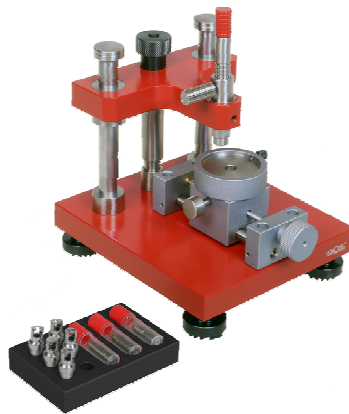
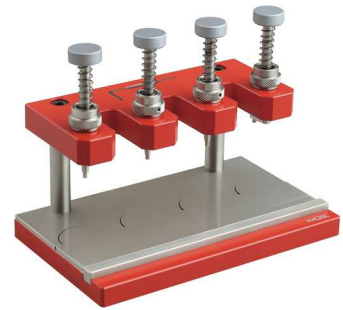


05



HANDS FITTING TOOLS

05 - 2

HANDS FITTING PRESSES

05 - 5

HANDS REMOVING PRESSES

05 - 10

HANDS REMOVING TOOLS

05 - 13

HANDS FITTING TOOLS



ASSORTMENT

MSA	Size	Kg
05.023	132 x 63 x 30 mm	0.107

Assortment of hands fitting tools equipped with Delrin® driven stakes. Knurled handle in anodised aluminium. Delivered in a wooden box.

Contents :

- 1x MSA05.010 Hands fitting tool, Ø 0.50 - 1.00 mm
- 1x MSA05.019 Hands fitting tool, Ø 0.65 - 1.10 mm
- 1x MSA05.011 Hands fitting tool, Ø 0.80 mm - flat
- 1x MSA05.012 Hands fitting tool, Ø 1.50 - 2.00 mm



ASSORTMENT

MSA	Kg
05.020	0.034

Assortment of hands fitting tools, equipped with Delrin® driven stakes. Knurled handle in anodised aluminium. Delivered in 1 plastic pouch.

Contents :

- 1x MSA05.012 Hands fitting tool, Ø 1.50 - 2.00 mm
- 1x MSA05.011 Hands fitting tool, Ø 0.80 mm - flat
- 1x MSA05.019 Hands fitting tool, Ø 0.65 - 1.10 mm
- 1x MSA05.010 Hands fitting tool, Ø 0.50 - 1.00 mm



ASSORTMENT

MSA	Kg
05.024	0.020

Assortment of hands fitting tools, equipped with Delrin® driven stakes. Knurled handle in anodised aluminium. Delivered in 1 plastic pouch.

Contents :

- 1x MSA05.012 Hands fitting tool, Ø 1.50 - 2.00 mm
- 1x MSA05.019 Hands fitting tool, Ø 0.65 - 1.10 mm



Ø 0.80 mm

MSA	Length	Kg
05.011	112 mm	0.010

Hands fitting tool with Delrin® driven stakes.
Knurled handle in anodised aluminium.

Spare parts :

MSA	Item	Kg
05.011-A	Flat stake	0.001
05.011-B	Stake Ø hole 0.80 mm	0.001



Ø 0.50 mm

Ø 1.00 mm

MSA	Length	Kg
05.010	112 mm	0.010

Hands fitting tool with Delrin® driven stakes.
Knurled handle in anodised aluminium.

Spare parts :

MSA	Item	Kg
05.010-A	Stake Ø hole 0.50 mm	0.001
05.010-B	Stake Ø hole 1.00 mm	0.001



Ø 0.65 mm

Ø 1.10 mm

MSA	Length	Kg
05.019	112 mm	0.010

Hands fitting tool with Delrin® driven stakes.
Knurled handle in anodised aluminium.

