



# STOPWATCHES

*hanhart*  
1882



**THE  
LEGENDARY  
■ PIONEER IN  
PRECISION  
TIMEKEEPING**

# P R E C I S I O N



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Q U A L I T Y

A N D



## A pioneer in precision timekeeping

Hanhart – today the leading manufacturer of stopwatches, market leader for mechanical stopwatches and specialist in high-precision, functional instrument watches for use in the air, on the land and on the sea – has its roots in the traditional craftsmanship and art of watchmaking in Switzerland and southern Germany.

The company was founded in 1882 in Diessenhofen in Switzerland by Johann A. Hanhart. In 1902, the watchmaking business moved to the watchmaking capital of southern Germany, Schwenningen/Neckar.

It was as early as 1924 that Hanhart launched the world's first affordable mechanical stopwatch. At that time, these timepieces came exclusively from Switzerland and were only available – if at all – at very high prices, since they were virtually only ever produced as one-off items. The great success of this stopwatch laid the foundations for further innovative technical developments, such as the complicated split-second stopwatch or an ultrafast oscillator with a balance wheel frequency of 360,000 vibrations per hour, which enabled Hanhart to become one of the first manufacturers of watches capable of measuring hundredths of a second.

As the company grew, a second factory was established in the southern German town of Gütenbach in 1934. This is still where the entire stopwatch collection is manufactured today, and some of the wristwatches.

Then in 1938 a new era began – the first Hanhart chronograph model, the mono-pusher "Calibre 40", went into production. This was followed in 1939 by the legendary pilot's chronographs "Calibre 41" and "TachyTele".

After the Second World War and the dismantling of the production facilities by the occupying forces, the hard work of reconstruction began in 1949.

By the early 1950s, production was already in full swing again.

Hanhart began to concentrate increasingly on making mechanical stopwatches. In 1962, Hanhart amazed the market with its low-priced stopwatch "Amigo" – precision mechanics in a plastic case.

With the start of the era of the quartz watch, Hanhart set up its own plastics injection moulding plant and developed a quartz movement which would subsequently be sold by the millions. During these years, the range of mechanical and electronic stopwatches, quartz watches and alarm clocks being produced expanded steadily.

With the renaissance of traditional watchmaking in the mid-1990s, Hanhart was able to draw on its own pioneering achievements from the past: from 1997 onwards, it began to make faithful reproductions of the legendary pilot's chronographs in new and limited editions, using the old tools and specifications. These replica chronographs have been enormously popular with collectors and enthusiasts.

Nowadays high-quality mechanical timepieces, painstakingly manufactured in numerous individual stages at the factory in Gütenbach, continue to represent an important product segment for Hanhart alongside its wide range of stopwatches for industry and sport. Just as they were used in the past for all important car races, amongst other things, now they are the essential rallying companion for ambitious vintage car drivers.

The design and technology of the wristwatches in the Pioneer and Primus collections are also based on Hanhart's vast expertise and long tradition of making chronographs.

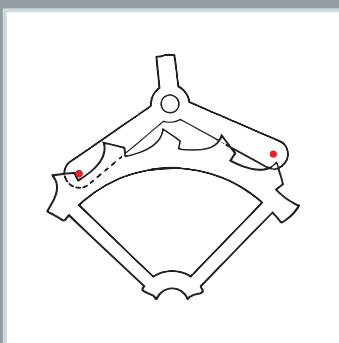
They combine historic features such as the red button – Hanhart's trademark since 1939 – with the latest technology and contemporary design.



## Lever design

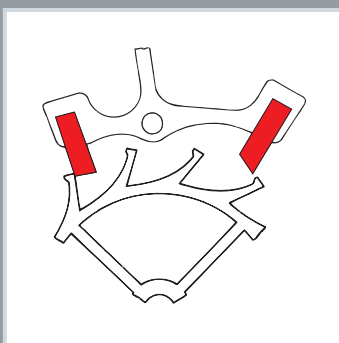
### **Pin lever design, 1 or 7 jewels, depending on the model**

The pin lever escapement with shock-resistant balance wheel is a very robust and reliable technology. It guarantees superb accuracy that will last for decades.



### **Swiss lever escapement, 7, 9 or 11 jewels, depending on the model**

The lever escapement (2 jewels on the lever) and the shock-resistant balance wheel increase the accuracy and lifespan of these mechanical precision stopwatches. We use the Swiss lever escapement for stopwatches which will run for long periods and/or for fast-beat movements.





### Split-seconds addition timer (hand wound at crown)

Page 8

For time measurement with interrupt option,  
drag indicator for split time measurement

**Start**

**Stop the split time** with drag indicator

**Reset and zero-setting** of

the drag indicator

**Stop**

**Zero-setting**

**Flyback** (Tempo) optional on all models

Crown  
Right button

Right button  
Crown  
Left button



No. Movement type			Quality features			
			Accurate running time $1/5 + 1/100$	Accuracy $1/5 + 1/100$	Accurate running time $1/10$	Accuracy $1/10$
135	19" pin lever	7 jewels	16-18 hours	0.02 %	8-9 hours	0.03 %

### Addition timer (hand wound at crown)

Page 10

For time measurement with interrupt option

**Start**

**Stop**

**Zero-setting**

**Flyback** (Tempo) optional on all models

Crown  
Crown  
Side button



No. Movement type			Quality features			
			Accurate running time $1/5 + 1/100$	Accuracy $1/5 + 1/100$	Accurate running time $1/10$	Accuracy $1/10$
121	19" pin lever	1 jewel	10-12 hours	0.04 %	5-6 hours	0.06 %
122	19" pin lever	7 jewels	10-12 hours	0.04 %	5-6 hours	0.06 %
126	19" lever	11 jewels	16-18 hours	0.02 %	-	-
185	19" lever	7 jewels	16-18 hours	0.02 %	8-9 hours	0.03 %

### Crown stopper (hand wound at crown)

Page 16

Simple time measurement with no interrupt option

**Start**

**Stop**

**Zero-setting**

Crown  
Crown  
Crown



No. Movement type			Quality features			
			Accurate running time $1/5 + 1/100$	Accuracy $1/5 + 1/100$	Accurate running time $1/10$	Accuracy $1/10$
111	19" pin lever	1 jewel	10-12 hours	0.04 %	5-6 hours	0.06 %
112	19" pin lever	7 jewels	10-12 hours	0.04 %	5-6 hours	0.06 %
115	19" pin lever	7 jewels	10-12 hours	0.03 %	5-6 hours	0.06 %
115	19" lever	7 jewels	10-12 hours	0.03 %	8-9 hours	0.08 %

### Addition timer (hand wound at crown)

Page 20

For time measurement with interrupt option

**Start**

**Stop**

**Zero-setting**

Green button  
Red button  
White or black button

**Flyback** (Tempo) standard on "Amigo" models (except Allsport)



No. Movement type			Quality features			
			Accurate running time $1/5 + 1/100$	Accuracy $1/5 + 1/100$	Accurate running time $1/10$	Accuracy $1/10$
164	19" pin lever	0 jewels	60 minutes	0.08 %	30 minutes	0.14 %
174	19" pin lever	0 jewels	60 minutes	0.08 %	30 minutes	0.14 %
141	19" pin lever	0 jewels	10-12 hours	0.06 %	5-6 hours	0.08 %
152	19" pin lever	7 jewels	-	-	8-9 hours	0.08 %

## Quality and precision

The name Hanhart has for decades been synonymous with precision timekeeping like no other.

