

03



SPECIALIZED WATCH MAKING TOOLS

03 - 2

LATHES

03 - 11

RIVETING STAKES

03 - 15

DRILL MACHINES

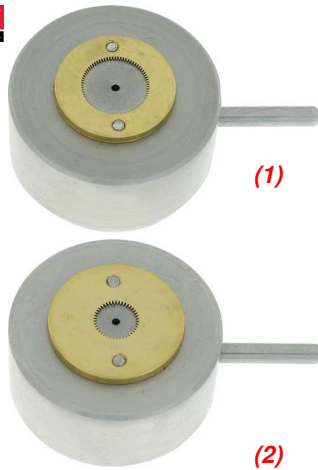
03 - 16

**Tools for locking/unlocking oscillating weight bolts.
Calibres 2892... and 7750...**



MSA	For calibres	Kg
03.676-2892	ETA 2892 - 2893 - 2894 - 2895	0.665
03.676-7750	ETA 7750 - 7751 - 7753	0.665

Press for locking/unlocking oscillation weight bolts. The broach is mounted on spring for a fast and precise job. The broach is interchangeable and easily disassembled by unscrewing the head.
Delivered without movement holder MSA03.678-xxx or MSA03.680-xxx.



MSA	For calibres	Kg
03.680-2892 (1)	ETA 2892 - 2893 - 2894 - 2895 - 2896 - 2897	0.078
03.680-7750 (2)	ETA 7700 - 7750 - A07111 - A07161 - A07271	0.079

Support for assembling/disassembling the oscillating weight bolts.

Spare part :

MSA	Item	Kg
03.676-A	Guide staff Ø 4 mm	0.001



MSA	For calibres	Kg
03.678-2892 (1)	ETA 2892 - 2893 - 2894 - 2895	0.070
03.678-7750 (2)	ETA 7750 - 7751 - 7753	0.090

Base holder for MSA03.676-2892 and 03.676-7750.



MSA	For calibres	Kg
03.679-2892	ETA 2892 - 2893 - 2894 - 2895	0.090
03.679-7750	ETA 7750 - 7751 - 7753	0.110

Broach for MSA03.676-xxxx and 03.677-xxxx.

Tools for assembling/disassembling oscillating weight bolts, screw-on pushers, screw-on tubes and battery covers.



MSA	Kg
03.675	0.170

Tool for locking/unlocking oscillating weight bolts.
Delivered with 2 interchangeable snap-on keys (MSA03.620-2892 and 03.620-7750) and a detailed user's manual.

Spare parts :

MSA	Item	Kg
03.620-2892	Key for calibres 2892, 2893, 2894 and 2895	0.008
03.620-7750	Key for calibres 2000-1, 7750, 7751 and 7753	0.008
03.620-A	Hexagonal handle compatible with all illustrated keys	0.060



MSA	Size	Kg
03.622	120 x 70 x 35 mm	0.448

Tool for assembling/disassembling screw-on pushers and tubes.

Contents :

- 1 plate
- 1 hexagonal handle MSA03.620-A
- 13 interchangeable keys MSA03.620-01, -02, -03, -04, -05, -06, -07, -08, -203, -207, -P3, -P27 and -P39.

See next page for details of spare parts.



MSA	Size	Kg
03.623	120 x 70 x 35 mm	0.460

Tool for locking/unlocking oscillating weight bolts and assembling/disassembling screw-on pushers and tubes.

Contents :

- 1 plate
- 1 hexagonal handle MSA03.620-A
- 15 interchangeable keys MSA03.620-01, -02, -03, -04, -05, -06, -07, -08, -203, -207, -2892, -7750, -P3, -P27 and -P39.

See next page for details of spare parts.



MSA	Size	Kg
03.621	120 x 70 x 35 mm	0.496

Tool for locking/unlocking oscillating weight bolts and assembling/disassembling screw-on pushers, screw-on tubes and battery covers.









