



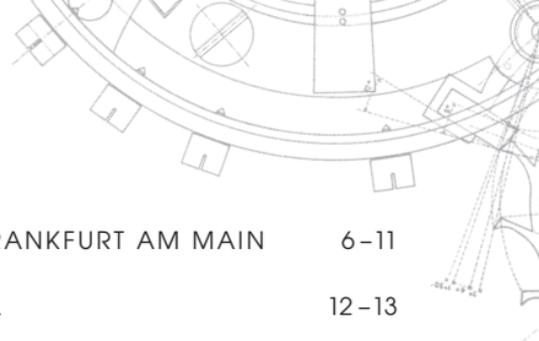
SERIES 917



*Sinn*

SPESIALUHREN ZU FRANKFURT AM MAIN





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## DEAR CUSTOMER,

We know from numerous conversations that the people who buy our watches do so out of conviction. This includes people with a pronounced affinity to technology who are fascinated, for example, by the solutions we have devised for protection from magnetic fields and scratch resistance. Some of our customers, such as divers, pilots and the German GSG 9 special police unit, rely on their watches in their respective careers because their lives depend on it.

They all swear by the performance, resilience and durability, as well as the quality and precision of our watches. That is why the world's largest classification society DNV GL (formerly Germanischer Lloyd, Hamburg) regularly tests and certifies the water and pressure resistance of our diving watches.

Selected pilot watches are tested and certified by independent institutions according to the DIN 8330 Horology – Aviator watches in an extensive and complex type and unit verification process. This ensures that a DIN 8330-compliant pilot watch is a suitable all-round replacement for the on-board timekeeping instruments available to pilots. Functionality is our top priority and ultimately determines the design. Only the technical features that are really needed can be found on our watches. Because we believe that products have to speak for themselves.

The basic question that we ask ourselves is: which innovative technologies and materials can be employed for our craft and provide solutions for rendering our watches even more practical for everyday use? It is often worth indulging in a little lateral thinking to see what is going on in other industrial sectors or fields of science. We repeatedly go to the limits of physical resources to upgrade our watches – with the aim of making what’s good even better. Most of our best developments are yet to come!

I am delighted that you have decided to buy a SINN timepiece and hope that it will continue to give you pleasure for many years to come.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'L. Schmidt', with a stylized flourish at the end.

Lothar Schmidt



*Sinn*

ENGINEERING OF TECHNOLOGY ON MAIN

*Sinn*

ENGINEERING OF TECHNOLOGY ON MAIN

## SINN SPEZIALUHREN ZU FRANKFURT AM MAIN

It was back in 1961 that pilot and blind-flying instructor Helmut Sinn founded the company. Since then, we have been committed to producing high-specification mechanical watches. In 1994, the graduate engineer Lothar Schmidt took over the company. This marked the beginning of a new era for the SINN brand, because the new owner took a decisive step towards more innovation. Under his leadership, new technologies and materials were introduced, thus providing the crucial incentives for our company's evolution and gradual emergence as an insider's tip for lovers of fine watches. Today, our name stands for technical innovations – much to the delight of both the trade and our customers alike.

### **Technical innovations**

Take, for example, the absolutely condensation-free, anti-reflective, German Submarine Steel diving watch – made possible by HYDRO Technology. Other examples include a chronometer chronograph fashioned from a 22-carat gold alloy that is as hard as stainless steel and a chronometer with a magnetic resistance of up to 80,000 A/m. There are also watches with a clockwork mechanism optimally protected from aging by an inert gas and integrated dehumidifying capsule. The list would not be complete without mentioning the development of mission timers (Einsatzzeitmesser or EZM in German) for firefighters, for special police units and border patrol guards. DIAPAL is one of our most important technological developments, with oiling no longer needed for the most important functions in the watch thanks to the materials we select. This technology was first used in 2001. With the aid of TEGIMENT Technology, we achieve greatly increased scratch resistance through surface hardening.