In the field of mechanical stopwatches, Hanhart is the acknowledged market leader, as demonstrated by its extensive product range, which covers every possible function.

There is a choice of shock-resistant movements with high-quality Swiss lever escapements or with the simpler pin lever technology. The cases are made of metal or ABS plastic, and certain models have extra dust and water protection.

When choosing a stopwatch, the following criteria should be considered:

- Function
- Movement type (lever, pin lever, jewels)
- Case (metal, ABS, dust and water protection)
- Metal or plastic buttons
- Mineral glass or acrylic glass

**24 month Hanhart guarantee**  
**Made in Germany**

## Split-seconds addition timer

Addition timer for time measurement with interrupt option, with drag indicator for split time measurement.

All models have a diamond-cut, chrome-plated brass case, polished or matt.

All models feature a lever escapement with 7 jewels. They are shock-resistant and have additional dust and water protection.

### Calibration

See description on page 40.



135.0101-0S

Pin lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 130 g



135.0401-0S

Pin lever, 7 jewels

1/10 sec. 15 min.

Case Ø 55 mm, weight 130 g



135.0201-0S

**Industry model**

Pin lever, 7 jewels

1/100 min. 30 min.

Case Ø 55 mm, weight 130 g



135.0301-0S

**Industry model**

Pin lever, 7 jewels

1/5 sec. + 1/100 min. 30 min.

Case Ø 55 mm, weight 130 g

## Addition timer with drag indicator

### Industry model

Precision mechanics with mineral glass, metal crown and metal comfort button.

### “Horsemen’s”

Extra-large numbers, crown and 1 button, with drag indicator and leather wrist loop for equestrian sports.

### Split-seconds addition timer with flyback and rotating countdown bezel

The numerals ring on the rotating countdown bezel helps achieve exactly the correct time specifications (seconds) for individual measuring processes. The drag indicator allows split times to be measured, while the flyback function allows timing to be started immediately with no time lost from the current measuring process.



135.4101-5S

### Industry model

Pin lever, 7 jewels  
1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g



135.0101-5S

### Industry model

Pin lever, 7 jewels  
1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g



135.5709-0S

### Horsemen’s

Pin lever, 7 jewels  
1/5 sec. 30 min.

Case Ø 55 mm, weight 130 g



135.0165-XS

### Split-seconds addition timer with flyback and rotating countdown bezel

Pin lever, 7 jewels  
1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g



## Addition timer

Addition timer for time measurement with interrupt option.

All models have a diamond-cut, chrome-plated brass case, polished or matt.

All models are protected against shock, dust and water.

The models with lever escapement have additional case seals to give added protection against dust and water.

### Calibration

See description on page 40.



122.0101-00

Pin lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g



122.0401-00

Pin lever, 7 jewels

1/10 sec. 15 min.

Case Ø 55 mm, weight 120 g



122.0201-00

**Industry model**

Pin lever, 7 jewels

1/100 min. 30 min.

Case Ø 55 mm, weight 120 g



122.0301-00

**Industry model**

Pin lever, 7 jewels

1/5 sec. + 1/100 min. 30 min.

Case Ø 55 mm, weight 120 g

## Addition timer

### “Robust 200”

Precision mechanics with mineral glass, metal crown and button. With this special model, Hanhart has taken account of the requirements of industry and craftsmen.

The glass parts are resistant to scratching and acid. The metal buttons and crowns are extremely robust and resistant to solvents and thinners.

Especially suitable for use in the chemical industry, paint workshops or photographic laboratories.

### “Allsport”

Universal referee's stop watch.

Scale goes up to 60 min.

20, 35, 45 and 60 min. marked in yellow.

### Addition timer with flyback and rotating countdown bezel

The numerals ring on the rotating countdown bezel helps achieve exactly the correct time specifications (seconds) for individual measuring processes. The flyback function allows timing to be started immediately with no time lost from the current measuring process. The large numerals on the white dial make the watch very easy to read.

### Industry model

With tough metal crown and metal button.



125.0104-0S

#### Robust 200

Lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 135 g

Mineral glass, metal crown and button



122.6401-00

#### Allsport

Pin lever, 7 jewels

1/5 sec. 60 min.

Case Ø 55 mm, weight 120 g



125.0165-XS

#### Addition timer with flyback and rotating countdown bezel

Pin lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g



125.4101-5S

#### Industry model

Pin lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g

125.0101-5S

White dial

## Addition timer

### Hours counter

Specially designed for measuring long periods of time, this addition timer is fitted with a 10-hour counter, a black seconds hand and a red, jumping minutes hand.

### Fast running timer

$\frac{1}{100}$  sec. gradation



126.7701-00

### Hours counter

Lever, 11 jewels

$\frac{1}{5}$  sec. 60 min. + 10 hours

Case Ø 55 mm, weight 130 g



126.7801-00

### Hours counter

Lever, 11 jewels

$\frac{1}{5}$  sec. +  $\frac{1}{100}$  min. 60 min. + 10 hours

Case Ø 55 mm, weight 130 g



126.4365-50

### Hours counter

Lever, 11 jewels

$\frac{1}{5}$  sec. 60 min. + 10 hours

Rotating countdown bezel

Case Ø 55 mm, weight 120 g

126.7765-50

White dial



126.0801-00

### Fast running timer

lever, 11 jewels

$\frac{1}{100}$  sec. gradation,

90 sec. display time

Hand revolution 3 sec.

Runs approx. 16 min.

Case Ø 55 mm, weight 125 g



## Addition timer

### “Mega Minute”

Stopwatch with sprung central minutes hand for measuring up to 60 minutes.