Contents :

- 1 plate
- 1 hexagonal handle MSA03.620-A
- 18 interchangeable keys MSA03.620-01, -02, -03, -04, -05, -06, -07, -08, -203, -207, -2892, -7750, -GENT, -LADY, -MED, -P3, -P27 and -P39.






See below the details of spare parts.

SPECIALIZED WATCH MAKING TOOLS



Spare parts for screwing tubes :

MSA	Item	Kg	
03.620-01	Key for tubes MSA65.001, Ø 1.50 mm	0.005	
03.620-02	Key for tubes MSA65.002, Ø 1.80 mm	0.005	
03.620-03	Key for tubes MSA65.003, Ø 2.65 mm	0.005	
03.620-04	Key for tubes MSA65.004, Ø 2.75 mm	0.005	
03.620-05	Key for tubes MSA65.005, Ø 2.95 mm	0.005	
03.620-06	Key for tubes MSA65.006, Ø 3.00 mm	0.005	
03.620-07	Key for tubes MSA65.007, Ø 3.00 mm	0.005	
03.620-08	Key for tubes OM SEAM.	0.005	

Spare parts for screwing pushers :

MSA	Item	Kg	
03.620-203	Key for pushers MSA61.203 / .703	0.005	
03.620-207	Key for pushers MSA61.207 / .707	0.005	
03.620-P27	Key for pushers type P27	0.006	
03.620-P3	Key for pushers type P3	0.006	
03.620-P39	Key for pushers type P39	0.006	


Spare parts for oscillating weight bolts :

MSA	Item	Kg	
03.620-2892	Key for calibres 2892, 2893, 2894 and 2895	0.008	
03.620-7750	Key for calibres 2000-1, 7750, 7751 and 7753	0.008	

Spare parts for Swatch® battery covers :

MSA	Item	Kg	
03.620-GENT	Key for Gent watches	0.015	
03.620-LADY	Key for Lady watches	0.015	
03.620-MED	Key for Medium watches	0.015	

Spare part :

MSA	Item	Kg	
03.620-A	Hexagonal handle compatible with all illustrated keys	0.060	



MSA	Type	Internal Ø	Kg
03.653-P3	P3	3.00 mm	0.060
03.653-P27	P27	3.50 mm	0.060
03.653-P39	P39	3.60 mm	0.060

Tool for screw/unscrew fluted pusher tubes.
Aluminium handle.

Tools for riveting oscillating weight axles.



ASSORTMENT

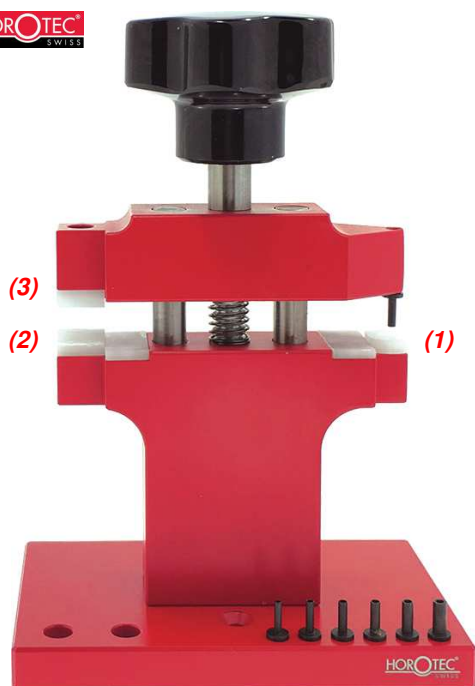
MSA	Kg
03.666	0.110

Assortment of 4 punchers for riveting oscillating weight axles.

Spare parts :

MSA	Item	Kg
03.666-1570	Puncher, Ø 4.70 x L85 mm	0.011
03.666-2135	Puncher, Ø 4.70 x L85 mm	0.011
03.666-2235	Puncher, Ø 4.70 x L85 mm	0.011
03.666-3035	Puncher, Ø 4.70 x L85 mm	0.011

Press for fitting/removing press-in pushers and crown tubes.



MSA	Size	Kg
03.657	100 x 60 x 142 mm	0.480

Press for fitting/removing press-in pushers and crown tubes easily and without damage.