Spare parts :

MSA	Item	Kg
05.019-A	Stake Ø hole 0.65 mm	0.001
05.019-B	Stake Ø hole 1.10 mm	0.001



Ø 2.00 mm

Ø 1.50 mm

MSA	Length	Kg
05.012	112 mm	0.010

Hands fitting tool with Delrin® driven stakes.
Knurled handle in anodised aluminium.

Spare parts :

MSA	Item	Kg
05.012-A	Stake Ø hole 1.50 mm	0.001
05.012-B	Stake Ø hole 2.00 mm	0.001



MSA	Kg
05.031	0.155

Hands fitting tool on a rotating base.
Delivered with 8 PEEK tips and 1 protective cap.

PEEK (polyetheretherketone phenylene) is a polymer with different properties and high performance used, among others, in the aerospace industry.

- Very good resistance to solvents
- Stability over time
- Doesn't mark the parts.

Spare parts :

MSA	Item	Kg	
05.031-0	PEEK flat tip, Ø ext. 2.00 mm	0.001	
05.031-0.30	PEEK tip Ø int. 0.30, Ø ext. 2.50 mm	0.001	
05.031-0.80	PEEK tip Ø int. 0.80, Ø ext. 2.60 mm	0.001	
05.031-0.95	PEEK tip Ø int. 0.95, Ø ext. 2.80 mm	0.001	
05.031-1.10	PEEK tip Ø int. 1.10, Ø ext. 2.90 mm	0.001	
05.031-1.35	PEEK tip Ø int. 1.35, Ø ext. 3.00 mm	0.001	
05.031-1.50	PEEK tip Ø int. 1.50, Ø ext. 3.20 mm	0.001	
05.031-2.10	PEEK tip Ø int. 2.10, Ø ext. 3.50 mm	0.001	
05.031-E	PEEK protective cap	0.001	
05.031-M	(1) Handle	0.024	
05.031-S	Rotating base	0.098	

Fitting watch hands, without damaging the dial and the hands are delicate operations that guarantee the aesthetics of the watch.
An ideal hands press for any after-sales service jobs.



MSA	Size	Kg
05.021	70 x 70 x 65 mm	0.400

Hands fitting press for wrist and pocket watches, for a quick and efficient job. It allows a precise control by holding the die vertically while pressing on the hand. Nice finish in steel and aluminium.
Delivered with 8 Delrin® screw-on stakes.

Spare parts :

MSA	Item	Kg
05.017-01	(1) Broach	0.009
05.017-02	Spring	0.002
05.017-A	Stake Ø 0.50 mm	0.002
05.017-B	Stake Ø 0.70 mm	0.002
05.017-C	Stake Ø 0.90 mm	0.002
05.017-D	Stake Ø 1.20 mm	0.002
05.017-E	Stake Ø 1.50 mm	0.002
05.017-F	Stake Ø 1.70 mm	0.002
05.017-G	Flat stake	0.002
05.017-H	Conical stake	0.002

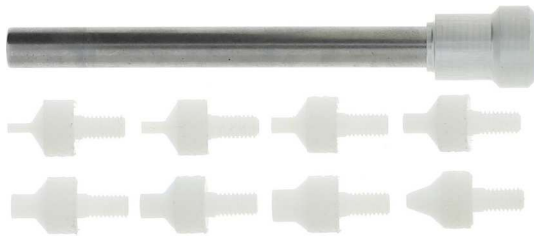


MSA	Size	Kg
05.022	105 x 70 x 72 mm	0.520

Hands fitting press with 3 broaches for wrist and pocket watches without any broach replacement.
Delivered with 8 Delrin® screw-on stakes.