Excellent readability thanks to double-sized minute scale in contrasting colour, and sprung minutes hand.

All models have precision lever movements (7 jewels). Shock-protection, additional dust and water protection.

All models have a diamond-cut, chrome-plated and polished brass case.

### “Mega Minute” with flyback and rotating countdown bezel

Stopwatch with sprung central minutes hand for measuring up to 60 minutes. The numerals ring on the rotating countdown bezel helps achieve exactly the correct time specifications (seconds) for individual measuring processes. The flyback function allows timing to be started immediately with no time lost from the current measuring process.



185.7901-00

#### Mega Minute

Lever, 7 jewels  
1/5 sec. 60 min.

Case Ø 55 mm, weight 125 g



185.8001-00

#### Mega Minute - Industry model

Lever, 7 jewels  
1/100 min. 60 min.

Case Ø 55 mm, weight 125 g



185-7965-5E

#### Mega Minute with flyback and rotating countdown bezel

Lever, 7 jewels  
1/5 sec. 60 min.

Case Ø 55 mm, weight 120 g



185.4765-5E

#### Mega Minute with flyback and rotating countdown bezel

Lever, 7 jewels  
1/5 sec. 60 min.

Case Ø 55 mm, weight 120 g

## Addition timer in ABS case

As well as its stopwatches in metal cases, Hanhart also offers more inexpensive addition timers in functional ABS plastic cases. Very lightweight and easy to handle.

### Calibration

See description on page 40.



121.0117-00

Pin lever, 1 jewel  
1/5 sec. 30 min.  
Case Ø 55 mm, weight 80 g



121.0417-00

Pin lever, 1 jewel  
1/10 sec. 15 min.  
Case Ø 55 mm, weight 80 g



121.0217-00

**Industry model**  
Pin lever, 1 jewel  
1/100 min. 30 min.  
Case Ø 55 mm, weight 80 g



121.0317-00

Pin lever, 1 jewel  
1/5 sec. + 1/100 min. 30 min.  
Case Ø 55 mm, weight 80 g

## Addition timer in ABS case

### “Lumen”

For use in industry and, especially, in laboratories, Hanhart offers two watches in its precision mechanics range with luminous dials.

Once the special dial has been “charged” with light (takes approx. 1 hr.), the face will glow in the dark for approx. 3-4 hours so it is clearly readable. This requires no additional energy or radiating materials. This useful property is achieved by using an innovative plastic material containing light-storing pigments.

The practical ABS case of the “Lumen” has additional dust and water protection.

In a special production process, the glass and the glass fixing ring are moulded together and then firmly screwed to the case.

Of course, these watches are also popular with athletes, as they always have been.

### “Mega Minute”

Excellent readability thanks to double-sized minute scale and sprung minutes hand.

All models have precision lever movements (7 jewels). Shock-protection, additional dust and water protection. Unlike rival products, all Hanhart “Mega Minute” stopwatches have a sprung minutes hand.

ABS special case Ø 64 mm. The glass is injected directly into the glass fixing ring, and the ring and case are screwed together.



121.1515-00

#### Lumen

Pin lever, 1 jewel  
1/5 sec. 30 min.

Case Ø 55 mm, weight 80 g



185.8416-00

#### Mega Minute

Lever, 7 jewels  
1/5 sec. 60 min.

Case Ø 64 mm, weight 85 g



121.1615-00

#### Lumen

Pin lever, 1 jewel  
1/10 sec. 15 min.

Case Ø 55 mm, weight 80 g



185.8616-00

#### Mega Minute

Lever, 7 jewels  
1/10 sec. 30 min.

Case Ø 64 mm, weight 85 g



## Crown stopper

All models have a diamond-cut, chrome-plated and polished brass case. All models are protected against shock, dust and water.

These models have additional case seals to give extra protection against dust and water.

### Calibration

See description on page 40.



112.0101-00

Pin lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g



112.0401-00

Pin lever, 7 jewels

1/10 sec. 15 min.

Case Ø 55 mm, weight 120 g



112.0201-00

**Industry model**

Pin lever, 7 jewels

1/100 min. 30 min.

Case Ø 55 mm, weight 120 g



112.0301-00

**Industry model**

Pin lever, 7 jewels

1/5 sec. + 1/100 min. 30 min.

Case Ø 55 mm, weight 120 g

## Crown stopper

### "Robust 100"

Precision mechanics with mineral glass and metal crown.

With this special model, Hanhart has taken account of the requirements of industry and craftsmen. The glass parts are resistant to scratching and acid. The metal crown is extremely resistant to solvents and thinners.

Especially suitable for use in the chemical industry, paint workshops or photographic laboratories.

### "Big 1/10 sec."

A particular speciality of Hanhart precision mechanics is the stopwatch with large-scale 1/10 sec. gradation.

### "Pulse/breathing rate"

Specially for measuring pulse and breathing rate. Based on 15 pulse beats or 5 breaths.

### "Tachy/Telemeter"

This stopwatch with its special tachy- and telemeter scales is ideal for accurate speed control.

Outer scale: Tachymeter, speedometer

Measuring distance: 200 m

Middle scale: 1/5 sec. gradation

Inner scale: Telemeter, noise level meter up to 20 km

### Calibration

See description on page 40.



115.0104-0S

#### Robust 100

Pin lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 135 g

Mineral glass, metal crown



115.0501-00

#### Big 1/10 sec.

Lever, 7 jewels

1/10 sec. 5 min.

Running time approx. 3 hours

Case Ø 55 mm, weight 120 g



112.7001-00

#### Pulse/breathing rate

Pin lever, 7 jewels

1/10 sec. 30 min.

Case Ø 55 mm, weight 120 g



115.6701-5S

#### Tachy/Telemeter

Pin lever, 7 jewels

1/5 sec. 30 min.

Case Ø 55 mm, weight 120 g

metal crown

## Crown stopper in ABS case

As well as its stopwatches in metal cases, Hanhart also offers more inexpensive crown stoppers in functional ABS plastic cases with pendant ring. Very lightweight and easy to handle.

### Calibration

See description on page 40.



111.0117-00

Pin lever, 1 jewel  
1/5 sec. 30 min.  
Case Ø 55 mm, weight 75 g



111.0417-00

Pin lever, 1 jewel  
1/10 sec. 15 min.  
Case Ø 55 mm, weight 75 g



111.0217-00

**Industry model**  
Pin lever, 1 jewel  
1/100 min. 30 min.  
Case Ø 55 mm, weight 75 g



111.0317-00

**Industry model**  
Pin lever, 1 jewel  
1/5 sec. + 1/100 min. 30 min.  
Case Ø 55 mm, weight 75 g



## Day timer

Modelled on the traditional Hanhart pocket watches, these watches show hours and minutes and have a small seconds.