Delivered with 7 stakes, external Ø from 1.55 to 2.95 mm.

Spare parts :

MSA	Item	Kg
03.654-A	(1) Stake Ø ext. 2.95 - Ø int. 1.55 mm	0.001
03.654-B	Stake Ø ext. 2.65 - Ø int. 1.55 mm	0.001
03.654-C	Stake Ø ext. 2.45 - Ø int. 1.55 mm	0.001
03.654-D	Stake Ø ext. 2.15 - Ø int. 1.55 mm	0.001
03.654-E	Stake Ø ext. 1.95 - Ø int. 1.55 mm	0.001
03.654-F	Stake Ø ext. 1.75 - Ø int. 1.55 mm	0.001
03.654-G	Stake Ø ext. 1.55 - Ø int. 1.55 mm	0.001
03.654-H	(2) Removing support	0.001
03.656-A	(3) Lower fitting support	0.001
03.656-B	(4) Upper fitting support	0.001



Keys for screw/unscrew pushers.

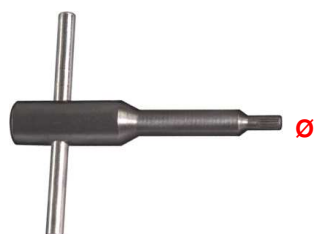


MSA	Internal Ø	Kg
03.655	3.10 mm	0.007

Steel key for screw/unscrew the chronograph pushers MSA61.207 and 61.707.

Nice black finish.

Keys for screw/unscrew the tubes of screw-on crowns.



MSA	For tubes	External Ø	Kg
03.665-01	MSA65.001	1.60 mm	0.006
03.665-02	MSA65.002	1.90 mm	0.006
03.665-03	MSA65.003	2.65 mm	0.006
03.665-04	MSA65.004	2.70 mm	0.006
03.665-05	MSA65.005	2.90 mm	0.006
03.665-06	MSA65.006	3.05 mm	0.006

Steel key for screw/unscrew the tubes of screw-on crowns to assure waterproof of diving watches.

Nice black finish.

Crowns extractor.



MSA	Size	Kg
03.604	40 x 15 x 25 mm	0.023

Crowns extractor with adjustment screw.

Tools for lanterning canon pinions.



MSA	Size	Kg
03.005	50 x 50 x 120 mm	0.317

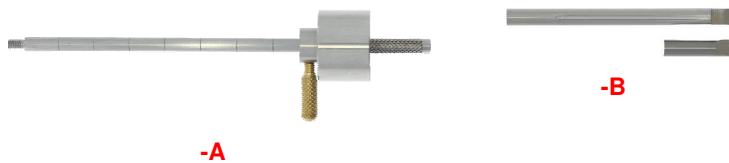
Press for lanterning canon pinions with hard metal beaks and sliding ring mounted on grooved broach.

This press can be used in 2 different ways :

- (1) - With the standard broach for single use.
- (2) - With the grooved scale broach and 1 screwed sliding ring for height punch adjustment.

Spare parts :

MSA	Item	Kg
03.005-A	Punch stem with weight	0.050
03.005-B	Broach with beak, L54 x Ø 4 mm + Lower beak, L16 x Ø 4 mm	0.008



MSA	Size	Kg
03.004	97 x 7 x 45 mm	0.135

Tool for lanterning canon pinions, fixable on a vice.

Setting rounds.



MSA	Ø	Ø hole	Kg
03.428	35 mm	4.50 mm	?
03.429	35 mm	3.50 mm	?

Setting round with glass top and grey anodized aluminium body.

Tools for hairspring collets.