Spare parts :

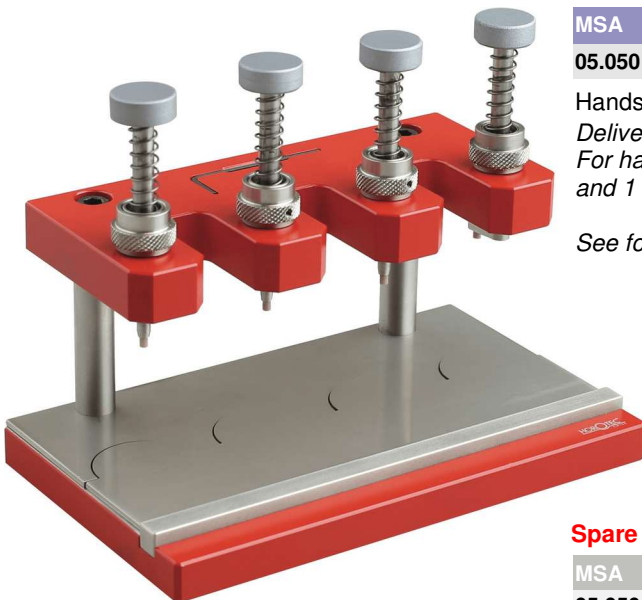
MSA	Item	Kg
05.017-01	(1) Broach	0.009
05.017-02	Spring	0.002
05.017-A	Stake Ø 0.50 mm	0.002
05.017-B	Stake Ø 0.70 mm	0.002
05.017-C	Stake Ø 0.90 mm	0.002
05.017-D	Stake Ø 1.20 mm	0.002
05.017-E	Stake Ø 1.50 mm	0.002
05.017-F	Stake Ø 1.70 mm	0.002
05.017-G	Flat stake	0.002
05.017-H	Conical stake	0.002



ASSORTMENT

MSA	Kg
05.017-03	0.026

Assortment with 1 broach and 8 Delrin® screw-on stakes for presses MSA05.021 and MSA05.022.



MSA	Size	Kg
05.050	160 x 100 x 130 mm	1.440

Hands fitting press, 4 broaches.
 Delivered with stakes equipped with PEEK tips (doesn't mark the hands).
 For hands : hours (Ø 1.35 mm), minutes (Ø 0.95 mm), seconds (Ø 0.30 mm)
 and 1 decentred stake.

See following pages for other compatible stakes.

Spare parts :

MSA	Item	Kg
05.050-BA	Adjustable stop ringDE	0.010
05.050-BR	Broach with head	0.018
05.050-RE	Spring for broach	0.002

Accessory :

MSA	Item	Kg
05.050-P	Decentred adaptor for movement holder. Base Ø 31 mm	0.105



High precision hands fitting press with revolving head to avoid changing broaches, ideal for production series. Each broach is equipped with a knurled ring for fine height adjustment. Suitable for movement holder MSA09.010-xx Ø 31 mm (see chapter 09).



MSA	Tips	Use	Kg
05.109	Steel	For H/M hands	1.350
05.114	PEEK	For H/M hands	1.350

High precision hand fitting press, with 2 hardened steel broaches and 2 stakes Ø 1.35 - 0.95 mm.



MSA	Tips	Use	Kg
05.110	Steel	For H/M/S hands	1.475
05.115	PEEK	For H/M/S hands	1.475

High precision hand fitting press, with 3 hardened steel broaches and 3 stakes Ø 1.35 - 0.95 - 0.30 mm.



MSA	Tips	Use	Kg
05.113	Steel	For H/M/decentred Sec hands	1.585

High precision hand fitting press, with 3 hardened steel free broaches, 1 indexed broach and 4 stakes Ø 1.35 - 0.95 - 0.30 mm - decentred.



MSA	Tips	Use	Kg
05.112	Steel	For H/M/S/Date hands	1.585
05.117	PEEK	For H/M/S/Date hands	1.585

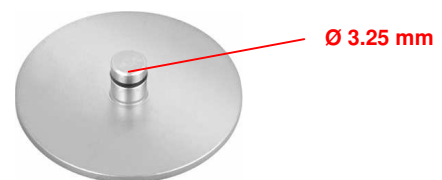
High precision hand fitting press, with 4 hardened steel broaches and 4 stakes Ø 1.35 - 0.95 - 0.30 - 2.10 mm.