850.0901-50

### Day timer

Movement: ETA 6497/2  
Lever, 17 jewels, small seconds  
Case Ø 55 mm, weight 120 g



850.4901-00

### Day timer

Movement: ETA 6497/2  
Lever, 17 jewels, small seconds  
Case Ø 55 mm, weight 120 g

## Addition timer in ABS case

### "Felix"

"Felix" is a technically simple and robust addition timer in the Hanhart mechanical range. The winding mechanism for the shock-protected pin lever movement is located on the reverse. The robust ABS case comes with a cord for hanging round the neck.



164.3120-00

#### Felix red

Pin lever, 0 jewels  
1/5 sec., display time 10 min.  
Case Ø 55 mm, weight 75 g

164.3119-00

#### Felix black



164.3419-00

#### Felix black

Pin lever, 0 jewels  
1/10 sec., display time 5 min.  
Case Ø 55 mm, weight 75 g

164.3420-00

#### Felix red



174.3219-00

#### Felix black

Pin lever, 0 jewels  
1/5 sec., display time 30 min.  
Case Ø 55 mm, weight 75 g

174.3220-00

#### Felix red



174.3620-00

#### Felix red

Pin lever, 0 jewels  
1/10 sec., display time 15 min.  
Case Ø 55 mm, weight 75 g

174.3619-00

#### Felix black

## Addition timer in ABS case

### "Amigo"

The "Amigo" is the classic among the more inexpensive addition timers in the mechanical range. The winding mechanism for the shock-protected pin lever movement is located on the reverse. The robust ABS case comes with a cord for hanging round the neck.

### "Tristop"

The "Tristop" in Hanhart's mechanical range is designed as a 3-scale stopwatch. This means that the time is even easier to read thanks to a 10-times enlarged 1/10 sec. display.

The winding mechanism for the shock-protected pin lever movement is located on the reverse. The robust ABS case comes with a cord for hanging round the neck.



141.0134-00

#### Amigo

Pin lever, 1 jewel, 1/5 sec. 30 min.  
Case Ø 55 mm, weight 85 g

141.0135-00

Chrome-plated back



141.0434-00

#### Amigo

Pin lever, 1 jewel, 1/10 sec. 15 min.  
Case Ø 55 mm, weight 85 g

141.0435-00

Chrome-plated back



141.6434-00

#### Amigo

Pin lever, 1 jewel, 1/5 sec. 60 min.  
Case Ø 55 mm, weight 85 g  
Referee's watch 20, 35, 45 and  
60 min. marked in yellow

141.6435-00

Chrome-plated back



152.8335-00

#### Tristop

Chrome-plated back  
Pin lever, 7 jewels, 1/10 sec. 30 min.  
Case Ø 55 mm, weight 85 g



## Selection criteria

Hanhart has been one of the leading producers of electronic stopwatches since 1976. Initially, the company made them with LED displays (light diodes), but since 1982 it has been using LCD technology. This kind of display brings significant benefits in terms of information content and energy consumption, and so increases running times.

Since 1989, Hanhart has been using "chip on-board" technology, due to the smaller and more ergonomic case designs combined with much increased functionality. It brings with it significant improvements in quality.

### Brief description of the functions

Start/stop: individual time measurement with no interruption.

Addition: time measurement with interrupt option.

Split: split time measurement while timing continues.

Dual measurement: for measuring two times in quick succession.

Lap: circuit or section times. After each stop, a new measuring process begins automatically at time "0".

Short lap: shortest lap time.

Countdown: count down for a freely programmable period of time, at "0" a signal sounds.

Count-up: incremental counting/stopwatch function.

Autorepeat: automatic repeating at the end of the programmed time.

Pacer: acoustic pace-setter, freely adjustable.

Memory: memories which can be retrieved separately after the time recording has finished.

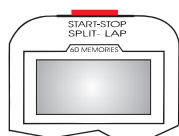
Reset: zero-setting.

Memory reset: deletes memory.

System reset: complete resetting of the stopwatch functions.

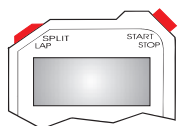
### 24-month Hanhart guarantee.

Start/Stop, Split and Lap timing are the most important operations when using a stopwatch. Depending on the model, these can be carried out using 1 or 2 buttons.



#### 1-button operation

All the above operations are carried out using one button. No accidental mistakes!



#### 2-button operation

Start/Stop and Split or Lap are operated using two separate buttons.

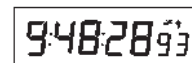
#### Temperature range

All Hanhart electronic stopwatches work in a temperature range from about -15°C to +55°C.

#### Temperature range for "Labor 1, 2, 3"

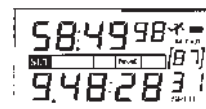
Ambient temperature from +5°C to +40°C, storage temperature from -20°C to +70°C.

Stopwatches with relatively few functions mainly use one-line displays, while multifunction stopwatches usually use multi-line displays.



#### One-line display

Large numerals and symbols. Clear display!



#### Multi-line display

Where there is a wide range of functions, more information is shown on the display.

#### Water protection

The watches shown in the table below as having water protection "yes" have additional seals and are therefore resistant to sprayed or splashing water. The watches marked as "water resistant" are tested by Hanhart at a pressure of 2 bar. They remain undamaged after long periods in water up to 10 m deep.

In order to keep the watches water-resistant over many years, they should be serviced by a specialist approx. every 2 years.