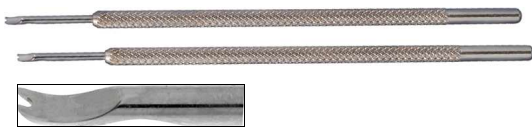
MSA	Ø	Kg	MSA	Ø	Kg
03.101-03	0.30 mm	0.006	03.101-08	0.80 mm	0.006
03.101-04	0.40 mm	0.006	03.101-09	0.90 mm	0.006
03.101-05	0.50 mm	0.006	03.101-10	1.00 mm	0.006
03.101-06	0.60 mm	0.006	03.101-12	1.20 mm	0.006
03.101-07	0.70 mm	0.006			

Broaches for hairspring collets with nickel-plated brass knurled handle.
Length 98 mm.



MSA	External Ø	Ø hole	Length	Kg
03.102-11	1.10 mm	0.45 mm	95 mm	0.010
03.102-16	1.60 mm	0.55 mm	95 mm	0.010
03.102-21	2.10 mm	0.75 mm	95 mm	0.010

Tool for turning and setting hairspring collets with nickel-plated brass knurled handle.



MSA	Spatulas width	Total length	Kg
03.103-E	1.80 mm	95 mm	0.015
03.103-C	2.50 mm	115 mm	0.022
03.103-D	3.00 mm	120 mm	0.024

PAIR

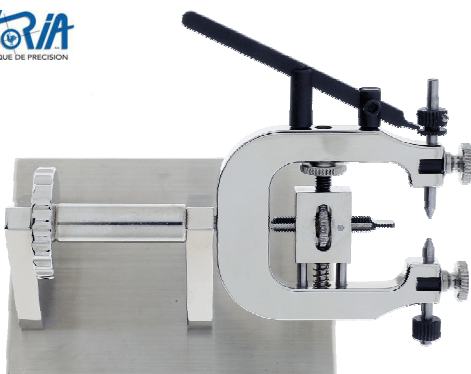
Pair of hairspring collets levers with nickel-plated brass knurled handle.

Truing callipers.



MSA	Size	Kg
03.416	?	?

Truing calliper for the control of wheels or balances. A stop screw enables the fine adjustment of its opening.
Equipped with 4 safety-runners, 2 conical and 2 in ruby with holes Ø 0.15 mm.



MSA	Size	Kg
03.415	85 x 70 mm	0.260

Truing calliper on base.

Poising tool.



MSA	Size	Kg
03.419	80 x 50 x 45 mm	0.300

Poising tool with spirit level Ø 18 mm and 2 adjustable feet.
Delivered with 2 ruby jaws MSA03.419-A, length 15 mm.

Spare parts :

MSA	Item	Kg
03.419-A	Ruby jaw	0.001
03.419-B	Wooden box	0.175



Tools for stud holding and for setting balance screws.



MSA	Size	Kg
03.200	Ø 40 x 9 mm	0.106

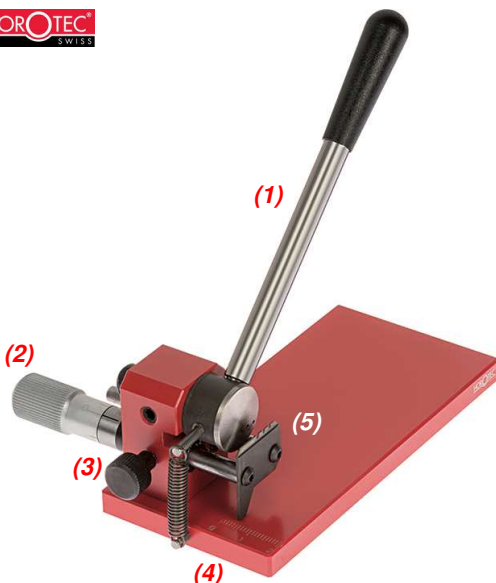
Tool for stud holding, used for fixing the stud on the balance-spring.



MSA	Size	Kg
03.424	Ø 40 x 7 mm	0.030

Nickel-plated brass tool with holes for setting the balances, with 12 holes from Ø 0.5 to 2.5 mm.

Tools for winding stems.



MSA	Base size	Kg
03.602	60 x 118 mm	0.353

Tool for shortening winding stems, allowing the length setting of stems in serial production.