## Ongoing advancement in technology and quality

Our top priority has always been to develop watches that offer superior performance – both in daily and in professional use. Which is why our engineers are working continually to identify which innovative methods, materials and technologies are best suited for optimising our watches. Each new development has to first undergo rigorous practical tests before being incorporated. And no watch leaves our workshops before it has been subjected to thorough checking and fine adjustment by our master watchmakers.

## Innovations in endurance testing

The world's largest classification society for maritime safety DNV GL (formerly Germanischer Lloyd, Hamburg), has been testing our diving watches for pressure and water resistance since 2005. As part of DNV GL's official certification process, our diving watches have been treated as part of diving equipment since 2006 and tested and certified in accordance with European diving equipment standards. This is unparalleled in the watch industry. Selected pilot watches are tested and certified by independent institutions according to the DIN 8330 Horology – Aviator watches in an extensive and



complex type and unit verification process. This ensures that a DIN 8330-compliant pilot watch is not only a suitable all-round replacement for the on-board timekeeping instruments available to pilots, but is also capable of remaining unaffected by the physical stresses of flight, posing no risk potential for the crew or aircraft, and demonstrating compatibility with other on-board instruments.

The Temperature Resistance Technology keeps mechanical watches performing at temperatures ranging from  $-45^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ . This technology has proven its worth in the EZM 10 TESTAF, for example, used as part of the official approvals procedure for Airbus Helicopters (formerly Eurocopter) EC 145 T2 high-performance helicopter. The 303 CRYSTAL is impressive proof of the functional reliability of our watches under the toughest climatic conditions. Equipped with Temperature Resistance Technology, the chronograph passed the acid test at the Yukon Quest, the world's most demanding dogsled race. The 203 ARCTIC passed its Arctic endurance test on the wrist of extreme diver Mario M. Weidner, withstanding all dives in the freezing cold waters of the Arctic Ocean above 81 degrees latitude. Both watches were worn on top of protective clothing. The real test was in the extreme temperature fluctuations between water and land – a test that the 303 CRYSTAL and the 203 ARCTIC passed with flying colours.

Image: All of the technical details of our watches are documented by tests. This system of assessment has been specially designed for certification of the pressure resistance of our diving watches by DNV GL (formerly Germanischer Lloyd, Hamburg), the world's largest classification society for maritime safety.

## Workshop modifications

From the robust case and the polished crystal to the exquisitely decorated movement, we make sure that each and every detail in our watches is fit for purpose. In addition to our technology, the heart of any SINN watch is the fascinating mechanical movement. That is why we rely only on selected renowned manufacturers.

“SZ movements” is the name given to our movement modifications. The results are high-quality calibres characterised by impressive features. An example of this is the SZ04 with regulateur for the 6100 REGULATEUR series.

The EZM 1.1 and the model series 140 and EZM 10 uses our proprietary chronograph development, the SZ01. It was modelled on the Lemania 5100 calibre used in the EZM 1. One of the biggest differences between the SZ01 and the Lemania 5100 is the former’s stopwatch minute display. This feature now makes it even easier and quicker to record stop times more accurately. This development is based on the Valjoux 7750 calibre. The aim of this modification was to significantly improve the readability of the chronograph function.

The SZ calibres 02, 03 and 05 are a modification of the SZ01 movement, characterized by an off-center 60-minute counter. The 60-minute scale of the stopwatch minute counter is much simpler and more intuitive to read than the 30-minute scale commonly found in other watches.



## PREFACE BY PETER GÖBEL

German Rally Champion 2002, 2004, 2005, 2006 and 2010

Sometimes, meeting someone for coffee can be a life-changing event. In 1987, during the Hunsrück Rally, I invited world champion Walter Röhrl to join me for a cup of coffee and a piece of cake – and he accepted. Five years later, the two of us paired up for my very first rally. Since then, I've been having the time of my life – since taking up a sport in which time plays such an important role. Whether you're dealing with a countdown or a time trial, one thing is always the same: hours, minutes and seconds mean the difference between victory and being an also-ran.