Model	Catalogue page	+/- sec.-month	Time measuring buttons	Display times	Battery change warning	Water protection
Stratos 2	31	30	2	1		
Stopstar 2	31	30	2	1		
Profil 1	30	30	2	1		yes
Profil 25	30	7	2	1.5		yes
Sprint	31	30	2	1		
Modul 1	26	14	1	1.5	●	yes
Modul 3	24	14	1	1.5	●	yes
Magma 10	26	7	1	2		yes
Magma Pro	27	7	1	2		yes
Delta E 100	28	7	2	2.5	●	water protected
Delta E 200	28/29	7	2	2.5	●	water protected
Spectron	37	7	2	2.5	●	water protected
Accord 1	38	14	1	1	●	yes
Accord 2	38	14	1	1	●	yes
Compact	38	30		1		
Labor 3	39	30		3		
Labor 2	39	30		1		
Labor 1	39	30		1		

# E C T R O N I C S



Addition	Split	Lap	Short lap	Memory	Countdown with signal	Count-up after countdown	Auto-repeat	Time	Date	Special features
•	•									
•	•									
•	•									Can be calibrated
•	•	•		25				•		
•	•	•						•	•	
•	•	•		60				•	•	
•	•	•		60	•		auto	•	•	With external connector
•	•	•	•	10				•	•	
•	•	•	•	10	•		auto	•	•	Pacer and display light also with external connector
•	•	•	•	65				•	•	
•	•	•	•	65	•		auto	•	•	Pacer, also with external connector
•	•	•	(•)	65	•		auto	•	•	1/100 min. + 1/100 sec. (•)
	•	•		60				•	•	1/100 min.
	•	•		60				•	•	1/100 min. Printer connection for Printo
•					•			•		
					•	•		•	•	
					•	•		•	•	
					•					

## Memory stopwatches 1-button operation

### “Modul 3”

Measuring range: 1/100 sec.  
 LCD display: 1.5 lines  
 Top line: 7-digit  
 Bottom line: 2 digits for  
 memory display  
 Numeral height: 6 mm  
 Display range: 9 hrs., 59 min.,  
 59.99 sec.  
 Internally: 23 hrs., 59 min.,  
 59.99 sec.  
 Memories: 60 per time type  
 Size: 82 x 61 x 28 mm  
 Weight: approx. 90 g  
 Battery: AA 1.5 V  
 Battery life: approx. 2 years

### Functions:

Start/Stop/Reset  
 Split/Lap/Addition – all three times  
 can be switched at any time  
 Split time can be set in advance of  
 the actual time  
 Separate system and memory reset  
 Countdown with repeat  
 Time of day, date

### 60 memories:

for Split/Lap/Addition

If a “Printo” is purchased at a  
 later date, the “Modul 3” can be  
 connected straightaway with no  
 modification.

### “Modul 3”

With connection for 1/100 sec.  
 light barrier.

Supplied with protective pouch  
 and cord.



262.1762-00

**Modul 3**

1/100 sec.



262.1763-00

**Modul 3**

1/100 sec.

With light barrier connection



## Thermal printer

### “Printo” thermal printer

Scope of delivery as for the “Printo” set without the “Modul 3” stopwatch.  
16 digits per line, approx. 8000 printouts per battery set.

Sequential no.: 3-digit  
Printout if stopwatch starts at “0”: 9 hrs., 59 min., 59.99 sec.

Printout if stopwatch starts from actual time: 23 hrs., 59 min., 59.99 sec.

Temperature range: -5°C to +50°C  
Size: 120 x 85 x 35 mm  
Weight: approx. 200 g  
Battery: 4 x AAA, 1.5 V Alkaline

### Functions:

Can be connected to “Modul 3”  
Printout of: Split, Lap and Addition times

Marker for time type, sequential number printout

Two basic functions:

- The memory of the “Modul 3” is released again after outputting to the printer (to record times of more than 60 participants).
- Memory content of the stopwatch is preserved. (Advantage: memory content can be printed out more than once with different time types.)

Thermal paper rolls

Light barrier connection

### “Printo” set

Consists of: “Printo” thermal printer plus “Modul 3”.  
Case with foam insert, 2 rolls of paper for the printer, spare batteries and connecting cable.

The “Modul 3” (60 memories) is connected to the “Printo” printer by a connecting cable (plug-in connection). The data recorded by the stopwatch can be printed during or after the recording.

### Calibration

See description on page 40.

902.1324-20

**Printo thermal printer**



600.1700-00

**Printo set**



## Multi-function and memory stopwatches 1-button operation

### “Modul 1”

Measuring range: 1/100 sec.  
 LCD display: 1.5 lines  
 Top line: 7-digit  
 Bottom line: 2-digit  
 Numeral height: 6 mm  
 Display range: 9 hrs., 59 min.,  
 59.99 sec.  
 Internally: 23 hrs., 59 min.,  
 59.99 sec.  
 Memories: 60 per time type  
 Size: 82 x 61 x 28 mm  
 Weight: approx. 90 g  
 Battery: AA, 1.5 V  
 Battery life: approx. 2 years

### Functions:

Start/Stop/Reset  
 Split/Lap/Addition – all three times  
 can be switched at any time  
 Separate system and memory reset  
 Time of day, date

### 60 memories:

for Split/Lap/Addition

### “Magma 10” and “Magma Pro”

These models have two-line LCD  
 displays for easy reading. Thanks  
 to 1-button operation, there can be  
 no accidental mistakes during time  
 measurement. With 10 memories  
 each, these two stopwatches are  
 highly versatile.

Supplied with protective pouch  
 and cord.



260.1760-00

**Modul 1**  
 1/100 sec.



236.1950-00

**Magma 10**  
 1/100 sec.



## “Magma 10” and “Magma Pro”

have a robust, water-resistant ABS case and a very clear display and come with a pouch and cord.

Measuring range: 1/100 sec.

LCD display: 2 lines

Top line: 6-digit + 2-digit memory display

Bottom line: 7-digit Date, time, countdown pace-setter with “Magma Pro”

Numeral height: 6 mm

Display range:

Top line: 59 min., 59.99 sec.

Bottom line: 9 hrs., 59 min., 59.99 sec.

Memories: 10 per time type

Size: 82 x 61 x 28 mm

Weight: approx. 90 g

Battery: AA, 1.5 V

Battery life: approx. 2-4 years

## “Magma 10”

### Functions:

Start/Stop/Reset –

Addition/Split/Lap/Short Lap

Split time can be set in advance of the actual time

Time of day, date

### 10 memories:

10 each for Split/Lap/Addition (the first 9 times + the last measured time)

## “Magma Pro”

With LCD light

### Functions:

Start/Stop/Reset –

Addition/Split/Lap/Short Lap

Split time can be set in advance of the actual time

Pacer (acoustic beat, 1-300 beats/min.)

2 different countdowns (interruptible and non-interruptible) with signal

Time of day (can also be called up during measuring)

Split/Lap and time can be alternated during measurement

Date

### 10 memories:

10 each for Split/Lap/Addition (the first 9 times + the last measured time)



237.1950-00

### Magma Pro

1/100 sec.

With LCD light



237.1952-00

### Magma Pro

1/100 sec.

With light barrier connection



## Multi function and memory stopwatches 2-button operation

### “Delta E 100” and “Delta E 200”

With its electronic hand-held stopwatch range “Delta E 100” and “Delta E 200”, Hanhart is introducing a new generation of high-performance time measuring instruments. The Delta series uses software specially developed by Hanhart. These stopwatches are water-resistant.