Description :

- (1) - Lever with ergonomic handle with 1 return spring
- (2) - Micrometric screw graduated to 1/10 mm for precise setting of cut length
- (3) - Blocking screw to always keep the same length during cutting in serial production
- (4) - Base equipped with a small ruler with divisions from 0 to 15 mm
- (5) - Side pierced with 3 holes suitable for stems Ø 0.90, 1.00 and 1.20 mm.

Spare parts :

MSA	Item	Kg
03.602-A	Spring	0.001
03.602-B	Knife	0.016





MSA	Ø	Kg	MSA	Ø	Kg
03.600-08	0.80 mm	0.030	03.600-13	1.30 mm	0.030
03.600-09	0.90 mm	0.030	03.600-14	1.40 mm	0.030
03.600-10	1.00 mm	0.030	03.600-15	1.50 mm	0.030
03.600-11	1.10 mm	0.030	03.600-16	1.60 mm	0.030
03.600-12	1.20 mm	0.030			

Tool for shortening winding stems, with knurled handle. Provided with a stop for regular cutting.
Length 70 mm.



MSA	Kg
03.603	0.100

Tool for oiling the winding stems. Allows a perfect, clean and quick greasing for all types of stems.

Spare part :

MSA	Item	Kg
03.603-A	Cup with felt	0.007



Other tools.



MSA	Size	Kg
03.006	127 x 80 mm	1.050

Tool used to check the perfect straightness of stems. This tool is usually placed in a vice.
Delivered without American chuck. See MSA03.839-x (page 03-16).



MSA	Length	Kg
03.010	115 mm	0.011

Lantern-chuck. Tool to hold the screw by its head used to shorten or round and polish the screw thread end.
Delivered with 3 heads of different diameters.

Spare parts :

MSA	Item	Kg
03.010-040	Head for Ø 0.40 mm	0.001
03.010-060	Head for Ø 0.60 mm	0.001
03.010-080	Head for Ø 0.80 mm	0.001



MSA	Size	Kg
03.310	Ø 25 x 19 mm	0.022

Tool for closing barrel covers.

SPECIALIZED WATCH MAKING TOOLS

HOROTEC
SWISS



MSA	Size	Kg
03.019	140 x 70 x 35 mm	0.115

The specialised watchmaking tool kit is the essential ally of watchmaking professionals for precise interventions.

This ingenious box contains four specialised tools :

- MSA03.011 : tool for shockproof spring Novodiac
- MSA03.012 : tool for shockproof spring Novodiac
- MSA03.014 : tool for turning the stud and the regulator pins block ETACHRON
- MSA03.015 : tool for pressing out the stud from the stud support ETACHRON.

HOROTEC
SWISS



Ø 1.55 mm



MSA	Kg
03.011	0.013

Tool for shockproof spring Novodiac.

For calibres ETA 2801 - 2824-2 - 2834-2 - 2836-2 - 6497.

HOROTEC
SWISS



Ø 1.45 mm



MSA	Kg
03.012	0.013

Tool for shockproof spring Novodiac.

For calibres ETA 2660 - 2671 - 2688.

HOROTEC
SWISS



MSA	Kg
03.015	0.008

Tool for pressing out the stud from the stud support ETACHRON.

HOROTEC
SWISS



MSA	Kg
03.014	0.008

Tool for turning the stud and the regulator pins block ETACHRON.

HOROTEC
SWISS



MSA	Kg
03.016	0.008

Tool for opening the dial bolts (fastener split pin).
Mirror polished tip.

HOROTEC
SWISS



MSA	Kg
03.017	0.008

Tool for oscillating weight bolts.

HOROTEC
SWISS



MSA	Size	Kg
03.018	Ø 6 x 61.50 mm	0.017

Corrector tool with black POM tip.

Spare part :

MSA	Item	Kg
03.018-A	Black POM tip	0.002

Special lathes for polishing pivots.



MSA	Type	Version
03.452	(1)	106 With 3 broaches MSA 03.467, MSA03.474 and MSA03.475
03.454		108 With 4 broaches MSA03.467, MSA03.468, MSA03.469 and MSA03.475

Nickel-plated brass pivoting tool with 3 broaches (24 notches and 48 lanterns) or 4 broaches (36 notches and 72 lanterns).
Delivered in a wooden box.