Now, after more than 20 years in rally racing and more than 250 events all over the world – from small-scale regularity tests to the legendary Dakar Rally – I have seen again and again that a stopwatch is the most important tool a co-driver and navigator can have. And if you are fortunate enough to own a chronograph that was designed and engineered with rally racing in mind, "taking time" is even more fun, and makes the navigator's task much easier.

The Rallychronograph 917 from SINN is a special treat for me, particularly because my own experience and ideas played a part in its development. As a rally navigator I am especially pleased that the SINN company from Frankfurt am Main has incorporated some of the specific, everyday requirements of one of the most fascinating sports disciplines in the world.



Pete Götzel



## THE “CLASSIC CAR RALLY” ADVENTURE

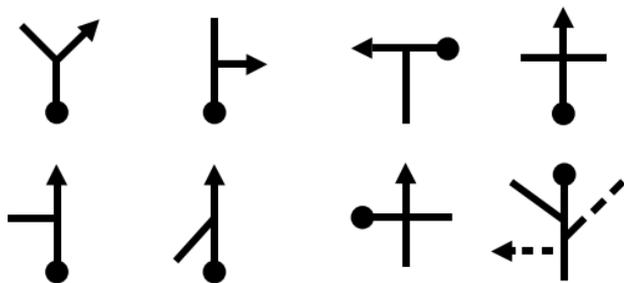
**From brand-new rallies like the Hamburg-Berlin Klassik, via popular courses like the Saxony Classic and the Silvretta Classic, to the legendary Mille Miglia route – classic car rallies are gaining more and more fans. No matter which rally you participate in, they all have one thing in common: the thrill of a sporting challenge on fascinating routes. And everyone involved enjoys taking advantage of personal experience and superior technology to achieve the best possible results for the team and vehicle. That goes for both road rallies and complex time trials.**

In road rallies, the team faces two primary tasks: orientation (for example with the help of pacenotes and the information in the road book) and time trials. In vintage car rallies these are often regularity trials which require a given stage of the route to be driven in a specified length of time. In this case, a precise stopwatch is indispensable. In the so-called “hourglass category” only mechanical watches and chronographs are allowed – in homage to the era in which the vehicles themselves were built. The 917 Rally Chronograph was specially developed to meet the exacting requirements of classic rallies.

## Always in demand: A good sense of direction

Pacenotes are symbols which are used to describe the rally course. There are different versions, with some remotely resembling Chinese pictograms. Pacenotes can be used with maps or "au naturel" – which means the route includes roads that are not indicated on conventional maps.

The pictograms show the course of the route in the direction of travel. A dot indicates the direction the driver is coming from. One version is called the "mileage road book", which numbers the kilometers consecutively. In this case, it is recommended to set the counter to zero at the starting line of the race.



Example of pacenotes

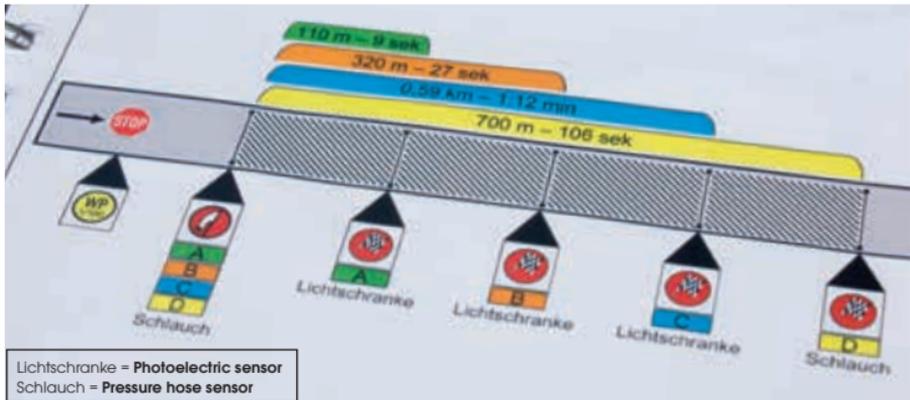
| Distanz |          | Direction | Information | km zu |
|---------|----------|-----------|-------------|-------|
| Total   | Partiell | Richtung  | Information |       |
|         |          |           |             |       |
| 0.19    |          |           |             | 14.05 |
| 0.30    | 50       |           |             | 22.60 |
|         |          |           |             | 13.86 |
|         |          |           |             | 22.30 |
|         |          |           |             |       |