ABS plastic case, protective pouch with cord.

Measuring range: 1/100 sec.  
LCD display: 2.5 lines  
Top line: 6-digit + battery status display

Bottom line: 7-digit  
Function window for: Lap, Short Lap, normal time, date, countdown, pacer  
2-digit memory display

Numeral height: 7 mm/5 mm

Display range:  
Top line: 59 min., 59.99 sec.  
Bottom line: 9 hrs., 59 min., 59.99 sec.

Memories: 65 per time type  
Size: 90 x 60 x 19 mm  
Weight: approx. 85 g  
Battery: AAA, 1.5 V  
Battery life: approx. 5 to 7 years

### Calibration

See description on page 40.



245.1945-00

**Delta E 100**

245.1944-00

**Delta E 100**

Black case



245.1946-00

**Delta E 200**

## “Delta E 100”

### Functions:

Start/Stop/Reset  
Addition/Split/Lap/Short Lap  
Split time can be set in advance of the actual time  
Time of day  
Split, Lap, Short Lap and time can be alternated during measurement  
Date

### 65 memories:

with evaluation, fast search

## “Delta E 200”

### Functions:

Start/Stop/Reset  
Addition/Split/Lap/Short Lap  
Split time can be set in advance of the actual time  
Pacer (1-300 beats/min.)  
Countdown  
Countdown and stopwatch can be used at the same time  
Time of day  
Split, Lap, Short Lap and time can be alternated during measurement  
Date

### 65 memories:

with evaluation, fast search



245.1947-00

**Delta E 200**

With light barrier connection

## Basic function stopwatch 2-button operation

### “Profil 1” and “Profil 25”

All models have a robust, water-protected ABS case and a clearly readable LCD display, and they come with a protective pouch and cord.

Measuring range: 1/100 sec.  
 LCD display: 7-digit + 2 for Event Counter  
 Numeral height: 8 mm  
 Display range: 9 hrs., 59 min., 59.99 sec.  
 Size: 82 x 61 x 28 mm  
 Weight: approx. 90 g  
 Battery: AA, 1.5 V  
 Battery life: approx. 2-5 years

#### Functions of “Profil 1”:

Start/Stop/Reset –  
 Addition/Split/Dual measurement

“Profil 1” also comes in a version that can be calibrated. Your own Office of Weights and Measures can arrange this.

19.2  
02.01

#### Functions of “Profil 25”:

Start/Stop/Reset –  
 Addition/Split/Lap  
 Time of day

#### 25 memories:

25 split times and 25 lap times

The “Profil 25” also has a function window for Split, Lap and normal times.

#### Calibration

See description on page 40.



220.1721-00

**Profil 1**  
1/100 sec.



225.1721-00

**Profil 25**  
1/100 sec.



221.1723-00

**Profil 1**  
1/100 sec.  
Can be calibrated



## "Sprint"

The "Sprint" is a very lightweight and easy to use stopwatch. Here, too, the normal time and date can be called up.

Measuring range: 1/100 sec.  
 LCD display: 6-digit  
 Numeral height: 5 mm  
 Display range: 59 min., 59.99 sec.  
 Size: 55 x 58 x 16 mm  
 Weight: approx. 35 g

### Functions:

Start/Stop/Reset –  
 Addition/Split/Dual measurement  
 Time of day: [2x12 hrs. a.m./p.m.]  
 Date

The "Sprint" comes with an SR 44 button cell battery.  
 Battery life: approx. 2 years.

## "Stopstar 2"

Measuring range: 1/100 sec.  
 LCD display: 7-digit  
 Numeral height: 7 mm  
 Display range: 9 hrs., 59 min., 59.99 sec.  
 Size: 82 x 61 x 28 mm  
 Weight: approx. 70 g  
 Battery: AA, 1.5 V  
 Battery life: approx. 2 to 5 years

### Functions:

Start/Stop/Reset –  
 Addition/Split/Dual measurement

## "Stratos 2"

Measuring range: 1/100 sec.  
 LCD display: 7-digit  
 Numeral height: 6.5 mm  
 Display range: 9 hrs., 59 min., 59.99 sec.  
 Size: 66 x 70 x 21 mm  
 Weight: approx. 62 g  
 Battery: button cell SR 54  
 Battery life: approx. 2 years

### Functions:

Start/Stop/Reset –  
 Addition/Split/Dual measurement



280.1680-00

**Sprint**  
 1/100 sec.

280.1681-00

**Sprint**  
 Red case



211.1710-00

**Stopstar 2**  
 1/100 sec.

211.1712-00

**Stopstar 2**  
 Black case



205.1705-00

**Stratos 2**  
 1/100 sec.

I N D U S T R Y   A N D   L A B O R A T



## Desktop timers

### “Mesotron”

For all applications, including school, sport, laboratory and industry use.

With the “Mesotron”, Hanhart is offering a clearly readable, quartz-controlled analogue table-top/ wall-mounted timer.

The ergonomic design of this timer makes it very stable.

The hands are luminous.

Measuring range: 0-60 sec. +  
1/100 min.

Analogue display:  
Outer scale: 0-60 sec.,  
+ 0-60 min.

Inner scale: 0-100/100 min.

Dial: Ø 110 mm

Temperature range:  
-10°C to +70°C

Size: 175 x 130 x 40/  
95 mm

Weight: approx. 375 g

Battery: AA, 1.5 V

Battery life: approx. 1-2 years

### Functions:

Start/Stop/Reset –

Addition – Flyback

### Calibration

See description on page 40.

**24-month Hanhart guarantee**

### “Mesotron”

+/- sec.-month	14
Time measuring buttons	2
Battery change warning	•
Addition	•



631.4031-00

**Mesotron**

0-60 sec. + 1/100 min.



## Desktop timers

### "Prisma 200" and "Prisma 400"

The desktop timers "Prisma 200" and "Prisma 400" are two practical interval up/down timers for use in industry, laboratories and schools, and for sport and domestic purposes.

The "Prisma" range comes with a strong plastic case and an adjustable acoustic alarm.

Measuring range:  $\frac{1}{100}$  sec. or  $\frac{1}{100}$  min.

LCD display: 2-line plus function window

Top line: 3-digit

Bottom line: 5-digit

Function window: 2-line, with 6 positions

Numeral height: 22/8 mm

Display range:

selectable

- a) 999 min.,  
99/100 min.
- b) 9 hrs.,  
59 min.,  
59 sec.,  
 $\frac{1}{10}$  sec.