Accessories for use with the presses illustrated above.



MSA	Kg
05.015-R	0.010

Table to set counter.



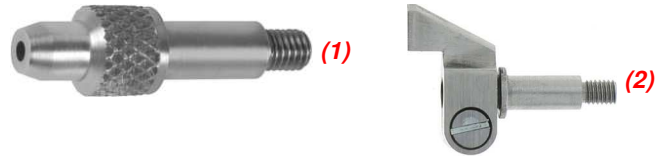
MSA	Kg
05.015-P	0.010

Decentred adaptor for movement holder.



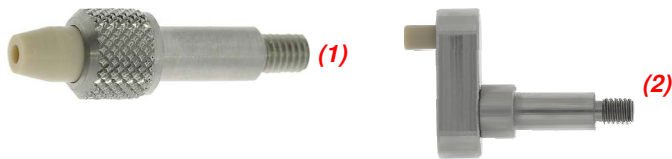
Other accessories :

MSA	Item	Kg
05.110-A	(1) Stop ring, height 18 mm	0.008
05.110-B	Stop ring, height 12 mm	0.007
05.110-S	Spring for broach	0.002
05.118	Broach with spring	0.015
05.119	Broach with groove and spring	0.015
05.119-A	Simple broach	0.013



MSA	Tips	Ø hole	Kg
05.110-03	Steel	0.30 mm	0.002
05.110-04	Steel	0.95 mm	0.002
05.110-09	Steel	1.10 mm	0.002
05.110-05	(1) Steel	1.35 mm	0.002
05.110-08	Steel	1.50 mm	0.002
05.110-07	Steel	1.70 mm	0.002
05.110-06	Steel	2.10 mm	0.002
05.110-01	(2) Steel	7.50 mm (Length)	0.004
05.110-02	Steel	Flat	0.002

Spare stainless steel stakes for presses MSA05.050, MSA05.109, MSA05.110, MSA05.111 and MSA05.112. Other diameters available upon request.



MSA	Tips	Ø hole	Kg
05.114-03	PEEK	0.30 mm	0.002
05.114-14	PEEK	0.40 mm	0.002
05.114-15	PEEK	0.50 mm	0.002
05.114-16	PEEK	0.55 mm	0.002
05.114-17	PEEK	0.75 mm	0.002
05.114-18	PEEK	0.85 mm	0.002
05.114-04	PEEK	0.95 mm	0.002
05.114-19	PEEK	1.05 mm	0.002
05.114-09	PEEK	1.10 mm	0.002
05.114-20	PEEK	1.15 mm	0.002
05.114-21	PEEK	1.25 mm	0.002
05.114-05	(1) PEEK	1.35 mm	0.002
05.114-08	PEEK	1.50 mm	0.002
05.114-22	PEEK	1.55 mm	0.002
05.114-23	PEEK	1.65 mm	0.002
05.114-07	PEEK	1.70 mm	0.002
05.114-24	PEEK	1.80 mm	0.002
05.114-25	PEEK	1.95 mm	0.002
05.114-06	PEEK	2.10 mm	0.002
05.114-13	PEEK	3.00 mm	0.002
05.114-01	(2) PEEK	7.50 mm (Length)	0.004
05.114-02	PEEK	Flat	0.002

Spare stakes with PEEK tip for presses MSA05.050, MSA05.114, MSA05.115, MSA05.116 and MSA05.117. Other diameters available upon request.