Mileage road book

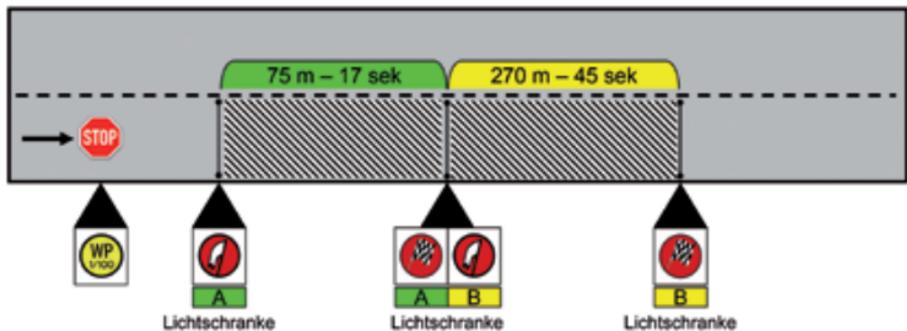


## Precision work: The time trial

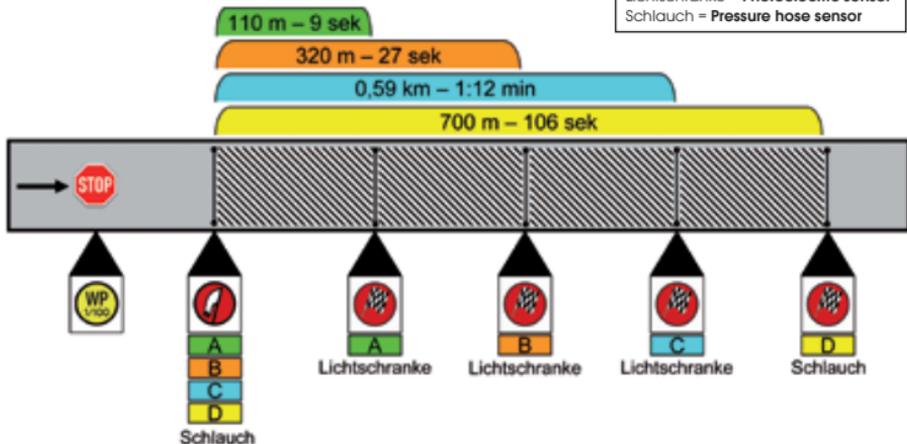
Regularity rallies, also called time-speed-distance rallies (TSD), are a type of time trial. They are indicated by a yellow road sign (TSD 1/100). At the signpost, an official gives the drivers a hand signal telling them when to start. Time is recorded beginning after a few meters, coinciding with a red flag signal when the vehicles pass a photoelectric sensor or pressure hose sensor. The co-driver presses the stopwatch at this starting line and begins measuring the target time. The team should continue driving once the TSD has been completed so as not to hinder the vehicles behind it.



## Time Trial



### Example 1



### Example 2

**Example 1:** Each team, naturally, has its own preferences and methods for stopping the times during time trials. Proposal for the time trial shown left: use the chronograph (stop) function in combination with the backwards counting bezel. Before starting, set 17 on the bezel to 12 o'clock. Start the stopwatch at the precise point of passing photoelectric sensor A. You can then count down the time to sensor AB for the driver. On driving through sensor AB, trip the stopwatch to zero and then restart it immediately. Now set 45 on the bezel to 12 o'clock; you can then let the driver know precisely how much time he has left until the end of the special stage.