Temperature

range: -10°C to +55°C

Size: 175 x 130 x 40/  
95 mm

Weight: 390 g

Battery: AA, R 6

Battery life: approx. 1-2 years



626.2626-00

**Prisma 400**

Blue case

4 timers

Selectable:  $\frac{1}{10}$  sec. or  $\frac{1}{100}$  min.

“Prisma 200”

2 timers  
Selectable: 1/10 sec. or 1/100 min.

**Functions:**  
Start/Stop/Reset –  
Addition – Flyback – Countdown  
with adjustable acoustic alarm  
2 timers, fully programmable, with  
start/stop activation either together  
or separately  
Repeat, manual or automatic  
Time of day

“Prisma 400”

4 timers  
Selectable: 1/10 sec. or 1/100 min.

**Functions:**  
Start/Stop/Reset –  
Addition – Flyback – Countdown  
with adjustable acoustic alarm  
4 timers, fully programmable,  
with start/stop activation  
either together or separately  
Repeat, manual or automatic  
Time of day

**Calibration**  
See description on page 40.

24-month Hanhart guarantee

“Prisma 200” and “Prisma 400”

+/- sec.-month	7
Time measuring buttons	2
Display lines	2
Battery change warning	•
Addition	•
Lap	•
Countdown with signal	•
Autorepeat	•
Time	•
Adjustable acoustic signal	•



626.2625-00

**Prisma 400**

White case

4 timers

Selectable: 1/10 sec. or 1/100 min.



625.2626-00

**Prisma 200**

Blue case

2 timers

Selectable: 1/10 sec. or 1/100 min.



625.2625-00

**Prisma 200**

White case

2 timers

Selectable: 1/10 sec. or 1/100 min.



## Industrial timing 1/100 min.

### “Robotimer”

Industrial design

3 or 4 precision stopwatches with 1/100 min. and item counter for work processes or cycle counter.

- All times in a work process can be recorded with no loss of data.
- Always ready for use thanks to use of reliable mechanical stopwatches.

201.6683-00

#### Robotimer

3 crown stoppers for 3 x separate times plus	Lever, 7 jewels 30 minutes
1 addition timer for total time	Lever, 11 jewels 10 hours

923.0748-00

#### Item counter

4-digit with rotation to zero







251.1951-00

**Spectron**

1/100 min. + 1/100 sec.

## **Industrial timing** 1/100 min., 1/100 sec.

### **“Spectron”**

2-button operation

Selectable:	1/100 min., 1/100 sec.
LCD display:	2.5 lines
Top line:	6-digit plus battery status display
Bottom line:	7-digit
Function window:	for Lap/normal time
Memory display:	2-digit
Numeral height:	7 mm/5 mm
Display range:	
Top line:	9999.99 min.
Bottom line:	99999.99 min.
Size:	82 x 61 x 28 mm
Weight:	85 g
Battery:	AAA, 1.5 V
Battery life:	approx. 5-7 years

### **Functions at 1/100 min.:**

Start/Stop/Reset –  
Split/Lap/Addition  
Split and Lap can be read at the  
same time  
Time of day, date

**65 memories:**  
for Split and Lap

### **Functions if switched to 1/100 sec.**

Technical data as for the  
“Delta E 200”  
(see description on page 28-29).  
Start/Stop/Reset –  
Addition/Split/Lap/Short Lap  
Split time can be set in advance  
of the actual time  
Countdown  
Countdown and stopwatch can be  
used at the same time  
Time of day, date

**65 memories:**  
with evaluation, fast search

Supplied with protective pouch  
and cord.

### **Calibration**

See description on page 40.

## Industrial timing 1/100 min.

### "Accord 1"

1-button operation

Measuring range: 1/100 min.  
 LCD display: 1.5 lines  
 Top line: 7-digit  
 Memory display:  
 Bottom line: 2-digit  
 Numeral height: 6 mm  
 Display range: 99999.99 min.  
 Size: 82 x 61 x 28 mm  
 Weight: 90 g  
 Battery: AA, 1.5 V  
 Battery life: 2-5 years

### Functions:

Start/Stop/Reset – Split/Lap  
 The two times can be switched at any time. Separate system and memory reset  
 Time of day, date

**60 memories:** for Split and Lap

### "Accord 2"

Extra: option of connecting to printer, plug-in connection in the battery cover. Technical data as for the "Accord 1". Supplied with protective pouch and cord.

## Short period timers 1/1 sec.

### "Compact"

A short period timer with stopwatch function for industry and laboratory use.

LCD display: 6-digit  
 Numeral height: 8 mm  
 Display range: 23 hrs., 59 min., 59 sec.  
 Size: 64 x 60 x 16 mm  
 Weight: approx. 40 g  
 Battery: button cell SR 44  
 Battery life: approx. 2 years

### Functions:

Stopwatch (counting upwards)  
 Countdown with alarm and repeat  
 Time of day (24 hrs.)  
 This model comes with a button cell battery (SR 44).  
 Battery life: approx. 1-2 years.  
 The timer has a clip for hanging or standing it up and a magnet



265.6765-00

**Accord 1**  
1/100 min.

265.6766-00

**Accord 2**  
1/100 min.



610.6700-00

**"Printo"-Set**  
 "Accord 2" + "Printo"  
 Description of "Printo" printer  
 see page 25



291.4690-00

**Compact**  
1/1 sec.

## Short interval timers 1/1 sec.

### “Labor 1, 2, 3”

Three short interval timers for industry and laboratory use.

“**Labor 1**” is the model with a programmable countdown. The pre-set time can be called up repeatedly.

LCD display: 4-digit  
 Numeral height: 18 mm  
 Display range: 59 min., 59 sec.  
 Size: 76.2 x 66 x 18 mm  
 Weight: approx. 60 g

#### Functions:

Countdown (alarm at “0”)

“**Labor 2**” offers two programmable countdown or count-up times or a normal time display. 2 timers in one device.

LCD display: 6-digit  
 Numeral height: 18 mm/10 mm  
 Display range: 99 hrs., 59 min., 59 sec.  
 Size: 76.2 x 66 x 18 mm  
 Weight: approx. 60 g

#### Functions:

Countdown (alarm at “0”)  
 Count-up  
 Time of day: 12/24 hr. switchable  
 Date

“**Labor 3**” has a triple display for three separate, programmable countdown or count-up times. The “Labor 3” also displays the normal time.