MSA	Tips	Ø hole	Kg
05.111-03	Delrin®	0.30 mm	0.002
05.111-12	Delrin®	0.60 mm	0.002
05.111-04	Delrin®	0.95 mm	0.002
05.111-09	Delrin®	1.10 mm	0.002
05.111-11	Delrin®	1.20 mm	0.002
05.111-05	Delrin®	1.35 mm	0.002
05.111-08	Delrin®	1.50 mm	0.002
05.111-10	Delrin®	1.60 mm	0.002
05.111-07	Delrin®	1.70 mm	0.002
05.111-06	Delrin®	2.10 mm	0.002
05.111-13	Delrin®	3.00 mm	0.002
05.111-01	Delrin®	7.50 mm (Length)	0.004
05.111-02	Delrin®	Flat	0.002

Spare stakes with Delrin® tip for presses MSA05.050, MSA05.109, MSA05.110, MSA05.111 and MSA05.112. Other diameters available upon request.



High precision hands fitting press equipped with 2 adjustable and interchangeable broaches, ideal for production series. Suitable for movement holder MSA09.010-xx (see chapter 09).



MSA	Use	Kg
05.100	For hour and minute hands	0.780

High precision hands fitting press with 2 adjustable and interchangeable broaches.
Base Ø 31 mm.
See also movement holders MSA 09.010-xx (chapter 09).

Spare parts :



MSA	Item	Kg
05.101-A	Adjustable broach with white head for minute hands, Ø hole 1.00 mm	0.019 
05.101-B	Adjustable broach with black head for hour hands, Ø hole 1.20 mm	0.019 



MSA	Use	Kg
05.101	For hour and minute hands	1.260

High precision hands fitting press with 2 adjustable and interchangeable broaches. Revolving head to avoid broach changing.
Base Ø 31 mm.
See also movement holders MSA 09.010-xx (chapter 09).

Spare parts :

MSA	Item	Kg
05.101-A	Adjustable broach with white head for minute hands, Ø hole 1.00 mm	0.019 
05.101-B	Adjustable broach with black head for hour hands, Ø hole 1.20 mm	0.019 

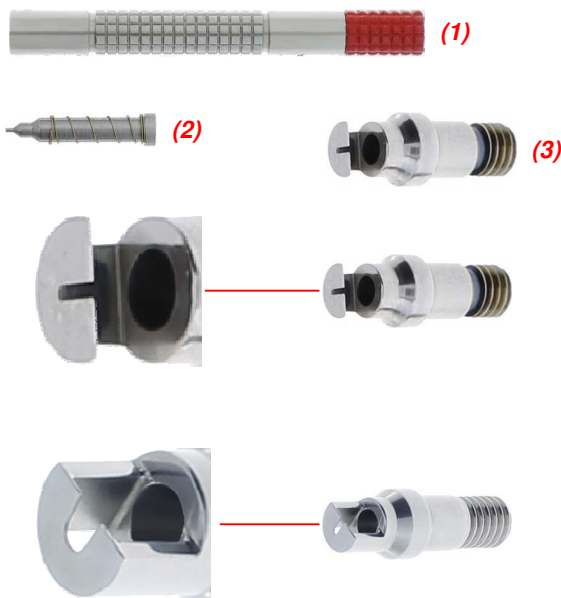
Accessories for presses MSA05.100 and MSA05.101.



MSA	Kg
05.101-C	0.019

Simple broach with red head for second hands, flat not pierced.

Hands removing press, without contact with the dial.



MSA	Size	Kg
05.129	80 x 80 x 85 mm	0.700

Hands removing press, without contact with the dial.
This press allows removing safely the hands fitted on dial, guaranteeing their extraction without damaging the dial.

Contents :

- 1 press MSA05.129-01
- 1 hand tool MSA05.128-02
- 1 base MSA05.129-02 for extractors and pins
- 1 removable plate
- 3 extractors MSA05.129-060, MSA05.129-150 and MSA05.129-250
- 3 pins MSA05.128-015, MSA05.128-060 and MSA05.128-100.

