening keys.

Optional adaptable chucks :

MSA	Length mm	\varnothing mm
20.360-C100	33.9	1.00
20.360-C150	"	1.50
20.360-C160	"	1.60
20.360-C200	"	2.00
20.360-C235	"	2.35
20.360-C300	"	3.00

Chuck for micromotors MSA 20.360-P1 and P2.

Other diameters available upon request.



MSA	Size mm	Kg
20.360-P4	\varnothing 12.8 x 57.3 x 20.2(h)	0.045

90° angle handpiece for Micromotor MSA 20.362. Maximum speed 35'000 r.p.m. Chuck \varnothing 3.00 mm included. Delivered with tightening keys and a set of standard accessories (3 rubber micro-disks and 3 abrasive disks in different \varnothing).

Optional adaptable chucks :

MSA	Length mm	\varnothing mm
20.360-C160	33.9	1.60
20.360-C235	"	2.35

Chucks for handpiece MSA 20.360-P4.

MSA	Size mm	Kg
20.367	\varnothing 14 x 93	0.095

Riveting hammer handpiece for micromotor MSA 20.362. Maximum speed 20'000 r.p.m. in usage intermittent mode (16'000 r.p.m. in continuous mode).



SPEED
1.000~50.000 RPM



MSA	Voltage	Power	Size mm	Kg
20.361	220 V	200 W	230 x 175 x 98	2.600

The NSK Espert 500 micromotor is perfectly adapted for jobs requiring an extra effort. Speed regulation on potentiometer or with pedal MSA 20.360-F. Start button on box or directly on the micromotor, right/left rotation, tempomat ; a second micromotor can be plugged in with A/B selector (A and B cannot be used simultaneously). Maximum speed 50.000 r.p.m.

Delivered with :

- 1 motor MSA 20.361-M1
- 1 hand piece MSA 20.361-P1
- 1 chuck \varnothing 2.35 mm MSA 20.360-C235
- 1 chuck \varnothing 3.00 mm MSA 20.360-C300
- 1 micromotor holder.

Optional accessories/replaceable items :

MSA	Power	Size mm	Kg
20.361-M1	200 W	\varnothing 28.3 x 121.4	0.160



Motor for MSA 20.361. Speed 1.000~50.000 r.p.m. Maximum torque 8.7 cN-m.

Delivered with 1.5 m spiral cord.

Maximum speed : 50.000 r.p.m. in intermittent mode or 40.000 r.p.m. in continual mode.

MSA	Size mm	Kg
20.361-P1	\varnothing 22.4 x 59.4	0.094

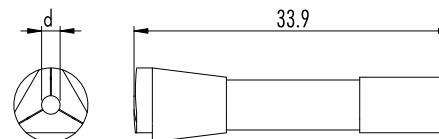


Handpiece with rapid tightening ring to be fitted on micromotor MSA 20.361. Chucks \varnothing 2.35 and 3.00 mm included. Delivered with tightening keys.

MSA	Size mm	Kg
20.361-P2	\varnothing 22.4 x 58.9	0.070



Handpiece with rapid tightening ring to be fitted on micromotor MSA 20.361. Chucks \varnothing 2.35 and 3.00 mm included. Delivered with tightening keys.



Optional adaptable chucks :

MSA	Length mm	\varnothing mm
20.360-C100	33.9	1.00
20.360-C150	"	1.50
20.360-C160	"	1.60
20.360-C200	"	2.00
20.360-C235	"	2.35
20.360-C300	"	3.00

Chuck for micromotor for MSA 20.360-P1 and P2. Other diameters available upon request.

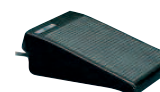
MSA	Size mm	Kg
20.361-P3	\varnothing 15 x 84.5	0.130



Thin pen shape handpiece with rapid tightening ring for special jobs, for micromotor MSA 20.361.

Delivered with tightening keys and a set of standard accessories (3 rubber micro-disks and 3 abrasive disks in different \varnothing).

MSA	Kg
20.360-F	0.600



Rheostat pedal (Pedal-Vario) for MSA 20.361.