Spare broaches for MSA03.452 and MSA03.454 :

MSA	Item
03.467	Type 123 : Broach with conical notched disk. For seconds \varnothing 0.15 - 0.30 mm
03.468	Broach with lantern and notched disk. For pivots \varnothing 0.04 - 0.10 mm
03.469	Type 125 : Broach with lantern and notched disk. For pivots \varnothing 0.10 - 0.15 mm
03.474	Type 126 : Broach with lantern and notched disk. For pivots \varnothing 0.04 - 0.15 mm
03.475	Type 127 : Broach with lantern and notched disk. For pivots \varnothing 0.16 - 0.36 mm

Spare parts for MSA03.452 and MSA03.454 :

MSA	Item
03.425-A	Type 131 : Pivot gauge \varnothing 0.05 - 0.40 mm
03.425-B	Type 131a : Pivot gauge \varnothing 0.40 - 0.80 mm
03.425-C	Type 131b : Pivot gauge \varnothing 0.80 - 1.20 mm
03.470	Type 119 : Supplement for sliding puppet
03.472	Type 135 : Pulley with fork
03.473	Type 135a : Fork
03.476	Type 118a : Broach with notched disks for pivots \varnothing 0.38 - 0.76 mm
03.477	Type 117a : Broach with notched disks for pivots \varnothing 0.38 - 1.00 mm
03.478	Type 118 : Broach with notched disks for pivots \varnothing 0.38 - 1.20 mm
03.479	Type 122 : Cylinder for broaches MSA03.468, 03.469 and 03.474
03.481	Type 155a : Bow for hand work
03.484	Type 155 : Bow for hand work, spring steel

???

HORIA
MECANIQUE DE PRECISION



MSA

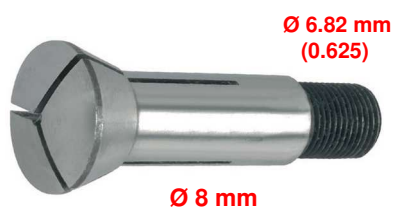
03.483

Lathe for polishing screws.

Contents :

- 1 wooden box
- 1 lathe with chuck and broach : body 8 mm, \varnothing 5 mm
- 4 grinding wheels \varnothing 50 mm : 1 cast iron, 1 bronze, 1 boxwood and 1 tin
- 1 set of 22 chucks : body 5 mm from \varnothing 0.40 to 2.50 mm
- 1 set of 12 lanterns : body 5 mm from \varnothing 0.30 to 2.50 mm.

American chucks.



MSA	Ø	Kg	MSA	Ø	Kg
03.840-0.3	0.30 mm	0.090	03.840-2.0	2.00 mm	0.090
03.840-0.4	0.40 mm	0.090	03.840-2.2	2.20 mm	0.090
03.840-0.5	0.50 mm	0.090	03.840-2.3	2.30 mm	0.090
03.840-0.6	0.60 mm	0.090	03.840-2.4	2.40 mm	0.090
03.840-0.7	0.70 mm	0.090	03.840-2.5	2.50 mm	0.090
03.840-0.8	0.80 mm	0.090	03.840-2.6	2.60 mm	0.090
03.840-0.9	0.90 mm	0.090	03.840-2.7	2.70 mm	0.090
03.840-1.0	1.00 mm	0.090	03.840-2.8	2.80 mm	0.090
03.840-1.1	1.10 mm	0.090	03.840-2.9	2.90 mm	0.090
03.840-1.2	1.20 mm	0.090	03.840-3.0	3.00 mm	0.090
03.840-1.3	1.30 mm	0.090	03.840-3.5	3.50 mm	0.090
03.840-1.4	1.40 mm	0.090	03.840-4.0	4.00 mm	0.090
03.840-1.5	1.50 mm	0.090	03.840-4.5	4.50 mm	0.090
03.840-1.6	1.60 mm	0.090	03.840-4.6	4.60 mm	0.090
03.840-1.7	1.70 mm	0.090	03.840-5.0	5.00 mm	0.090
03.840-1.8	1.80 mm	0.090	03.840-6.0	6.00 mm	0.090
03.840-1.9	1.90 mm	0.090	03.840-7.0	7.00 mm	0.090

B8 american chuck.