Spare parts :

MSA	Item	Kg
05.128-015	Pin with spring Ø 0.15 mm	0.002
05.128-02	(1) Hand tool	0.020
05.128-060	(2) Pin with spring Ø 0.60 mm	0.002
05.128-100	Pin with spring Ø 1.00 mm	0.002
05.129-01	Press only	0.660
05.129-02	Base only	0.090
05.129-060	(3) Hands extractor, notch 0.60 mm	0.003
05.129-150	Hands extractor, notch 1.50 mm	0.003
05.129-250	Hands extractor, notch 2.50 mm	0.003

Optional extractors :

MSA	Item	Kg
05.129-060C	Counter hands extractor, notch 0.60 mm	0.003
05.129-085	Hands extractor, notch 0.85 mm	0.003
05.129-100	Hands extractor, notch 1.00 mm	0.003
05.129-200	Hands extractor, notch 2.00 mm	0.003

Optional extractors with columns :

MSA	Item	Kg
05.128-B	Hands extractor with columns, 0.60 x 3.80 mm	0.003
05.128-C	Hands extractor with columns, 1.45 x 3.80 mm	0.003
05.128-D	Hands extractor with columns, 2.10 x 4.70 mm	0.003

Other sizes of extractors upon request.

Accessory :

MSA	Item	Kg
05.129-E	Blind hands and counter hands extractor	0.065



MSA	Size	Kg
05.129-PE	80 x 80 x 85 mm	0.680

Hands removing press, without contact with the dial.
This press allows removing safely the hands fitted on dial, guaranteeing their extraction without damaging the dial.

Contents :

- 1 press MSA05.129-01
- 1 hand tool MSA05.128-02
- 1 base MSA05.129-02 for extractors and pins
- 1 removable plate
- 1 blind hands and counter hands extractor MSA05.129-E.

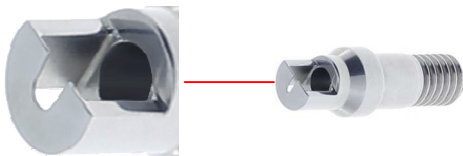
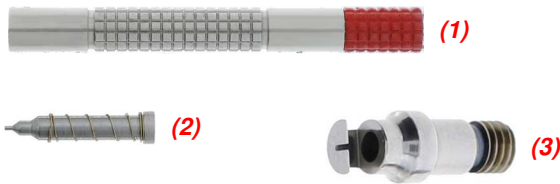
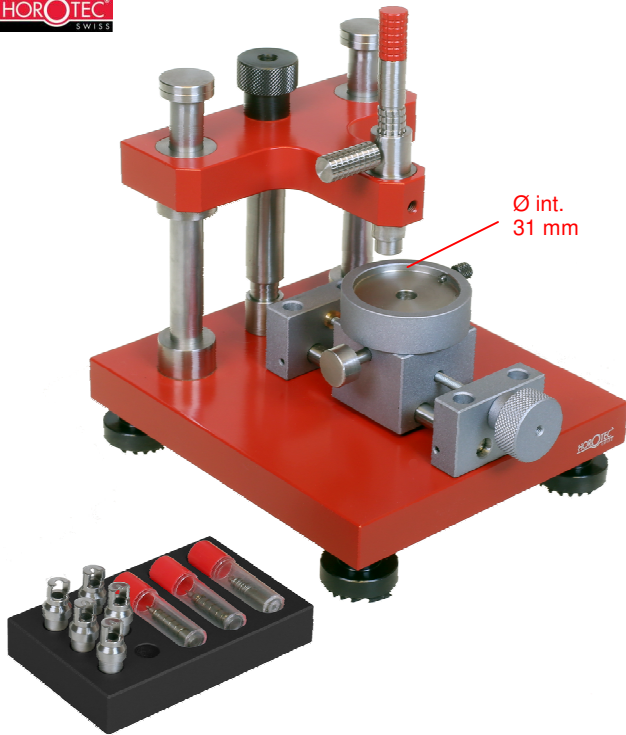
Spare parts :

MSA	Item	Kg
05.128-02	(1) Hand tool	0.020
05.129-01	Press only	0.660
05.129-02	Base only	0.090
05.129-E	Blind hands and counter hands extractor	0.065



MSA05.129-E

Hands removing press with fine adjustment, without contact with the dial.