3 separate timers in one device.  
 LCD display: 3 x 6-digit  
 Numeral height: 8 mm/6 mm  
 Display range: 99 hrs. 59 min., 59 sec.  
 Size: 83 x 70 x 22 mm  
 Weight: approx. 80 g

#### Functions:

Countdown (3x) (alarm at “0”)  
 Count-up  
 Time of day: 12/24 hr. switchable  
 Date  
 These models come with a button cell battery (SR 44).  
 Battery life: approx. 1-2 years.

All timers have a clip for hanging or standing them up and a magnet.



292.4492-00

**Labor 1**  
 1/1 sec.



293.4693-00

**Labor 2**  
 1/1 sec.



294.4994-00

**Labor 3**  
 1/1 sec.



### “Systema“

The “Systema” clipboard is a well-designed, useful item to help with time-recording. The top section also has an interchangeable part for fitting an electronic stopwatch (with a clip) or a mechanical one (with a holding bracket) (see photo), so that both right- and left-handed people can use the stopwatch in an ergonomically correct position.

“Systema” has an integral pen-holder and a clamp for an A4 pad of paper. The device is easy to hold using the carry strap or handle.

Colour: light grey

Size: 400 x 330 x 18/11 mm

Weight: approx. 770 g

### Stopstand

For mechanical stopwatches in metal or plastic cases (not incl. stopwatch).

## Calibrating stopwatches

The calibration of measuring devices (including stopwatches) is becoming ever more important in the light of the monitoring of test equipment for compliance with ISO 9000 ff.

Hanhart offers a calibration service which includes calibration of watches and a CERTIFICATE of their accuracy.

Calibration certificates can be issued for the following watches:

- All mechanical stopwatches except for the “Felix” range.
- The electronic stopwatches “Delta”, “Modul”, “Accord”, “Profil”, “Magma”, “Stopstar”, “Spectron”, “Mesotron”, “Prisma”.



**901.0677-90**

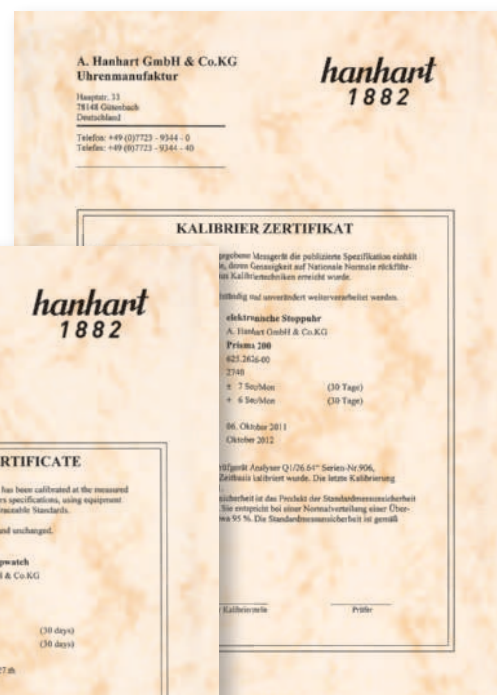
### Systema

Basic board excl. stopwatch holder

**921.0582-40**

### Carry strap

For hanging the “Systema” clipboard round your neck (no illustration)



**904.1389-40**

Calibration certificate



901.0678-10

**Systema**

With holding bracket for mechanical metal stopwatches (not incl. stopwatch)



901.0678-30

**Systema**

With clip for electronic stopwatches (not incl. stopwatch)



905.0698-40

**Holding bracket**

Metal holding bracket for mechanical stopwatches (not incl. backing plate)



905.0752-20

**Plastic clip**

For electronic stopwatches. Suitable for Stopstar, Profil, Accord, Magma 10 + Magma Pro, Modul, Delta, Spectron (not incl. backing plate)

905.0752-00

**Stopstand**

For metal cases

905.0755-90

**Stopstand**

For plastic cases  
Cal. 111 + 121



## Metal mounting plates for mechanical stopwatches

Freely interchangeable, stopwatches can be easily fitted to the car dashboard using these specially made mounting plates.

Clever mechanics make handling stopwatches easy as you fit them and remove them.

The stopwatches are held in place by sturdy little supports with rubber pads and a fixing element with spring-loaded bearings. The stopwatches are pushed gently into the sprung mounting.

Stainless steel, polished.

Delivery does not include stopwatches.

### Dimensions of metal mounting plate:

#### Single plate

Size: 80 x 62 x 3 mm

#### Double plate

Size: 140 x 62 x 3 mm

#### Triple plate

Size: 200 x 62 x 3 mm

### Leather clipboard

With paper holder and dashboard mounting plate for 3 mechanical stopwatches.

Delivery does not include stopwatches.



901.0101-00

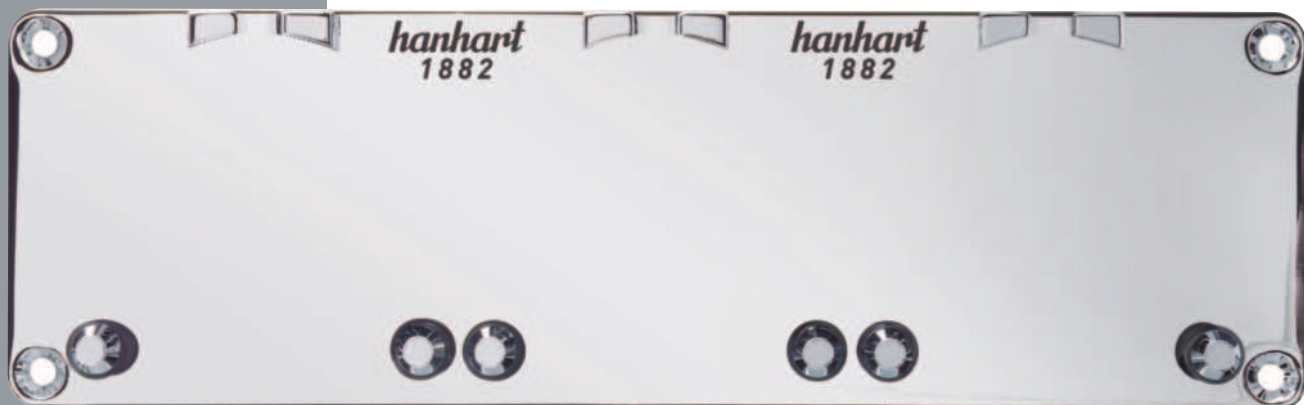
Plate for 1 watch

901.0201-00

Plate for 2 watches

901.0301-00

Plate for 3 watches







901.0301-60  
Leather clipboard

*hanhart*  
1882

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