**Example 2:** To make reading off the time intervals as clear as possible, the Rally Chronograph 917 is equipped with a backwards counting bezel in which the all-important last few seconds are highlighted in red. Suggestion for the time trial shown left: Before starting, set 9 on the bezel to 12 o'clock. Start the stopwatch at the precise point of driving over the pressure hose sensor. You can now read off the precise time remaining to photoelectric sensor A on the bezel and count this down for the driver. Without stopping the stopwatch, set 27 on the bezel to 12 o'clock after passing photoelectric sensor A; after passing sensor B set 12 to 12 o'clock (the second hand reaches the zero mark on the bezel after 1:12 minutes) and set 46 to 12 o'clock after passing C (the second hand reaches the zero mark after 106 seconds = 1:46 minutes). You can then count down the precise amount of time remaining for the driver.



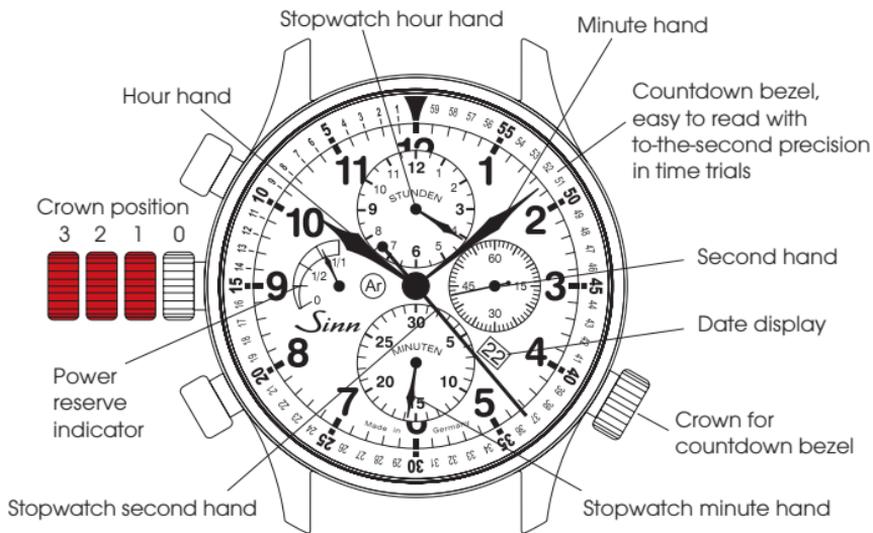
## MODEL SERIES 917

**On the road for 5 hours. Having successfully negotiated the winding pass roads, it's now time for the next time trial. In a rally, it's all down to maximum precision and practicality. And this is where the 917 series scores highly. Because, besides technical refinement, the 917 Rally Chronograph has the resilience of a high-grade mechanical watch: it is shock resistant and anti-magnetic, has a solid stainless steel case and offers a degree of condensation resistance which can only be provided by our Ar-Dehumidifying Technology. Giving it the best possible qualification for rallies and for everyday use.**

Special feature: the interior backwards counting bezel. This permits precision setting and easy reading of exact target times. Red numerals for the last 15 seconds raise attention levels in the critical time zone. All information can be read off at a glance from the classic dial with anti-reflective sapphire crystal glass. And the winding reserve display in the form of a petrol tank indicator means that you can be sure that your chronograph will be fully operational up to the finishing line and beyond.

# INSTRUCTIONS FOR USE

Model 917 GR



## Winding the watch (crown position 1)

The crown is screwable (crown position 0). To loosen the crown, turn it *counter-clockwise* (crown position 1). The movement is wound by turning the crown *clockwise*. About 40 winds of the crown are generally enough to ensure reliable functionality. Under normal circumstances, simply wearing the watch every day should suffice to keep the self-winding mechanism wound. The power reserve allows you to take off your watch overnight without having to re-wind it.