MSA	Size	Kg
05.131	110 x 125 x 125 mm	1.875

Hands removing press with fine adjustment, without contact with the dial.
This press allows removing safely the hands fitted on dial, guaranteeing their extraction without damaging the dial.

Contents :

- 1 press MSA05.131-P
- 1 hand tool MSA05.128-02
- 1 base MSA05.129-02 for extractors and pins
- 5 extractors MSA05.129-060, MSA05.129-060C, MSA05.129-150, MSA05.129-200 and MSA05.129-250
- 3 pins MSA05.128-015, MSA05.128-060 and MSA05.128-100.

Spare parts :

MSA	Item	Kg
05.128-015	Pin with spring Ø 0.15 mm	0.002
05.128-02	(1) Hand tool	0.020
05.128-060	(2) Pin with spring Ø 0.60 mm	0.002
05.128-100	Pin with spring Ø 1.00 mm	0.002
05.129-02	Base only	0.090
05.129-060	(3) Hands extractor, notch 0.60 mm	0.003
05.129-060C	Counter hands extractor, notch 0.60 mm	0.003
05.129-150	Hands extractor, notch 1.50 mm	0.003
05.129-200	Hands extractor, notch 2.00 mm	0.003
05.129-250	Hands extractor, notch 2.50 mm	0.003
05.131-P	Press only	1.720

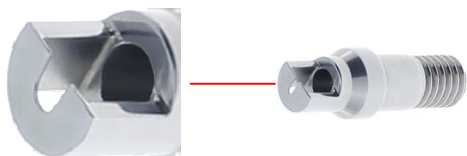
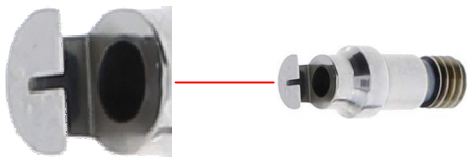
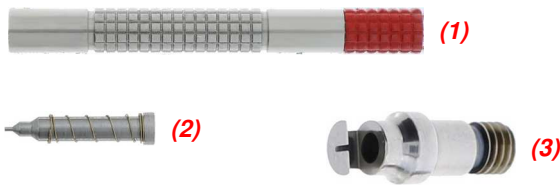
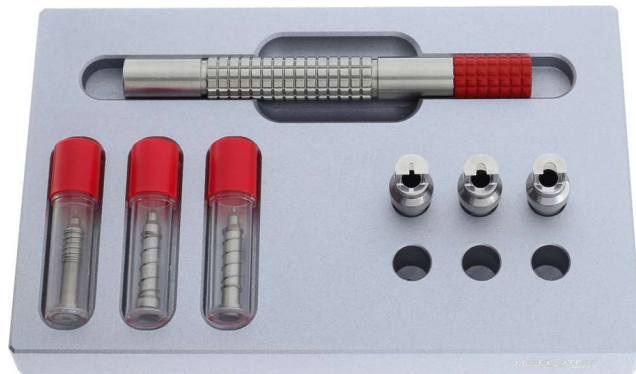
Optional extractors :

MSA	Item	Kg
05.129-085	Hands extractor, notch 0.85 mm	0.003
05.129-100	Hands extractor, notch 1.00 mm	0.003

Optional extractors with columns :

MSA	Item	Kg
05.128-B	Hands extractor with columns, 0.60 x 3.80 mm	0.003
05.128-C	Hands extractor with columns, 1.45 x 3.80 mm	0.003
05.128-D	Hands extractor with columns, 2.10 x 4.70 mm	0.003

Other sizes of extractors upon request.



MSA	Size	Kg
05.128	109 x 69 x 15 mm	0.400

Hands removing tool, without contact with the dial.