MSA	Voltage	Power	Size mm	Kg
20.005	110/220 V	120 W	250 X 190 X 130	3.200
20.005-A	"	"	"	"

Complete micromotor NM3000 delivered with :

- 1 electronic motor NM3000
- 1 handpiece MSA 20.005-02 for MSA 20.005 or
- 1 handpiece MSA 20.005-04 for MSA 20.005-A
- 1 foot pedal rheostat MSA 20.005-03
- 1 grey handpiece stand micromotor.

Speed : 1'000 – 35'000 r.p.m.

Replacement part :

MSA	Item
20.015-01	Pair of motor coals contacts



MSA	Type	Size mm	Kg
20.005-02	N°35	ø 17.5 x 83	0.170

Handpiece for micromotor with chuck ø 2.35 mm, speed 40'000 r.p.m.

Chucks for assortment MSA 20.005-01 suitable with MSA 20.005-02 :

MSA	Items
20.005-P055	Chuck ø 0.55 mm
20.005-P080	Chuck ø 0.80 mm
20.005-P105	Chuck ø 1.05 mm
20.005-P155	Chuck ø 1.55 mm
20.005-P205	Chuck ø 2.05 mm
20.005-P235	Chuck ø 2.35 mm
20.005-P255	Chuck ø 2.55 mm
20.005-P300	Chuck ø 3.00 mm
20.005-P320	Chuck ø 3.20 mm

Replacement part :

MSA	Item
20.015-07	Handpiece pin



MSA	Type	Size mm	Kg
20.005-04	N°34	ø 17.5 x 83	0.170

Handpiece for micromotor with chuck ø 2.35 mm, speed 40'000 r.p.m.

Suitable chucks for MSA 20.005-04 :

MSA	Items
20.005-M160	Chuck ø 1.60 mm
20.005-M235	Chuck ø 2.35 mm
20.005-M300	Chuck ø 3.00 mm
20.005-M317	Chuck ø 3.175 mm

Replacement part :

MSA	Item
20.015-07	Handpiece pin



MSA	Size mm	Kg
20.005-01	88 x 47 x 10	0.050

Set of 9 chucks for handpiece MSA 20.005-02.

MICROMOTORS



MSA	Type	Size mm	Kg
20.005-05	N°36	ø 14 x 90	0.200

Hammer vice for micromotors MSA 20.205 and 20.205-A.
Speed 40'000 r.p.m.

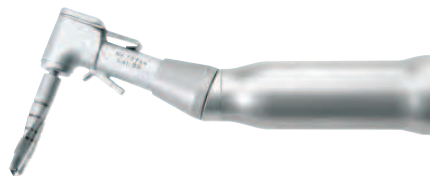
Replaceable points for MSA 20.005-05 :

MSA	Items
20.005-R050	Round point ø 0.50 mm
20.005-R100	Round point ø 1.00 mm (1)
20.005-R210	Round point ø 2.10 mm
20.005-C070	Round point 0.7 x 0.7 mm
20.005-C100	Round point 1.0 x 1.0 mm (2)
20.005-C160	Round point 1.6 x 1.6 mm
20.005-T100	Round point 1.0 x 0.5 mm (3)
20.005-T150	Round point 1.5 x 0.8 mm
20.005-T250	Round point 2.5 x 1.2 mm



MSA	Size mm	Kg
20.005-10	46 x 87 x 10	0.035

Set of 9 chucks and points for hammer vice MSA 20.005-05.

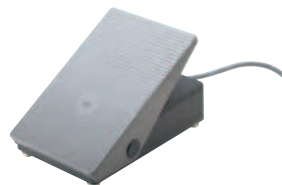


MSA	Type	Size mm	Kg
20.015	N°37	ø 17.5 x 87	0.150

90° angle handpiece, 1 : 1 for micromotors MSA 20.205 and 20.205-A. Speed 40'000 r.p.m.

Replaceable Parts :

MSA	Items
20.015-07	Handpiece pin
20.015-02	End screw for 90° angle handpiece
20.015-03	90° angle handpiece gear
20.015-04	Fixing key for 90° angle handpiece



MSA	Size mm	Kg
20.005-03	180 x 110 x 105	0.580

Foot rheostat (Pedal-Vario) for MSA 20.005 and 20.005-A.

Replaceable Parts :

MSA	Items
20.015-05	Small pedal spring
20.015-06	Big pedal spring