### **Time adjustment (crown position 3)**

In crown position 3, the motion is paused. This helps you to set the watch precisely. Please make sure the date changes at midnight and not at midday. Just move the hands forward until the date changes. Afterwards you attempt to set the time. We recommend moving the hands past the desired minute marker and then adjusting it backwards. The movement restarts as soon as the crown is no longer in position 3.

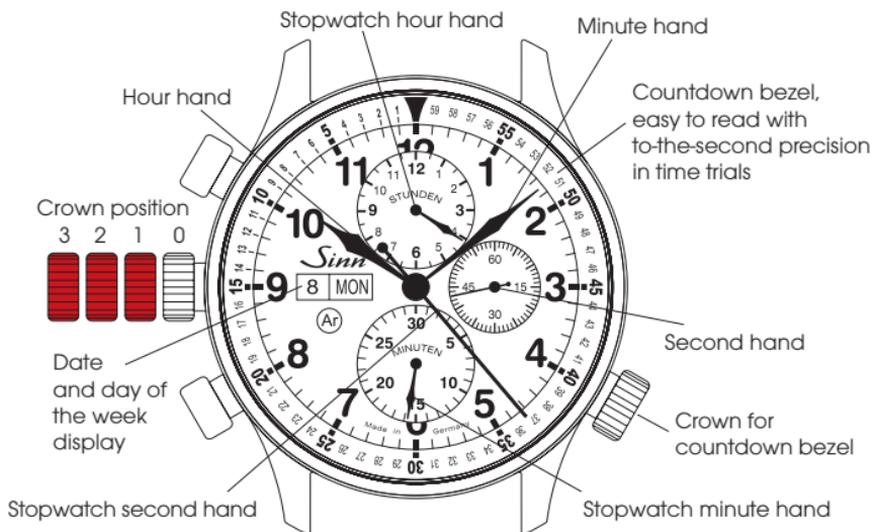
### **Quickset date adjustment (crown position 2)**

**Do not use this function between 9 p.m. and 3 a.m.** Set the crown in position 2 and turn it *clockwise* until the correct date appears in the date display window. **Please do not use the date-setting function between 9 p.m. and 3 a.m.** Between these times, the gear wheels used for changing the date are engaged, and the movement could be damaged.

**Please take care to fasten the crown after making adjustments.**

# INSTRUCTIONS FOR USE

Model 917



## Winding the watch (crown position 1)

The crown is screwable (crown position 0). To loosen the crown, turn it *counter-clockwise* (crown position 1). The movement is wound by turning the crown *clockwise*. About 40 winds of the crown are generally enough to ensure reliable functionality. Under normal circumstances, simply wearing the watch every day should suffice to keep the self-winding mechanism wound. The power reserve allows you to take off your watch overnight without having to re-wind it.

### **Time adjustment (crown position 3)**

In crown position 3, the motion is paused. This helps you to set the watch precisely. Please make sure the date changes at midnight and not at midday. Just move the hands forward until the date changes. Afterwards you attempt to set the time. We recommend moving the hands past the desired minute marker and then adjusting it backwards. The movement restarts as soon as the crown is no longer in position 3.

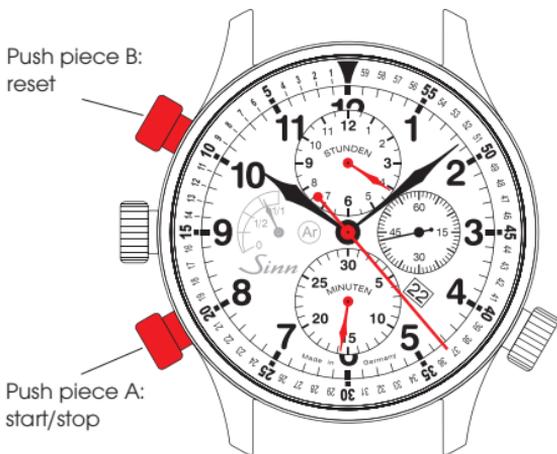
### **Quickset date and day of the week adjustment of the week (crown position 2)**