Contents :

- 1 hand tool MSA05.128-02
- 1 base MSA05.128-01 for extractors and pins
- 3 extractors MSA05.129-060, MSA05.129-150 and MSA05.129-250
- 3 pins MSA05.128-015, MSA05.128-060 and MSA05.128-100.

Spare parts :

MSA	Item	Kg
05.128-01	Base only	0.225
05.128-015	Pin with spring Ø 0.15 mm	0.002
05.128-02	(1) Hand tool	0.020
05.128-060	(2) Pin with spring Ø 0.60 mm	0.002
05.128-100	Pin with spring Ø 1.00 mm	0.002
05.129-060	(3) Hands extractor, notch 0.60 mm	0.003
05.129-150	Hands extractor, notch 1.50 mm	0.003
05.129-250	Hands extractor, notch 2.50 mm	0.003

Optional extractors :

MSA	Item	Kg
05.129-060C	Counter hands extractor, notch 0.60 mm	0.003
05.129-085	Hands extractor, notch 0.85 mm	0.003
05.129-100	Hands extractor, notch 1.00 mm	0.003
05.129-200	Hands extractor, notch 2.00 mm	0.003

Optional extractors with columns :

MSA	Item	Kg
05.128-B	Hands extractor with columns, 0.60 x 3.80 mm	0.003
05.128-C	Hands extractor with columns, 1.45 x 3.80 mm	0.003
05.128-D	Hands extractor with columns, 2.10 x 4.70 mm	0.003

Other sizes of extractors upon request.

HANDS REMOVING TOOLS



PAIR

MSA	Tips width	Length	Kg
05.009	1.00 mm	105 mm	0.020

Pair of hand levers with varnished aluminium handles, for sweep second hands and small counter hands of chronometers.
Delivered with 2 dial protectors MSA70.004.



PAIR

MSA	Tips width	Length	Kg
05.007	2.50 mm	105 mm	0.022

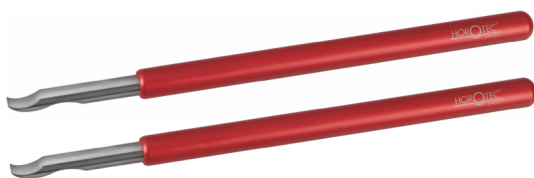
Pair of hand levers with varnished aluminium handles, for wrist watches.
Delivered with 2 dial protectors MSA70.004.



PAIR

MSA	Tips width	Length	Kg
05.013	3 mm	115 mm	0.015

Pair of hand levers with varnished aluminium handles and polished work surface.
Delivered with 2 dial protectors MSA70.004.



PAIR

MSA	Tips width	Length	Kg
05.008	4 mm	105 mm	0.042

Pair of hand levers with varnished aluminium handles, for pocket watches.
Delivered with 2 dial protectors MSA70.004.



PAIR

MSA	Tips width	Length	Kg
05.014	10 mm	115 mm	0.020

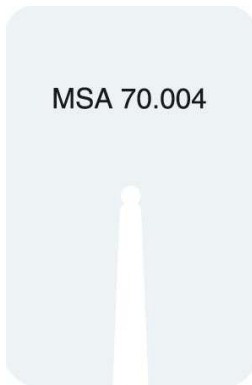
Pair of hand levers with varnished aluminium handles and polished work surface, for alarm and wall clocks.
Delivered with 2 dial protectors MSA70.004.



PAIR

MSA	Tips width	Length	Kg
05.107	2.50 mm	105 mm	0.020

Pair of hand levers with anodised grey aluminium knurled handles.
 Delivered with 2 dial protectors MSA70.004 in 1 plastic pouch.



MSA 70.004

MSA	Length	Kg
70.004	25 x 38 x 0.20	0.001

Plastic dial protector to be used during hands extraction.
 Avoids scratching the dial with the hand levers illustrated above.

NOTES