MSA	Ø	Kg	MSA	Ø	Kg
03.839-030	0.30 mm	0.060	03.839-200	2.00 mm	0.060
03.839-050	0.50 mm	0.060	03.839-210	2.10 mm	0.060
03.839-060	0.60 mm	0.060	03.839-220	2.20 mm	0.060
03.839-070	0.70 mm	0.060	03.839-230	2.30 mm	0.060
03.839-080	0.80 mm	0.060	03.839-240	2.40 mm	0.060
03.839-090	0.90 mm	0.060	03.839-250	2.50 mm	0.060
03.839-100	1.00 mm	0.060	03.839-260	2.60 mm	0.060
03.839-110	1.10 mm	0.060	03.839-270	2.70 mm	0.060
03.839-120	1.20 mm	0.060	03.839-280	2.80 mm	0.060
03.839-130	1.30 mm	0.060	03.839-290	2.90 mm	0.060
03.839-140	1.40 mm	0.060	03.839-300	3.00 mm	0.060
03.839-150	1.50 mm	0.060	03.839-350	3.50 mm	0.060
03.839-160	1.60 mm	0.060	03.839-400	4.00 mm	0.060
03.839-170	1.70 mm	0.060	03.839-450	4.50 mm	0.060
03.839-180	1.80 mm	0.060	03.839-500	5.00 mm	0.060
03.839-190	1.90 mm	0.060			

American chuck B6/128.

Chucks P 4.5 type.



Tightening chuck 4.5 type.

MSA	Item	Kg
03.875-080	Tightening chuck P 4.5 type, Ø 0.80 mm	0.002
03.875-100	Tightening chuck P 4.5 type, Ø 1.00 mm	0.002
03.875-150	Tightening chuck P 4.5 type, Ø 1.50 mm	0.002
03.875-160	Tightening chuck P 4.5 type, Ø 1.60 mm	0.002
03.875-200	Tightening chuck P 4.5 type, Ø 2.00 mm	0.002
03.875-235	Tightening chuck P 4.5 type, Ø 2.35 mm	0.002
03.875-250	Tightening chuck P 4.5 type, Ø 2.50 mm	0.002
03.875-300	Tightening chuck P 4.5 type, Ø 3.00 mm	0.002
03.875-400	Tightening chuck P 4.5 type, Ø 4.00 mm	0.002

Carriers.



MSA	Size	Kg
03.838	40 x 16 x 12 mm	0.060

Set of 12 small carriers with block.
 Ø 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.65, 0.70, 0.75, 0.85, 0.95 and 1.05 mm.

Belts for the lathes illustrated on previous pages.



MSA	Ø	Length	Kg
03.890-2	2 mm	1 m	0.015
03.890-3	3 mm	1 m	0.015
03.890-4	4 mm	1 m	0.015
03.890-5	5 mm	1 m	0.015
03.890-6	6 mm	1 m	0.015
03.890-7	7 mm	1 m	0.015
03.890-8	8 mm	1 m	0.015
03.890-10	10 mm	1 m	0.015
03.890-12	12 mm	1 m	0.015

Belt in polyurethane.



MSA	Ø	Length	Kg
03.891-4	4 mm	1 m	0.018
03.891-5	5 mm	1 m	0.018
03.891-6	6 mm	1 m	0.018

Green POLYCORD belt.

Riveting stakes and hole plates are in tempered stainless steel. Used for riveting, unriveting or holing small pieces. "V" shape slots are suitable to remove pinions or any other watch components.