**Do not use this function between 9 p.m. and 3 a.m.** Crown position 2 can be used to change the date and day of the week quickly and simply. To set the date, pull the crown to the second position and turn it *clockwise* until the current date appears in the display window. To set the day of the week, turn the crown *counter-clockwise* until the desired day of the week is indicated. **Please do not use the date setting function between 9 p.m. and 3 a.m.** Between these times, the gear wheels used for changing the date are engaged, and the movement could be damaged.

**Please take care to fasten the crown after making adjustments.**

## USING THE CHRONOGRAPH TO MEASURE TIME

The chronograph is operated by means of buttons A and B. The measurement starts when button A is pressed once. Pressing this button again stops the measurement. The measurement is resumed by pressing button A once more. This allows you to add up and record the cumulative time. Button B resets the hands of the chronograph to zero.

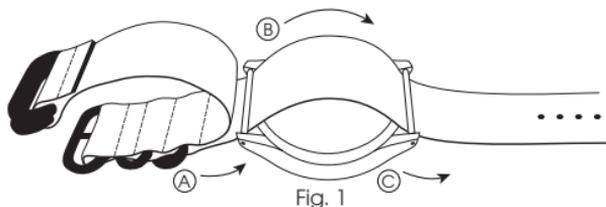


## ASSEMBLING AND ADJUSTING THE LENGTH OF STRAPS

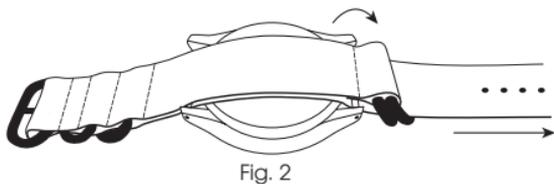
If you are not sure how to assemble, shorten or lengthen the watch straps, please contact your specialist SINN retailer directly or one of our watchmakers in customer service in Frankfurt am Main. We would also be happy to help you over the telephone.

### Assembling the textile strap

1. Place your watch on a soft cloth with the dial facing down.
2. Fold over the shorter side of the textile strap with the two metal loops pointing to the left. Then bring the longer side of the textile strap through the spring bars on the left and right, as illustrated in figure 1 (steps A to C).



3. Fold over the shorter side of the textile strap to the right over the case back and bring the longer side through the two metal loops. Tighten the textile strap carefully (figure 2).

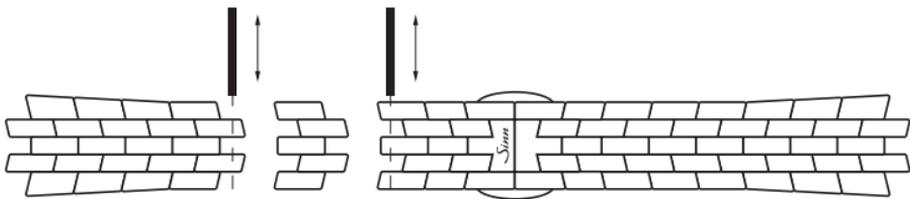


## Adjusting the length of the solid bracelet

Determine the relative lengths of the two sides before adjusting the length of the bracelet. To ensure maximum comfort, both sides of the bracelet should contain the same number of links. If this is not possible, the top bracelet strap (above the 12 on the clock) should be longer.

It is not necessary to detach the solid bracelet from the watch or the clasp.

1. Loosen the screws on the side of the bracelet link which is to be removed or added.
2. Remove the superfluous bracelet link or insert a new one.
3. Before screwing tight, add a small drop (no more!) of thread-locker (AN 302-42 medium-tight) to the thread of the bracelet screw.