MSA		Size	Number of holes	Ø holes	Kg
03.901	(1)	53 x 15 mm	24	0.50...2.20 mm	0.030
03.902	(2)	53 x 15 mm	36	0.50...2.50 mm	0.026

Hardened steel riveting stake with 24 calibrated holes from Ø 0.50 to 2.20 mm or 36 calibrated holes from Ø 0.50 to 2.50 mm.



MSA		Size	Number of holes	Ø holes	Kg
03.903		50 x 15 mm	36	0.50...2.50 mm	0.025

Brass riveting stake with 36 calibrated holes from Ø 0.50 to 2.50 mm.



MSA		Size	Number of holes	Ø holes	Kg
03.904		72 x 15 mm	20	0.50...2.50 mm	0.030

Hardened steel riveting stake, with 20 calibrated holes from Ø 0.50 to 2.50 mm, 2 "V" shape slots and 5 notches of different dimensions.



MSA		Size	Number of holes	Ø holes	Kg
03.905		40 x 40 x 40 mm	36	0.30...10.00 mm	0.378

Hardened steel riveting stake, universal cubic shape, with 36 calibrated holes from Ø 0.30 to 10.00 mm and 16 slots with different shapes and dimensions.
For watches, alarm clocks and wall clocks.



MSA		Size	Number of holes	Ø holes	Kg
03.906		46 x 46 x 15 mm	15	0.80...6.50 mm	0.196

Polished hardened steel riveting stake, hexagonal shape, with 15 calibrated holes from Ø 0.80 to 6.50 mm and 4 slots of different dimensions.

Holes : Ø 0.80 - 1.00 - 1.20 - 1.50 - 2.00 - 2.30 - 2.70 - 3.00 - 3.20 - 3.70 - 4.00 - 4.50 - 5.50 - 6.00 - 6.50 mm.
Slots : 0.30 - 0.50 - 0.70 - 0.90 mm.

High-precision sensitive drilling machine SERVO.



MSA	Voltage	Kg
03.300	220 V	9.500

The SERVO 7150 is a high-speed benchtop micro drilling machine. Easy-to-use, very precise, it is equipped as standard with a spindle taking the B-8 chucks.

- Continuously adjustable speeds by potentiometer integrated in the frame.
- With thyristor-controlled variable speed motor
- Removable protective cover on the belt
- Built-in switch in the frame
- Hardened and rectified spindle
- Drilling lever with adjustable angular position and graduated ring
- Depth micrometric stop
- Front dial indicator for measuring the spindle travel
- Lighting.

Technical data :	
Drilling capacity in steel	3 mm
Continuous spindle speeds	200...20'000 rpm
Spindle travel	38 mm
Distance spindle - column	89 mm
Distance table - spindle nose	0...130 mm
Table area	182 x 300 mm
Total height	342 mm

Optional :

MSA	Item
03.300-A	Self-tightening chuck with chuck holder die, tightening 0...3 mm / Ø 24 x L44 mm

Bench-top drill machine PROXXON®.



MSA	Voltage	Kg
03.301	230 V (50 - 60 Hz)	3.300

Bench-top drill machine PROXXON® TBM 220. Plane-milled worktable made of cast aluminium (220 x 120mm) with adjustable fence and scale as well as threaded holes for securing the MICRO compound table KT 70.

- Solid steel column (20 x 340mm)
- Cast aluminium console with guides and spindle-worked adjustments
- Very high-quality motor, extremely quiet and very durable
- Belt transmission with 3 speeds. The movement of the belts provides 3 speeds and triple torque at low speeds
- Feed lever with adjustable depth scale.

Delivered with 6 tightening chucks Ø 1.00, 1.50, 2.00, 2.40, 3.00 and 3.20 mm.

Technical data :	
- Power supply	230 V (50 - 60Hz)
- Motor power	85 W
- Spindle speeds	1'800, 4'700 and 8'500 rpm
- Throat depth, column to drill spindle	140 mm
- Spindle travel	30 mm
- 3/8" threading for fixing a toothed tightening chuck	

Optional :

MSA	Item
03.301-T	Micro-coordinate table KT 70, 200 x 70 x 42 mm