## TECHNICAL DETAILS

### **Mechanical movement**

- Calibre Valjoux 7750
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Hand adjustment with stop-second function
- Shock resistant as per DIN ISO 1413
- Anti-magnetic as per DIN 8309

### **Watch case**

- Stainless steel, polished
- Sapphire crystal glass in front, anti-reflective on both sides
- Transparent case back made of sapphire crystal glass, anti-reflective on the interior
- Case back screw-fastened
- Meet the technical requirements for waterproofness, as set out in standard DIN 8310
- Pressure resistant up to 10 bar
- Low pressure resistant
- Band lug width 22 mm
- Case diameter 44 mm

### **Functions**

- Hours, minutes, subsidiary seconds
- Chronograph
- Date display
- Countdown bezel, easy to read with to-the-second precision in time trials
- 917 GR: Power reserve indicator
- 917: Day of the week display

### **SINN Technologies**

- Ar-Dehumidifying Technology enhances functional reliability and freedom from fogging

# ADVICE

## **Water resistance**

In its original condition, your watch fulfils the technical requirements of water resistance according to DIN 8310. The static compressive stress of your watch is given in bar. Each and every one of our watches is tested for water resistance. However, in everyday use it is important to note that seals can suffer from wear and ageing over time due to a wide range of factors which arise when wearing a wristwatch. We therefore recommend having the water resistance checked at least once a year. To ensure your watch retains its water resistance for as long as possible, rinse it with tap water if it comes into contact with seawater, chemicals or the like. Continual mechanical stress in the form of shocks and vibrations can also not only reduce water resistance, but also increase wear and tear of the movement. Care should therefore be taken to protect your watch from unnecessary impacts.

## **Accuracy**

The measured results of the watch's rate are always "snapshots" taken under laboratory conditions. For this reason, we also take each owner's individual movements into account when making a specific regulator correction. It is therefore only possible to judge the accuracy of your watch after it has been in operation for approximately eight weeks. In the event of a deviation, please keep a daily record of its timekeeping over an extended period, for example one week.

**Do you have any questions? Our employees will be pleased to advise you.**

Telephone: + 49 (0)69/97 84 14-400

Telefax: + 49 (0)69/97 84 14-401

E-mail: [service@sinn.de](mailto:service@sinn.de)

## SERVICE

### **Does your SINN watch need an inspection, repair, retrofitting or reconditioning?**

If possible, please use our service order form. For information about our service order form, please refer to the section entitled "Customer Service" on our website [www.sinn.de/en](http://www.sinn.de/en) and to the section entitled "Servicing and repairs" in our general terms and conditions at [www.sinn.de/en](http://www.sinn.de/en). We would be happy to send you a copy of the general terms and conditions.

Our international partners generally offer on-site service. However, should they be unable to provide a certain service, they will organise the safe dispatch and return of the SINN watch to our manufactory in Germany. Please be aware that our partners will wait until they have a sufficient number of SINN watches before they post a shipment, in order to keep transport costs and customs duties to a minimum. This will increase the processing time.

Alternatively, you can send your SINN watch to us directly. You will be required to cover the postage costs for the delivery and return shipment, which vary depending on the country. For insurance reasons, we strongly recommend sending us any return goods by registered parcel post. We regret that we are unable to accept deliveries with unpaid postage!

In case you have a chance to drop off your watch directly at our office in Frankfurt am Main we look forward to your visit. Please make a note of our opening times.

**For information about our service, please refer to the section entitled "Customer Service" on our website [www.sinn.de/en](http://www.sinn.de/en) or +49 (0)69 / 97 84 14-400.**

# Sinn

SPEZIALUHREN ZU FRANKFURT AM MAIN



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Technische Änderungen vorbehalten.

Technical specifications are subject to changes.



STRECKENREKORD 1:18.4  
WALDENHÖRDE 1:18.4

*Sinn*  
MULTISPEED

*Carrera*

SEBRIT